

**THE EXPERIENCES OF NAMIBIAN SENIOR PRIMARY SCHOOL
TEACHERS IN CURRICULUM DESIGN: THE CASE OF KHOMAS
REGION**

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AMUNKETE KANDALI LOTTY

201100998

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MAIN SUPERVISOR: DR. D. WOLFAARDT

ABSTRACT

This study aimed to investigate the experiences of Namibian senior primary school teachers in curriculum design in the Khomas region, with emphasises mainly being placed on roles and responsibilities of teachers in curriculum design. The involvement of teachers in curriculum design is one of the most important aspects that ensure the successful implementation of the curriculum and effective pedagogy in schools. The study sought to answer the following questions: (1) What are the roles and responsibilities of senior primary school teachers in curriculum design in the Khomas region? (2) Why is it important to involve senior primary school teachers in curriculum design? (3) To what extent are teachers influential in curriculum design? (4) What challenges are faced by senior primary school teachers in exercising their roles in curriculum design in the Khomas region? (5) Which strategies can be employed to enable the effective participation of senior primary school teachers in curriculum design in the Khomas region? The study employed a qualitative research design where seven (7) senior primary school teachers from the Khomas region who were involved in curriculum design were selected by means of a purposive sampling strategy. The study also included four (4) members of the Programme Quality Assurance (PQA) and four (4) curriculum developers to represent National Institute NIED. Data were collected by means of in-depth, face-to-face interviews with the participants. The findings of the study show that senior primary school teachers are essential, and assume different roles and responsibilities at NIED during the curriculum design process but only the teachers that are part of the curriculum panels, therefore not all the senior primary school teachers are involved. The research findings also show that there are challenges for senior primary school teachers in the curriculum design process, and the participants have suggested a few strategies to overcome those challenges. From the findings, the following recommendations were made: more senior primary school teachers should be involved in the curriculum design process, the selection of the participants for curriculum panels at NIED should remain fair and transparent, curriculum developers and other stakeholders should create an inclusive environment for teachers to become fully involved, and their opinions should be regarded as of equal importance as those of other participants. Therefore, as much as senior primary school teachers are the curriculum implementers, they should be equally involved in

curriculum design. This study contributes to the academic literature in the field and raises awareness of the significant roles that senior primary school teachers play in the curriculum design process.

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LIST OF ACRONYMS

CCC	Curriculum Coordinating Committee
DNEA	Directorate of National Examinations and Assessment
MEAC	Ministry of Education, Arts and Culture
MoE	Ministry of Education
MoEAC	Ministry of Education, Arts and Culture
NIED	National Institute of Educational Development
PQA	Programme Quality Assurance

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DEDICATION

I dedicate this work to my parents, Samuel Amunkete and Paulina Nandjembo, for their continued support, love and for the conditions they provided that made the study possible.

DECLARATION

I, Lotty Kandali Amunkete, hereby declare that this study is my own work and is a true reflection of my research, and that this work or any part thereof has not been submitted for a degree at any other institution.

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Name of Student	Signature	Date

CHAPTER 1: INTRODUCTION

1.1 Introduction

This study investigated the roles and responsibilities of Namibian senior primary school teachers in curriculum design. Johnson (2012) defines a curriculum as the foundation of any education system. This implies that, no matter how well the curriculum is developed, if teachers do not understand and accept it extensively, it could cause variations in interpretation in classrooms. Hence, these differences could lead to less efficiency and put the attainment of the national goals of basic education in jeopardy. In order to avoid this predicament, teachers should be actively involved in curriculum planning and development. In support of this, Kelly (2009) argues that the involvement of teachers in curriculum design is one of the most important aspects that ensure the successful implementation of the curriculum and effective pedagogy in schools.

This chapter introduces the study by explaining the background to the study, as well as the statement of the problem and the purpose of the study. It also presents the research questions, states the importance of the study, discusses the delimitations and limitations and gives definitions of terms.

1.2 Background of the study

Johnson (2012) states that education will not produce quality, open-minded individuals if the curriculum is not well articulated. To start with the definition, the

term, curriculum, has different meanings but originally it derived from the Latin word 'currere' which means 'to run'. Lunenburg and Ornstein (2011) define curriculum as a guiding, written document that stipulates methods that could be utilised to attain intended goals at the end of the programme. This definition is appropriate for this study because it fits with the definition provided in the Namibia National Curriculum for Basic Education. Thus, the curriculum is defined as the official document for teaching, learning and evaluation that provides direction to planning, organising and implementing teaching and learning (Ministry of Education, Arts and Culture [MoEAC], 2015). In short, it implies that the curriculum is the official document utilised in teaching and learning in Namibia, and it provides a direction in terms of the organisation and implementation of teaching and learning. Consequently, for teaching and learning to occur, a curriculum must be developed and be readily available to be utilised by the teachers concerned.

Bates, Lewis and Pickard (2011) posit that the first nationalised curriculum was introduced in the United Kingdom in 1988, and it went through various revisions to make the content deliverable. Unfortunately, it was not successfully implemented, as it did not contact teachers for their input. Kelly (2009) argues that, if the curriculum is not extensively understood, it does not only diminish academic standards but, at the same time, it also influences behaviour and attitude. This realisation underscores the importance of involving teachers in curriculum planning because teachers are the ones who deliver the curriculum content. If teachers are left out of curriculum development and misinterpret the curriculum, it can be presumed that the goal, namely to attain effective curriculum implementation, would be a mirage.

According to the Ministry of Education (MOE, 2013), the panel members on a curriculum design committee are selected by the officials of the National Institute for Educational Development (NIED), regional directors, inspectors, advisory teachers or principals. The number of panel members will be determined for each panel for each term, based on the diversity of subject areas covered by each panel. Furthermore, the names of co-opted members, members of subject committees, working groups and other ad-hoc committees have to be submitted to the Curriculum Coordinating Committee (CCC). The NIED official needs to inform members and the heads of the institutions concerned regarding the appointment of members and of changes that may occur in respect of the membership of persons on the panel or subject committee/ working groups. This is done through the Chief Executive Officer under Curriculum Research and Development at NIED. In addition, the members of the Curriculum Panels are appointed for a three-year term or such terms may be determined by the Permanent Secretary for reappointment (Ministry of Education, 2013).

A member who is promoted or transferred to another region, shall remain a member for the remaining period if so wished. The functions of the Curriculum Panel are namely: to coordinate and maintain control over the tasks assigned to the subject committee/working groups/ad-hoc committees; initiate and assist in the development of teaching materials, supplementary materials and suitable textbooks; recommend the most appropriate assessment procedures and instruments in the different subjects in relation to the assessment policies of the Ministry; draft curricula; do revisions of curricula as requested by the CCC. Furthermore, they should work according to the official implementation and revision schedule of the MoE, study regional and

international developments in collaboration with NIED in the curriculum area concerned and recommend a range of relevant methodologies that facilitate the successful implementation of the curriculum (Ministry of Education, 2013).

Johnson (2012) defines curriculum design as the declaration which identifies the elements of the curriculum, states what their relationship are to one another and indicates the principles of organisation and the requirements of that particular organisation for the administrative conditions under which it is to operate. So far there are only two national curricula that have been implemented in Namibian schools, and the rest were just pilot curricula employed as the foundation of the Namibian education system. The involvement of teachers in curriculum design and development is one of the most crucial aspects to ensure the successful implementation of the curriculum and effective pedagogy in schools. In support of this, a South African researcher, Bantwini (2010) states that teachers are key to the success of curriculum development and reform because their knowledge, beliefs and perceptions play an important role in understanding the way in which the curriculum can be designed.

In Namibia, Article 20 of the Constitution advocates *Education for all*, and it was stipulated based on the foundation of the Education Act (Act 16 of 2001). The Namibian education contains the key features of a democratic and educational, national curriculum. This is substantiated by education's four overall goals guiding the education system in Namibia, namely access, equity, quality and democracy (The Republic of Namibia, 2007).

The National Curriculum for Basic Education is designed at the National Institute for Education and Development (NIED) which is a directorate in the Ministry of Basic Education, Arts and Culture. NIED is charged with the responsibility to review, revise and develop the curriculum. Hence, the Namibian National Curricula for Basic Education are designed only at NIED; it is thus centralised. The model of a centralised curriculum is not something new. For instance, California centralised its curriculum policy in the 1990s, based on the context of the neo-liberal education philosophy of *No Child Left Behind*. This reformed curriculum was implemented from 2002 (Nieveen & Kuiper, 2012). Under this rule, according to Erss, Kalmus and Autio (2016), teachers are perceived as technicians who implement the system and are paid by results. Presently, Namibia has adopted an education system for a democratic society (MoEAC, 2015). In accordance with Kelly (2009), an appropriate curriculum for a democratic society should be one that continues the development of knowledge and skills and create an opportunity for the learners to develop independent thinking. It is noteworthy in Kelly's description that the curriculum for a democratic society should allow teachers to exercise their freedom and make professional judgements.

A considerable amount of research on teachers' involvement in curriculum development has been conducted worldwide. In addition, studies have tended to focus mainly on the extent of teachers' involvement in curriculum development, but little attention has been paid to the way that teachers' involvement in curriculum development relates to their professional development. Hence, it is worth scrutinising the involvement of teachers in the planning and development of the National Curriculum for Basic Education in Namibia, and to investigate how

teachers are involved, as well as their perceptions of the effect that their involvement has on the effectiveness of the curriculum. In the literature review, teachers' involvement in the curriculum development process globally and in Namibia will be considered.

Therefore, the study intended to investigate the way in which senior primary school teachers are involved in national curriculum development and their roles and responsibilities during this process. A National Curriculum Committee develops the curriculum; it consists of parents, teachers, other stakeholders and educational officers. However, although teachers are the ones who implement the curriculum, they are not always deeply involved in designing the curriculum. Therefore, this research investigated the roles and responsibilities of Namibian senior primary school teachers in designing the curriculum in the Khomas region.

1.3 Statement of the problem

Teachers are often given a curriculum, which they are entrusted to implement. Often little or no training regarding the implementation of the curriculum is given to teachers. Furthermore, teachers are tasked to deliver the curriculum successfully, ensuring that everything is covered, but sometimes there are not enough textbooks or teaching and learning materials and poor infrastructure which influence the implementation of the new curriculum. According to Johnson (2012), this kind of situation may deter the attainment of the national goals as teachers' understanding of the new curriculum may not be as well articulated as was planned in the policies. In support, Kelly (2009) asserts that many questions arise with the implementation of

new curricula, such as: Who designs the curriculum? Are teachers involved in the curriculum design? Hence, this study investigated the roles in curriculum design of Namibian senior primary school teachers in the Khomas region and the influence that such teachers have on the curriculum design.

1.4 Research questions

The research questions for this study are as follows:

1. What are the roles and responsibilities of senior primary school teachers in the Khomas region in curriculum design?
2. Why is it important to involve senior primary school teachers in the Khomas region in curriculum design?
3. To what extent are senior primary school teachers in the Khomas region influential in curriculum design?
4. What challenges are faced by senior primary school teachers in the Khomas region in exercising their roles in curriculum design?
5. Which strategies can be employed to enable the effective participation in curriculum design of senior primary school teachers in the Khomas region?

1.5 Significance of the study

This study provides a comprehensive understanding of the important roles and responsibilities of senior primary school teachers in national curriculum design. The research findings of this study will be supportive to curriculum developers and the

Ministry of Education in recognising the important roles and responsibilities of senior primary school teachers in curriculum design, as well as considering the need to involve more of them. Furthermore, the study will help the educational stakeholders to familiarise themselves with the challenges faced by senior primary school teachers during the process of curriculum design and consider the type of support that they can provide. The research is also important in filling a knowledge gap by investigating specifically the roles and responsibilities of senior primary school teachers.

Again, this study is significant because its results determine whether or not Namibian senior primary school teachers are involved in the development of the curriculum. Thus, the findings could serve as a source for further action. In addition, this research will create awareness and new knowledge regarding the significance of involving teachers in curriculum development in the Namibian context. The Namibian National Curriculum for Basic Education articulates that the greatest challenge of curriculum reform is in its implementation, and urges teachers to take ownership and implement it with commitment (MoEAC, 2015). Therefore, this research provides insight into how involving teachers in the development of the curriculum could contribute to the effectiveness of its implementation in Namibia and narrows a gap that might exist between the prescribed curriculum and actual classroom practice. Moreover, it can encourage future researchers to investigate areas that have emerged from this research.

1.6 Limitations of the study

In carrying out the study, the willingness regarding the participation of respondents was a major constraint, as some participants were not willing to be voice-recorded, and, consequently, it led to participants withdrawing from the study. Usually, when participants wanted a break, questioning them became a burden, thus resulting in them not providing sufficient or incomplete information. To curb this problem, the interviews were kept as short as possible, but still acquired all the needed information. The study was also constrained during the data gathering process and the construction and planning of the interviews. Furthermore not all intended respondent because some of them were busy or participants were just not willing to participate at all.

1.7 Delimitations of the study

The research was conducted in the Khomas region only. Furthermore, this study was limited to senior primary school teachers in the Khomas region; therefore, the sample is not large enough for the findings to be generalised to Namibia teachers at large.

1.8 Definition of terms

Curriculum - It is a document that guides schools on the way to organise the teaching and learning process, and provides a clear outline to ensure that there is consistency in the delivery of the curriculum in schools throughout the country (Johnson, 2012).

Curriculum design - It is a term which is employed to understand how people learn, as well as a consideration of the principles and models of design which include alignment with learning outcomes, activities and assessments (Fullan, 2010).

Curriculum development - It is the organised preparation of whatever is going to be taught in schools at a given time in a given year. Curricula are official documents, serving as guides for teachers and made obligatory by regional and ministerial departments (Fullan, 2010).

Curriculum implementation - This entails putting into practice the officially prescribed courses of study, syllabi and subjects in schools. In other words, it is the process that involves helping the learner to acquire the intended knowledge and experience (Johnson, 2012).

1.9 Summary

In this chapter, the study was introduced by covering the following: the background, statement of the problem, research questions, as well as the significance, of the study. It is against this background of the study to investigate the roles of senior primary school teachers in the Khomas region in the national curriculum design and development in Namibia was carried out.

Chapter Two outlines the theoretical framework underpinning this study. Furthermore, relevant literature was employed to clarify curriculum development as more detailed aspects and concepts presented by other researchers were discussed.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature about the roles and responsibilities of senior primary school teachers in curriculum design related to the study. According to Gay (2011), the purpose of a literature review is to determine what has already been done that relates to the topic. There are several reasons why the literature review was conducted, namely, to ascertain the relevance of the topic in relation to the identified research problem, examine the theory which informs this study, identify the gaps and try to find ways to fill them, identify new ideas and approaches that help in the process of developing the research and evaluate and complement the new findings with those already known (Gay, 2011). The study consulted books, journals, the internet, related literature researches, primary sources, education policy documents, articles and newspapers.

The discussion of the related literature is divided into different sub-sections, such as the theoretical framework on which the study was based, an overview of the term curriculum, curriculum design as a concept, curriculum design as a process, stakeholders of curriculum design, teachers' perceived roles in curriculum design, curriculum design in Namibia and, finally, the challenges of curriculum design.

2.2 Conceptual framework

In investigating the roles of Namibian senior primary school teachers in curriculum design, the study employed Wiggins and McTighe's (1998) conceptual framework, *Understanding by Design*. *Understanding by Design* or *Backward Design* operates

mainly in three stages: the teacher should be involved in curriculum design, he or she should be familiar with the design and the curriculum content, and teachers' understanding of the curriculum is also important in the learning and teaching of learners. Wiggins and McTighe (1998) state that curriculum designers seldom consider the full potential of teachers as co-designers of curriculum materials. Traditionally, curriculum designers view teachers as either transmitters of the intended curriculum or as active implementers of the curriculum materials. The conceptual framework was used to guide the study because it places significant emphasis on the importance of teachers' involvement in curriculum design. As mentioned earlier, teachers play different roles and responsibilities in curriculum design, hence the involvement of teachers in curriculum design is crucial.

According to Wiggins and McTighe (1998), designers may seek teachers' input during the formative stages of the development project and ask for feedback during implementation, but this assumes that teachers merely play a supportive role in the educative process. Hence, Wiggins and McTighe (1998) take an opposite view by assigning solely to teachers the role of curriculum developers. Moreover, they state that, in this role as co-designers, teachers act as decision-makers who operate in the complex learning context of the classroom to co-create the enacted curriculum with the learners and the curriculum materials.

According to Johnson (2012), curriculum design can be challenging; therefore, the involvement of all educational stakeholders, especially teachers who are directly involved in learner instruction, play a vital role in successful curriculum design. In line with this, Carl (2009) states that, without doubt, the most important person in the

curriculum implementation process is the teacher. Carl (2009), furthermore, argues that good teachers support better learning because they are most knowledgeable about the practice of teaching and are responsible for introducing the curriculum in the classroom. Hence, senior primary school teachers' knowledge, experiences and competencies are central to any curriculum design effort.

The teacher involved in curriculum design has many roles and responsibilities. Teachers want to enjoy teaching and watch their learners develop interests and skills in their areas of interest. The teacher may need to create lesson plans and syllabi within the framework of the given curriculum, since the teacher's responsibilities are to implement the curriculum to meet learners' needs (Carl, 2009). Many studies support the empowerment of teachers through participation in the curriculum design. For example, Fullan (2010) found that the level of teacher involvement at the centre of the curriculum design led to the effective achievement of educational reform. Therefore, a teacher is an important factor in the success of curriculum design, as well as the steps of implication and evaluation. Handler (2010) also advocates that there is a need for teacher involvement in the designing of the curriculum because teachers can contribute by working collaboratively and effectively with curriculum developers and specialists to arrange and compose materials, textbooks and content relevant to the subject areas. Therefore, teacher involvement in the process of curriculum development is important to align the content of the curriculum with learners' needs in the classroom.

2.3 An overview of the term, curriculum

It is generally believed that the main purpose of providing school education is to change the behaviour of the recipients, as well as to provide access to culturally-valued knowledge and to become more knowledgeable in general (Johnson, 2012). According to Mass (2013), learners who have undergone behavioural change will display higher skills in understanding concepts and performing activities, as well as show positive changes in their attitudes. These experts also argue that this change of behaviour through schooling can only be made possible with the existence of a structured curriculum.

The definition of the word, curriculum, has been a source of contest all along. As argued by John Franklin Bobbit in Kelly (2009), in one of the earliest works on the subject (*The Curriculum*), the term originated from the chariot tracks of ancient Greece. According to Kelly (2009), the Latin term *currere* (to run or proceed) was later adopted to represent such running as a race that was compared to following a curriculum. Learners in a school setting were thus compared to a group running a course of action and experiences by means of which they would transit to adulthood in their society. Kelly (2009) asserts that Bobbit went further to include in his definition the entire scope of formative actions and experiences taking place in and out of school, including unplanned and undirected experiences. Indeed, one can argue that school activities today do not differ much from participating in a race. The winners of the race will be those who pass successfully the barriers mounted on the way, namely the various subjects, as well as the tests and examinations instituted by the education system (Mass, 2013).

The meaning of curriculum has continued to widen to the extent that a variety of other meanings of the term were adopted by both the general public and professionals. There are those who consider it to be the teaching and instruction offered to learners; however, there are also others who only associate it with documented instructions sent to schools by authorities for the teachers to translate into meaningful knowledge (Kelly 2009). Interestingly, even teachers at times seem to differ in what they refer to as a curriculum. Marsh (2014), for example, asserts that some of these teachers take curriculum to include the lessons to be covered in a day, the skills supposed to be imparted to the learners and the plans developed in order to attain class and school objectives.

With the progressive movement in the USA in the early 1900s, consensus was struck on two aspects of curriculum, namely planning and provision (Marsh, 2014). In other words, the consensus was that a planned curriculum should be selected from the society's culture and the means of delivery should be tailored to fit the prevailing cultural practices. Besides, the planned curriculum needs were also to take cognisance of learners' interests, values and abilities. The above line of argument has led to three distinctions of the term, curriculum, namely the intended (government prescriptions contained in different subject syllabi), the enacted (what actually goes on in the classrooms) and the attained curriculum (what the learners actually learn) (Kelly, 2009). This distinction underscores the importance of what is to be taught and how. Therefore, the content meant for learners' learning and the methods of delivery need not be ad-hoc; rather, they should be well-thought through and organised procedures to guarantee the achievement of goals (Marsh, 2014).

Mass (2013) claims that a curriculum provides a framework for learning. He, furthermore, suggests that the term, curriculum, includes everything that can be learned and which has the most value. It also relates to the educational needs of the learners, as well as to the social and political context in which teaching and learning takes place. In its broadest sense the term, curriculum, includes the ‘how’ and the ‘what’ of learning which occurs formally and informally, inside, as well as outside educational institutions. Informal learning, also known as the hidden curriculum, comprises what learners learn from the way the enacted curriculum is organised and delivered. However, according to Kelly (2009), learners and teachers are not included in the planning; thus, they are usually not involved in the designing of the curriculum that they employ in schools.

Kelly (2009) posits that a curriculum can be seen as a means of achieving specific educational goals and objectives. In this sense, the curriculum can be regarded as a checklist of desired outcomes. Woody (2012) argues that the term, curriculum, can be understood as a process of selecting courses of study or content. In other words, a curriculum either describes or prescribes the content and goals of formal instruction. Stenhouse (1975) claims that a curriculum can be seen as a plan or a blueprint meant for implementing educational activities systematically. In this vein, a curriculum is viewed as a plan for teaching or instruction with a specific focus on content.

Brady (2005) defines the curriculum as a document that outlines a course programme that is written on a piece of paper. Thus, a curriculum is associated with the official written programmes of study published by the ministries or departments of education

and local authorities or boards of education. The presentation of the document purports to provide teachers with a model to follow in the curriculum process. In this case, the curriculum is seen synonymous with the term, “syllabus” (Handler, 2010), instead of regarding curricula narrowly as formalised classroom content or prescriptive learning objectives. Marsh (2014) posits that a curriculum is an interrelated set of plans and experiences that a learner completes under the guidance of the school. Marsh (2014) continues that the relationship between “plans and experiences” is intertwined, where “plans” are attributed to planned curricula in advance and “experiences” refer to unplanned happenings in the classroom. In view of this, the study defines curriculum as the planned interaction of learners with instructional content, materials, resources and processes for evaluating the attainment of educational activities.

From the definitions above, it is evident that the word, curriculum, has various meanings based on different perspectives and context. Therefore, the study opted to view a curriculum as a combination of all these definitions as the aforementioned experts view it, with specific emphasis on a Namibian definition. According to the Ministry of Education, Art and Culture (2015, p.01), a “curriculum is an official policy for teaching, learning and assessment that gives direction to planning, organizing and implementing the teaching and learning process.” It, furthermore emphasises that a curriculum plans for all the experiences that learners encounter under the guidance of the teacher and the direction of the school. The study views a curriculum as a process which entails the provision of instructional strategies and methods to be employed in a pedagogical manner, to accomplish curriculum objectives and to provide quality education to all the learners. The curriculum aims

both to preserve what is considered valuable and promote change for the future of the society (Kelly, 2009).

Different countries have their own national curriculum with different aims and objectives that are formulated, based on the country's needs and demands, as well as on global economic competitiveness (Handler, 2010). The national curriculum stipulates a set of subjects to be taught at each phase with prescribed time allocations for their delivery, indicating the number of hours that each has to be taught (Masila, 2007). In some countries, such as the United Kingdom, Namibia, South Africa and Ghana, the governments perceive subjects, like English, Mathematics and Science, as the core knowledge that children need to acquire (Carl, 2009). Therefore, these governments believe that these subjects have to be placed at the heart of the learners' learning in state schools. According to Kelly (2009), the curriculum has a large legal basis as it undergoes numerous reviews and revisions. Thus, developing and reforming the curriculum is a very demanding process that requires much time. Furthermore, Kelly (2009) states that the curriculum is not set in stone, but is a social construct which consists of a selection of the subject content and other aspects decided upon by curriculum developers.

Oghuvbu (2011) states that the curriculum in a school context can, furthermore, be viewed as the totality of a systematically planned process of pedagogy based on the aims and objectives of the educational policy of a specific country. It describes the core aims and objectives for education regarding the way in which the teaching process should be conducted. It, furthermore, consists of academic- and subject-

based, as well as non-academic or other curriculum, programmes. Primary school curriculum subjects are academic, curriculum-based for all subjects/content designed for primary school level (Alavi, 2016). Furthermore, some studies reveal that, during the formulation of the primary school curriculum, the curriculum developers consider essential, core competencies, such as creativity, critical thinking, comprehension, cross-cultural communication and citizenship (Kelly, 2009).

2.4 Curriculum design as a concept

According to Ramparsad (2009), curriculum design is a term employed to describe the purposeful, deliberate and systematic organisation of the curriculum in a school, class or course. In other words, it is a way for teachers to plan instruction according to the needs of the designed curriculum. When curriculum developers and teachers design the curriculum, they identify what will be done, who will do it and when it will be done. Handler (2010) states that curriculum developers and teachers design a curriculum with a specific purpose in mind; thus, the ultimate goal is to improve learners' learning. However, there are other reasons to employ curriculum design. For example, designing a curriculum for middle school learners, with both elementary and high school curricula in mind, helps to ensure that learning goals are aligned and complement one another from one stage/Grade to the next (Handler, 2010). If a secondary school curriculum is designed without taking prior knowledge from primary school to future learning in high school into consideration, it can create real problems for the learners.

In Namibia, the national curriculum is designed based on different phases in the education system. Each subject in each Grade comprises different basic competencies which are a continuation of the previous (Ministry of Education, Arts and Culture, 2015). The main curriculum objectives in the junior primary school curriculum are devised to prepare learners for formal education; thus, learners are taught how to develop communication, concept formation and motor and social skills. From Grades 1 to 3 the curriculum is designed based on four key areas: “literacy, numeracy, broad knowledge of the immediate environment of the learner and personal health” (MEAC, 2015, p.18). Here, the curriculum aims to familiarise learners with information and communication technology as a primary tool for the learning process.

Furthermore, the teaching and learning process takes place through the medium of the mother tongue or predominant local language, as learners learn how to read and write. Besides that, the senior primary phase continues on a broad base, consolidates the foundation laid at the junior primary phase and develops it further. The curriculum is, thus, designed for learners to create irreversible literacy and numeracy learning skills and basic knowledge in all the key learning areas (Ministry of Education, Arts and Culture, 2015). Each school subject is designed considering the different basic competencies and learning objectives which form a continuation to the next Grade.

Similarly, the primary school curriculum of Malaysia is formulated based on the six pillars of knowledge, skills and value domains which are essential to human

physical, mental, social creative and critical thinking. These pillars are: (a) communication, (b) spirituality, attitudes and values, (c) humanity; (d) science and technology; (e) physical development and aesthetics; (f) personal skills (Ministry of Education, Malaysia, 2014). Consequently, the Malaysian primary school curriculum enhances creativity, embraces diversity and provides an opportunity to learners to integrate the knowledge, skills and values learned in the classroom and during extra-curricular activities (Kelly, 2009). Therefore, to attain these curriculum objectives and aims, it requires positive coordination and sufficient teaching and learning resources through effective supervision. According to Oghuvbu (2011), in schools support and encouragement are the most effective supervision tools that enhance the professional growth of teachers to develop appropriate teaching methods, techniques and procedures which will improve their overall performance and efficiency.

Ramparsad (2009) argues that the curriculum provides essential roles in school, as it guides teachers on the way to go in the teaching and learning process. Thus, the actual implementation of the curriculum depends on the teachers' involvement in curriculum development, as well as in the school's supervision. A study conducted by Pietarinen (2017), based on the large-scale curriculum reform in Finland, indicates that the curriculum mostly describes the general goals, core aims and objectives of education. This includes the teacher who will teach a specific subject to a specific Grade, as well as when it will be taught. Furthermore, it directs and guides teachers on the way to implement the subject content and learning objectives to be included in the lessons. Vitikka (2009) adds that curriculum knowledge content reflects the didactic tradition and the pedagogical approach adopted emphasises the integration of subjects and a coherent learning experience, as well as human growth.

Kelly (2009) describes the design of a curriculum as a means of curriculum reform. Hence, a school curriculum is reformed due to developments in the country and changes in the education system. According to McCulloch (2005), curriculum reform is a vital component of educational innovation. Therefore, the curriculum is reviewed and revised to remove the old content and update the existing educational curriculum in response to profound and multi-faceted changes occurring in the world today. Furthermore, Badran (2011) argues that a curriculum is reformed to address societal and individual needs. For example, in Namibia, the Ministry of Education reformed the curriculum soon after its independence, where English became the new medium of instruction, replacing the previously Afrikaans.

The primary purpose for curriculum reform is to provide basic education to every Namibian child and redress the past inequalities and injustices through the four primary goals, which are access, equity, quality and democracy (Ministry of Education, 2004). Furthermore, the national curriculum was reformed in 2015 to ensure that it remains relevant to the challenges that Namibia faces and strengthens the quality of education (Ministry of Education, Arts and Culture, 2015). Therefore, this confirms the views of Bantwini (2010) that curriculum reforms are mainly intended to bring new changes in the education system and the classroom during the pedagogical process.

Education reform is viewed as a mechanism for solving educational problems and redressing educational injustices. Hence, prior researchers indicate that the reforming of the curriculum provides a central tool for school development (Kelly, 2009). On

the other hand, curriculum changes advocate the enquiry-learning approach which indicates active pedagogy and the construction of new knowledge and meanings. Rogan and Grayson (2003) suggest that curriculum reform has to be accompanied by a comprehensive plan of the way in which the new concepts and new ideas will be implemented, based on the resources in the classroom or at the school. In so doing, it will reduce the wasting of resources and avoid discouraging the experience of the teachers. Hence, curriculum reform can be successfully implemented based on teachers' ownership of their knowledge and skills regarding reform ideas.

The efficacy of the curriculum reform requires commitment from all the curriculum designers, as well as active roles of teachers, in every step. Therefore, Rogan and Grayson (2003) plead for policymakers and curriculum developers to focus more on "how" to bring the new curriculum into practice than just on the "what" of enacting curriculum policy regarding the desired educational change. In so doing, it will avoid a gap between the curriculum that is developed and that which is actually implemented. Teachers need to have up-to-date knowledge and skills to be able to design, implement and deliver the curriculum reform very well. According to Vitikka (2009), the success of curriculum development depends on the roles of teachers in the developmental process since they are the implementers and key contributors to educational changes and quality education. Hence, changes in curriculum reform always have to be situated in the society, culture and education system of the country in which the reform takes place (Kelly, 2009).

In addition, Ramparsad (2009) asserts that there are three basic types of curriculum design which are subject-, learner- and problem-centred designs. A subject-centred curriculum design revolves around a particular subject matter or discipline. For example, a subject-centred curriculum may focus on English. This type of curriculum design tends to focus on the subject rather than the individual. A subject-centred curriculum design often revolves around what needs to be studied and how it should be studied. A core curriculum is an example of a subject-centred design. This type of curriculum is standardised (Ramparsad, 2009). Teachers are given a set or list of aspects that need to be studied along with specific examples of how they should be studied. The primary drawback of a subject-centred curriculum design is that it is not learner-centred. In other words, a subject-centred curriculum design is less concerned with individual learners' needs and learning styles when compared to other forms of curriculum design, such as a learner-centred design. According to Handler (2010), this can cause problems with learners' engagement and motivation, and may even cause learners to fall behind in class because it concentrates too much on the content rather than the needs of the learners.

Handler (2010) defines a learner-centred curriculum design as one that revolves around the learner. It takes each individual's needs, interests and goals into consideration. In other words, it acknowledges that learners are not the same and should not be subjected to a standardised curriculum. This type of curriculum design is meant to empower learners and allow them to shape their education through choices. Furthermore, Handler (2010) argues that a learner-centred curriculum is differentiated and often affords learners the opportunity to choose assignments, learning experiences or activities; this, in turn, motivates the learners and helps them

to stay engaged in the material that they are learning. The major drawback of this kind of curriculum design is that it puts much pressure on the teacher to create instruction and find materials that are conducive to each learner's learning needs. This can be very difficult for teachers due to time constraints or even the lack of experience or skills. It can also be difficult for teachers to balance learner wants and interests with learners' needs and required outcomes.

According to Johnson (2012), a problem-centred curriculum design is also a form of learner-centred design. It focuses on teaching learners how to look at a problem and produce a solution. This is considered an authentic form of learning because learners are exposed to real-life issues which help them to develop skills that are transferable to the real world. A problem-centred curriculum design increases the relevance of the curriculum and allows learners to be creative and innovative while learning. The major drawback to such a curriculum design is that it does not always take learners' differing learning styles into consideration.

2.5 Curriculum design as a process

According to Glickman, Gordon, Gordon and Ross-Gordon (2013), a curriculum can be defined as a plan that directs teacher instruction and utilised in education. Many districts and schools employ a tool, called a curriculum guide, which is designed to help teachers pace their lessons (Glickman et al., 2013). However, a curriculum and curriculum guide do not come out of nowhere. In other words, time and energy go into the creation of such documents. The process of creating a curriculum is better known as the curriculum design. Hence, curriculum models are employed in order to

create a comprehensive curriculum and curriculum guide. Fullan (2010) asserts that a model determines the type of curriculum utilised: it encompasses educational philosophy and the approach to teaching and learning methodologies. He states that there are countless models of curriculum design. Many of them blend several styles; however, there are two main models of curriculum design which are Tyler's and Wheeler's Models.

Tyler's model for curriculum design is based on the following questions: What educational purposes should the school seek to attain? What educational experiences can be provided that are likely to attain these purposes? How can these educational experiences be effectively organised? How can we determine whether these purposes are being attained? (Fullan, 2010). The model is linear in nature, starting from objectives and ending with evaluation. In this model, evaluation is terminal. It is important to note that objectives form the basis for the selection and organisation of learning experiences, as well as the basis for assessing the curriculum and objectives that are derived from the learners, contemporary life and subject specialists. To Tyler, evaluation is a process by which one matches the initial expectation with the outcomes. Tyler's model for curriculum design is a product model since the intended outcome (product) of the learning experience is prescribed beforehand.

According to Fullan (2010), Wheeler's model for curriculum design is an improvement on Tyler's model. Instead of a linear model, Wheeler developed a cyclical model. Evaluation in Wheeler's model is not terminal. Findings from the evaluation are fed back into the objectives and the goals which influence other stages. Wheeler contends that aims should be discussed as behaviour referring to the

end product of learning which yields the ultimate goals and aims as formulated from the general to the specific in curriculum designing. This results in the formulation of objectives at both an enabling and a terminal level, and content is distinguished from those learning experiences which determine that content. Wheeler's model for curriculum design is a product model since the selection of learning experiences comes before the selection of content; thus, it specifically gears the content in the curriculum to learners.

Curriculum design is a continuous and recurring process. Oliva (2009) defines curriculum design as a comprehensive and multi-dimensional process, where the curriculum is planned, designed and implemented in the classroom. In support of Olivas' definition, Lunenburg (2011) adds that during the curriculum design process, educational stakeholders plan, implement and evaluate the curriculum, and that ultimately results in curriculum design. According to Johnson (2012), curriculum design identifies the elements of a curriculum, states what their relationship is to one another and indicates the requirements and principles of the organisation for the administrative conditions under which it is to operate. Kelly (2009) observes that curriculum design as an intentional process or activity directed at (re)designing, developing and implementing curricular interventions in formal or corporate education.

However, according to Carl (2005), curriculum design is an umbrella and continuous process in which structure and systematic planning methods figure strongly from design to evaluation. Therefore, curriculum development can also be seen as a

process which involves making the necessary choices about who to participate in the decision-making process regarding the curriculum, when to participate and how it will proceed (Adentwi, 2005).

Curriculum design has many interpretations and definitions. Hence, for the purpose of this study, all the above definitions are accepted since they are all similar and consist of the same components of the curriculum development process, namely, planning, designing, dissemination, implementation and evaluation. The national curriculum is developed differently, based on each individual country. Each state has diverse programmes, policies and institutions which are involved in supervising and guiding the curriculum developmental process (Khan & Law, 2015). McKernan (2007) indicates the three different approaches employed in designing the curriculum as top-down, middle-up and bottom-up. In the top-down approach, the administrator determines the curriculum for teachers. While, in the middle-up approach, administrators provide time and resources for revisions determined by the school and teachers. Lastly, in a bottom-up or “grassroots” approach, administrators believe that the curriculum can be revised only by those who teach it.

According to Abudu and Mensah (2016), variations in the planning and development process are due to the approaches mentioned above and preferences of the nations. For instance, some countries, such as Ghana and Burkina Faso, prefer a centralised (top-down) curriculum design where there is less interaction between curriculum planners of the system and the classroom. Other countries, like Australia and the United Kingdom, prefer a decentralised (bottom-up) curriculum where teachers are active during the process of curriculum development (Australian Curriculum,

Assessment and Reporting Authority, 2010). However, when the curriculum is designed centrally, teachers are not fully involved in the process. Therefore, they are only ordered or instructed to implement the curriculum, while in a decentralised curriculum teachers are fully engaged in all the curriculum phases (Chitate, 2005).

Based on the Finnish National Core Curriculum (2016), the national core curriculum is centralised as the Finnish National Board of Education, a state agency, invites all the education stakeholders to participate in the developmental process. In other words, curriculum development can be conducted locally, regionally or nationally when curriculum developers, such as educational officers, national specialists, teachers and educational stakeholders are responsible for planning and developing the curriculum (Mass, 2013). Thus, curriculum developers are required to design an appropriate curriculum which is of good quality, clear, coherent and consists of the needs of the learner-centred approach and enhances collaborative learning. Furthermore, it has to state clearly what would be taught by the teachers and what learners will need to learn to acquire knowledge and skills at each stage of schooling (Kelly, 2009). Furthermore, the curriculum developers are urged to ensure that all government schools have the same curriculum with the same subject content and the same structure (Dogan, 2012).

Most importantly, teachers and other curriculum developers are expected to draw up the aims and objectives of the curriculum and point out the problems that need to be tackled during the teaching and learning process. This assists in ensuring that the curriculum is developed in a way that it serves the needs of the learners, the society

and the nation at large. However, Mass (2013) argues that there is no need to limit the school curriculum to the content to be taught, but rather to expand to situations that allow learners to learn how to live together and with others in order for them to learn-to-be.

The process of curriculum development and reform goes through several stages, and it is undertaken after every specified period which is defined by the educational institution of the different nations (Kahn & Law, 2015). For instance, in the Namibian education system, the school curriculum is reformed and reviewed after every five years and, if needs be, a new curriculum could be implemented. Once the curriculum is well designed and revised, it will be distributed to schools for implementation and evaluated over a certain period. Thus, Kobiah (2016) advocates for the need to evaluate a curriculum empirically, with the aim of realising and achieving the intended learning goals and objectives. The curriculum reviews and redesign have to be undertaken as necessary. Additionally, Olivia (2011) urges that, when planning and designing a curriculum, the designers need to make use of different stages, such as analysis, design, development, implementation and evaluation activities, which are operationalised in specific tactics (Kelly, 2009).

On the other hand, during the planning process, it is essential for curriculum developers to consider curriculum mapping. Curriculum mapping plays a significant role in eliminating differences between the planned and taught curriculum, as well as the curricular elements, such as the content, learning experience, objectives and goals (Johnson, 2012). Furthermore, curriculum mapping is a practical system employed to

enlighten the standard of the academic content that contributes to the development of the vision and mission statements of the schools (Hale, 2008). Recent studies reveal that curriculum mapping is a new and innovative model in the curriculum development process and includes components, such as curriculum planning, teacher-teacher collaboration, technology integration and reflective inquiry.

2.6 Stakeholders in curriculum design

According to Ramparsad (2009), designing a curriculum requires the input of different stakeholders, such as teachers, school principals, parents, community members, learners, district administrators and school boards. The role of the teachers includes defining different course components that are considered relevant in line with the latest technological development in the education sector. Handler (2010) states that, in addition to developing the curriculum, teachers help in executing the findings regarding the curriculum design. Teachers contribute continuously to the development of school curricula by developing periodic courses, teaching plans and giving consideration to the special needs of the learners.

Therefore, compiling a good curriculum without the input of teachers will not enable the achievement of learning objectives and goals. The role of school administrators in the curriculum design cannot be underestimated since they are the people who monitor the implementation of the curriculum. In addition, they employ teachers (in the case of private schools). Furthermore, they are responsible for purchasing learning materials, an essential requirement in curriculum implementation. Ramparsad (2009) argues that parents, on the other hand, support and influence the

implementation of the curriculum through financial resources, such as the payment of school fees. In addition, parents may help in monitoring and evaluating the implementation of the curriculum by keeping a close check on the lessons learnt in school and monitoring the learners' homework.

Tasdemir (2010) asserts that professionals, such as psychologists and social workers, may offer a contribution to the various ways of dealing with learners with special needs. For instance, professional counsellors may provide various useful options in dealing with learners of foreign origin or those with disabilities. Furthermore, community members can assist the school administration in the implementation of the curriculum by co-operating and providing the necessary resources that may not be available in the school setting, but are found in the community. In addition, community members can also volunteer and act as school board members. Other stakeholders in the curriculum design include the government and the professional regulation commission that provide licenses to graduates of different colleges and universities. Therefore, professionals and community members can source information on curriculum design and progress from government reports on the performance of schools or by enquiring from teachers, learners and school administrators (Tasdemir, 2010).

2.7 Teachers' perceived roles in curriculum design

Teachers have to know the objectives, content, teaching methods and techniques, as well as the approaches to evaluation well to be able to apply these in the teaching and learning process in order to manage the requirements of the current curriculum.

Gurol (2014) states that, regardless of how well the curriculum is developed, it will not achieve its objectives successfully unless teachers who put the curriculum into practice fulfill their tasks efficiently. Consequently, teachers as curriculum implementers have to be trained in implementing curriculum principles, implementation approaches, objectives, evaluation and technical competencies (Tasdemir, 2010).

Teachers play a major role in the curriculum implementation process and have responsibilities to practice the developed curriculum in accordance with its principles. Teachers are seen not only as active curriculum implementers but also as a primary element giving feedback about the current curriculum and how to improve it. Because, no matter how well a curriculum is developed with ideal dimensions, if it is not applicable, it cannot be regarded as effective. For this reason, an ideal curriculum will only achieve its objectives if it is implemented effectively. Therefore, teachers are expected to control the curriculum on at least the implementation level by mastering the principles of teaching, objectives, content, teaching-learning approaches, educational technologies and the evaluation process. Therefore, teachers contribute to the curriculum design process with their practical experiences (Tasdemir, 2010) and knowledge of the curriculum, as well as giving feedback regarding the implemented curriculum. A qualified and effective curriculum design process is possible with teachers' active involvement in the process (Handler, 2010).

Tasdemir (2010) emphasises the role of teachers as identifiers of objectives in the curriculum development process, which is crucial for the success in curriculum implementation. Oliva's statement (2011, p. 35), "just as the curriculum leader works primarily in one realm (curriculum) of the continuum called curriculum-instruction and then secondarily in the other realm (instruction), so too the teacher works primarily in both instruction and curriculum" emphasises the role of teachers in the curriculum development process. Moreover, Tasdemir (2010) adds that teachers and curriculum specialists all engage in activities to improve both the curriculum and instruction. In that case, it can be inferred that their roles are similar. This implies that teachers and curriculum specialists can be the same people. Tasdemir (2010) states that the teacher's role as a curriculum developer includes implementing the designed curriculum in the classroom. For this reason, teachers are seen as the most important element in the curriculum development process which begins by establishing instructional problems and ends with the suggestion of solutions.

Handler (2010) asserts that teachers are important elements in the curriculum development process. Oliva (2011) also emphasises that today teachers' roles in curriculum development are growing. Oliva, furthermore, adds that teachers have an important role to play in the curriculum development process because they know the learners' interests and needs, can adapt the curriculum to regional circumstances and can offer solutions. Stenhouse (2007) underlines that the most convenient curriculum will be developed with the help of teachers' teaching experiences. In other words, if teachers are involved in curriculum development, it will be much easier for them to implement it.

Teacher participation in the curriculum design process is considered essential and also stated by many researchers. Ramparsad (2009) suggests an approach to curriculum development in which teachers are assigned the roles of both developers and implementers. Moreover, there are two types of studies, one which focuses on teachers' role as curriculum developers in their own classes and the other on the extent of teachers' role as developers from classroom to province or state. In one research study conducted by Young (1985), teachers collaborated in curriculum guideline committees to prepare guidelines, but some teachers desired greater participation in the curriculum development process, while many were ambivalent towards it. The reasons for their ambivalence towards participation in curriculum development were, as stated by teachers, their low position in the educational hierarchy which decreased enthusiasm over time (Tasdemir, 2010).

According to Handler (2010), the factors motivating teachers to participate in the curriculum development process include taking professional responsibility, a sense of importance, curiosity about the curriculum development process and the desire to be involved in decision-making. Interacting with other educators, influencing curriculum decision, being informed about the field and gaining access to materials are some of the elements that make teachers satisfied with their participation in the process of curriculum development (Johnson, 2012).

Moreover, Johnson states that the benefits teachers gain from participating in curriculum development are stated as improvement in teaching, skills in curriculum development, enthusiasm for and self-confidence in curriculum design. Oliva (2011) asserts that teachers who take part in the curriculum development process make

professional decisions regarding the selection of objectives, the development and selection of materials, instructional strategies and the employment of measurement and evaluation techniques. Johnson (2012) adds that a master teacher, responsible for curriculum design at school level, has a broader knowledge of the goals of schooling, extensive abilities in curriculum development, skills in curriculum design and teaching strategies. Handler (2010) reports on teachers' improved skills and their positive feelings about curriculum development after having been involved in the curriculum development process.

Teachers' involvement in the process of curriculum design helps to build their competencies in implementing externally developed curricula and making decisions autonomously. While teachers are considered as curriculum developers, their roles include developing themes, learning activities and exploring resources for teaching and learning. Handler (2010) states that teachers can participate in curriculum development in two ways, one of which is their participation in the external curriculum development process and the other one is their involvement in the continuous adaptation and development of materials offered in the curriculum. The Ben-Peretz model referenced by Handler (2010) asserts that teachers should be involved in decision-making in terms of the content, learning objectives and materials to be utilised for a given topic regarding. In his model, teachers successful in their previous teaching are selected to take part in curriculum development.

The criteria for teacher selection in the curriculum design process are determined by their success in previous teaching and their knowledge of the subject matter. After the selection of teachers, firstly, they are asked to make suggestions on curricular

problems, subject matter and teaching strategies to be included in the new curriculum. At the second decision-making stage, teachers construct curriculum materials in collaboration with curriculum development experts. At another stage, content, instructional strategies and teaching activities that should be included in the curriculum are decided on and the first trial is conducted by teacher-developers in their own classes. Then, as a last stage, instructional strategies and teaching activities at formal trials are evaluated by all teachers.

Remillard (2015) also offers a model for teachers in curriculum development. The model is composed of three cycles in which teachers make decisions on curriculum development. These cycles are called design, construction and curriculum mapping. The design cycle includes the design of learning activities. The construction cycle involves the implementation of the learning activities in the classroom. The curriculum mapping cycle involves making decisions on the organisation and content of the enacted curriculum. Despite the significance of the teachers' active involvement in curriculum design and because of their roles in organising teaching, adopting the materials offered in the curriculum, evaluating and re-designing the instruction, teachers are, however, still considered as not active in designing the curriculum. However, curriculum design might turn out to be futile without the teachers' active participation (Kelly, 2009).

Handler (2010, p. 67) suggests that "the effectiveness of educational research is bound to the fact that educational problems and solutions are determined by implementers and researchers". In another words, teachers are seen as vital partners

in curriculum development in terms of determining curricular problems and offering curricular solutions (Mass, 2013).

Marsh (2014) adds that success in teaching is bound to being competent in curriculum planning. Robinson (2009) emphasises that the teacher can hardly be expected to implement the curriculum effectively without participating in curriculum planning. Therefore, teachers are expected to have curriculum development competencies. To determine teachers' perceptions of their curriculum development competencies is significant for implementing or developing the curriculum effectively and determining the contributions of teachers to the curriculum development process. Moreover, the role of a teacher as curriculum developer has not been researched in depth in recent years. Despite the importance of teachers' participation in curriculum development, their participation in curriculum design studies is still limited (Handler, 2010).

In some countries, teachers are involved in the process of curriculum design. Particularly in Finland, teachers, learners and members of the community are among the curriculum panels that design the curriculum (Finnish National Board of Education, 2014). Notably, as indicated by the Organization for Economic Co-operation and Development (OECD, 2014; OECD, 2016), Finland has been among the top countries in the Programme for International Student Assessment. To specify, OECD (2014) and OECD (2016) indicated that most learners in Finland master the baseline level of proficiency in subjects, such as science, reading and mathematics, measured by the Programme for International Student Assessment (PISA). Therefore, the study assumes that teachers' involvement in the process of

curriculum development has a positive impact on the academic performance of the learners.

Similarly, Scotland has reformed its curriculum to ‘curriculum for excellence’ (CfE), from the previous practice top-down curriculum to a combination of both top-down and bottom-up curricula (Priestley, Minty & Eager, 2014). The same authors articulate that the CfE was implemented in 2010, driven by the prominence of perceiving teachers as the agents of change and as curriculum developers. Therefore, it can thus be assumed that teachers are perceived as curriculum developers in Scotland.

Although few studies indicate that teachers are involved in the process of curriculum development, numerous studies have shown that teachers, especially in Africa, are left out of the process of curriculum development (Maphosa & Mutopa, 2012; Oloruntegbe, 2011), despite the important ideas teachers could bring on board in the process of curriculum planning and development. In South Africa, teachers are omitted from the curriculum decision-making process and experience that the curriculum is inflicted on them (Carl, 2005). In Nigeria teachers are rarely involved in the process of curriculum development (Oloruntegbe, 2011). Similarly, in Kenya, the experiences and talents of teachers are merely utilised during the curriculum development process, and most teachers are only involved during the implementation stage (Kobiah, 2016). This subtopic of teachers’ involvement in the curriculum development process revealed in literature is articulated, based on the four stages of

the curriculum development process which are curriculum planning, development, implementation and evaluation.

2.8 Curriculum design in Namibia

A directorate in the Namibian Ministry of Education, Arts and Culture, NIED is responsible for designing the curriculum. NIED was established in 1990 as a curriculum development centre with the responsibility to spear-head basic education reform and development (Ministry of Basic Education, Arts and Culture, 1996). NIED has been an important ministerial organ for curriculum design and development in basic education, as well as the co-ordination of the continuing professional development of educators since Namibia's independence. The responsibilities of NIED include the designing and revision of the national curriculum policy documents, school curricular and syllabi, teacher's guides and training manuals, as well as the development of subject-specific teaching and learning materials, the evaluation of teaching materials for Namibian schools, small scale research to inform curriculum and syllabus revision and continuous professional development for curriculum implementation (www.nied.edu.na/accessed 15/06/18). Effective curriculum delivery is a principal indicator of quality, basic education, and teachers are the vehicles through which the curriculum is to be delivered (Handler, 2010).

2.9 The challenges of curriculum design

According to Handler (2010), designing a whole curriculum is a very complex task. The intended curriculum, captured in content standards, has to be organised and worked out in learning trajectories and educational activities. Designers have to work together as a team, building a shared view of learning and teaching. As this will be a challenge already, the educational activities will also be co-designed by teachers who play a central role in orchestrating the activities and guiding learners. Curriculum designers, therefore, have to communicate their intentions to the teachers and they have to anticipate the habits and possibilities of the community because they are stakeholders in curriculum design.

2.10 Summary

This chapter looked at the theoretical framework of the study. It gave an overview of the term curriculum and discussed curriculum design as a concept and a process. It looked at the stakeholders of curriculum design, teachers' perceived roles in curriculum design and curriculum design in Namibia. It concluded with challenges of curriculum design. The next chapter presents the research methodology of the research. It discusses the research design, population of the study, sampling procedures, research sample, research instruments, data collection procedures, data analysis and research ethics.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

According to Fraenkel and Wallen (2012), research methodology is the systematic, theoretical analysis of the methods applied to a field of study. It comprises the theoretical analysis of the body of methods and principles associated with a branch of knowledge. In general, research methodology is the research strategy that outlines the way in which research is to be conducted and, among others, identifies the methods to be employed.

In this chapter, the study focused on the methods and procedures which were employed to collect data for the study by looking at the research design, population of, and participants in, the study as well as the research instruments. It also discusses the data collection procedures and data analysis employed.

3.2 Research design

In order to gain an in-depth understanding of the roles and responsibilities of Namibian senior primary school teachers in curriculum design, the study employed a descriptive case study design. According to Cresswell (2015), a case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, when the boundaries between phenomenon and context are not clearly evident and in which multiple sources of evidence are utilised. In this research project, the descriptive case study investigated the contemporary, real-life

phenomenon by means of a detailed, contextual analysis of the roles and responsibilities of senior primary school teachers in curriculum design in Namibia. Fraenkel and Wallen (2012) state that case study research is a methodology which involves either a qualitative or quantitative approach. In this case, a qualitative approach to the case study was employed in order to investigate the roles and responsibilities of senior primary school teachers in curriculum design in the Khomas region.

Mugenda and Mugenda (2013) define a qualitative study as an inquiry process to understand a social or human problem based on building a complex, holistic picture with words, reporting detailed views of informants, conducted in a natural setting. Qualitative researchers attempt to collect rich, descriptive data in respect of a particular phenomenon or context with the intention of developing an understanding of what is being observed or studied. It, therefore, focuses on the views and understanding of individuals and groups regarding the world and how to construct meaning out of their experiences. The advantage of employing a qualitative approach in this research was that it provided a better understanding in depth and breadth of the topic at hand by examining the roles and responsibilities that senior primary school teachers play in designing the curriculum.

Qualitative research also focuses on description and interpretation. It may lead to the development of new concepts or theory or to an evaluation of an organisational process (Creswell, 2015). Cohen, Morrison and Morrison (2011) state that qualitative research has preference for logical analysis in controlling or accounting for

extraneous variables. Qualitative research was, therefore, appropriate for this study as it enabled it to determine senior primary school teachers' perceptions of their roles and responsibilities in curriculum design.

3.3 Population of the study

According to Cohen et al. (2011), a research population is any group of individuals who have in common one or more characteristic that are of interest to the researcher. In other words, it refers to the entire group of people, things or events of interest that a researcher wants to examine. The target population refers to a group of elements to which the researcher wants to make inference, the elements usually being persons, households, housing units and organisations (Creswell, 2015).

This research study targeted all senior primary school teachers in the Khomas region, as well as curriculum developers, including personnel from the NIED and Programme Quality Assurance (PQA). Therefore, the population of this study included curriculum designers from NIED, PQA personnel from the Ministry of Education and Namibian senior primary school teachers in the Khomas region (those who have participated previously in curriculum design).

3.4 Sampling procedures

Fowler (2009) defines sampling as the process of selecting a smaller group of participants to disclose eventually what a larger population might present if one asked every member of the larger population the same questions. In other words,

sampling is a process of selecting samples from a group or population to become the foundation for estimating and predicting the outcome of the population, as well as to detect the unknown piece of information (Cresswell, 2015).

Hence, the main objective of sampling is to achieve maximum accuracy in the researcher's estimation in a sample size and to avoid bias in the selection of the sample. This is important as bias can attack the integrity of facts and jeopardise the research outcome. Sampling techniques often depend on the research objectives/questions of a research study (Leedy & Ormrod, 2010). Generally, there are two types of sampling techniques that are widely deployed in research, namely, probability and non-probability sampling techniques. The participants of this research study were selected by utilising a purposive sampling technique.

According to Mertens (2009), purposive sampling is a non-probability sampling method and it occurs when elements/participants selected for the sample are chosen by the judgement of the researcher. In other words, purposive sampling, also known as judgment, selective or subjective sampling, is a technique in which the researcher relies on his or her own judgment when choosing members of the population to participate in the study. Hence, the decisions concerning the individuals to be included in the sample were taken, based on a variety of criteria which may include specialist knowledge of the research issue or the capacity and willingness to participate in the research. Therefore, the purposive sampling technique allowed the study to make a decision about the individual participants who would be most likely to contribute appropriate data, both in terms of relevance and depth. In this study the

sample comprised senior primary school teachers and curriculum developers who were personnel from NIED and PQA.

3.5 Research sample

The research sample for this study was selected by means of a purposive sampling technique. A sample is a small portion of the total set of objects, events or persons which together comprise the subject of the research study. In other words, a sample is an element of the population considered for actual inclusion in the research study or a subset of measurements drawn from a population in which one is interested (Bryman, 2008).

The research sample constituted of four curriculum developers from NIED, four members of the Programme Quality Assurance (PQA) and seven senior primary school teachers in the Khomas region who had previously participated in the curriculum design. Therefore, the sample of this study consists of fifteen participants.

3.6 Research instruments

The instrument that was employed to solicit data on the roles and responsibilities of Namibian senior primary school teachers in the curriculum design was an interview. Interviews were also conducted to gather data from the curriculum developers who were personnel from NIED and PQA. As noted by Mertens (2009), qualitative data are most often collected by researchers by means of interviews and questionnaires.

However, interviews compared to questionnaires are more powerful in eliciting narrative data that allow the study to investigate people's views in greater depth.

Fowler (2009) defines an interview as a valuable method for exploring the construction and negotiation of meaning in a natural setting. In other words, the value is not only because it builds a holistic snapshot, analyses words and reports detailed views of participants, but also because it enables interviewees to speak in their own voice and express their own thoughts and feelings. Cresswell (2015) defines an interview as a conversation, whose purpose is to gather descriptions of the real world of the interviewee with respect to the interpretation of the meanings of the described phenomenon. In similar vein, Patton (2008) adds that an interview is an extendable conversation between partners who aim to gain in-depth information about a certain topic or subject and through which a phenomenon could be interpreted in terms of the meanings that the interview brings to it.

Semi-structured interviews were conducted to gather data from the curriculum developers from NIED and members of PQA, as well as teachers, to enable them to give detailed information and also to allow the study some flexibility to uncover the full and actual roles of teachers in curriculum design. Gubrium and Holstein (2012) point out that, with structured interviews, this kind of interviewing is an open situation where flexibility and freedom are offered to the interviewee, in terms of planning, implementing and organising the interview content and questions. Therefore, the interviewer would be more keen to follow up on interesting developments and to let the interviewee elaborate on various issues.

A semi-structured interview is a more flexible version of the structured interview, as it allows depth to be achieved by providing the opportunity on the part of the interviewer to probe and expand the interviewees' responses. Bryman (2008) argues that, when undertaking such interviews, researchers are recommended to use a basic checklist that would help to cover all relevant areas. In this case, an interview schedule (Addendum 1 and 2) which covered all aspects of the research questions was utilised. The advantage of an interview guide is that it allows for in-depth probing while permitting the interviewer to keep the interview within the parameters traced out by the aim of the study.

3.7 Data collection procedures

Data were collected by conducting semi-structured interviews with all the participants from NIED at their offices in Okahandja. The study thereafter conducted interviews with PQA members in their offices at the Ministry of Education in the Khomas region. Lastly, senior primary school teachers who had previously taken part in curriculum design were also interviewed. On average, each interview lasted approximately 30 minutes. An interview guide was formulated and employed during all interviews. Open-ended interview questions were employed to collect information in this research study. According to Fowler (2009), one of the strengths of open-ended questions is that both the interviewer and interviewee are allowed to ask more questions for clarification.

Authorisation to collect data in the Khomas region from PQA personnel and senior primary school teachers who had previously taken part in curriculum design was

granted by the Permanent Secretary, as well as the Director of Education in the Khomas region. Permission to conduct the study was also granted by the acting director of NIED. Interviews were face-to-face and were recorded with the participants' permission. In order for participants to give responses freely, frankly, honestly and sincerely, they were made aware that there were no right or wrong answers to the questions and their professional careers would not be affected as it was only an exercise for research purposes and their responses would be kept strictly confidential.

The transcripts from interviews provided a full record of what each particular participant stated. An informed letter was utilised to outline the objectives of the study to the participants and also to record their permission to participate in the study.

3.8 Data analysis

Bryman (2008) defines data analysis as the process of inspecting, cleaning, transforming and modelling data with the objective of discovering useful information, arriving at conclusions and supporting the decision-making process. Data can be analysed quantitatively, qualitatively or mixed (both quantitatively and qualitatively). In this case, data were analysed qualitatively. According to Leedy and Ormrod (2010), qualitative data analysis is the classification and interpretation of linguistic (or visual) material to make statements about implicit and explicit dimensions and structures of meaning-making of the material and what was represented. Meaning-making can refer to subjective or social meanings. Hence,

qualitative data are also applied to discover and describe issues in the field of structures and processes in routines and practices.

Often, qualitative data analysis combines approaches of a rough analysis of the material (overviews, condensation, summaries) with approaches of a detailed analysis that is elaboration of categories, hermeneutic interpretations or identified structures (Cresswell, 2015). In this case, the main aim of analysing data qualitatively was to describe a phenomenon, senior primary school teachers' roles and responsibilities in curriculum design in Khomas region, in some or greater detail.

In line with the qualitative data analysis, data from the interviews were taped and manually transcribed and coded to identify pertaining themes for further discussion in the study. Research findings from the interviews will be discussed in Chapter 4 in line with the literature reviewed in Chapter 2. The study analysed the data obtained by employing a thematic form since this is the appropriate way of analysing qualitative data. A discussion of the interview data in line with the literature review will subsequently be presented. Relevant interpretation, discussion and recommendations were drawn from the analysed data.

3.9 Research ethics

According to Cresswell (2015), ethics are norms or standards of behaviour that guide moral choices about our behaviour and relationships with others. The goal of ethics in research is to ensure that no one is harmed or suffers adverse consequences from research activities.

The study obtained ethical clearance from the Director of Research and Ethics Committee of the University of Namibia. A letter of permission was also obtained from the University of Namibia, the office of the Permanent Secretary at the Ministry of Education and the Director of Education in the Khomas region. The purpose of the study was thoroughly explained to the principals of the selected teachers and to the participants. The study adhered to ethical trustworthiness in its conduct, to ensure the quality of findings by refraining from being bias during data collection, interpretations, generalizing of findings, and the study also ensured that there was no errors during data analyses.

In order to ensure confidentiality, the research participants were assured that their identities would not be disclosed and would not appear on any paperwork and the information they provided would not be discussed with others except the supervisors. The voice recordings will be destroyed after 5 years, starting from when the thesis has been evaluated.

3.10 Summary

In this chapter, the study focused on the methods and procedures which were employed to collect data for the study. The chapter did so by looking at the research design, population, sample of the study, research instrument and data collection procedures and data analysis used in this research study.

The next chapter (Chapter 4) focuses on data presentation and analysis. It presents an interpretation and discussion of the roles and responsibilities of the Namibian senior primary school teachers in the Khomas region according to the research questions.

CHAPTER 4: PRESENTATION OF FINDINGS

4.1 Introduction

This chapter focuses on the presentation of the findings regarding the roles and responsibilities of the Namibian senior primary school teachers in the Khomas region. The data presented here derive from fifteen (15) participants: four curriculum developers from NIED, four members of the Programme Quality Assurance (PQA) and seven senior primary school teachers in the Khomas region who had previously participated in curriculum design. Responses from all interviews were analysed together to gather the same information. In line with qualitative data presentation, some of the responses were quoted verbatim. The data presentation and analysis were done according to themes, and these themes emanated from the data collected. Those themes were employed to form sub-headings in this chapter.

4.2 Presentation of results

The chapter is arranged according to the following themes:

- General information.
- The roles and responsibilities of senior primary school teachers in curriculum design.
- The importance of involving senior primary school teachers in curriculum design.
- The extent to which senior primary school teachers are involved in curriculum design.

- Challenges faced by senior primary school teachers in exercising their roles and responsibilities in curriculum design.
- Strategies to ensure that senior primary school teachers participate effectively in curriculum design.

4.2.1 General information of the participants

The participants who were involved in the data collection included seven (7) senior primary school teachers, four (4) curriculum developers from the National Institute for Educational Development (NIED) and four (4) from Programme Quality Assurance (PQA). The distribution of participants who were interviewed is summarised in Table 1 below:

Table 1: Distribution of participants

Khomas Region						
Participants		Gender			Number of years on Panel	Number of cycles
		MALE	FEMALE	Total		
Senior primary school teachers		2	5	7		
	Teacher 1		✓		3	1
	Teacher 2	✓			9	3
	Teacher 3		✓		6	2
	Teacher 4		✓		3	1
	Teacher 5	✓			6	2
	Teacher 6		✓		5	2
	Teacher 7		✓		12	4
Curriculum developers (NIED)		2	2	4		
	CD 1	✓			20	7
	CD 2		✓		4	2
	CD 3	✓			17	6
	CD 4		✓		10	4

Programme Quality Assurance (PQA)		2	2	4		
	PQA 1	✓			3	1
	PQA 2	✓			14	5
	PQA 3		✓		12	4
	PQA 4		✓		6	2

Table 1 above shows the distribution of all participants in a fair representation in terms of gender, and it indicates that both genders were more or less equally represented in this study, although the females dominated the representation with three (3) participants.

Table 4.1 also indicates that all the senior primary school teachers involved in this research had been panellists for at least 3-12 years, and had much experience of what happens during the design of a curriculum. Teachers are appointed to serve on curriculum panels for 1 cycle which can last for 3 years. When it lapses, they are reappointed for another cycle should they apply or are nominated. Therefore, it indicates that, for those teachers who had been on the panel for six (6) years and above, their terms had been renewed or they were re-appointment by the Permanent Secretary in the Ministry of Education. The Table above also indicates that curriculum developers and members of PQA had been involved in curriculum design for at least 3-20 years; hence, they had a thorough knowledge of curriculum design.

4.2.2. Participants' definition of curriculum design

During the interviews, participants were asked the following question: What do you understand under the term, curriculum design? All participants were able to explain

the term. Their verbatim responses were grouped into two groups: i) teachers' responses; ii) curriculum developers (CD) of NIED and PQA's responses.

Teachers' responses

Teacher 1: *Curriculum design is a process of coming up with a syllabus by including all the textbooks and teaching materials which guides teachers on what to teach, which topic, assessments to be used and how to assess learners per each phase.*

Teacher 2: *It is to design a curriculum that is applicable to all the learners, so the curriculum should be in line with all the needs of the learner.*

Teacher 3: *It is something that gives us the guideline on what should be done in terms, of teaching and learning, the time frame in which it should be done*

Teacher 5: *Curriculum design is a set of work or certain expectations that learners per each phase must be able to meet which are clearly set in terms of objectives and basic competencies.*

CD and PQA responses

In interviews with curriculum developers, they mentioned verbatim:

CD 1: *Curriculum design is usually referred to as the process of developing or designing the standards of the subject matter that is supposed to be taught in schools in that specific phase or stage.*

CD 3: *Curriculum design has got different meanings and manifestations. From NIED perspective, I would say it is more convenient to be talking about syllabus and how they nailed down, outlining the content and whatever the learners should learn in broader terms.*

In line with this, a member of the Programme Quality Assurance (PQA2) stated that: *The school system has got to have a curriculum in place that is designed to meet the needs of Namibian child. Hence, each subject has to be taught in accordance with the set up curriculum in place, so every five years' curriculum is designed to meet the needs of the learners in the country.*

The statements above show that most of the participants understood what curriculum design development entailed. Teachers, CD and PQA all had a similar understanding of the definition according to their different personal viewpoints.

4.2.3. Perceptions of curriculum panel compilation

Teachers, CD and PQA were asked about the criteria employed to select teachers to participate in designing the curriculum and whether teachers needed a certain qualification and experience to be selected for curriculum design and development. Of the 15 participants, three (3) teachers and two (2) PQA members said that they were not aware of the selection criteria employed to select teachers as panel members. The other ten (10) participants mentioned the following compilation of the criteria/requirements that teachers needed in order to become panel members: experience, qualifications, being an expert in the subject, being dedicated to

education and the needs of the learners and participating in educational activities at regional and national level. For example, teachers were selected with the aim of balancing poor performing and best performing schools, as well as the geographical areas in which they taught.

All the participants were also asked whether the process of selecting senior primary school teachers was transparent and unbiased. Here are some of their verbatim responses:

Teacher 2: *Yes, absolutely*

Teacher 5 mentioned that the selection process was done fairly with transparency and no bias. He, furthermore, said:

Teachers are selected according to their experience and qualification and the selection process is done with transparency and no favouritism.

In line with this, Teacher 7 said, *For teachers to be involved, they need to be recommended by a school principal or inspector of education in the respective region and the process of selection is done with transparency because the selected teachers are nominated because of their qualification and experience.*

CD1: *Yes, it is done with transparency through nomination forms considering regions, gender and experience.*

Almost all the participants in the study agreed that the process of selecting senior primary school teachers was done in a transparent and unbiased manner.

All participants in the study were asked whether there was fair representation in curriculum panels. Seven (7) participants disagreed, one (1) participant (PQA) outlined that the question should be posted to NIED and the other 7 (participants) agreed that there was a fair representation. To support the statement, here are a few verbatim responses:

Table 2: Participants’ views of fair representation.

Participants in agreement	Participants in disagreement
<p>Teacher 1: <i>Yes, because there are only three schools in Namibia that are teaching hair dressing, and all three of the schools were represented</i></p> <p>CD1: <i>Yes, they are fairly represented. Things are achievable in different ways; you can have two teachers do a good job or ten people do a proper job depending on the commitment. But the more the group, the more the relaxation.</i></p> <p>CD3: <i>Yes, they are fairly represented overall.</i></p>	<p>Teacher 3: <i>Not at all, I was the only senior primary teacher in my panel in the last cycle.</i></p> <p>CD1: <i>It is difficult to say that there is fair representation. Yes, we select teachers from every phase, and we make sure that there is a fair representation across all the panels and not necessarily in every subject that you will have teachers from all the regions. We have to make space for other stakeholders to also sit on the panel.</i></p> <p>CD3: <i>No they are not fairly represented per region because of a limited number of panel members that we have to take on board</i></p>

Table 2 above gives an overview of the teachers, CDs and PQA's perceptions with regards to fair representation. Based on the results it is fair to say that a distinction cannot be made whether or not there was fair representation.

All the participants of the study were also asked about the stakeholders who served on the panel. They concurred that stakeholders were representatives of tertiary institutions and vocational training centres, such as the University of Namibia, Namibia University of Science and Technology and Vocational Training Centres. Other stakeholders were the Namibia Institute of Mining and Technology, Namibia Qualification Authority, Namibia Training Authority, Directorate of National Examination and Assessment, Non-Governmental Organisations, such as The United Nations Educational, Scientific and Cultural Organisation. Furthermore, , advisory teachers, people from the industry, activists, volunteers, experts from other countries, parents on school boards, B2 gold; workers' unions, traditional leaders, community activists, people with disabilities and NAMCOL were also stakeholders as far as curriculum design was concerned.

4.2.4 The roles and responsibilities of senior primary school teachers in curriculum design

Under this theme, different questions were posed to the participants to determine the actual roles and responsibilities that senior primary school teachers played in curriculum design. The questions included; (1) What are the roles and responsibilities of senior primary school teachers? (2) Which areas do you mostly focus on during the process of curriculum design? (3) At what stage do teachers play

the most important role in curriculum design and development? The study analysed questions 2 and 3 together because the same sentiments were echoed by all the participants regarding the roles and responsibilities of senior primary school teachers in curriculum design.

Table 3: Verbatim transcripts on the roles and responsibilities of senior primary school teachers.

Participant	Responses
Teacher 1 and Teacher 7	<i>The roles and responsibilities of senior primary school teachers is to design materials, for example textbooks and new syllabus for different subjects that can be used at each phase.</i>
Teacher 2	<i>Our roles and responsibilities are to assess the current curriculum, its shortcomings or changes that we need to make to cater the need for all the learners.</i>
Teacher 3	<i>The roles and responsibilities of senior primary school teachers is to draw up the syllabus, set the topics according to the basic competencies. As a curriculum panellists, we also look at the number of assessments and guide teachers of the number of assessments that should be done for the term.</i>
Teacher 4	<i>As curriculum panel members, we have to create a syllabus that is to be used in schools and assess it in</i>

	<i>terms of its practicality in classroom practice and meeting the needs of all the learners.</i>
Teacher 5	<i>The roles and responsibilities is to critique the curriculum to see if the curriculum that is designed is relevant, the impacts it will make in that particular child's life and how it will help the learners in facing challenges their meet in education.</i>
Teacher 6	<i>As curriculum panel member, we have to look at the current curriculum and assess its effectiveness, the difficulties teachers are experiencing in interpreting the curriculum. So the major role is to find solutions to challenges related to the curriculum, train teachers and also to monitor and develop the curriculum.</i>
CD 1	<i>The roles is to come up with materials that will conform to the wishes of the Ministry of Education, in terms of what to be taught in that specific phase. So their roles are to research on relevant content/topics that is supposed to be included in the curriculum and make sure it is relevant according to level of the learners per each phase.</i>
CD 2	<i>They are involved in curriculum design in different ways and such as being members of the curriculum panel. Senior primary school teachers are involved in all the panels for all the subjects that are taught in</i>

	<i>Senior primary level. So they participate in all the design, revisions, material development, professional development, workshops and all the activities that curriculum panels are responsible for.</i>
CD 3	<i>With reference to curriculum design being about syllabus that is where teachers will come in. Teachers in the curriculum panel do quality control in terms of the content, if it feasible to all the learners.</i>
CD 4	<i>As our stakeholders, I would say that the general role is to guide us because there are directly on the ground and they know the needs of the learners.</i>
PQA 1	<i>The responsibilities are to make sure that all the challenges experienced on the ground by the teachers are addressed and make sure teaching and learning is happening in a more acceptable way.</i>
PQA 2	<i>When I was part of the curriculum panel, we would actually look at the subject content where the learners are coming from and how they should fit in the secondary phase. Hence, both primary and secondary teachers need to discuss what is happening at each phase, so that curriculum flows.</i>
PQA 3	<i>The role is for teachers to meet with education officers at NIED and share ideas on the content to be included</i>

	<i>in the syllabus.</i>
PQA 4	<i>The senior primary school teachers are on the ground and they have first-hand information on how curriculum should be develop to suit the Namibian child.</i>

Table 3 shows verbatim transcripts of participants' views regarding the roles and responsibilities of senior primary school teachers. The roles and responsibilities of senior primary school teachers can be summed up as: 1) Designing materials; 2) Assessing the current curriculum and make changes if needs be; 3) Drawing up syllabi; 4) Determining assessments; 5) Addressing challenges faced with implementation; 6) Deciding on the content of the curriculum; 7) Training other teachers for implementation; 8) Informing and guiding curriculum developers based on the experiences and expertise obtained.

4.2.5 Perceptions regarding the training of panel members

During the interviews, teachers, curriculum developers and PQA were asked the following questions: Do all senior primary school teachers receive some training on how to design the curriculum? In what type of training do they normally engage? Are senior primary school teachers taught about their roles and responsibilities during the training process?

All the participants in the study concurred that there was no proper training for panel members in designing a curriculum. However, there was an induction section at the start of every three-year cycle.

CD 1 said that: *The first session is to give guidelines and rules. They are given a hand-out on their roles and responsibilities, and it is familiar to a job description. So it is mostly on-the-job training, which is mostly limited to curriculum panel inductions and guideline.*

In line with that, Teacher 2 attested that, *Every time they select a new panel, the first thing before they start with the design of the curriculum there is a sort of induction where you will be informed of your responsibilities and duties.*

All the participants from the study agreed that during those induction sessions, all the panel members were trained regarding their roles and responsibilities. They were clearly trained in the tasks that they needed to carry out. Clarity was given when something was not clear and panel members were free to ask about anything that was not clear to them.

4.2.6 The importance of involving senior primary school teachers in curriculum design

This theme focused on presenting results regarding the feasibility of teachers' involvement in the curriculum design and development process. Participants were asked about the importance of involving senior primary school teachers in curriculum design. The questions from the interview guide were: Why do you think it is important for senior primary school teachers to be involved in curriculum

design? What are the benefits of involving senior primary school teachers in decision-making during curriculum design and development? Verbatim responses to the questions were analysed together and are presented below in Table 4.

Table 4: Verbatim transcripts of the benefits and importance of involving senior primary school teachers in curriculum design.

Participant	Responses
Teacher 1	<i>It is important for senior primary school teachers to be involved because they are the ones spend most of the time with the learners in class, so we know what the learners are capable of and what they cannot do and this knowledge helps in curriculum design.</i>
Teacher 2	<i>It is important for us to be involved because we are the ones dealing with the learners, we know the shortcomings of any given curriculum and it also act as a source of empowerment to design a curriculum.</i>
Teacher 3	<i>It is important to be involved because teachers are the experts ... They are ones who experience the curriculum, the good and the bad of the curriculum in the classroom.</i>
Teacher 4	<i>They are people who develop the curriculum and other people who are on the ground to implement the curriculum. Hence, it is important to involve teachers in curriculum design because they are the ones facing problems in the classroom and they are the ones who make decisions based on their experiences.</i>

Teacher 5	<i>Yes, it is important to involve senior primary teacher because they are the ones teaching in that phase and they are the ones with the first-hand information about the challenges their experience in any given curriculum. Hence, their involvement makes the curriculum to be inclusive.</i>
Teacher 6	<i>It is important to involve senior primary school teachers in curriculum design because they can help in giving important information according to what their experience in classroom teaching and learning.</i>
Teacher 7	<i>Teachers are the ones that experiences the challenges in implementation of any given curriculum, so involving them is important because their can make informed decision based on their everyday experiences.</i>
CD 1	<i>Teachers per each phase must be involved in curriculum design, so as to give first-hand information, stating the challenges their experience and to work together to design a curriculum which caters for all the learners.</i>
CD 2	<i>Curriculum developers cannot design a good curriculum without the involvement of teachers of each phase. These teachers are important in creating an inclusive curriculum which accommodates all learners.</i>
CD 3	<i>It is important to involve teachers because they are part of the stakeholders who should be consulted and they provide vital information in curriculum design.</i>

CD 4	<i>It is important for teachers to be involved in terms of consultation, so as to get the correct information on what should be amended or changed during curriculum design.</i>
PQA 1	<i>For us to have a sound and applicable curriculum, teachers per each phase must be involved and it is important in creating a workable curriculum.</i>
PQA 2	<i>If senior primary school teachers are not involved, the curriculum will be difficult to implement because they cannot implement something they did not develop. So, in short it is important to involve senior primary school teachers in curriculum design.</i>
PQA 3	<i>Teachers have a full say about the designing of the syllabus and they are the interpreters of the syllabus in the classroom, so it important for them to be involved in curriculum design.</i>
PQA 4	<i>It is important to involve senior primary school teachers because they get first-hand information from teachers who are on the ground.</i>

All the participants strongly acknowledged the need for senior primary school teachers to be involved in curriculum design. They associated the importance with the following reasons:

- They know the capability of learners.
- They deal with the learners on a daily basis.
- They know the shortcomings and challenges of the existing curriculum.

- They are the experts in their specialised fields.
- They have vital, first-hand information of their experiences.
- It promotes inclusivity in terms of stakeholder engagement.
- It is important in creating a workable, sound and applicable curriculum.
- When teachers are involved, it makes it easy for them to implement the curriculum.

Teachers were also asked what they perceived as their own benefits in participating in curriculum development. They responded that it helped them in knowing how to design and develop the curriculum, teachers' manuals and implement assessment. It gave them a sense of accomplishment when they suggested changes and they saw those addressed. Teacher 3 stated that: *It helps me a lot in my teaching strategies, how I approach learners and I understand the basic competencies better.* It thus helped teachers to improve their teaching strategies. Teachers said that they acquired expertise and, at the same time, gained experience and learnt from others as well.

Teacher 7 said that the benefits were: *You will have a sense of ownership. It will be easy for you to interpret the curriculum and syllabus with ease. It makes your planning easy. Your learners will also perform better; hence, you benefit in different ways.* These are the benefits highlighted by the teachers concerning how they benefited from participation in curriculum design.

Teachers were also asked whether their involvement in curriculum design could assist the Ministry of Education in achieving its intended goals for the curriculum. Here are some of their responses:

Teacher 1: *Yes, it does help. When teachers are involved, the curriculum will be set according to the level of the learners.*

Teacher 3: *Yes, that is why the curriculum also have to be approved by DNEA and the learners write National Standard Achievement Tests in Grade 5 and 7 so that the Ministry of Education can determine if the learning objectives and competencies are achieved.*

All seven (7) participating teachers concurred that their involvement in curriculum design and development could help the Ministry of Education to achieve its intended goals for the curriculum.

4.2.7 The extent to which senior primary school teachers are involved in curriculum design

Under this theme, all the participants were asked about the extent to which senior primary school teachers were involved in curriculum design and the selection process of teachers involved.

The way in which teachers were involved

Teachers, CDs and PQA were asked: In what way are senior primary school teachers involved in decision-making during curriculum design and development?

Teachers 1 and 2 gave similar responses by saying: *We decide on certain things as a panel and we hand in our draft product to the curriculum developer. It is up to them to review and if there are changes that need to be done then they call us back.*

The other teachers also stated that they were involved in decisions making. Decisions were taken by a panel, in accord with other stakeholders who were panel members as

well. They highlighted that their decisions were in the boundaries mostly of setting the syllabus and the numbers of periods allocated. They critiqued the existing curriculum regarding its relevance.

Curriculum developers (CD) and PQA were also asked the same question: In what way are senior primary school teachers involved in decision-making during curriculum design and development? CD and PQA agreed with some of the decisions that teachers could make. They said that teachers, as the first level of consultation, decided on the relevant content with regards to the level of the learners for whom it was intended, the types of assessment, evaluation of what was developed and making value judgements, as well as addressing the challenges. To support the above statement, PQA 4 stated:

Teachers have a full say when it comes to making syllabus. They are just involved as all the other panel members, and they have to play the role of influencing the syllabus.

All the participants concurred with regards to the involvement of teachers in curriculum design and development.

Curriculum developers (CD) were asked whether all the senior primary school teachers were consulted during the process of curriculum design and development.

CD 1: We have representatives from all regions. We cannot consult all the teachers because it is not cost effective, so they are consulted through their representatives from their regions.

CD 2: *Not all. We have to work with samples and trust that the consultations are widely representative.*

CD 3: *The phrase “all” is not applicable. You can only have a limited scope of members on the panel.*

CD 4: *Not all. Only a few because you only need a percentage to give you a proper representation. So they are consulted, but you only take a sample.*

From the sentiments echoed by curriculum developers, it was clear that they all agreed that not all the teachers were necessarily consulted as they were consulted through representatives.

Areas of involvement

During the interview, another question was asked to the participants: Which areas do teachers mostly focus on during the process of curriculum design? Below are some of their responses.

Teacher 3: *Senior primary school teachers mostly focus on syllabus writing and to give examples on assessments and do workshops for curriculum implementation.*

The above sentiments concur with a curriculum developer (CD 3), who said: *Teachers do not design the curriculum, but they focus on quality assurance, thus providing information on teaching materials, teaching methods, assessments, and to make decisions on what to be amended on a given curriculum.*

Another Teacher (T 5) stated: *Senior teacher assesses the curriculum holistically, psychologically, intellectual and how it impacts the learners. We also look at stages of development and make the curriculum suitable for the Namibian child.*

Teacher 7 posits: *Teachers look at everything whilst designing a curriculum and they are the first level of consultation (curriculum panellists) to look into the materials and say whether it will work or not.*

A curriculum developer (CD 4) echoed: *Teachers mostly focus on guiding us to know the needs of the learners, the needs of the teachers and the needs of the society, so they give us the practical experiences of the learners.*

In addition, a member of the Programme Quality Assurance (PQA 2) said: *Teachers are experts. They critique, review and look at the whole curriculum and determine its impact on learners.*

From the data gathered, it is apparent from the participants' view that, in the curriculum meetings, senior primary school teachers mostly focused on syllabus writing, providing information on teaching materials, sequencing content, identifying cross-curricular activities, assessments and learning objectives, as well as basic competencies, which were based on the specific phases.

How teacher's involvement affected the pedagogical process

When teachers were asked about the way in which the involvement of teachers in curriculum design affected the pedagogical process, most of them agreed that it indeed enhanced the pedagogical process. They said that most of the areas that they struggled with were discussed and solutions found; therefore, when they returned to their classes they were well informed, which made teaching easy, enjoyable and

effective. They also said that, when they returned to the learners, they would identify and approach them differently, as well as accommodate them in different ways. Moreover, it changed the individual involved as a teacher because he or she would be better informed regarding the curriculum and thus understand the syllabus better.

One teacher, however, differed slightly from others. Teacher 5 said: *Sometimes a teacher will come back and do the same things because sometimes change is also a problem, but sometimes they will adapt to change and implement what they have learned.*

The majority of the teachers saw the involvement in curriculum design as a factor which contributed to effective pedagogy.

4.2.8 Challenges faced by senior primary school teachers in exercising their roles in curriculum design

Under this theme, all the participants were asked a question(s) related to the challenges faced by senior primary school teachers in exercising their roles in curriculum design. The research findings show that teachers faced different challenges in executing their roles in curriculum design. Some of the responses from the participants were:

Teacher 2: *Yes, there is a challenge because our current curriculum does not cater fully for inclusive education for learner's who don't belong to intellectual impaired neither mainstream.*

Teacher 3: *Limited knowledge on the content of the other phases, when you attended with other panels members for different phases.*

Teacher 4: *Deciding on cross-curricular issues, like spelling mistakes are not allowed in English but are allowed in social studies. Stereotypical issues to be decided upon. It is also difficult on certain things to be included in content when panel members are from different geographical areas. Your way of understanding differs circumstantially.*

Teacher 5: *NIED needs to come up with developing a curriculum for braille, so teachers had to go to Zambia, South Africa and Finland to get training because of a lack of experts in Namibia in that field. Remuneration is also a challenge.*

Teachers, CDs and PQA also agreed that teachers faced a few challenges in executing their roles in curriculum development. Some of these were the lack of knowledge of the content and assessment, finding balance between what to include and what to exclude in the curriculum; teachers could also be limited in their own expertise; there was a lack of the necessary materials to develop a curriculum, such as books, research conducted by teachers, as well as the interpretation of the curriculum. This stems from the fact that, since they were not involved in all the different stages of the design and development of the curriculum, their viewpoints might not have been captured properly. The fact that not all teachers were involved posed a challenge on its own, as developing the curriculum took time.

All-in-all, teachers, CDs and PQA spoke of the same challenges experienced when the teachers executed their roles in the process of curriculum design and development.

4.2.9 Strategies to ensure that senior primary school teachers participated effectively in curriculum design

Under this theme, all the participants were asked question(s) related to the strategies to ensure that senior primary school teachers participated effectively in curriculum design. Data gathered showed that participants proposed different strategies to ensure teachers' effective participation in curriculum design. Some of the responses from the participants were:

Teachers 1, 2, 5 all pointed out that, as panel members, they should first receive intensive training in curriculum design. They said that they did receive training, but it was not sufficient. They also said that, after training, there should also be refresher training because the world was dynamic. They pointed out that teachers serving on the panels should have a critical eye during implementation to see whether the curriculum was relevant or whether it should be changed.

Teacher 3 suggested that: *Before we go as panellist, there should be meetings held per phase to discuss with all teachers at regional level so that when the panel members goes to NIED, their information will come from a bigger group.*

Teacher 4 stated: *We are only given 3 days twice a year due to budget constraints, but if you want a proper job done then you should invest in it for them to do it in a quality and recommendable manner.*

Teacher 6: *There should be refresher course for teachers.*

Teacher 7: *I would suggest that the numbers of panel members need to be increased.*

CD 1: *Teachers should improve their qualifications and skills. They should also look at international trends and compare them to our local curriculums.*

CD 2: *When draft curriculums are sent to regional level, more teachers should participate there and send written feedback to NIED.*

CD 3: *The starting point is for tertiary institutions to induct teachers on how to do curriculum design and development, it will be a milestone.*

CD 4: *There should be a constant flow of information between the curriculum developer and the teachers involved.*

PQA members also suggested that the curriculum should be on par with that of other countries. Curriculum developers should consult widely and be given time to go to the regions to consult in order for teachers to feel involved. There should be remuneration, as well as strengthened training. NIED officials should go to schools to monitor the implementation process. All the participants of the study mentioned strategies that were in agreement with one another.

4.3 Summary

This chapter presented the collected data under different themes. It looked at the general information of the participants, their definitions of curriculum design and development, perceptions of the compilation of the curriculum panel, as well as the roles and responsibilities of senior primary school teachers in curriculum design. It also paid attention to the importance of involving senior primary school teachers in curriculum design and the extent to which those teachers were involved, as well as the challenges they faced in executing their roles. It, finally, looked at the strategies to ensure effective participation in curriculum design. The next chapter comprises a discussion of the findings.

CHAPTER 5: DISCUSSION OF FINDINGS

5.1 Introduction

This chapter discusses the results that were presented and interpreted in Chapter 4. It will answer research questions and relate the findings to the theoretical framework and literature review.

5.2 Linkage of the findings to the conceptual framework

The study employed Wiggins and McTighe's (1998) conceptual framework, namely *Understanding by Design*, to investigate the roles of Namibian senior primary school teachers in curriculum design. The data collected indicate that senior primary school teachers were represented all though not fairly and actively involved in designing the curriculum in various panels and committees. The senior primary school teachers involved were qualified, experts in their subjects and had teaching experience. This concurs with Wiggins and McTighe's (1998), who posit that curriculum design operates mainly in three stages, namely: (1) the teacher should be involved in curriculum design; (2) he or she should be familiar with it; (3) it is important to know the curriculum, and teachers' understanding of the curriculum is also important in the learning and teaching of learners. The conceptual framework was used to guide the study because it places significant emphasise on the importance of teachers' involvement in curriculum design. As mentioned earlier, teachers play different roles and responsibilities in curriculum design, hence the involvement of teachers in curriculum design is crucial.

Wiggins and McTighe (1998) state that curriculum designers seldom consider the full potential of teachers as co-designers of curriculum materials. Traditionally, curriculum designers view teachers as either transmitters of the intended curriculum or as active implementers of the curriculum materials. According to Wiggins and McTighe (1998), designers may seek teachers' input during the formative stages of the development project and ask for teachers' feedback during implementation, but these roles assume that teachers merely play a supportive role in the educative process. Hence, Wiggins and McTighe (1998) take an opposite view by assigning to teachers the sole role as curriculum developers. In this role as co-designers, teachers act as decision-makers who operate in the complex learning context of the classroom to co-create the enacted curriculum with the learners and the curriculum materials. Based on the findings of the study, in Namibia, teachers were actively involved in the curriculum design and development process and were not viewed as just implementers; they were assigned specific roles during the curriculum design and development.

5.3 Discussion of the results

5.3.1 Participants' definition of curriculum design

From the data gathered, it appears that most of the participants had the correct idea of what curriculum design development entailed. Teachers, CD and PQA all had a similar view of the definition and understood it according to their different personal viewpoints. The participants defined curriculum design as the process of establishing guidelines to guide the teaching and learning process. The process involves creating syllabi and outlining the content to be learned, the time frame in

which it needs to be learned and the specific learning objectives and basic competencies that should be achieved. It also involves formulating other materials, such as guidelines on assessment and teachers' manuals that support the learning and teaching process. Their definitions are in line with Ramparsad (2009) who defines curriculum design as a term employed to describe the purposeful, deliberate and systematic organisation of the curriculum in a school, class or course. In other words, it is a way for teachers to plan instruction according to the requirements of the designed curriculum. Furthermore, Handler (2010) states that curriculum developers and teachers design a curriculum with a specific purpose in mind; thus, the ultimate goal is to improve learners' learning. However, there are other reasons for curriculum design, for example, designing a curriculum for middle school learners with both elementary and high school curricula in mind helps to make sure that learning goals are aligned and complement each other from one stage/Grade to the next.

5.3.2 Perceptions regarding the compilation of the curriculum panel

The majority of the participants gave the following criteria/requirements that a teacher needed to become a curriculum panel member: experience, qualifications, expertise in the particular subject and having a vested interest in education and the needs of the learners, as well as a teacher who participated in educational activities at regional and national level, amongst others.

From the findings it is clear that most of the participants in the study agreed that the process of selecting senior primary school teachers to be involved in designing the

curriculum was conducted in a transparent and unbiased manner. This concurs with the Ministry of Education (MOE, 2013) which states that the members of the panels for curriculum design are selected by officials of the National Institute for Educational Development (NIED), regional directors, inspectors, advisory teachers and principals. The number of panel members will be determined for each panel for each term, based on the diversity of subject areas covered by each panel. Furthermore, the names of co-opted members, members of subject committees, working groups and other ad-hoc committees should be submitted to the Curriculum Coordinating Committee (CCC). The particular NIED official needs to inform members and heads of the institutions concerned regarding the appointment of members and of changes that may occur in respect of the membership of persons on the panel or subject committee working groups through the Chief Executive Officer under Curriculum Research and Development at NIED.

In addition, the members of the curriculum panels are appointed for a three-year term or such terms may be determined by the Permanent Secretary for reappointment (Ministry of Education, 2013). In case a member had been promoted or transferred to another region, he or she shall remain a member for the remaining period if so wished. The functions of the curriculum panels are: to coordinate and maintain control over the tasks assigned to the subject committee/working groups/ad-hoc committees; initiate and assist in the development of teaching materials, supplementary materials and suitable textbooks; recommend the most appropriate assessment procedures and instruments in the different subjects in relation to the assessment policies of the Ministry; draft curricula and do revision of curricula as requested by the CCC. Furthermore, they should work according to the official

implementation and revision schedule of the MoE, study regional and international developments in collaboration with NIED in the curriculum area concerned and recommend a range of relevant methodologies that facilitate successful implementation of the curriculum (Ministry of Education, 2013).

5.3.3 The roles and responsibilities of senior primary school teachers in curriculum design

The results stipulate the following roles and responsibilities of senior primary school teachers as: (1) designing materials for teaching and learning; (2) assessing the current curriculum and making the necessary changes; (3) drawing up syllabi; (4) deciding on assessment; (5) addressing the challenges faced with the implementation of the curriculum; (6) deciding on the content of the curriculum; (7) training other teachers for implementation; (8) informing and guiding curriculum developers, based on their experiences and expertise.

The data gathered indicate that senior primary school teachers were represented on various panels and committees involved in designing the curriculum. This is in line with McTighe (1998) who takes an opposite view by assigning the role of curriculum development solely to teachers. Furthermore, McTighe (1998) asserts that teachers have exclusive agency over the curriculum, as well as the time and resources to create a curriculum from scratch. Hence, in this role as co-designers, teachers act as decision makers who operate in the complex learning context of the classroom to create the enacted curriculum with the learners and curriculum materials. In addition, Ramparsad (2009) notes that some teachers may be knowledgeable concerning

recent changes in subject matter, while others may be well versed in learning theories that can be employed to teach that subject matter. Furthermore, Ramparsad (2009) emphasises that teachers, in general, have practical knowledge based on their daily work with learners, and this knowledge is useful in curriculum design because teachers can assess whether the ideas developed will or will not work in the classroom.

The findings also indicate that senior primary school teachers play an important role in terms of guiding the curriculum developers in specifying the needs of the learners, teachers and that of the society, which are essential in curriculum design. This concurs with Carl (2005) who posits that teacher involvement in curriculum design ensures the successful implementation of that given curriculum. Therefore, senior primary school teachers should be able to make brave decisions about content and the subject matter to be included in the curriculum. This indicates that teachers' classroom practice improves because of their involvement in curriculum design. Their active involvement has a motivational effect and this is instrumental in the successful implementation of the curriculum.

In addition, McTighe (1998) suggests an approach to curriculum development where teachers are assigned the roles of both developers and implementers. Failure to involve teachers in the design of the curriculum may result in the ineffective implementation of the curriculum. The discussion above indicates that teachers play a acceptable role in curriculum design and development but it is not clear to what

extent teachers influence decision-making in curriculum design as they are not involved in all stages of curriculum design and development.

According to Johnson (2012), curriculum design can be challenging; therefore, the involvement of all educational stakeholders, especially teachers who are directly involved in learner instruction, plays a vital role in successful curriculum design. In line with this, Carl (2009) states that, without doubt, the most important person in the curriculum implementation process is the teacher. Furthermore, Carl (2009) argues that better teachers support better learning because they are most knowledgeable about the practice of teaching and are responsible for introducing the curriculum in the classroom. Hence, as per the findings of the study, curriculum panels in Namibia comprise various stakeholders which include teachers, because it is believed that they are experts in the classroom and they are also seen as the first line of consultation.

In other words, the knowledge, experiences and competencies of senior primary school teachers are central to any curriculum design effort. Teachers involved in curriculum design have many roles and responsibilities. Teachers want to enjoy teaching and watch their learners develop interests and skills in their areas of interest. The teacher may need to create lesson plans and syllabi within the framework of the given curriculum since the teacher's responsibilities are to implement the curriculum to meet learners' needs (Carl, 2009).

Many studies support the empowerment of teachers through participation in curriculum design. For example, Fullan (2010) finds that the level of teacher involvement at the centre of curriculum design has led to the effective achievement of educational reform. Therefore, a teacher is an important factor in the success of curriculum design, including the steps of implication and evaluation hence teacher's involvement in curriculum design and development of teacher's on curriculum panels in Namibia. Handler (2010) also found that there was a need for teacher involvement in the designing of the curriculum because teachers can contribute by working with curriculum developers and specialists collaboratively and effectively to arrange and compose materials, textbooks and content relevant to the subject areas. Therefore, teacher involvement in the process of curriculum development is important to align the content of the curriculum with learners' needs in the classroom.

Although the NIED officials, with teachers working in collaboration with them, bear the responsibility for curriculum design, teachers need to play a more significant role in developing the curriculum at all stages of curriculum design. Kelly (2009) argues that teachers should form an integral part of the curriculum development process and not be expected to merely translate the intentions and ideologies of others into practice. The question which normally arises to counter this notion is: Do teachers have the prerequisite knowledge to perform this noble task? Alavi (2016) concurs by saying that teachers do not have the relevant knowledge and skills that would enable them to be actively involved in activities outside the classroom. The study, however, believes that with enough training teachers can play an important role in curriculum design. Carl (2005) strongly recommends that senior primary school teachers should

become involved in curriculum design by stating that teacher involvement is “essential”. Hence, there is a need to involve teachers as active participants. NIED members are curriculum experts, but they need guidance regarding the feasibility of the curriculum in the classroom in different contexts.

5.3.4 The importance of involving senior primary school teachers in curriculum design

The research findings indicate that all the participants strongly acknowledged that senior primary school teachers needed to be involved in curriculum design. They related it to the following reasons: teachers knew the capability of learners; they dealt with learners on a daily basis; they were aware of their shortcomings and the challenges of the existing curriculum; they were the experts in their specialised field; teachers had vital first-hand information of their experiences. Furthermore, it promoted inclusivity in terms of stakeholder engagement. It was also important in creating a workable, sound and applicable curriculum and, finally, when teachers were involved they could more easily implement the curriculum.

In line with this, Johnson (2012) argues that curriculum design can be challenging; therefore, the involvement of all educational stakeholders, especially teachers who are directly involved in learner instruction, plays a vital role in successful curriculum design. Furthermore, Carl (2009) states that, without a doubt, the most important person in the curriculum implementation process is the teacher. Consequently, Carl (2009) argues that better teachers support better learning because they are the most knowledgeable of the practice of teaching and are responsible for introducing the

curriculum in the classroom. Hence, the participants in this study perceived senior primary school teachers' involvement in Namibia as of utmost importance.

Many studies support the empowerment of teachers through participation in curriculum design. For example, Fullan (2010) found that the level of teacher involvement at the centre of curriculum design led to the effective achievement of educational reform. Therefore, a teacher is an important factor in the success of curriculum design, which includes the implementation and evaluation of the designed curriculum. Handler (2010) also argues that teachers need to be involved in designing of curriculum because they can contribute by working collaboratively and effectively with curriculum developers and specialists to arrange and compose material, textbooks and content relevant to the subject areas. Therefore, teacher involvement in the process of curriculum development is important to align the content of the curriculum with learners' needs in the classroom.

5.3.5 The extent to which senior primary school teachers were involved in curriculum design

5.3.5.1 Teachers' involvement in curriculum design

According to the results, the teachers stated that they were involved in decision-making, and that their decisions came about as a panel which included other stakeholders as panel members as well. They highlighted that their decisions were in the boundaries of: drawing up the syllabus, deciding on the number of periods allocated and critiquing the existing curriculum on its relevance. CDs and PQA agreed with some of the decisions that teachers could make. They said that teachers decided on the relevant content with regards to the level of the learners that it was

intended for and the types of assessments. They also looked at what had been developed and made value judgements. They were the first level of consultation and addressed the challenges. They stated that after they are done with the tasks that they are entrusted with, their work are handed over to other committees to approve or decline their changes and inputs. Hence, all the participants of the study agreed on the teacher's involvement. This concurs with Handler (2010) who asserts that a qualified and effective curriculum design process is possible with teachers' active involvement in the process. In addition, Tasdemir (2010) emphasises the role of teachers as identifiers of objectives in the curriculum development process which is crucial for the success of the implementation of the curriculum. Oliva's statement (2011, 35), "just as the curriculum leader works primarily in one realm (curriculum) of the continuum called curriculum-instruction and then secondarily in the other realm (instruction), so too the teacher works primarily in both instruction and curriculum" emphasises the role of teachers in the curriculum development process.

Moreover, Tasdemir (2010) adds that teachers and curriculum specialists all engage in activities to improve both the curriculum and instruction. In that case, it can be inferred that their roles are similar, implying that teachers and curriculum specialists are one and the same. Tasdemir (2010) states that the teacher's role as a curriculum developer includes implementing the designed curriculum in the classroom. For this reason, teachers are seen as the most important element of the curriculum development process which begins by establishing instructional problems and ends with the suggestion of solutions.

5.3.5.2 Areas of involvement

It was apparent from the participants' views that senior primary school teachers focused mostly on the following: syllabus writing; providing information on teaching materials; sequencing content; identifying cross-curricular activities, assessments, learning objectives and basic competencies, based on the specific phases during the curriculum meetings. In line with this, Handler (2010) states that teachers can participate in curriculum design in two ways, one of which is their participation in the external curriculum development process and the other one is their involvement in continuously adapting and developing the materials offered in the curriculum. Furthermore, the Ben-Peretz model in Handler (2010) asserts that teachers should be involved in decision-making in the process of curriculum design in terms of the content, learning objectives and materials to be employed in a given topic. In his model, teachers, successful in their previous teaching, are selected to take part in curriculum development. In Namibia the criteria for teacher selection in the curriculum design process are their success in previous teaching and their knowledge of the subject matter. After the selection, teachers are asked to make suggestions on curricular problems, subject matter and teaching strategies to be included in the new curriculum. At decision-making stage, teachers construct curriculum materials in collaboration with curriculum development experts. At another stage, content, instructional strategies and teaching activities that should be compiled and handed over to other committees to decide on what should be approved. Then, as a last stage, instructional strategies and teaching activities at formal trials are evaluated by all teachers.

5.3.5.3 The effect of teachers' involvement on the pedagogical process

According to the findings, most of the teachers reported that the involvement of teachers in curriculum design indeed enhanced the pedagogical process. They said that most of the areas that they had struggled with were discussed and solutions were found. Consequently, when they returned to their classes, they were well informed. This made teaching easy, enjoyable and effective. They also reported that when they went back to their learners, they could identify with the learners differently. They, furthermore, approached them differently and accommodated them in different ways. Moreover, they admitted that the process changed them as teachers as they knew the curriculum better and understood the syllabus. The majority of the teachers saw their involvement in curriculum design as a contributing factor to effective pedagogy.

In line with this, many studies support the empowerment of teachers through participation in curriculum design. For example, Fullan (2010) found that the level of teacher involvement at the centre of curriculum design led to the effective achievement of educational reform. Therefore, a teacher is an important factor in the success of the curriculum, as well as its implementation and evaluation. Handler (2010) also found that teachers needed to be involved in the designing of the curriculum because teachers could contribute by working collaboratively and effectively with curriculum developers and specialists to arrange and compose material, textbooks and content relevant to the subject areas. Hence, teacher involvement in the process of curriculum development is important to align the content of the curriculum with learners' needs in the classroom. Thus, when teachers are empowered, there will be improved teaching and learning.

5.3.6 Challenges faced by senior primary school teachers in exercising their roles in curriculum design

The participants pointed out various challenges that were experienced by teachers as they executed their roles. They are the lack of knowledge of the content and assessment, as well as finding a balance between what to include in the curriculum and what not. Teachers could also be limited in their own expertise and lack materials, such as books to develop a curriculum. There could be a lack of research conducted by teachers and interpretation of the curriculum, because they were not involved at all the different stages of the curriculum design and development. Furthermore, their viewpoints might not be well captured and the fact that not all teachers are involved was a challenge on its own. Finally, developing the curriculum takes time. This concurs with Ramparsad (2009) who notes that, in terms of curriculum design, the process which teachers are requested to follow is sometimes unclear. For example, in Namibia, some of the teachers are qualified, but they lack the necessary skills to participate in curriculum design. Hence, the approach to participation in the process only involves a few teachers.

Further, Handler (2010) posits that designing the whole curriculum is a very complex task. The intended curriculum, captured in content standards, has to be organised and worked out in learning trajectories and educational activities. Designers have to work together as a team, building a shared view on learning and teaching. As this will be a challenge already, the educational activities will also be co-designed by teachers who play the central role in orchestrating the activities and guiding learners. Curriculum designers in Namibia, therefore, have to communicate

their intentions to the teachers and they have to anticipate the habits and possibilities of the community because they are the stakeholders of the curriculum.

5.3.7 Strategies to ensure that senior primary school teachers participate effectively in curriculum design

The strategies that were recommended by participants were: (1) intense training for panel members; (2) refresher training because the world is dynamic; (3) teachers serving on the panels should have a critical eye during implementation to establish whether the curriculum is relevant or should be changed; (4) provision should be made for panel members to meet teachers for consultation purposes; (5) the number of days and sessions for panel members should be increased; (6) the number of panel members should be increased to include more teachers; (7) teachers should improve their own skills and qualifications; (8) tertiary institutions should induct teachers on the way to design and develop the curriculum; (9) there should be a constant flow of information between the curriculum developers and the teachers involved; (10) the curriculum should be on par with those of other countries; (11) the curriculum developers should consult widely and should be given time to go into the regions to consult so that teachers can feel consulted; (12) there should be remuneration for panel members; (13) NIED officials should monitor the implementation process.

In terms of training, Handler (2010) suggests that the professional development of teachers is an important factor which contributes to the success of curriculum design and implementation. This simply means that teachers should be trained when they

become panel members in order to participate effectively in curriculum design and also for the success of the curriculum design and implementation.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

The findings of the study indicate that only a few teachers, who serve on the curriculum panels, were involved in the process of curriculum design and development but the rest of the Namibian senior primary school teachers were not involved and were hardly ever consulted. Therefore, there is a need to involve more teachers to serve on the curriculum panel or, alternatively, provision should be made for teachers to be consulted in order for the Namibian curriculum to be viewed as a consultative to the teachers who implement it. Proper training should also be given to teachers who serve on the curriculum panel at NIED.

From the data gathered it seems that most of the participants had the correct idea of what curriculum design development entailed. Teachers, CD and PQA all had a similar view of the definition and understood it according to their different personal viewpoints. In a nutshell, the participants defined curriculum design as the process of establishing guidelines that guide the teaching and learning process. The process involved creating syllabi and outlining the content that must be learned, the time frame in which it needed to be learned and the specific learning objectives and basic competencies that should be achieved. It also involved formulating other materials that support the learning and teaching process, such as guidelines on assessment and teacher manuals. Therefore, this shows that senior primary school teachers knew exactly what curriculum design entailed.

The majority of the participants regarded the following as criteria/requirements that a teacher needed to become a curriculum panel member: experience, qualifications, subject expertise, a love for education, with the needs of the learners at heart and participation in educational activities at regional and national level, amongst others. Therefore, the findings indicate that most of the participants in the study agreed that the selection of senior primary school teachers to design the curriculum was done in a transparent and unbiased manner.

The results show that senior primary school teachers had different roles and responsibilities in curriculum design, and these include: (1) designing materials for teaching and learning; (2) assessing the current curriculum and making changes when necessary; (3) drawing up the syllabus; (4) deciding on assessment; (5) addressing the challenges faced with the implementation of the curriculum; (6) deciding on the content of the curriculum; (7) training other teachers for implementation; (8) informing and guiding curriculum developers based on their experiences and expertise. Therefore, it shows that senior primary school teachers were actively involved in curriculum design.

The research findings indicate that all the participants strongly acknowledged the importance of involving senior primary school teachers in curriculum design. They associated the importance with the following reasons: teachers knew the capability of learners; they dealt with these learners on a daily basis; they were aware of their shortcomings and the challenges of the existing curriculum; they were the experts in their specialised fields; teachers had vital first-hand information of their experiences. Involvement promotes inclusivity in terms of stakeholder engagement. It is also

important in creating a workable, sound and applicable curriculum. Finally, when teachers are involved it makes it easy for them to implement the curriculum. Therefore, the study concludes that senior primary involvement is vital for curriculum design and should receive more prominence.

The teachers in this study stated that they were involved in decision-making, and that their decisions were made together with other stakeholders who were panel members as well. There is however a need to involve more teachers as panel members because they are not represented in a fair number. They highlighted that their decisions were in the boundaries of: setting the syllabus; deciding the numbers of periods allocated; critiquing the existing curriculum on its relevance. CDs and PQA agreed with some of the decisions that teachers could make. They said that teachers decided on the relevant content with regards to the level of the learners it was intended for and the types of assessments. Furthermore, they looked at what was developed and made value judgements. They were the first level of consultation and addressed the challenges. Hence, all the participants concurred on the panel members' involvement; however, the majority of Namibian senior primary school teachers were not part of the process because there were only a limited number of teachers allowed to serve on the panels.

The findings also show that senior primary school teachers faced different challenges in executing their roles in curriculum design. Some of the challenges mentioned by the participants were that senior primary school teachers were not well trained prior to becoming panel members. Furthermore, they only met twice a year for a three

days. This also affected them negatively since they had to leave their learners at their schools unattended. They also pointed out that there was a lack of remuneration.

Participants were able to propose different strategies to ensure teachers' effective participation in curriculum design. Some of these strategies are that senior primary school teachers should be supported, there should be more teachers to sit on the panel, teachers should be able to air their views on the curriculum design process freely, their roles should be clearly explained and they should be trained before taking part in curriculum design so that they will be able to understand their roles and know what they are supposed to do.

The findings of this study are valuable to the MoE, NIED, all the educational officers and teachers as they will be aware of the roles and responsibilities, the extent to which teachers are involved, the strategies to ensure effective participation, as well as the challenges encountered by senior primary school teachers during the curriculum design and development process. Hence, the findings of the study will assist the education officers to consider the type of support to provide all senior primary school teachers in order to overcome the challenges and ensure the effective design and development of the curriculum.

A shortcoming of the study was the difficulty in the field as the participants' unwillingness to be audio recorded and to take part in the study proved difficult but, nonetheless, the study achieved its objectives through the participants who had taken

part. If replication of the study could be done, the study would extend the study to participants from all the regions, as well as to not limit it to senior primary school teachers only because not many teachers are panel members. The study would also make use of observation as a method of collecting data to observe panel members as they execute their roles and, subsequently interview them. This may produce better and more reliable results, as well as cut much of the cost for the study. Another shortcoming of the study was the lack of recent literature and gaps in Namibian literature on the topic.

6.2 Recommendations

This study recommends that more senior primary school teachers should become involved in the curriculum process and panel members should be trained and receive more information about curriculum design, as well as inform other teachers of the process of curriculum design and development.

The study recommends that the selection process that involves senior primary school teachers in curriculum design should remain fair, transparent and unbiased.

The study recommends that senior primary school teachers should continue with their roles and responsibilities during curriculum design and, if possible, become more actively involved in the whole process of designing and developing the curriculum.

The study recommends that senior primary school teachers should be involved in curriculum design because they play a significant role in the process of designing the curriculum.

There is a lack of remuneration; therefore, the study recommends that panel members should receive remuneration.

The study recommends that senior primary school teachers' roles and responsibilities should be clearly explained and they must be trained beforehand so that they will be aware of their roles and responsibilities during the curriculum design. NIED should try by all means to curb the challenges faced by teachers.

The study recommends that the curriculum developers, politicians and other stakeholders should create an inclusive environment for teachers to be fully involved in curriculum design.

Further qualitative research studies could be carried out to observe panel members as they execute their roles during curriculum design and development to observe their exact roles in practice. A quantitative study can be carried out to determine the exact number of teachers who are involved in curriculum design and development as panel members, as well as establish the exact representation ratio of the number of teachers on the curriculum panels in relation to the number of all the teachers in Namibia.

Moreover, the results of this study cannot be generalised, but will be kept within the context in which the study was conducted. The results could have been more significant if the study had been conducted with curriculum panel members from all the other regions in Namibia as this would have allowed generalisability of the results.

REFERENCES

- Abudu, A. M., & Mensah, M. A. (2016). Basic School Teachers' Perceptions about Curriculum Design in Ghana. *Journal of Education and Practice*, 7(19), 21-29.
- Adentwi, K. I. (2005). *An introduction: Curriculum development*. Accra: WILAS Press limited.
- Alavi, J. (2016). *The role of EFL teachers' perceptions of curriculum change in their job satisfaction*. Tehran: SRTTU.
- Australian Curriculum, Assessment and Reporting Authority (2010). *A Curriculum for the country: The absence of the rural in a National Curriculum*. Canberra. University of Canberra.
- Badran, A. (2011). *The Introduction of archaeology*. New York: Springer.
- Bantwini, B, D. (2010). How teachers perceive the new curriculum reform: Lessons from a school district in the Eastern Cape Province, South Africa. *International Journal of Educational Development*, 30(1), 83-90.
- Bates, J., Lewis, S., & Pickard, A. (2011). *Education policy, practice and the professional: The curriculum*. London; New York: Continuum.
- Brady, M. (2005). *School-based curriculum development*. London: SAGE.
- Bryman, A. (2008). *Social research methods (3rd Ed)*. Oxford: Oxford University Press.
- Carl, A. (2009). *Teacher empowerment through curriculum development theory into practice*. New Delhi: Juta and Company Ltd.

- Carl, A. E. (2005). The voice of the teacher in curriculum development: A voice crying in the wilderness? *South African Journal of Education*, 25(4), 223-228.
- Chitate, H. (2005). Post-independent Zimbabwe's new 'O' Level History syllabus 2166: A crisis of expectations. *Zimbabwe Journal of Educational Research*, 17(3), 234-257.
- Cohen, W. Morrison, L. & Morrison, K. (2011). *Research methods in education*. New York: Routledge.
- Creswell, J. W. (2015). *30 Essential skills for the qualitative researcher*. New Jersey: Pearson.
- Doğan, S. (2012). *The views of teachers about curriculum mapping process*. Istanbul: Yıldız Technical University.
- Erss, M., Kalmus, V., & Autio, T. H. (2016). 'Walking a fine line': Teachers' perception of curricular autonomy in Estonia, Finland and Germany. *Journal of Curriculum Studies*, 48(5), 589-609.
- Fink, A. (2009). *How to sample in surveys (2nd Ed)*. Thousand Oaks: SAGE Publications.
- Finnish National Board of Education (2014). *National Core Curriculum for Basic Education 2014*. Helsinki: Finnish National Board of Education.
- Finnish National Board of Education (2016). *National Core Curriculum for Basic Education 2016*. Helsinki: Finnish National Board of Education.

- Fowler, F. J. (2009). *Survey research methods (4th Ed)*. Thousand Oaks: SAGE Publications.
- Fraenkel, J. R., & Wallen, N. E. (2012). *How to design and evaluate research in education (8th Ed)*. New York: McGraw-Hill.
- Fullan, M. (2010). *The meaning of educational change*. New York: Teacher's College Press.
- Gay, U. (2011). The importance of Literature Review in Research. *Journal of Research Studies*, 9(34), 12-24.
- Glickman, C. D., Gordon, G. C. D., Gordon, S. P., & Ross-Gordon, J. M. (2013). *The basic guide to supervision and instructional leadership (3rd Ed)*. Boston: Pearson.
- Gubrium, J. F. & Holstein, J. A. (2012). *Handbook of Interview Research: Context and Method*. Thousand Oaks: Sage Publication.
- Gurol, K. (2014). *Curriculum in conflict: Social Visions, Educational Agendas and Progressive School Reforms*. New York: Teachers' College Press.
- Hale, J. A. (2008). *A guide to curriculum mapping: Planning, implementing and sustaining the process*. California: Corwin Press.
- Handler, B. (2010). Teacher as curriculum leader: A consideration of the appropriateness of that role assignment to classroom-based practitioners. *International Journal of Teacher Leadership*, 3(3), 32-42.
- Hawkes, G. & Rowe, G. (2008). A characterization of the methodology of qualitative research on the nature of perceived risk, trends and omissions. *Journal of Risk Management*, 1(11), 617-643.

- Johnson, J. A. (2012). *Curriculum revision that works: Principles of effective change*. New Jersey: Allyn and Bacon.
- Kelly, A. V. (2009). *The curriculum: Theory and practice (6th Ed)*. Los Angeles; London: SAGE.
- Khan, M. A., & Law, L. S. (2015). An Integrative Approach to Curriculum Development in Higher Education in the USA: A Theoretical Framework. *International Education Studies*, 8(3), 66-76.
- Kobiah, L. K. (2016). Teachers' Perspective towards their Involvement in Selection and Organization of Learning Experiences and Implementation of Secondary School Curriculum in Kenya. *Journal of Education and Practice*, 7(28), 53-59.
- Leedy, P. D. & Ormrod, J. E. (2010). *Practical Research: Planning and Design (8th Ed)*. New Jersey: Upper Saddle.
- Lunenburg, F. C., & Ornstein, A. C. (2011). *Educational administration: Concepts and practices (6th Ed.)*. Belmont, CA: Wadsworth.
- Maphosa, C., & Mutopa, S. (2012). Teachers' awareness of their role in planning and implementing school-based curriculum innovation. *Anthropologist*, 14(2), 99-106.
- Marsh, R. (2014). *Education and society*. New York: Routledge.
- Masila, V. (2007). From apartheid education to the Revised National Curriculum Statement: Pedagogy for identity formation and nation-building in South Africa. *Nordic Journal of African Studies*, 16(2), 146-160.

- Mass, L. (2013). *Education policy, practice and the professional*. New York: Continuum International Publications.
- McCulloch, G. (2005). Curriculum reform, educational change and school improvement. The practice and theory of school improvement. *Journal of Education*, 4(3), 69–81.
- McKernan, J. (2007). *Curriculum and imagination: Process theory, pedagogy and action research*. London: Routledge.
- Mertens, D. M. (2009). *Research and Evaluation in Education and Psychology: Integrating Diversity with Quantitative and Qualitative Approaches (2nd Ed)*. Thousand Oaks: Sage Publications.
- Ministry of Basic Education and Culture [MBEC] (1996). *Pilot Curriculum Guide for Formal Basic Education*. Okahandja: NIED.
- Ministry of Education (2004). *Assessing Inclusive Education in Practice in Namibia*. Okahandja: NIED.
- Ministry of Education (2004). *Education Act of 2001*. Okahandja: NIED.
- Ministry of education [MOE] (2013). *Procedural rules and functions for curriculum panels*. Okahandja: NIED
- Ministry of Education Arts and Culture [MEAC] (2015). *The national curriculum for basic education*. Okahandja: NIED.
- Ministry of Education, Malaysia (2014). *Improving the current curriculum and preparing for structural change*. Putrajaya. Ministry of Education.
- Mugenda, A. A. & Mugenda, A.G. (2013). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: Acts Press.

- National Institute for Educational Development (2010). *Development and Revision of National Curriculum Policy*. (www.nied.ed.na/accessed 15/06/18).
- Nieveen, N. & Kuiper, W. (2012). Balancing Curriculum Freedom and Regulation in Netherlands. *Journal of Curriculum Studies*, 12(4), 45-49.
- OECD (2014). *Education at a Glance 2014, OECD Indicators*. Paris: OECD Publishing.
- OECD (2014). *Programme for International Student Assessment (PISA) 2012 Results: Ready to learn*. Paris: OECD Publishing.
- Oghuvbu, E. P. (2011). Implementation of the primary school curriculum modules in Nigeria: the role of supervision. *The Anthropologist*, 13(2), 147-150.
- Oliva, P. (2009). *Developing the curriculum (7th Ed)*. New York: Allyn and Bacon.
- Olivia, A. (2011). The voice of the teacher in curriculum development: a voice crying in the wilderness? *South African Journal of Education* 25(4), p223-228.
- Oloruntegbe, K. O. (2011). Teachers' involvement, commitment and innovativeness in curriculum development and implementation. *Journal of Emerging Trends in Educational Research and Policy Studies*, 2(6), 443-449.
- Patton, M. Q. (2008). *Qualitative Research and Evaluation Methods (3rd Ed)*. Thousand Oaks: Sage Publication.
- Pietarinen, J. (2017). Large-scale curriculum reform in Finland—exploring the interrelation between implementation strategy, the function of the reform, and curriculum coherence. *The Curriculum Journal*, 28(1), 22-40.

- Priestley, M. Minty, B. & Eager, L. (2014). An Analysis of knowledge in new curricula in Scotland and New Zealand. *Curriculum Journal*, 1(25), 67-78.
- Ramparsad, R. (2009). A strategy for teacher involvement in curriculum development. *South Africa Journal of Education*, 21(4), 287-291.
- Remillard, G. (2015). *Education and social change: Connecting local and global perspectives*. Cambridge: Continuum International Publication Group.
- Robinson, H. (2009). *Whitehead Curriculum leadership: strategies for development and implementation*. Los Angeles: SAGE Publication.
- Rogan, J. M., & Grayson, D. J. (2003). Towards a theory of curriculum implementation with particular reference to science education in developing countries. *International Journal of Science Education*, 25(10), 1171-1204.
- Stenhouse, L. (1975). *An Introduction to Curriculum Research and Development*. London: Heinemann.
- Tasdemir, W. (2010). Curriculum Models and Curriculum Commonplaces. *Journal of Curriculum Studies*, 14(2), 197-200.
- Vitikka, E. (2009). Opetussuunnitelman Mallin jäsenyys. Structuring curriculum design: content and pedagogy constructing the whole. Finnish Educational Research Association, *Research in Educational Sciences*, 44(1), 253-268.
- Wiggins, G., & McTighe, J. (1998). *Understanding by Design*. Alexandria, Virginia: Association of Supervision and Curriculum Development.
- Wolfaardt, D. (2017). Class notes in Principals in Curriculum Design and development. UNAM.

Woody, J. (2012). *Curriculum development: theory and practice*. New York: Harcourt Brace and World.

Young, M. (1995). Knowledge and Curriculum: An International Dialogue. *Journal of Curriculum Studies*, 47(6), 23-28.

APPENDIX 1: INTERVIEW GUIDE FOR TEACHERS

Teacher Interview guide

Introduction

My name is Lotty Kandali Amunkete, a student doing Master in Education Degree majoring in curriculum and assessment studies at the University of Namibia. The research is titled: The roles of Namibian senior primary school teachers in curriculum design: a case of Khomas region. Thank you for your willingness, interest and time in participating in this study. I would like to assure you that the information I gather will be used for research purpose only and will be treated with confidentiality.

Instructions:

- Anonymity will be maintained, thus you are not required to provide your name
- The format that will be used will not merely be question and answer, but participants are free to be in agreement or disagreement and discuss issues that will be raised.
- There are no wrong and right answers, all responses will be highly appreciated

Please answer the following questions as sincerely as possible;

Questions

Research Question: What are the roles of Namibian senior primary school teachers in curriculum design?

1. What do you understand by the term curriculum design?	
2. What are the roles and responsibilities of senior primary school teachers in curriculum design?	
3. How are senior primary school teachers involved in decision-making during curriculum design and development?	
4. What are the benefits of involving senior primary school teachers in decision-making during curriculum design and development?	
5. Which areas do you mostly focus on during the process of curriculum design?	
6. Do all senior primary school teachers involved receive proper training on how to design the curriculum?	
7. To be specific, what type of training do you normally engage in?	
8. During the training process, are senior primary school teachers taught about their roles	

and responsibilities when taking part in curriculum design?	
9. Do you face any challenges in executing your roles and responsibilities in curriculum design?	
10. If yes, what are those challenges?	
11. What are your recommendations or suggestions to ensure effective participation of senior primary school teachers in curriculum design?	

Research Question: To what extent are teachers influential in curriculum design?

12. How many of you have been involved in curriculum design?	
13. How often have you participated in curriculum design?	
14. Besides senior primary school teachers, what are other stakeholders involved in curriculum design?	
15. What is the criteria used to select teachers to be involved in curriculum design?	

16. Do teachers need a certain qualification and experience in order to be selected for curriculum design?	
17. Is the process of selecting senior primary school teachers to participate in curriculum design done with transparency and no bias?	
18. Do senior primary school teachers avail themselves to participate in the National curriculum design and development?	
19. As senior primary school teachers, are you all consulted during the process of the new National curriculum design and development?	
20. Does the involvement of senior primary school teachers help the Ministry of Education to achieve its intended goals of the curriculum?	
21. As an senior primary teacher, what are the benefits of participating in curriculum design?	

Research Question: Why is it important to involve senior primary school teachers in curriculum design?

22. Why do you think it is important for senior primary school teachers to be involved in curriculum design and why do you say so?	
23. How does the involvement of senior primary school teachers in curriculum design affect the pedagogical process?	
24. Does the involvement of senior primary school teachers in curriculum design have an effect on curriculum implementation?	
25. Do you think senior primary school teachers are fairly represented in curriculum design and why do say so?	
26. Does the Ministry of Education encourage teachers to participate in curriculum design and development? If yes how?	
27. Which stage do teachers play the most important role in curriculum design and development?	
28. How does the participation of senior primary school teachers in curriculum design increases teachers' motivation at work?	

29. Does the involvement of senior primary school teachers in curriculum design contribute to learners' performance?	
30. How does the involvement or not of senior primary school teachers in curriculum design affect the implementation of the curriculum?	
31. Do you think teachers implement the curriculum more effectively once they are involved in all stages of curriculum design and development and why do you say so?	

Thank you for your time; this is the end of the interview!

APPENDIX 2: INTERVIEW GUIDE FOR NIED AND PQA PERSONNEL

NIED and PQA officials Interview guide

Introduction

My name is Lotty Kandali Amunkete, a student doing Master in Education Degree majoring in curriculum and assessment studies at the University of Namibia. The research is titled: The roles of Namibian senior primary school teachers in curriculum design: a case of Khomas region. Thank you for your willingness, interest and time in participating in this study. I would like to assure you that the information I gather will be used for research purpose only and will be treated with confidentiality.

Instructions:

- Anonymity will be maintained, thus you are not required to provide your name
- The format that will be used will not merely be question and answer, but participants are free to be in agreement or disagreement and discuss issues that will be raised.
- There are no wrong and right answers, all responses will be highly appreciated

Please answer the following questions as sincerely as possible;

Questions

INTERVIEW GUIDE FOR CURRICULUM DEVELOPERS

Research Question: What are the roles of Namibian senior primary school teachers in curriculum design?

1. What do you understand by the term curriculum design?	
2. What are the general roles and responsibilities of senior primary school teachers in curriculum design?	
3. How are senior primary school teachers involved in decision-making during curriculum design and development?	
4. As a curriculum developer, do you normally receive any training before engaging in curriculum design?	
5. What type of training do you engage in before taking part in the curriculum designing process?	
6. During the training process are you taught about your roles and responsibilities when taking part in curriculum design?	

7. Do all the senior primary school teachers involved receive proper training on how to design and develop the curriculum?	
8. What type of training do senior primary school teachers normally engage into before taking part in the process of curriculum design?	
9. During the training process, are senior primary school teachers taught about their roles and responsibilities when taking part in curriculum design?	
10. Do teachers ask for any help or clarification about their roles and responsibilities from curriculum developers during curriculum design?	
11. As a curriculum developer, what are your roles and responsibilities in curriculum design and development?	
12. Which areas do you mostly focus on during the process of curriculum design?	

Research Question: To what extent are teachers influential in curriculum design?

13. How long have you been a curriculum developer?	
14. How many time(s) have you attended the curriculum design?	
15. How many senior primary school teachers were involved in curriculum design when you were designing it?	
16. Who is mainly involved in curriculum design?	
17. Are all senior primary school teachers consulted during the process of National curriculum design and development? If yes how?	
18. If no, why do you say so?	
19. What is the criteria used to select teachers to participate in curriculum design?	
20. Do teachers need a certain qualification and experience in order to be selected for curriculum design?	
21. Is the process of selecting senior primary school teachers to participate in	

curriculum design done with transparency and no bias?	
22. Do teachers avail themselves to participate in the National curriculum design and development?	

Research Question: Why is it important to involve senior primary school teachers in curriculum design?

23. Why do you think it is important for senior primary school teachers to be involved in curriculum design and why do you say so?	
24. Does the involvement of curriculum developers and senior primary school teachers help the Ministry of Education to achieve its intended goals of the curriculum?	
25. Are senior primary school teachers fairly represented per region in curriculum design and why do you say so?	
26. Does the Ministry of Education encourage teachers to participate in curriculum design and development?	
27. What are the benefits of involving senior primary school teachers in decision-making process during curriculum design and development?	

28. Do you think teachers implement the curriculum effectively once they are involved in all stages of curriculum design and development and why do you say so?	
29. What are the challenges faced by teachers during curriculum design and development?	
30. What are your recommendations or suggestions to ensure effective participation of teachers in curriculum design?	

Thank you for your time; this is the end of the interview!

APPENDIX 3: PERMISSION BY PERMANENT SECRETARY



REPUBLIC OF NAMIBIA

MINISTRY OF EDUCATION, ARTS AND CULTURE

Tel: +264 61 -2933202
Fax: +264 61- 2933922
Enquiries: G. Munene
Email: gml2munene@yahoo.co.uk

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

File no: 11/1/1

Ms Lotty Kandali Amunkete
P. O. Box 72192
Khomas Grove
Windhoek
Email: lottyamukete@yahoo.com
Cell: 081 491 6640

Dear Ms Amunkete,

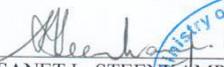
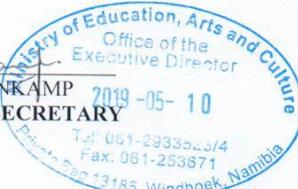
SUBJECT: PERMISSION TO CONDUCT RESEARCH IN KHOMAS REGION

Kindly be informed that permission to conduct an academic research for your Master's Degree on "The Role of Namibian Upper Primary Teachers in Curriculum Design in the Khomas Region" in 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. 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.

Sincerely yours


SANET L. STEENKAMP
PERMANENT SECRETARY


10/5/19
Date

All official correspondences must be addressed to the Executive Director.

APPENDIX 4: PERMISSION BY KHOMAS REGIONAL OFFICE



REPUBLIC OF NAMIBIA

KHOMAS REGIONAL COUNCIL

DIRECTORATE OF EDUCATION, ARTS AND CULTURE

Tel: [09 264 61] 293 9411
Fax: [09 264 61] 231 367/248 251

Private Bag 13236
WINDHOEK

File No: 13/2/9/1

Amunkete Kandali Lotty
University of Namibia
P.O. Box 72192
Khomas Grove

REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN KHOMAS REGION

Your letter dated 27 February 2019 on the above topic refers.

Permission is hereby granted to you to conduct your research for your Masters of Education titled: "The roles of Namibian Upper Primary Teachers in Curriculum Design: A case study of Khomas Region" which aim to provide a comprehensive understanding on the importance and the roles of upper primary school teachers in national curriculum design.

The following conditions must be adhered to:

- Permission must be granted by the School Principal;
- Teaching and learning in the respective schools should not be disrupted;
- Teachers who will take part in the research should do so voluntarily;
- You are advised to contact our Subject Advisors themselves and arrange appointment
- A copy of your thesis with your findings/recommendations must be provided to the Directorate of Education, Arts and Culture, Khomas Regional Council.

NIED is a different directorate; therefore, you have to get permission from the Director of NIED.

I trust this confirmation will suffice.

Yours sincerely

[Signature] 05/04/2019
DIRECTORATE OF EDUCATION, ARTS AND CULTURE
PRIVATE BAG 13236 WINDHOEK
05-04-2019
DIRECTOR
KHOMAS REGION

APPENDIX 5: ETHICAL CLEARANCE CERTIFICATE FROM UNAM



ETHICAL CLEARANCE CERTIFICATE

Ethical Clearance Reference Number: FOE/473/2019 Date: 24 June, 2019

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: The Roles Of Namibian Upper Primary Teachers In Curriculum Design: A Case Of Khomas Region

Researcher: AMUNKETE KANDALI LOTTY

Student Number: 201100998

Supervisor(s): *Dr. D. Wolffaardt*

Take note of the following:

- (a) Any significant changes in the conditions or undertakings outlined in the approved Proposal must be communicated to the UREC. An application to make amendments may be necessary.
- (b) Any breaches of ethical undertakings or practices that have an impact on ethical conduct of the research must be reported to the UREC.
- (c) The Principal Researcher must report issues of ethical compliance to the UREC (through the Chairperson of the Faculty/Centre/Campus Research & Publications Committee) at the end of the Project or as may be requested by UREC.
- (d) The UREC retains the right to:
 - (i) Withdraw or amend this Ethical Clearance if any unethical practices (as outlined in the Research Ethics Policy) have been detected or suspected,
 - (ii) Request for an ethical compliance report at any point during the course of the research.

UREC wishes you the best in your research.

Dr. E. de Villiers: HREC Chairperson

A handwritten signature in black ink, appearing to read "E. de Villiers", written over a horizontal line.

Ms. P. Claassen: HREC Secretary

A handwritten signature in black ink, appearing to read "P. Claassen", written over a horizontal line.

APPENDIX 5: PARTICIPANT INFORMATION LEAFLET AND CONSENT FORM



TITLE OF THE RESEARCH PROJECT:

THE ROLES OF NAMIBIAN SENIOR PRIMARY SCHOOL TEACHERS IN CURRICULUM DESIGN: A CASE OF KHOMAS REGION

REFERENCE NUMBER: 201100998

PRINCIPAL INVESTIGATOR: LOTTY KANDALI AMUNKETE

ADDRESS: PO BOX 72192, KHOMAS GROVE, WINDHOEK

CONTACT NUMBER: +264 81 4916640

You are being invited to take part in a research project. Please take some time to read the information presented here, which will explain the details of this project. Please ask the study staff any questions about any part of this project that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research entails and how you could be involved. Also, your participation is **entirely voluntary** and you are free to decline to participate. If you

say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part.

This study has been approved by the Research Ethics Committee at The University of Namibia and will be conducted according to the ethical guidelines and principles of the international Declaration of Helsinki, South African Guidelines for Good Clinical Practice and Namibian National Research Ethics Guidelines.

1. What is this research study all about?

The study will be conducted in Windhoek, at selected schools, PQA offices as well as at NIED. The total number of participants will be four curriculum developers, 4 persons from PQA as well as 10 teachers from different schools in Windhoek. In total the study will recruit 18 participants.

The study aims to provide an understanding on the importance and the roles of senior primary school teachers in national curriculum design. The study is carried out to provide understand the importance and the roles of senior primary school teachers in curriculum design, as well as to consider the need of involving them more.

2. Why have you been invited to participate?

You are invited to participate in this research because you are in a position to have rich information which is of significance towards the study. The participants have been purposely selected as they are believed to have the previously participated in previous curriculum design.

3. What will your responsibilities be?

You are kindly urged to provide honest information greatly looked-for by this study by answering interview questions or participating in group discussions. The interview will last for about 20 to 30 minutes.

4. Will you benefit from taking part in this research?

The study has no personal benefits to participants as of current, however in future it will benefit curriculum developers, teachers involved in curriculum design as well as add to literature with regards to findings obtained from the study.

5. Are there risks involved in your taking part in this research?

Participants are reassured that there is no harm that will result from participating in this study.

6. Will you be paid to take part in this study and are there any costs involved?

There will be no payments given for participating in this study. The researcher is responsible for all costs involved in the research process.

7. Who will have access to the collected information?

To ensure confidentiality and anonymity of the collected information, data collection materials used in this research will be stored in a safe place to avoid leakage of information and will be destroyed at least after five years. You are reassured that collected information will only be used for academic purposes and no one else apart from my supervisors will have access to them. Furthermore, your right to privacy will be highly guaranteed and when quoted in the thesis which will be available to the public, false names will be used.

8. Is there anything else that you should know or do?

As a participant, you have the right to withdraw at any given point in time during the study.

Finally, you can contact my supervisor, **Dr. D. Wolfaardt** at tel,+264 855744788 if you have any further queries or encounter any problems.

Otherwise, you can also contact the **Research Ethics Committee** at +264 061 2063061;pclaassen@unam.na if you have any concerns or complaints that I have not been adequately addressed.

You will receive a copy of this information and consent form for your own records.

Declaration by participant

By signing below, I agree to take part in a research study entitled:

**The Roles Of Namibian Senior primary school teachers In Curriculum Design:
A Case Of Khomas Region**

I declare that:

- a) I have read or had read to me this information and consent form and it is written in a language with which I am fluent and comfortable.
- b) I have had a chance to ask questions and all my questions have been adequately answered.
- c) I understand that taking part in this study is **voluntary** and I have not been pressurised to take part.
- d) I may choose to leave the study at any time and will not be penalised or prejudiced in any way.

e) I may be asked to leave the study before it has finished, if the study doctor or researcher feels it is in my best interests, or if I do not follow the study plan, as agreed to.

Signed at (*place*) on (*date*)
2019.

.....
Signature of participant

.....
Signature of witness

Declaration by investigator

I *LOTTY KANDALI AMUNKETE* declare that:

- I explained the information in this document to
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he or she adequately understands all aspects of the research, as discussed above
- I did not use an interpreter.

Signed at (*place*) On (*date*)
..... 2019.

.....
Signature of investigator

.....
Signature of witness