INTEGRATED CURRICULUM IN LESOTHO: EXPLORING PRIMARY SCHOOL TEACHERS' INSTRUCTIONAL AND ASSESSMENT PRACTICES

By

LERATO MATILDA RALEBESE

(RAMOHLOKOANE)

(STUDENT NO. 2004197782)

A thesis submitted in fulfilment of the requirements in respect of

Doctoral Degree qualification

IN THE

SCHOOL OF EDUCATION STUDIES

FACULTY OF EDUCATION

AT THE

UNIVERSITY OF THE FREE STATE

BLOEMFONTEIN

OCTOBER 2018

PROMOTER: PROF LC JITA

DECLARATION

I, **Lerato Matilda Ralebese**, declare that this study titled "***Integrated Curriculum in Lesotho: Exploring primary school teachers' instructional and assessment practices"*** is my own work. It has not been submitted previously for an award of academic degree or examination at any other university. The sources quoted are acknowledged by means of reference and failure to acknowledge is inadvertent.

I have not obtained a degree elsewherebased on this work. Furthermore, I took reasonable care to ensure that the work is original, and, to the best of my knowledge, does not breach copyright law, and has not been taken from other sources except where such work has been cited and acknowledged within the text.

I hereby declare that I am aware that the copyright is vested in the University of the Free State.

Signature: ……. Date: ……

L. M. Ralebese

ACKNOWLEDGEMENTS

The completion of this thesis has not been easy but it was worth it. I am grateful to God, the Almighty for the life He gave me and the individuals He provided who supported me in the pursuit and finalisation of my study. I am thankful to my parents (Ntate Lisema and 'M'e 'Malerato Mrs Ramohlokoane) who gave me unconditional love and support throughout my life, ensuring that I achieve the best I could.

Numerous individuals contributed towards the completion of this work. Dr Tsakeni, Dr Jita, Dr Mbhalati and Dr Reju for being the living examples that it is achievable regardless of the challenges I faced. Mr Ralebese, Matobako, Mr Leoisa, Maboi and Nthati, your sacrifices in ensuring that I complete my thesis are highly appreciated.

What would I be without the loving, caring, supportive and humorous husband of mine? Thank you, Daddy (Mr Moeketsi David Ralebese), you were pivotal in making my dream come true. Had it not been due to the support I received from SANRAL and from SANRAL Chair, my dedicated, critical, persuasive, caring, frank supervisor, Professor Loyiso Jita,the completion of this study would be blurred. I thank God for a supervisor of your calibre; you provided diligent support and offered a variety of opportunities to facilitate the completion of this academic journey. You always strive for excellence.

ABSTRACT

The risk of eroding quality in education, due to the focus on increasing enrolments in schools, has generated a wide interest in curriculum reform and learner-centeredness in education. Moreover, the realisation that education is directly linked to each country's economic and social progression compels policy makers to pursue a policy blueprint that would transform classroom practices. However, the reforms brought by such policies hardly gain access into classrooms to change teachers' practices. As a result, the policy-practice gap continues to exist.

Although the implementation of curriculum reform is often contentious and complex, it is necessary to attain educational targets. As such, implementation cannot simply be regarded as a mere execution of policy prescriptions, but should engage the sense-making processes of teachers as the core implementers. When a reform is as radical and ambitious as the one espoused by Lesotho's Curriculum and Assessment Policy (CAP), it becomes essential to establish teachers' interpretations and actual practices with respect to the new curriculum.

The purpose of this study was to explore the primary school teachers' instructional and assessment practices in the implementation of the New Integrated Curriculum (NIC) in Lesotho.

The study presents cases of four purposively selected qualified primary school teachers from schools in one dissemination centre in Maseru where the new curriculum had been implemented since its introduction in Lesotho in 2013. The data were gathered through document analysis, interviews, and by observing teachers presenting lessons in their classroom contexts while implementing the NIC.

I employed the descriptive content analysis technique in analysing the data from their planning books, the interview transcripts, and from the observations. A combination of the sense-making theory and social cognitive theory was used to explain their understandings and practices.

Teachers developed scheme-of-work and lesson plans in a compartmentalised manner and further presented non-integrated lessons. They typically isolated instruction and assessment in planning and during the lessons. They further used teacher centred methodologies and were in control of the learning process.

Additionally, they faced contextual challenges, which included lack of resources and overcrowding.

Therefore, teachers' understanding of integration, pedagogy, and roles seemed to fall short of the prescriptions. Their practices were subsequently influenced by their limited understanding and the contextual challenges they faced. As a result, their understandings and practices were found to be unaligned with the policy prescriptions. These understandings of policy prescriptions and their subsequent implementation were attributed to contradictory policy messages, curriculum content organisation, scheme-of-work and lesson plan formats as well as the prevailing classroom situations.

Teachers were positive about the NIC. However, their efforts in addressing the policy prescriptions pertaining to instruction and assessment processes are stifled, due to conflicting demands on them, prompting them to revert to their old ways of teaching.

This study fosters awareness to the relevant stakeholders about teachers' interpretations of the CAP prescriptions. It sheds light on teachers' particular concerns as core agents of reform. It would further help the policymakers make decisions by reflecting on the actual instructional and assessment experiences of teachers.

This study concludes that the effective implementation of the new curriculum depends heavily on appropriate interpretation of the policy prescriptions by teachers, clarity of the curriculum guidelines and the conduciveness of the context.

I therefore recommend thorough professional development (PD) of teachers (in-service and pre-service) which focuses on integration and what it entails. I further suggest that the organisation of curriculum content should be reviewed to promote integration. The scheme and lesson plan formats should also be reviewed to break the boundary lines between the learning areas.

Keywords: assessment, curriculum and assessment policy prescriptions, curriculum reform, instruction, integration, quality education, teachers' practices, teachers' understandings,

OPSOMMING

Die risiko van verswakking in die gehalte van onderwys as gevolg van 'n fokus op toenemende inskrywings by skole, het groot belangstelling in kurrikulumhervorming en leerdergesentreerdheid in die onderwys tot gevolg gehad. Bowendien dring die besef dat onderwys direk met elke land se ekonomie en maatskaplike vooruitgang verband hou dwing beleidmakers om ’n bloudruk vir beleid na te streef wat klaskamerpraktyke sal verander. Die hervorming wat met hierdie beleide gepaard gaan, vind egter nie neerslag in klaskamers ten einde onderwysers se praktyke te verander nie. Gevolglik bly die beleidspraktykgaping voortbestaan.

Alhoewel die implementering van kurrikulumhervorming dikwels omstrede en komplekse is, is dit nodig vir die bereiking van opvoedkundige teikens. As sodanig kan implementering nie bloot as slegs 'n uitvoering van beleidsvoorskrifte beskou word nie, maar dit moet die singewingsprosesse van onderwysers as die hoof implementeerders betrek. Wanneer 'n hervorming so radikaal en ambisieus is soos die een wat deur Lesotho se Kurrikulum- en Assesseringsbeleid (GLB) aangewend word, word dit noodsaaklik om onderwysers se interpretasies en werklike praktyke met betrekking tot die nuwe kurrikulum te vestig.

Die doel van hierdie studie was om die laerskoolonderwysers se onderrig- en assesseringspraktyke in die implementering van die Nuwe Geïntegreerde Kurrikulum (NIC) in Lesotho te ondersoek.

Die studie bied gevalle aan van vier doelgerigte geselekteerde laerskoolonderwysers van skole in een verspreidingsentrum in Maseru, waar die nuwe kurrikulum sedert bekendstelling in Lesotho in 2013 geïmplementeer is. Die data is ingesamel deur middel van dokumentanalise, onderhoude, en die waarneming van onderwysers wat lesse in klaskamerkonteks aanbied met die implementering van die NIK.

Ek het die beskrywende inhoud-analiseringstegniek gebruik om die data uit hul beplanningsboeke, die onderhoudstranskripsies en die waarnemings te ontleed. 'n Kombinasie van die singewings- en sosiaal-kognitiewe teorie is gebruik om hul begrip en praktyke te verduidelik.

Onderwysers het werkskemas en lesplanne op 'n kompartementaliseerde wyse ontwikkel en verder nie-geïntegreerde lesse aangebied. Hulle het gewoonlik

voorskrifte en assessering in beplanning en tydens die lesse geïsoleer. Hulle het verder onderwysergesentreerde metodologieë gebruik en was in beheer van die leerproses. Daarbenewens is hulle gekonfronteer met kontekstuele uitdagings wat gebrek aan hulpbronne en oorlading insluit.

Daarom het onderwysers se begrip van integrasie, pedagogie en rolle geblyk om aan die voorskrifte tekort te skiet. Hul praktyke is dus deur hul beperkte begrip en die kontekstuele uitdagings wat hulle in die gesig gestaar het beïnvloed. Gevolglik is gevind dat hul begrip en praktyke nie met die beleidsvoorskrifte ooreenstem nie. Hierdie begrippe van beleidsvoorskrifte en die daaropvolgende implementering word toegeskryf aan teenstrydige beleidsboodskappe, kurrikuluminhoud-organisasie, werkskemas en formate van lesplanne, asook die heersende klaskamersituasies.

Onderwysers was positief oor die NIK. Hul pogings om die beleidsvoorskrifte met betrekking tot onderrig- en assesseringsprosesse aan te spreek, word egter geknou as gevolg van teenstrydige eise aan hulle, wat hulle daartoe lei dat hulle na hul ou leermetodes terugkeer.

Hierdie studie bevorder bewustheid aan die betrokke belanghebbendes oor onderwysers se interpretasies van die GLB-voorskrifte, wat hul onderrig- en assesseringspraktyke direk en indirek beïnvloed. Dit werp lig op onderwysers se besondere bekommernisse as hoof agente van hervorming. Dit sal die beleidsmakers verder help om besluite te neem deur te besin oor die werklike onderrig- en assesseringservarings van onderwysers.

Hierdie studie kom tot die gevolgtrekking dat die effektiewe implementering van die nuwe kurrikulum hoofsaaklik afhang van die onderwysers se toepaslike interpretasie van die beleidsvoorskrifte en die duidelikheid van die kurrikulumriglyne en die bevorderlikheid van die konteks.

Daarom beveel ek deeglike professionele ontwikkeling van onderwysers aan (in-diens en voordiens) om te verseker dat onderwysers die kurrikulum-aspekte verstaan, wat integrasie behels en hoe dit in hul onderskeie skoolkontekste aangespreek moet word.
Sleutelwoorde: assessering, kurrikulumvoorskrifte, kurrikulumhervorming, onderrig, integrasie, gehalte-onderwys, onderwyserspraktyke, onderwysersbegrip

DEDICATION

To my mother and father: ’M’e ’Malerato and Ntate Lisema Ramohlokoane

My love: Mr Moeketsi David Ralebese (Daddy)

My doves: Nthabiseng Joyous (Baby) and Reitumetse Joy (K’huthu) Ralebese

My sisters and brothers: Liphepelo, Lebohang, Nthusi, Mpho, Thandiwe, ’Mafelile, Nts’iuoa, Bra Lira, Lints’o, Matlotlo, Neo

All the sons and daughters of the Ramohlokoane and Ralebese families

My friends: ’Matumelo Kokonyane, NkhensaniMbalati and Moliehi Sekese

My mentor: Mrs Telukhunoane (’M’e Ts’eli)

Your unconditional support, love, patience, prayers and motivation kept me going. You empowered me to make my dream come true. Your belief in me encouraged me to pursue this challenging, exciting, and fruitful journey; honour to you, Bahlakoana-ba-’Mapholo’a-Lisema and Bakoena-ba-Molibeli.

LIST OF TABLES

LIST OF FIGURES

LIST OF PICTURES

TABLE OF CONTENTS

LIST OF ACRONYMS

ACL Anglican Church of Lesotho

AME	African Methodist Episcopal
CAP	Curriculum and Assessment Policy
CCK	Common Content Knowledge
CE	Creativity and Entrepreneurial learning area
CK	Content knowledge
DIP	Diploma in Education
DTEP	Distance Teacher Education Programme
ECoL	Examinations Council of Lesotho
EFA	Education for All
FPE	Free Primary Education
IP	Integrated Part
IPoNC	Integrated Part of the New Curriculum
LCE	Lesotho College of Education
LEC	Lesotho Evangelical Church
LLE	Linguistic and Literary [English] learning area
LLS	Linguistic and Literary [Sesotho] learning area
LO	Learning outcomes
MDGs	Millennium Development Goals
MEAL	Ministry of Education and Advanced Learning
MoET	Lesotho Ministry of Education and Training
NIC	New Integrated Curriculum
NM	Numerical and Mathematical learning area
NUL	National University of Lesotho

PCK	Pedagogical Content Knowledge
PSS	Personal, Spiritual and Social learning area
RCC	Roman Catholic Church
SADC	Southern African Development Community
SCK	Specialised Content Knowledge.
SCT	Social Cognitive Theory
SDGs	Sustainable Development Goals
SMT	Sense Making Theory
SSK	Subject Specific Knowledge
ST	Scientific and Technological learning area
UN	United Nations
WPP	World Population Prospects

CHAPTER 1 ORIENTATION

1.1 Introduction

Achieving universal primary education was one of the Millennium Development Goals (MDGs) aimed to be accomplished by 2015. According to the 2015 MDGs report, the global enrolment rate in primary schools had increased to 91% since 2000, while the net enrolment rate in sub-Saharan Africa increased by 20% since 2000 (UN, 2015). Working towards the attainment of the aforementioned MDGs, the concerned countries invested in a variety of factors to accommodate the increased number of children attending schools. For instance, they developed infrastructure (road and school construction), trained teachers (ensuring that the teachers are qualified) and made materials available at schools (e.g. science and mathematics kits).

However, the development of the MDGs was criticised from different angles (Rasheed, 2000; Fehling, Nelson & Venkatapuram, 2013; Guibou, 2017). For instance, it seemed that the developed countries and the funding agencies influenced the MDGs, resulting in a lack of authenticity in the developing countries. Secondly, some goals were limited to certain issues, such as quantity. This includes the educational goal on enrolment in schools which neglected to address the quality of the education the learners had to receive.

The achievements and shortcomings of the MDGs (on education) and Education for All (EFA) goals were reviewed and refined, resulting in the development and implementation of the sustainable development goals (SDGs) (UNESCO, 2015). The SDGs are the post-2015 global, refined and contextualised objectives for the developed and developing countries. For instance, SDG 4, “to ensure inclusive and quality education for all and promote lifelong learning” (UNDP, 2016), addresses the gap in the MDG on education, which states that education should accommodate different people and be of quality, stimulating everlasting learning.

Quality education has been a key concern in developed and developing countries, as a result, individual countries focused on different aspects to improve the quality of their education based on factors such as the country’s cultural, economic or political context (Chimombo, 2005; Schmidt, Wang & McKnight, 2005; Ramberg, 2014). In striving to

promote quality education, some countries focus on teacher training, some on improving infrastructure, while others concentrate on curriculum reform (Gopinathan, 2011).

Considering these various angles on how governments handle the issue of quality education, the general concern at school level is mainly to ensure effective learning by addressing factors such as appropriate curricula content and materials, use of child-centred pedagogy and a conducive physical, social and emotional environment (Chimombo, 2005; Dempster, 2012; Mupa & Chinooneka, 2015). Curricula reform is a widespread activity performed with the intention of enhancing the value of education systems. It therefore seems to be the best tool for dealing with quality education in most countries.

1.1.1 Background

The possibility of eroding quality in education,due to the focus on increasing enrolments in schools,has generated a wide interest in curriculum reform and learner-centeredness in education (Chisholm & Leyendecker, 2008; Ramberg, 2014; UN, 2015). Lesotho is no exception from other countries in this regard (addressing quality education).

Lesotho, as a signatory member of the United Nations (UN), seeks to comply with international conventions and agreements through its educational policies. This incorporates the educational targets of MDGs, EFA and SDGs, among others. For instance, many of Lesotho's educational policies are guided, to a considerable degree, by the EFA goals and policy actions in the field of education and training (MoET, 2005; UNESCO, 2014a). Besides, Lesotho has been implementing the Free Primary Education (FPE) policy since 2000 to promote EFA and has recently introduced the new curriculum to address the relevance and quality of education offered to its citizens (NCDC, 2013).

In order to prepare the landscape for implementing the said policies, Lesotho amended and developed some legal and policy frameworks to guide the implementation. For example, the Education Act, No 3 of 2010, stipulates that basic education should not only be free but compulsory as well. Moreover, the Teaching Service Regulations of

2002 and the Code of Good Practice of 2011 stipulate the roles and responsibilities for all stakeholders in the education system.

There is a view that some of the factors leading to the poor standard of education in Lesotho are the “unqualified” teachers and the kind of curriculum Lesotho had used over the years (MoET, 2005; MoET, 2009; Raselimo, 2010). The Lesotho Ministry of Education and Training (MoET) accordingly committed itself to improving the quality of primary education (from 2003–2015) by first upgrading teacher qualifications to at least diploma level of professional teaching (MoET, 2005). It has to be noted though that the upgrading of teachers’ qualifications had been done based on the same curriculum that had been in use (the old curriculum).

The Lesotho College of Education (LCE) introduced teacher development programmes, such as the Diploma in Education (primary) (DIP), that were offered to teachers who already had teaching certificates. Apart from that, the practising “unqualified” teachers were admitted into a Distance Teacher Education Programme (DTEP). The National University of Lesotho (NUL) also admitted the in-service teachers who had already obtained their diplomas to further their studies on part-time bases. Increasingly, therefore, most of the teachers recruited over the last few years in Lesotho are now qualified.

Besides implementing teacher development programmes in an attempt to improve the quality of education, Lesotho recently reviewed the curriculum for primary and high schools. This evaluation resulted in the production of the Curriculum and Assessment Policy (CAP). Thereby, the New Integrated Curriculum (NIC), which is said to be relevant in the context of Lesotho, was developed (MoET, 2009).

According to the MoET (2009), the grade 1–7 curriculum should follow an integrated approach to address the issue of relevance. The merits of this approach include recognising that learners are part of various communities, considering their experiences for learning and relating learning to real-world problems (Kahveci & Atalay, 2015).

However, Lesotho has gone through several educational reform movements, including those whose goals were to instil moral and cultural values, as well as social responsibility, to those that propagated Christian values and literacy, right through to

those that sought to use education as an instrument for promoting economic and social development (Muzvidziwa & Seotsanyana, 2002).

1.1.2 Problem statement

In light of the characteristics of the integrated curriculum and the reasons underpinning the curriculum reform in Lesotho (MoET, 2005; MoET, 2009; Dambudzo, 2015; Kahveci & Atalay, 2015), it is interesting to investigate Lesotho primary teachers' interpretation of the curriculum policy prescriptions and their implementation of instruction and assessment in their classrooms in the wake of the current curriculum reform.

Interestingly, this reform is intented to establish educational change by integrating practical and/or technical subjects into the school programmes; thus, teaching learners using child-centred approaches (MoET, 2005; MoET, 2009). Moreover, continuous assessment is to be linked with instruction by using authentic assessment strategies to supplement summative pen-and-paper examinations to show learners' actual knowledge and skills based on the predetermined standards of performance (ECoL & Burdett, 2012; ECoL, 2012).

Therefore, teachers are expected to change pedagogy and shift from traditional approaches of instruction and assessment to the alternative ones (MoET, 2009). This incorporates the use of learner- centred methods and different assessment strategies (assessment for learning, assessment as learning and assessment for learning). Assessment for learning enhances achievement while assessment as learning strategy makes active, committed and critical learners (Amakiri, 2017; Etsey & Gyamfi, 2017). The old curriculum focused on assessment of learning and in the new curriculum, assessment of learning forms part of the assessment. Researchers caution that the use this assessment strategy should be based on a rationale to shift from foundational to practical and reflective competences of learners (Atibuni & Olema, 2017).

Literature has documented the challenges of implementing an integrated curriculum in different countries. For instance, in Ohio, USA research found that theteachers liked the integrated curriculum and that its implementation depended on teachers' content knowledge and more significantly on their collaboration (Fu & Sibert, 2017). In

Singapore, a study found that the main implementation obstacle was that teachers lacked the content knowledge of different subject areas that are meant to be integrated but greater learner engagement was the main benefit of the integrated curriculum(Lam, Alviar-Martin, Adler & Sim, 2013). The case of South Korea is different. Korean teachers lacked the theoretical framework for curriculum integration hence they adopted a pragmatic approach towards integration by synchronising subject topics yetthey maintained the subject boundaries (Park, 2008).

The integrated curriculum is purported to: “develop a holistic view of learning; make learning applicable in practice to increase teachers’ and students’ motivation” (Ibraimova, 2017:11). Kahveci and Atalay (2015) and Dambudzo (2015) confirm its effectiveness and showed its benefits for learners such as improved academic performance, collaboration and motivation to learn.In spite of the purposes and the benefits, various factors affect the implementation of integrated curriculum in schools.

Various stakeholders have apprehensions about an integrated curriculum because it requireslearners to take responsibility for their own directed learning in addition to the quest for the provision of real life contexts for learning, (Shankar, 2014; Raselimo & Mahao 2015).

Curriculum reform in Lesotho requires a radical change at school level (MoET, 2009). This puts teachers at the forefront of implementation; hence, they are called the core curriculum implementers. Consequently, their knowledge (about curriculum, pedagogy and learners) and their instructional and assessment practices are crucial. Nevertheless, teachers are mostly left out of the curriculum development processes, which incorporate instructional design, except when they have to implement it (Jansen, 1998).

Owing to this, teachers’ understanding of the whole process of curriculum development may be vague due to their beliefs, interpretation and knowledge about instruction and assessment pertaining to the integrated curriculum. Eventhough teachers’ beliefs regarding the implementation of the integrated curriculum are crucial, research on this matter is limited (Fu & Sibert, 2017). However, Lun (2006) concurs with Oztuk and Erden (2010) that the teachers are generally positive towards the

integrated curriculum,its benefits for learners and they believe that its implementation contributes to improved learners' achievement.

According to various studies on curriculum development, the integrated approach is a quest to a main concern for the developed and developing countries (Jone, 2010; Dambudzo, 2015; UNESCO, 2017). The implementation stage is the most critical phase of curriculum development, which reveals learners' experiences in the various classrooms (Carl, 2009).

In view of the CAP prerequisite that instructional and assessment pedagogy should change (MoET, 2009; ECoL & Burdett, 2012; ECoL, 2012), teachers' practices are expected to improve in the implementation of the new curriculum. Since the current curriculum policy requires advancement of the teachers and learners' practices, it is important to understand the teachers' interpretation of the curriculum prescriptions, their classroom practices, together with factors that intervene between the goals of reform and effective learning, to make teachers the effective agents of reform (Roychoudhury & Kahle, 1999).

Jansen (1998) shows the importance of teachers' understandings in his critical analysis of curriculum reforms in South Africa, where he argues that educational policy reforms require teachers to apply skills. Apart from that, he indicates that reforms also demand teachers to comprehend the theoretical underpinnings of that particular policy and to be able to transfer such application and understanding into different classroom contexts.

This implies that the ideal dissemination process should include detailed explanations underpinning the Curriculum and Assessment Policy (CAP) and consequently, the reasons the new curriculum and assessment should be implemented in particular ways. This process may enable teachers to conceptualise and make sense of the new policy on curriculum and assessment in the country given that they were not involved in the initial conceptualisation of the policy. An effective dissemination process is therefore a prerequisite for successful curriculum reform in any country.

A significant challenge with the new curriculum in Lesotho lies in the fact that it seeks to promote integration, change the pedagogy and roles in the teaching of curriculum topics that were previously part of separate subjects, especially at the first level (i.e.

grades 1–4). In addition, the syllabi contents are also presented in separate learning areas.

The difficulty with this expectation is that the majority of teachers in Lesotho were trained to teach individual subjects and topics. They have had very little experience with integration in the curriculum, even after the 2003–2015 Strategic Plan was developed, which advocated for quality education that encompassed the issue of qualified teachers and the integration of subjects into school programmes (MoET, 2005; Raselimo, 2010).

More importantly, they should link their lessons with real-life problems and everyday experiences of the learners (MoET, 2009). Many teachersare unprepared for this tall order. This study thus sought to understand how primary teachers are currently experiencing and negotiating this specific integration challenge in their classrooms.

The study sought to understand how teachers' knowledge, beliefs and experiences help to shape their interpretation of curricula, as well as the instructional and assessment practices in the new curriculum of Lesotho. Currently, very little is known about how teachers in Lesotho interpret the curriculum, deliver instruction and assess learners in primary schools, especially in a time of transition from a traditional approach to teaching and assessment, to a more learner-centred approach.

How teachers conduct their lessons is therefore crucial for realising the aims of every curriculum reform, including the well-designed and sensible ones (Waugh & Godfrey, 1995). It is for this reason that the present study sought to explore the primary teachers' instructional and assessment practices in the Lesotho context in order to establish the challenges and opportunities for implementing successful curriculum reform. Moreover, understanding the classroom interactions of teachers and learners is vital, because this socio-cultural context makes the classroom practices meaningful, stable and consistent (Nkosana, 2013).

What do the teachers' actual classroom instructional and assessment practices in Lesotho look like under the new curriculum? In addition to determining the classroom practices, I am also interested in uncovering the teachers' understandings of the new curriculum demands, the way they make sense of the new curriculum itself and what practices resulted from their understandings of the new curriculum.

This study focuses more on the realities and challenges of the NIC implementation in the primary school classrooms rather than on the curriculum design process; that is, how teachers interpret the curriculum as reflected in their preparations and actual practices. How do primary school teachers in Lesotho negotiate the implementation of the new curriculum? Specifically, how do they deal with the new curriculum that brings together content from previously separate subject areas? How is instruction planned and implemented? And, how is the instruction assessed?

In order to determine responses for these questions, the researcher explored teachers' instructional and assessment practices at primary schools that have implemented the new curriculum since 2013, beginning with grades 1–3, and that are currently using this curriculum up to grade 7. The basic education programme includes grades 1–4, that is first level, at the end of which learners sit for the national summative test called "End of Level Test". Similarly, grades 5–7 fall within the programme in the intermediate phase.

The teachers' interpretations of the curriculum, their experiences (both past and present) in the environment in which they implement the curriculum and their challenges have to be understood from their perspectives. Hence, a common saying is "Education can change culture but only in so far as educators are transformed".

1.1.3 Research aim and objectives

This study aimed to explore the instructional and assessment practices of teachers in Lesotho's primary schools during the implementation of the New Integrated Curriculum (NIC) lessons. The objectives were as follows:

1. To determine the teachers' understandings of the Curriculum and Assessment Policy (CAP) in Lesotho in terms of its prescriptions for classroom instruction and assessment
2. To discover teachers' actual practices in implementing the curriculum and assessment guidelines during classroom instruction and assessment
3. To explain teachers' understandings and practices of the new curriculum
4. To recommend improvements in the implementation of the new curriculum in Lesotho

1.1.4 Research questions

The main research question of the study was “How do primary school teachers in Lesotho construct instructional and assessment practices in their classrooms during the implementation of NIC?”

To answer the main research question, the following secondary questions were proposed:

1. What are the teachers’ understandings of the new curriculum and assessment policy in Lesotho in terms of its prescriptions for classroom instruction and assessment?
2. How do teachers implement the curriculum and assessment guidelines during classroom instruction and assessment?
3. How can the teachers’ understandings and practices of the new curriculum be explained?
4. What recommendations can be made for improvements in the implementation of the integrated curriculum in Lesotho?

1.1.5 Rationale

This study was worth conducting because little is known about how teachers understand the CAP prescriptions, let alone how and why teachers conduct their instruction and assessment in the ways they do, especially when implementing a New Integrated Curriculum (NIC). In addition, this study was pursued to establish whether and how the new curriculum is implemented in line with the curriculum prescriptions.

Although researchers such as Raselimo and Wilmot (2013) have conducted a study on curricula reform in Lesotho, it was limited only to the integration of the concept in a subject (i.e. Environmental Education in Geography) not integration under a curriculum as a whole. This study revealed that the interaction between the teachers’ epistemologies and the contextual factors constrained the envisaged integration. The present study extends this recent literature by examining the actual teacher practices coupled with their perceptions and understandings regarding the holistic integration that includes, among others, integration of learning with daily life experiences and linking instruction with assessment.

Exploring the instructional practices, assessment practices and challenges that the teachers face, together with the teachers' views pertaining to the new curriculum, may influence the opportunities to structure and guide the implementation of relevant and quality education in Lesotho.

As a primary school teacher, I have taught subjects according to the old curriculum, which are now clustered into windows and/or learning areas (e.g. IPoNC comprises Science, Home Economics, Agriculture, Health and Physical Education, Social Studies and Religious Education, amongst others, at primary school). I am cognisant of the struggles that teachers encounter when implementing the new curriculum.

My experience is that many teachers are used to imposing knowledge and skills on learners, just to ensure that they pass their examinations, not necessarily to attain the curricular objectives (Ralebese, 2014). This phenomenon coincides with the dominant view that teaching is examination-oriented in many of Lesotho's classrooms (Raselimo, 2010). Hence, it is interesting to explore how teachers, who were more or less vested in the old curriculum, would suddenly negotiate the implementation of the new curriculum. That is, the curriculum which requires teachers, who were trained to teach according to the old curriculum, to employ more learner-centred approaches.

1.1.6 Significance

The studies that investigate the implementation of an integrated curriculum paint a gloomy picture. For instance, teachers are challenged by inadequate professional development, a lack of knowledge, skills and deep understanding about integration (Fu & Siberts, 2017; Ibraimova, 2017).

This study sought to uncover teachers' interpretations of the curriculum prescriptions, their intentions regarding their lessons, the actual classroom practices and the reasons for those practices. It further clarifies particular concerns relating to the implementation of effective instruction and assessment, especially in developing countries such as Lesotho. The research further intended to help the policymakers make informed decisions regarding the breadth and depth of the content that is taught in schools, the necessary instructional materials used and teachers' pedagogical content knowledge on the new curriculum.

I therefore wanted to foster awareness about the developments pertaining to the implementation of the New Integrated Curriculum (NIC) in general and to contribute to knowledge regarding the key challenges and opportunities of curriculum implementation in Lesotho and other developing countries. The programme evaluators whose goals might be to describe a programme and to evaluate its operational effectiveness (instrumental) may even use the results and recommendations of this case study.

1.2 Theoretical framework

This study relied on a combination of sense making theory and social cognitive theory to form the framework.

According to Coburn and Talbert (2006) Sense Making Theory (SMT) is a process whereby individuals use their pre-existing beliefs to construct meaning within a specific context. In the same way, Spillane, Halverson and Diamond (2004) indicate that context can either enable or constrain sense making. Therefore, sense making is an individual as well as a social process of constructing meaning when confronted by new information or events. The manner in which agents understand policy messages about their local behaviour depends on the interaction between their cognitive structures, their situation and policy signals (Spillane *et al.,* 2002; Coburn & Talbert, 2006).

This theory (SMT) offered a way for an in-depth exploration of how teachers construct their understandings of the policy prescriptions and how their understandings could influence their classroom practices. As such, SMT was a fitting theory that guided the formulation of the interview protocol aimed to solicit deeper reflection from teachers about their interpretations of policy prescriptions.

On the other hand, Jenkins, Hall and Raeside (2018) articulate that Social Cognitive Theory (SCT) is concerned with how individuals enact behaviour in a social setting including how that individual acquires information. Moreover, Bandura (1989) asserts that human behaviour is determined by cognitive (knowledge, expectations and attitudes), behavioural (skills, practice and self-efficacy) and environmental (social norms, access in community and influence on others) factors. Carillo (2010) posits that SCT is best described by the reciprocal interaction of behavioural factors, personal factors and environmental factors.

There is a consensus in literature that self-efficacy is central to SCT (Wang & Lin, 2007; Bandura, 1989; Nabavi, 2012). Self-efficacy influences the application of skills and whether they can be used to achieve the desired outcomes (Althauser, 2018). People may or may not feel confident about their own ability to perform certain tasks, especially new tasks. This implies that teachers are more inclined to do what they believe they are capable of/have capacity to do. Based on their prior experience, they judge and make decisions about the new information before them, whether the new information about reform requires them to do what they have capacity to do. Equally important, their environment reinforces their beliefs of whether they engage in new behaviour or maintain their extant behaviour (Jenkins *etal*., 2018).

Sense making theory helps to understand how individuals construct their understanding of new information and explains how their context influences their decisions (Coburn & Woulfin, 2012). In this study, it offers a lens for understanding how teachers construct their understandings of policy prescriptions and how their understandings potentially shape their practice.

On the other hand, social cognitive theory provides an explanatory framework of how individuals construct their practices (Carillo, 2010). It is therefore, an appropriate lens for understanding the practices of teachers in the context of their classrooms. Teachers' practices emerge from the interaction of their thinking and their context (Bandura, 1989).

Additionally, the SCT explains how individuals obtain and sustain certain behaviours. According to SCT, teachers' practices result from the interaction of their cognition with the environment. Therefore, SCT provided the frame for designing the observation protocol that would expose teachers' practices and reasons for such practices.

The combination of SMT and SCT is suitable for making the framework of this study. The former mainly focuses on the cognitive aspect of the individuals when confronted with new policy information (i.e. how they construct their understandings). The latter places more focus on the behavioural aspects of individuals as they implement new policies in a specific context (how and why they enact their practices).

Taken together, SMT and SCT guided me in the selection of a qualitative approach that generated thick descriptions of teachers' understandings of policy prescriptions

and how they implemented the new curriculum. Moreover, due to the intention of gaining in-depth information from the teachers, these theories gave me a background to select four cases purposely that would be explored extensively.

Furthermore, the two theories played a vital role in explaining the findings of this study. The principles of SMT and SCT (cognition, environment and behaviour) were useful in accounting for teachers' understandings and practices pertaining to the policy prescriptions.

1.3 Research design and methodology

The research design is a structured outline or strategy the researcher uses to answer the research questions (Johnson & Christensen, 2014). I used a non-experimental research design (case study) that is embedded in interpretivism in order to answer the research questions (*cf.* section 1.1.4).

This case study design involved purposive and convenience sampling techniques to obtain rich data that determined the theoretical generalisation as this is a qualitative study (Creswell, 2014). These techniques allow the researcher to use discretion to select a sample that is reasonably accessible and would elicit in-depth data (Johnson & Christensen, 2014). Therefore, the purposively and conveniently selected sample comprised four qualified teachers in grade 3, 4 and 5; their scheme and lesson plan books. The teachers were chosen from primary schools implementing the new curriculum at one educational centre in Maseru Lesotho.

To put this plan in action, the study used a qualitative methodology whereby data was gathered through observations, interviews and document analysis (Sullivan, 2001; Johnson & Christensen, 2012; Creswell, 2014).

As a result, teachers were observed during three lessons and interviewed after each lesson to ascertain their actual instructional and assessment practices as well as their understandings. I analysed their schemes of work and lesson plans, to establish their interpretations of policy prescriptions, for a particular unit during which observations were conducted. This was done with reference to other documents such as the syllabi and assessment guidelines. Then I followed the direct content analysis approach to analyse the collected data (Taylor-Powell & Renner, 2003; Bowen, 2009).

Table 1.1 below shows the methodology for this study, which was determined by the research questions that were addressed in the form of objectives.

Table 1–1: Methodology

Objective	Method	Instrument
What are the teachers' understandings of the new curriculum and assessment policy in Lesotho in terms of its prescriptions for classroom instruction and assessment?	Document analysis, observations& interviews	Syllabi, teachers' guide, scheme of work, lesson plan, voice recorder, observation schedule, camera, interview schedule
How do teachers implement the curriculum and assessment guidelines during classroom instruction and assessment?	Document analysis, observations & interviews	Syllabi, teachers' guide, scheme of work, lesson plan, voice recorder, observation schedule, camera, interview schedule
How can the teachers' understandings and practices of the new curriculum be explained?	Triangulation of Question 1 & 2 findings	
What recommendations can be made for improvements in the implementation of the integrated curriculum in Lesotho?		

1.4 Research ethics

To ensure that the study adhered to the ethics of research, permission was sought first from the relevant authorities. I obtained ethical clearance from the University of the Free State and permission from the Ministry of Education and Training in Lesotho as well as the school principals (Appendix A). Furthermore, I had informed consent from teachers that stipulated that their participation was voluntary and anonymous (Sullivan, 2001; Shenton, 2004).

1.5 Limitations of the study

Owing to the qualitative nature of this study, data was gathered from four participants. Therefore, the findings cannot be statistically generalised but only theoretical generalisations can be made (Creswell, 2014). In mitigation, the study relied on thick descriptions and methodological triangulation to increase the credibility of its findings.

The study initially targeted grade 4 teachers. However, in 2016 teachers had been allocated to teach other grades. In mitigation, I then made a conscious decision to follow the four teachers regardless of their grade as a way of widening the scope of the study.

1.6 Feasibility of the study

The selected dissemination centre consists of about thirty schools that belong to churches, the government, communities and private owners. Among these schools, some have more than two streams of grade 4 classes and almost all the teachers of these schools were qualified. All the schools of this centre were within my reach.

1.7 Research outline

Chapter 1: An orientation to the research; introduction, theoretical framework, rationale of the problem, research questions, aims and objectives, research design and methodology, research outline and summary.

Chapter 2: Literature review: introduction, history of curriculum reform in Lesotho, the nature of the new curriculum, theoretical and conceptual frameworks, phases of curriculum development, teacher knowledge in relation to instruction and assessment, teacher beliefs and perceptions on the nature of learning, effective instruction and assessment for the integrated part of the new curriculum.

Chapter 3: Discussion of the research design and methodology: the research paradigm, sampling, ethical consideration, data collection and analysis methods, instruments and techniques.

Chapter 4: Data presentation and analysis.

Chapter 5: Cross case analysis.

Chapter 6: Discussions, conclusions on the research findings and recommendations drawn from the research.

1.8 Summary

This chapter highlighted the entire study conducted. This study was intended to reveal how teachers interpret policy prescriptions seen by how they plan for and conduct their lessons and to reveal their practices regarding the implementation of the new curriculum. It followed the qualitative approach embedded in the interpretive paradigm. Data was collected by means of a case study using document analysis, observations and interview techniques. As a result, I had the text and descriptive data that were analysed using the direct content analysis principles outlined by Taylor-Powell and Renner (2003).

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

How do teachers implement curriculum reform that requires integration? Among many prerequisites, curriculum reform on its own requires teachers to be well trained with regard to the pedagogy necessary for the adequate implementation of such reform (Zhu, 2010). The implementation of curriculum reform that involves integration further places teachers at stake. It implies that teachers should also bring in the element of integration during the process in addition to the desired pedagogy. Integrated curriculum implementation entails equipping learners with skills that would enable them to solve real-life problems by using their knowledge from different disciplines (Corlu & Aydin, 2016).

In what way do teachers implement the new integrated curriculum to equip learners to survive in the 21st century? It was found that Basotho children are faced with certain challenges and ought to have the necessary competences to enable them to survive and function as individuals in different contexts of late (MoET, 2009). As a result, the Curriculum and Assessment Policy (CAP) was established and led to the development of the new curriculum and assessment means in Lesotho.

This chapter examines a group of issues regarding a curriculum developed due to the above-mentioned policy, especially the implementation related issues. The study explores the primary teachers' instructional and assessment practices pertaining to the integrated curriculum in Lesotho. The intention is to answer this main question: "How do primary school teachers in Lesotho construct their instructional and assessment practices in their classrooms during the implementation of the NIC?" In addition, the following secondary questions were addressed:

1. What are the teachers' understandings of the new curriculum and assessment policy in Lesotho in terms of its prescriptions for classroom instruction and assessment?
2. How do teachers implement the curriculum and assessment guidelines during classroom instruction and assessment?

3. How can the teachers' understandings and practices of the new curriculum be explained?
4. What recommendations can be made for improvements in the implementation of the integrated curriculum in Lesotho?

The discussion below resumes with the background of Lesotho education. The literature review focused on two overarching elements of this study, which are a discussion of the theoretical framework of this study and curriculum development incorporating the integrated curriculum model.

2.2 Theoretical framework

Several studies establish the importance of teachers' cognitive engagement with curriculum reform. It is argued that for implementation to succeed, teachers should understand what the policy envisages in order to construct an effective implementation approach in their classrooms (Jansen, 1998; Roychoudhury & Kahle, 1999; Spillane, Reiser & Reimer, 2002). However, many studies show that policy intentions hardly ever penetrate into the classrooms (Cohen, 1990; Lefstein, 2008).

Implementation literature abounds with explanations for discrepancies between policy intentions and teachers' practices (Lefstein, 2008; Coburn, 2006; Spillane *et al.,* 2002). These studies propose frameworks and theories that would guarantee the success of policy implementation (Spillane *et al.,* 2002; Spillane *et al.,* 2004; Coburn, 2005; Werts & Brewer, 2015).

The sense making theory seeks to explain how cognition shapes the understanding of policy and its potential to influence practice. Despite its limitations, this theory attempts to privilege the local agent's point of view by not looking at the agent as something to fix (Walls, 2017, Werts & Brewer, 2015).

As indicated earlier, this study determined teachers' classroom instructional and assessment practices in relation to the implementation of the New Integrated Curriculum (NIC). This includes how they interpret the policy prescriptions as revealed during the planning process for instruction and assessment, and how and why teachers design and enact instruction and assessment activities in specific ways during this time of transition in the Lesotho education system. The reason behind this

was to determine whether teachers instruct and assess learners to promote effective learning as expected.

Most importantly, this study sought to establish possible reasons that underpin teachers' practices. Great caution is therefore exercised in order not to see teachers as something to fix to guarantee implementation success. Hence, a combination of sense making theory and social cognitive theory was used to form a framework for explaining teachers' understandings and practices.

2.2.1 Rationale for the theoretical framework

I concur with the idea that learning is socially constructed and that instruction, learning and assessment are linked processes (Dudley-Marling, 2012; Norton, 2009;Harlen, 2004). Therefore, I used Social Cognitive Theory (SCT) combined with Sense Making Theory (SMT) as the frame of reference in this study, as explained earlier (*cf.* section 1.2). This combination of theories provided a framework to understand how teachers make sense of the CAP prescriptions as well as how and why they implement the curriculum reform at their respective schools. The combination was found most suitable for this study based on its nature.

Unlike other theories, such as rational theory, which is based on facts and where choice is at the heart of the implementing agents, this combination focuses on understanding how implementing agents make sense of and eventually enact the curriculum policy prescriptions. It deals with the implementing agents' minds in a way that values and acknowledges their varying contexts. This is mainly done to give the agents a voice by explaining the implementation from their perspective.

Traditional studies often disregard investing in the value of local context and focus on policy intentions rather than understanding the realities in defining these agents' practices on policy implementation (Werts & Brewer, 2015). This study is intended to merge the real incidents from the teachers' point of view with what is expected by the stakeholders. This exploration could help to illuminate factors that may prevent effective implementation of the new curriculum at school level from their point of view. Together, SCT and SMT enhance the understanding of NIC implementation, because these theories acknowledge that instruction and assessment do not occur in a

vacuum, thereby considering the context where these processes occur (Berglund & Lister, 2010).

The SMT perfectly complements SCT in that, what policy means to the implementing agents, is embedded in the interaction of cognitive structures, the situation and policy signals (Spillane *et al.,* 2002). Therefore, the manner in which teachers interpret the curriculum was defined in terms of how they schemed and prepared for their lessons, which is determined by their knowledge, beliefs, attitudes, access to resources, social norms and their ability to change classroom environment to suit the new curriculum demands.

Proponents of SCT stress that human behaviour is determined by environmental, behavioural and cognitive factors (Bandura, 1989). Complementary to this, SMT deals with an active process of interpretation, which involves individuals' rich knowledge foundation of understandings, beliefs and attitudes (Spillane *et al.,* 2002). SMT development entails three stages, namely situated cognition, individual cognition and role representation.

Essentially, the two theories have some similarities. However, for the purpose of this study, sense making was used to account for the teachers' understandings of curriculum policy prescriptions (cognitive aspects) while the social cognitive theory was used to explain teachers' instructional and assessment practices (behavioural aspects). Again, the social context (environment) in which cognition or behaviour takes place is central to both theories. This aspect added another dimension in explaining why and how cognition or behaviour is affected by context.

The next sections elaborate on different factors of SMT and SCT.

2.2.2 Environmental/ social factors

This study investigated how teachers understand and implement NIC in classrooms at their schools. The schools' contexts are considered the social environments (situated cognition) in which teachers perform their practices to implement the policy prescriptions. These include infrastructure, availability of classroom furniture, laboratories (computer, science), libraries, teaching aids, support from the principal, teachers and parents and teachers' capacity to bring change in their classrooms. SMT

further allows for investigation of teachers as individuals with different interpretations and practices that depend on their particular contexts (Louis, Mayrowertz, Murphy & Smylie, 2013).

The environmental factors encompass the social norms, access in community and ability to change one's own environment (Carillo, 2010). Based on the focus of this study, these are the educational norms, teachers' access in the school community and their potential to change their classroom environments to suit the requirements for the implementation of the new curriculum as opposed to old curriculum (Coburn, 2005).

The social context where teachers work is governed by power relations, that is the relationships of teachers with those in authority determine whose sense is followed (Louis *et al.,* 2013). This institutional context shapes how teachers make sense of policy mandates given the possibility that contradicting messages may come from those in authority (Spillane, Reiser & Gomez, 2006).

2.2.3 Cognitive factors

Individual cognition (SMT) deals with how individuals interpret stimuli that influence their own new understandings, emotions and values (Spillane *et al.,* 2002). That is how teachers construe the reform has an effect on their new understanding and values relating to their duties. Their understanding of curricula policy prescriptions depends on their individual prior knowledge, experiences and their perceptions of change. These encompass past experiences such as their professional training (pre-service and in-service), their teaching experiences of the previous and new curriculum and their acquisition of information about the NIC.

In the same way, social cognition is an important aspect that determines how policy messages are interpreted and understood (Coburn, 2005; Spillane *et al.,* 2002). That is, teachers' understandings also depend on the influence of those passing the policy messages to teachers. This means that meanings are constructed socially whereby teachers collaborate to construct unanimous meaning from policy (Louis *et al.,* 2013).

The cognitive factors are knowledge, expectations and attitudes. Teachers' knowledge is categorised into content knowledge, pedagogical knowledge and curricula knowledge (Shulman, 1987). These together determine teachers' choice of content

quantity that the learners should acquire; enable teachers to decide on the instructional and assessment methods and on materials suitable for the respective types of learners in their classrooms; and enable teachers to produce effective instruction and assessment (Gagne *et al.,* 2005).

2.2.4 Behavioural factors

As a framework, SCT acknowledges the particular manner in which one obtains and sustains behaviour with consideration of the social environment in which the person executes that behaviour (Jenkins *et al.,* 2018). Teachers' interpretations of the curriculum, the reasons for such interpretations, together with their practices, are considered to answer the research questions.

This theory enabled me to determine how teachers prepare for instruction and assessment, and to determine why they conduct the instructional and assessment activities in the ways they do in their respective classrooms. According to SCT, past experiences stimulate reinforcements, expectations and experiences that determine whether a person will engage in a specific behaviour and the reasons why a person engages in that behaviour (Bandura, 1989).

The behavioural factors are skills, practice and self-efficacy (Jenkins *et al.,* 2018). Teachers' abilities, their actions and their individual efficacy to execute instructional and assessment activities according to the set standards influence their behaviour regarding curriculum implementation. Teacher competence should portray their knowledge and skills to enhance effective learning.

Their behaviour ought to show the representation of the policy role. The intuitive models formed by the individual teachers regarding learning and classroom practices firmly influence how teachers interpret and implement curriculum when they read or hear about curricula change (Spillane *et al.,* 2002).

As articulated by Cooper (2014), teachers' competence is evidenced by their repertoire of teaching skills that facilitate learning. Teachers require these specific sets of identifiable behaviours to perform the teaching functions. The teachers' ability to ask questions and manage classrooms to facilitate learning serves as an example.

2.2.5 Self-efficacy

Self-efficacy refers to the belief that a person has his/her own capabilities to execute an action required of them to produce given attainments (Bandura, 1997). It incorporates the judgements about whether one can accomplish tasks with their current skills. As such, self-efficacy has implications for policy implementation.

According to Spillane *et al.* (2002), teachers may not have the necessary capacity and skills to work in new ways advocated by reform policies. This lack of skills has a debilitating impact on their self-efficacy. As a result, teachers may doubt their capabilities to undertake new policy prescriptions. This implies that they will only engage in behaviours that they perceive to be within their skillset (Bandura, 1989).

Moreover, people are more likely to engage in behaviours in which they believe they are competent (Nabavi, 2012). As such, when confronted by new policy prescriptions that require new methods, teachers may teach using the methods they believe they are competent in. Moreover, new information leads a person to think pessimistically or optimistically regarding their own ability to perform a new task (Evers, Brouwers & Tomic, 2002). As a result, behaviours that are inconsistent with one's self-efficacy may be unlikely to be pursued.

As much as self-efficacy is a central component of SCT (Carillo, 2010), beliefs are vital in sense making process (Spillane *et al.,* 2002). Beliefs influence the process of interpretation that may lead to bias understandings. Tacitly held beliefs about instruction and assessment may influence how a teacher views the policy prescriptions about changing instructional and assessment practices (Spillane *et al.,* 2002). This implies that one's beliefs may determine their self-efficacy, which ultimately determines certain behaviours that align with or defy expectations.

2.2.6 Constructivism: instruction and assessment

There are several envisaged changes from the old curriculum to the new one as per the CAP and its supporting documents. In terms of instruction and assessment, these changes seem to categorise the former as a positivists' curriculum and the latter as a constructivist curriculum.Constructivism is a combination of different theories used to counteract the problems of the traditional teaching and learning(Amineh &Asl, 2015). The previous Lesotho curriculum was teacher-centred and compartmentalised while

CAP envisages integration and the use of the learner-centred, activity based and participatory methodologies for the new curriculum (Raselimo & Mahao, 2015).

Based on the envisaged reforms in Lesotho curriculum, the old curriculum seemed to be based on positivism while the new one ought to be underpinned by constructivism. A positivism grounded curriculum assumes that facts are the only possible objects of knowledge ready to be imposed into learners' minds (Kiraly &Sascha, 2016). However, a constructivist curriculum relies on the belief that learners construct knowledge based on their experiences (Clement & Battista, 1990; Alam, 2017).

The envisaged pedagogy and the teachers-learners' roles for the new curriculum, are in accordance with the principles of constructivism. The curriculum reform aimsto do away with didactic teaching and introduces participatory, activity-centred methodologies (MoET, 2009). The use of these methodologies optimises learning eventhough theydepend on the context where they are employed(Omollo, Mbalamula & Nyakrura, 2017).

As indicated, the new curriculum necessitates a change of roles for learners and teachers.While teachers wereconsidered to be key in the learning situation in the old curriculum, the learners are now expected to assume greater responsibility for their own learning (MoET, 2009). This is supported by a constructive principle that responsibility for learning has to reside increasingly with the learner (Bado, 2015; Raselimo & Mahao, 2015).

Teachers are now expectedto facilitate learning for learners to construct their own knowledge as opposed to receiving and memorizing facts transferred to them by teachers(MoET, 2009). This is supported by Bado's (2015) proposition that, under constructivism, learners do not passively receive knowledge from the environment but actively create or invent it.

In addition, the current policy calls for individualised instruction and the use of continuous and criterion-based assessment as opposed to the norm referenced assessment accustomedto learning(MoET, 2009). As a result, the new curriculum is expected to be based on constructivism wherebylearners are regarded as unique beings (Bado, 2015).

Under constructivism, learners are regarded as unique beings (Bado, 2015). The current policy calls for individualised instruction and the use of criterion-based assessment as opposed to the norm referenced assessment used before (MoET, 2009). In the former assessment, learners' performance is judged and ranked against their peers' while in the latter, judgement and ranking is against the predetermined criteria. (Hussain, Tadesse & Sajid, 2015). Continuous assessment is a key strategy in moving from norm-referenced assessment to criterion referenced assessment (ECoL, 2012; MoET, 2009).

Harlen (2007) affirms that assessment should be used to determine whether the desired objectives have been met. The inference is that when learners are able to demonstrate the new knowledge, skills and attitudes, the objectives are achieved. Hence, assessment is used to determine the attainment of the objectives. This is why Saxon, Levine-Brown and Boylan (2008) draw attention to assessment methods, requirements and their influence on how and what learners learn.

According to constructivists, assessment and learning are linked processes and therefore require assessment to be conducted according to how learning occurred. They maintain that assessment measures learning and provides proof that the knowledge, skills and attitudes are acquired through a planned and systematic way (Harlen, 2004; Norton, 2009).

Constructivism calls for continuous assessment, thus the incorporation of formative and summative assessment. Even though implementing continuous assessment was found to multiply the administrative burdens placed on teachers (Jansen, 1998), according to the constructivists, assessment should be part of the learning process so that learners play a larger role in judging their own progress (Prairie, 2005).

In essence, assessment is used to determine whether the learners had successfully learnt what was intended, as stipulated in the curriculum. Thus, it focuses on how much change has occurred in learners' knowledge, skills and attitudes (Bentley, Ebert & Ebert II, 2000). Since Lesotho's new curriculum is developed within the framework of constructivism, this study is also based on constructivism principles regarding nature of learning.

2.3 Background of Lesotho education system

> *"The end of British colonial rule in 1966 provided an impetus for curriculum reform in Lesotho. Since then, a number of curriculum and assessment reforms have been attempted, albeit with a little success"* (Raselimo & Mahao, 2015:1).

Traditional education in Lesotho was provided in initiation schools with the purpose of inculcating moral and cultural values and an awareness of one's origins amongst the youth (Muzvidziwa & Seotsanyana, 2002). Elders in the society ran these schools. They emphasised the practical activities at home and in the fields; the traditional informal education system intended to produce a person characterised by social responsibility and committed to serve society and meet family requirements (Muzvidziwa & Seotsanyana, 2002).

Since 1833, missionaries arrived in Lesotho to spread their doctrine to the Basotho. They introduced Christian education that focused on cultivating Christian values and taught basic literacy to enable the Basotho to read the Bible, as well as vocational arts and formal education (Lekhetho, 2018).

Although Christian education provided the Basotho with the opportunity to develop literacy, some believed that what was taught in mission schools was decontextualised from the Basotho culture. This problem was compounded when Britain colonised Lesotho in 1886, thereby establishing a British system of education based on British values and traditions (Ts'ephe, 2004; Khama, 2018).

According to the Lesotho Education Act (1995), churches own the majority of schools (90%) in Lesotho. These churches are the Roman Catholic Church (RCC), Lesotho Evangelical Church (LEC), Anglican Church of Lesotho (ACL) and the African Methodist Episcopal (AME). The government and private owners unevenly share the remaining ten per cent (Khama, 2018). It is obvious, therefore, that the Lesotho Ministry of Education and Training is in a situation where they manage the schools, but they are often not the owners of the physical school buildings.

Consequently, this situation creates areas of conflict and uncertainty in the management of Lesotho schools. As indicated by Polaki and Khoeli (2005), due to the joint proprietorship, it is difficult to separate the responsibilities of the government and

the churches, for instance, how to decide on how far the power of the churches should be allowed to influence the education system in Lesotho.

Officially, the government's responsibility in education is to standardise education in Lesotho (Ts'ephe, 2004). This duty is threefold: to deploy teachers, to formulate a uniform curriculum and to conduct school inspections (MoET, 2001). The churches are responsible for the school infrastructure and the religious values in the schools (Lephoto, 2005; Khama, 2018). Therefore, churches may refuse to promote or even appoint teachers who do not belong to their specific affiliation, even if these teachers qualify.

The government and the school proprietors have conflicting interests in education. The government promotes EFA but private schools opt out of this policy and make education very expensive, because they are also in business. Again, some children are unable to attend school because the schools enforce compulsory school uniforms that exclude the poor (Lerotholi, 2001).

In summary, education in Lesotho had been informal, but important in the traditional transference of cultural knowledge. It was formalised upon the arrival of the missionaries who provided Christian education that indeed has shown numerous positive influences in Lesotho. After colonisation, Lesotho adopted the British style of education. However, the Christian and British education systems were decontextualised from the Basotho culture, which is still reflected in the current education system in Lesotho. An additional problem is the fact that education is a joint venture between the government and the Christian churches (Polaki & Khoeli, 2005).

After almost a century of British rule, Basutoland was renamed the Kingdom of Lesotho upon independence from Britain in 1966 (LGCM, 1993). From the 1970s to 1990s Lesotho was under military rule, which exiled King Moshoeshoe II in 1990. Constitutional government was restored in 1993. This was seen as an attempt to re-establish a truly democratic state (Ts'ephe, 2004). Following the contentious 1997 elections, there were violent protests and a military revolt in 1998. This unrest prompted SADC military intervention. Constitutional reforms have since been restored political stability and peaceful elections were held in 2002 (Ramaqele, 2002).

Traditionally, Lesotho depended on exporting its labour to South Africa, especially to the gold mines. At one time, miners' remittances accounted for as much as 30% of the Gross National Product (GNP) and were a particularly important household resource in rural areas. However, employment opportunities in the South African mines declined significantly due to several reasons, including increased mechanisation, a high unemployment rate in South Africa itself and weakening gold prices (Lerotholi, 2001; Ross, 2010).

The enormous retrenchment of Basotho mineworkers from South African mines in the 1990s plunged Lesotho further into poverty, adding to the unemployment caused by the political unrest from the 1970s and in 1998. The effect was that school enrolments decreased dramatically (Ramaqele, 2002).

One important aspect that successive governments of Lesotho agreed upon was that the education system should be reformed to make it more responsive to Basotho needs. The intention of these governments was also to increase the number of primary schools to cater for every Mosotho child, even in rural Lesotho (Muzvidziwa & Seotsanyana, 2002).

Many attempts to reform Lesotho's education system had failed. One of the main factors that contributed to continual failure of Lesotho schools was the resistance of the churches as chief proprietors. The churches interpreted the government's involvement as a way of undermining their (the churches') authority and as an attempt to decrease their control over school administration.

Owing to these factors, Lesotho's education has been marred by inefficiencies such as poor distribution of teaching materials and a lack of physical facilities prior to the introduction of Free Primary Education (FPE) in the foundation phase (Muzvidziwa& Seotsanyana, 2002). Only the lower grades (1–3) were provided with furniture when FPE was implemented, except in government schools that were constructed after the introduction of FPE.

Currently, the MoET has restructured its departments to streamline its structures and decentralise decision-making as well as improve education governance. This was done by building District Resource Centres and legalising the school management committees. The MoET interaction with the schools, including supervisory, monitoring

and evaluation activities, are currently performed at school level through the inspectorate (Ross, 2010).

Lesotho is classified as one of 34 least developed countries in Africa with approximately 57% of the population living below the poverty line (UNESCO, 2014b; CIA, 2018). It was also ranked 160 out of 188 countries on the Human Development Index (UNDP, 2016). It is thus difficult for poor families to meet the educational needs of their children. This deepening economic crisis causes parents to remove their children from school and send them to work (WFP, 2008).

Bokova (2012) shows that it is impossible to separate illiteracy from poverty and that literacy is the starting point in dealing with social ills. However, illiteracy is still a pertinent problem in Lesotho, with approximately 30% of the population described as illiterate (MoET, 2005), even though it is currently declining. According to MoET (2001), it is the responsibility of the government to reduce poverty. Therefore, the governments have found that the only inevitable option is to introduce FPE. This is why the government of Lesotho believes that FPE reinforces its Poverty Reduction Strategy Programme (Matsuura, 2005; Government of Lesotho, 2012).

In the past, primary education in Lesotho had been accessible only to those who could afford to pay school fees, which were very high because church schools charged enormous fees for enrolment in order to sustain the recurrent expenditure (Ts'ephe, 2004). Poverty made education an extremely expensive venture for many poor families in Lesotho. As a result of poverty, the MoET is faced with the problem of many children of school-going age dropping out of school. This, of course, contributes again to the high levels of poverty and illiteracy in Lesotho.

Early education, which was pioneered by missionaries, became the standard form of education in Lesotho. Even after the colonial administration in 1868, formal education in Lesotho was left in the hands of missionaries who played a central role in the provision of colonial education and continued to do so even in the post-independence era (Muzvidziwa, 2002). The MoET in Lesotho was subsequently established in 1927 as the government's attempt to reduce the churches' monopoly proprietorship of schools (MoET, 2001; Lephoto, 2005). The MoET was mandated to formulate a uniform curriculum, conduct school inspections and deploy teachers, thus

standardising education in Lesotho, and developing the curriculum for the schools (Ross, 2010).

A political minister, who is assisted by a deputy minister, heads the MoET. The principal secretary is the administrative head of this ministry. There are numerous councils, commissions, boards and committees with decision-making authority, which are accountable to the minister through the principal secretary (MoET, 2005). This is so even though the extent of control between the churches and the government remains unclear and a major challenge.

Currently, primary education in Lesotho consists of seven years. This primary sector provides instruction for learners aged approximately six to twelve years of age, from grades 1 to 5, new curriculum; standards 6 and 7, old curriculum. There are, however, exceptions due to the FPE policy of allowing up to about 18-year-old learners. The medium of instruction is English (MoET, 2005).

At the end of standard 7, as per the old curriculum, the national Primary School Leaving Examination (PSLE) determines the progression of all standard 7 learners to secondary school. However, for the new curriculum, the End of Level Test is administered nationally at the end of grade 4. The Examination Council of Lesotho (ECOL) is an autonomous body authorised by the MoET to organise and manage the national assessment (MoET, 2006).

Nonetheless, education in Lesotho showed high internal inefficiency in terms of the high dropout rate, as well as the repetition and completion rates, and only 50% of pupils entering standard 1 complete standard 7 (Lerotholi, 2001). The MoET (2005) also reports that only 73% of primary pupils transitioned to secondary schools.

From the above numbers, it can be concluded that the majority of primary pupils struggle to fulfil their academic potential because of the obvious flaws in the management of education in Lesotho. The pressure on the education system keeps on increasing as FPE and the new curriculum policies are implemented.

As if this is not enough, the HIV/AIDS pandemic has become the greatest challenge in the Lesotho education system. It negatively influences all sectors of society. High prevalence of HIV/AIDS affects efficiency within the system, especially for parents to

play their parental role in their children's education. It increases the number of orphans and it has financial implications. HIV/AIDS is a major threat to education (Avenstrup, 2004) because school-going children are either infected or affected by the pandemic, and as a result their school attendance becomes poor or they do not attend school at all.

When parents die of HIV/AIDS, the children are left with no source of income. This situation forces the orphans to engage in child labour and girls are usually sexually abused. Subsequently, the impact of poverty reinforces the spread of HIV/AIDS and in turn, the spread of HIV/AIDS results in increased levels of poverty (Lephoto, 2008). The World Food Program (WFP) shows that the number of child-headed households is increasing and as a result, food insecurity is a major problem for these children (Tomasini, Maspero, Van Wassenhove & Ittmann, 2008).

Shocking statistics reveal that approximately 63 million children in sub-Saharan Africa are out of school; including street children, child labourers, child soldiers, children from poor families, children living in rural remote and marginalised areas and those orphaned or infected by HIV/AIDS (UNESCO, 2018; UNESCO, 2017; UNESCO, 2015).

The number of orphans in Lesotho primary schools in 2009 was 221 000 with 25% having lost both parents, and 67% of all orphan-hood cases were estimated to have risen as a direct result of the HIV/AIDS epidemic (Nkhoma, 2013). Access to school for many orphans remains a challenge. The loss of income due to the death of parents reduces the capacity to meet school-related costs such as uniforms and food.

It is now 2018, so the above revelation is discouraging because one of the EFA goals was to ensure that by 2015 the following groups of children will have access to complete, free and compulsory primary education of good quality: the most vulnerable, disadvantaged, girls, those belonging to minorities and children in difficult circumstances (MoET, 2005). Therefore, developing countries have to ensure that their education systems are inclusive in order to reach EFA goals by 2015 and Lesotho is no exception. This is discouraging, considering the fact that education is meant for all, including the formerly marginalised groups of society.

As articulated by Rasheed (2000), there are five important aspects in defining “quality education”. Firstly, the status of the learner which entails health, readiness to learn, family and community support. Secondly, the learning environment is expected to be healthy, safe and sensitive and to provide adequate resources. Thirdly, curriculum content should be relevant and promote acquisition of knowledge and skills. Apart from that, in the process of implementing such a curriculum, a learner-centred approach should be employed in well-managed classrooms/schools, where assessment is used to improve learning. Lastly, such education should result in knowledgeable and skilled learners who participate in their societies.

2.4 Curriculum development

2.4.1 Defining curriculum

There are many different definitions of curriculum, yet there is no agreed upon definition. For instance, Marsh (1997) and Carl (2009) define curriculum as an interrelated set of plans and experiences that a learner completes under the guidance of a learning institution. Bobbitt (2004) and Breault and Marshall (2010) state that curriculum is the entire range of experiences, which are meant to unfold the abilities of the individuals. Bobbit refers to it as “the series of consciously directed training experiences that the school uses for completing and perfecting the enfoldment” (Jackson, 1992:9). The focus in a curriculum is on what is taught and how it is taught. The learner gets these experiences at school. The teachers and learners are the main agents in the classroom where the teaching-learning process occurs.

Definitions of curriculum fall in four categories: curriculum as a product, as a programme, as intended learning and as the experiences of a learner (Beane, Toepfer & Alessi, 1986). As a product, curriculum refers to all documents that result from curriculum planning and development. The view of curriculum as courses of study offered by the school implies that it is a programme. Curriculum is considered as experiences of the learner when those experiences are outcomes of the planned situations.

For this particular study curriculum is defined as the intended learning and therefore referred to as knowledge or content, skills and attitudes acquired in schools and the

entire range of experiences concerned in unfolding the abilities of the individual learners (Glatthorn, Boschee & Whitehead, 2006; Breault & Marshall, 2010).

2.4.2 Types of curriculum

There are different types of curriculum and each depends on the purpose it should serve. For instance, a planned curriculum is the curriculum that appears in the state and locally produced documents (Glatthorn, 2000). Another type is the hidden curriculum which comprises the experiences that learners derive from the organisation of the planned curriculum (Alsubaie, 2015). Other examples are: null curriculum, rhetorical curriculum, enacted curriculum; learned curriculum (Flinders, Noddings & Thornton, 1986; Rutten & Soetaert, 2012; Mitchell, 2016).

The New Integrated Curriculum is regarded to be a written curriculum that is presented in different syllabi per grade. This study explores the implementation of this curriculum as enacted by the teachers at school level.

2.4.3 Perspectives of curriculum development

A curriculum is the result of certain perspectives held by its developers. The major perspectives in the field of curriculum development are transmission, transaction/transition and transformational perspectives (Lemmer & Badenhorst, 1997).

Transmission perspective entails the passing on of knowledge to the learners by the teacher. In this regard, the main sources of information about school subjects, values and skills are the teacher and the curriculum. The teacher is active and the learner is predominantly receptive and passive in the teaching-learning process (Hearne & Cowles, 2001).

According to the aforementioned authors, the subject-area and the broad-field approaches are underpinned by this perspective and influenced by a positivism paradigm. In both approaches, the teacher acts as a source of information and imposes knowledge to learners who are passive receptors of that knowledge to reproduce it during examinations. Teachers should be objective and interested in scientifically proven facts taken from textbooks (Ornstein & Hunkins, 1998).

A transaction or transition perspective endorses a dialogue between the learners and the curriculum as presented by the teacher as the learners interact with the sources of knowledge by way of problem solving and the discovery of skills, thereby reconstructing knowledge for themselves (Lemmer & Badenhorst, 1997).

The social problem approach falls under this perspective. It is highly influenced by critical rationalism in which human beings are regarded as fallible (Ornstein & Hunkins, 1998). As a result, learners' mistakes are seen as learning opportunities and learning starts with a problem that arises due to a mismatch between the teacher's expectations and the learners' experiences. Learners willingly interact with various sources, criticising theories and being creatively and imaginatively involved.

The transformation perspective mainly focuses on change. This perspective sees schooling as something that has the potential to unfold possibilities for personal, social and transpersonal change (Lemmer & Badenhorst, 1997; Hearne & Cowles, 2001). According to the transformational perspective, schooling is concerned with the time span covered by curricula, syllabi and school years. Besides that, it opens up the possibility of various outcomes of learning and allows for the learners' future development.

This curriculum was developed using a transformational perspective that is grounded on the changed roles of the learners and their teachers, changed content organisation and pedagogy (MoET, 2009). Learners' involvement in schooling activities escalates with their ability to accept responsibility for their actions, beliefs and thoughts as discussed below.

The transformational perspective emphasises the emerging-needs approach, and it is dominated by the constructivism framework of thinking (Hearne & Cowles, 2001). The evaluation of the prior curriculum revealed that there are challenges facing the 21st century learners that need to be addressed by the education system (MoET, 2009). The fact that people are influenced by their values and beliefs is acknowledged and learners' understanding enables them to construct meaning on what they learn. The curricula perspectives shape the curricula content organisation.

2.4.4 Phases of curriculum development

Curriculum development is a flexible process that entails four main iterative phases. As indicated in Figure 2.1 below, curriculum may be designed because of the evaluation of an existing curriculum.

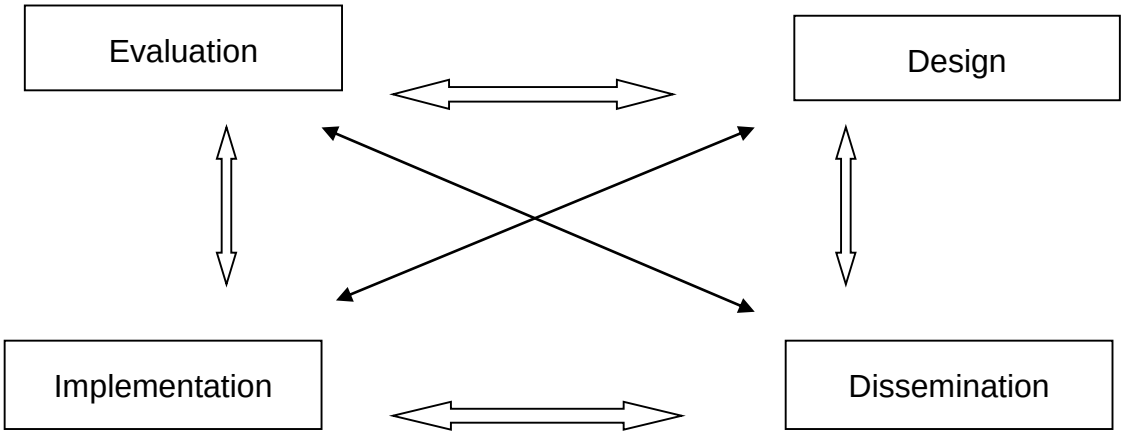


Figure 2-1: Phases of curriculum development

Source (Carl, 1995:48)

The evaluation process may lead to the dissemination of new information or implementation. Alternatively, the implementation of curriculum may elicit new information and may perhaps lead to the evaluation of the existing curriculum. It may also lead to the design of the other curriculum or even dissemination of the emanating information (Carl, 2009).

In Lesotho, the curriculum is developed by the National Curriculum Development Centre (NCDC), which is mandated by the Ministry of Education and Training (MoET) to develop the curriculum from primary up to high school level; to prepare various types of instructional materials used at these levels and to carry out pilot testing of curriculum materials in selected schools. Furthermore, NCDC executes the dissemination and in-service activities related to the revised or new curriculum together with curriculum materials. This centre ought to conduct educational research to establish the effectiveness of curricula in schools (Monaheng, 2007).

Curriculum development prescribes how to teach in relation to what is taught, since what is taught has to be linked and understood, considering the wider learning purposes and learning effects that accompany it (Hlebowitch, 2010). The teaching-learning process of the new curriculum (integrated) should be associated and

interpreted with consideration to its aims and the changes it brings (Lachiever & Tardif, 2002).

To locate this study within the specifics of the curriculum development process in Lesotho, the discussion on phases of curriculum development shows how it unfolds in the country. However, the main focus is on the implementation phase because this study explores how instruction and assessment are conducted in schools. The discussion of the three phases is therefore only meant to provide clarity and logic to the argument.

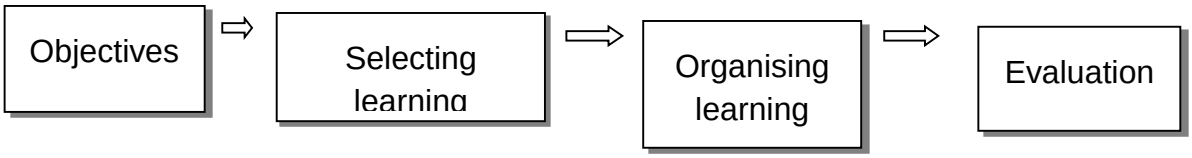
2.4.4.1 Curriculum evaluation

Curriculum evaluation is a phase during which the success and effectiveness of the curriculum are evaluated to make decisions on an educational programme performed to improve the quality of education (Hill, 1986; Carl, 2009). This phase is regarded as the determinant of the value of learning because it is concerned with what should be taught and to investigate what happens in the classroom (McCormick & James, 1983; Afsahi, 2016). Furthermore, it deals with curriculum design, instructional means, curriculum resources, staff development, learners' experiences and the development stages of planning, implementation and assessment (Carl, 2002).

In the case of Lesotho, the curriculum evaluation process revealed that the previous curriculum and assessment were unfit in terms of the expectations and the needs of Basotho children, their culture and other global needs; it promoted the development of only cognitive skills and not life-oriented skills (MoET, 2009). This led to the design of the "new" integrated curriculum. The new curriculum is intended to promote holistic learning, for it is proposed to stimulate unified knowledge and skills rather than segmented knowledge and skills (MoET, 2009).

It is important to interpret data that is obtained using any curriculum evaluation model in relation to the specific context (Carl, 1995). The following are examples models of curriculum evaluation: institutional model, Stake's countenance model, Taba's social studies evaluation model, Scriven's goal-free evaluation and Tyler's evaluation model (Jenkins & Shipman, 1976; Hill, 1986).

The NIC seem to be developed based on Tyler's evaluation model, the objectives model or the curriculum as product. This evaluation model entails four principles that curriculum makers have to take into account (Lemmer &Badenhorst 1997; Carl, 2009):



Tyler's objective model can be applied to any subject and at any level. Besides, it provides an easily followed set of procedures that appear to be logical and rational. Most importantly, this model emphasises learners' behaviour as well as their learning experiences. As good as this model may seem to be, there are no explicit guidelines given about why certain objectives should be chosen over others. In addition to this weakness, Tyler's concern is only on evaluating the objectives and ignoring the unintended learning that invariably occurs.

This study is mainly executed as part of the evaluation phase of curriculum development. I explored how teachers interpret and implement CAP prescriptions with regard to instruction and assessment under NIC and touch on the following elements from the implementer's angle: diagnosis of need; formulation of objectives; selection of content; organisation of content; selection of learning experiences and organisation of learning experiences.

2.4.2.2. Curriculum design

Curriculum design is one of the curriculum development phases in which a new curriculum is planned or where an existing curriculum is re-planned or reviewed (Carl, 2009). The review of an existing curriculum follows a full re-evaluation. This phase incorporates issues on situation analysis, aims, goals, objectives, selection of learning content and decisions on the teaching-learning opportunities, teaching-learning experiences and evaluation approaches.

According to Carl (2009), a situation analysis entails the collection and interpretation of all the information based on educational goals that help to develop well-rounded individual basic skills and addresses the specific needs of the community and learner. The administrative, financial and human context in which the curriculum development

or reform will occur need to be analysed together with the educational goals and parental expectations of education (Nketekete, 2002; Gass, 2012)

Primary education in Lesotho is intended to provide the foundations for reading, writing, arithmetic skills, respect for environment and acquisition of necessary life skills (MoET, 2009). A situation analysis was conducted to ensure that education is accessible, relevant, efficient and of the best quality (MoET, 2006; MoET, 2009).

A. Curricula approaches

In the process of deciding on the learners' experiences, various aspects of the teaching-learning situation ought to be dealt with in a particular way to enhance decision-making. This is referred to as a curricula approach. There is a wide range of approaches used in curriculum development, which is categorised into the subject-area approach, broad-field approach, problem of living or social-problem approach and emerging-needs approach (Lewy, 1991). These approaches influence the organising centre for the teaching-learning situation, the selection of objectives and the use of subject matter or content (Beane *et al.*, 1986; Offorma, 2014). Subject area and broad field approaches are described below because they are more relevant for the change introduced in Lesotho.

The subject-area approach is an approach whereby the curriculum plans are organised around separate subject areas or disciplines of knowledge (Beane *et al.*, 1986). For instance, the previous curriculum in Lesotho was divided into subjects such as social studies and mathematics. In such a case, learning objectives involve mastering subject matter and skills within a given subject.

The broad-field approach is a method of organising curriculum by combining two or more subject areas into a broader field mostly referred to as learning areas or programmes (Beane *et al.*, 1986). For example, literature, art, history and music may be combined to form a humanities programme. This approach allows for at least a touch upon subjects that would otherwise be excluded because of a lack of time (Lewy, 1991).

Marsh (1991) articulates that the decisions reached by the curriculum developers of the curricula approach can be affected by several factors, including political factors, national identity and unity, economic factors and religious factors. Schools are

frequently used to support and promote the political ideology of those persons in power and this aspect is regarded as the political factor. For example, during the apartheid era in the Republic of South Africa, there was Bantu education that was meant to train the blacks in hard labour whereas the whites were trained in technological aspects.

Investing in human capital is fundamental for productivity and technological advances (Ozturk, 2001; Dumciuviene, 2014).The economic factor seems to have a great influence on curriculum development as most countries, especially the developing countries which strive for quality education to enhance the economic growth (Hanushek & Wobmann, 2007; Makaran, 2015)

B. Forces underpinning curriculum development

While planning and predetermining the learners' experiences, certain forces influence the curriculum developers. This makes curriculum to be seen as a battleground of these competing forces that influence its development, namely: philosophical, social, psychological and knowledge forces (Doll, 1974).

i. Philosophical forces

Philosophical forces are the factors that require one to choose certain aspects over others in making decisions regarding curriculum (Ekanem & Ekeng, 2014). Decisions are influenced by the perennialists, idealists, pragmatists, re-constructionists, realists and existentialists' viewpoints that have respective beliefs, concerns, knowledge and various perspectives on learning and medium for learning (Doll, 1974). The development of the NIC is founded on principles of justice, equality and participatory democracy among others (MoET, 2006; MoET, 2009).

Given that CAP emphasises the use of child-centred methodologies (MoET, 2009), the integrated curriculum seems to be influenced by the pragmatists who believe that learners should be stimulated to explore and apply their thoughts to solve problems (Doll, 1974). The envisaged teachers' role is to facilitate learning and to enhance learners' construction of knowledge and acquisition of skills, values and attitudes using learner-centred and interactive methods during instruction to engage them actively (MoET, 2009:6).

The pragmatists believe that subject matter content must encourage the development of insight, understanding and appropriate skills that are to be acquired, whenever possible, in creative settings (Ormerod, 2006). They relate learning with the surroundings and experiences of the individual children and wish to teach children how to think rather than what to think (Kilpinen, 2008). As such, the NIC domains seem to be related to learners' background and experiences.

The first domain is "*Knowing oneself and relating to others"*. It stimulates learners to be conscious about their personal identity in terms of the national culture and encourages active learning to address emerging issues (NCDC, 2014). It further emphasises the relationships within different contexts such as family, school and community (NCDC, 2014).

"*My health and safety*" is the second domain. This domain familiarises learners with personal care, fitness and nutrition; it concentrates on precautionary measures that promote safety within the specific context of Lesotho (NCDC, 2014). The third domain is "*Understanding and sustaining the environment"* which refines resourceful and responsible interaction with the environment; it deals with issues of environment and management for sustainable environment (NCDC, 2014). The last domain prepares learners to survive different challenges they may encounter and to be self-reliant is referred to as "*Survival and self-reliance*."

These four domains are broken down into ten strands, namely: knowing myself, social relations, arts and culture, personal care and fitness, nutrition, safety, biological environment, physical environment, environmental protection and management and survival.

ii. Social forces

Young people live in a world larger than the school and the world influences their interests and attitudes (Beane *et al.*, 1986). Curriculum developers influenced by social forces thus consider the characteristics of contemporary society and characteristics that anticipate the future, such as the family structure, working in the technological society and culture when making decisions.

The Basotho as a nation have their own expectations about the educational aims and objectives that need to be addressed when developing the curriculum. They therefore

have a picture of the ideal school product. The social force therefore seems to have influenced the development of the new curriculum because one of its aspects is "awareness of self and others" which resulted in the core competences, namely "collaboration and co-operation; problem solving" (MoET, 2009: vi; NCDC, 2014).

The family had been viewed as the core of society's complex fabric. Most of the family structures had parents and children. However, due to the dilemmas such as HIV/AIDS, many families now comprise very old grandparents who are bound to take care of their grandchildren whose parents are either affected or infected by HIV/AIDS. Some homes are child-headed as parents abandon their families or have died (Jordan, Orozco & Averett, 2002). Curriculum developers therefore could consider this issue by bringing the idea of HIV/AIDS education into schools to prepare and help learners cope in the prevailing situation.

Working in the technological society makes life easy. The vast array of technology includes much more from mechanical conveniences in the home to sophisticated devices used in communication to the support systems for travelling (Beane *et al.*, 1986). In the past, for example, Basotho used horses as means of transport and the curriculum during those times was based on hard labour. As technology increases, curriculum should focus more on technological aspects that minimise human beings' workload, preparing them to cope with the current situation.

As technology has gradually replaced human production, increasing premium has been placed upon the quality and value of new ideas and the means of using them. The development of new ideas and knowledge is important, but the future will bring new demands upon society with regard to information. Technology is becoming capable of performing human services and workers will be needed to facilitate that process. Increasing value will be placed upon people who can network their credentials to fill emerging needs in the information society (Heath, Knoblauch & Luff, 2000; Beane *et al*., 1986).

Culture is also instrumental and worth considering in developing a curriculum for a particular society (Ogburn, 1937). The curriculum is developed with this purpose and it is to be implemented in schools, which are the institutions intended to aid in meeting the demands of that society. A school is established and maintained on the parents'

behalf to continue, extend and stabilise the educative teaching that began at home; to educate and teach children according to community norms, values, religious beliefs and standards and to strive to achieve the values, ideas and aims dictated by society (Daries, 2009). Therefore, curriculum developers need to take cultural expectations and perceptions of the society into account when developing the curriculum.

iii. Psychological forces

Psychological forces encompass the behavioural developments that lead to maturity founded in human needs (Beane *et al.*, 1986). These are incorporated in principles of learning, characteristics of physical growth and development and personality factors (Bowers, 1963). The policy advocates for a curriculum that would be designed to respond to the basic needs of the students at every stage of their development, as these needs are necessary for individuals to lead a full and happy life (MoET, 2009).

These are depicted from Maslow's hierarchy of needs: physiological, safety, psychological needs and self-actualisation (Huitt, 2004). The theory behind this hierarchy implies that curriculum should be developed to promote learner-centeredness and enhance the learning environment to be attentive to the learners' needs as individuals and members of the community (MoET, 2009). As a result, teachers should be encouraged through the curriculum to become facilitators with the goal of developing self-actualised learners in a cooperative, supportive environment (Huitt, 2004).

iv. Knowledge forces

Knowledge is a factor that influences the process of curriculum development too. Curriculum developers concern themselves with the kind of knowledge that the curriculum aims to impart to learners, and how the teachers (Husbands, 2015) will present that knowledge to learners. Lewy (1991) attests that individuals need the rapid growth of encyclopaedic knowledge to read and be knowledgeable enough to understand what is read and to form an opinion about the issues. This brings forth the following question: How can knowledge be best organised to achieve the desired outcomes, especially under the integrated curriculum model? Hence, the discussions on the ways of organising knowledge in the curriculum follow in subsection D below.

C. Curricula organisation

Curriculum has content regardless of its design or developmental model (Ornstein & Hunkins, 1998). The manner in which curriculum developers view the content is heavily dependent on their philosophical posture of knowledge and reality. Traditional philosophies advocate that knowledge should be discovered while the more progressive philosophies posit that knowledge should be invented. The organisation of content is critical to any type of curriculum design regardless of its philosophical underpinnings and is perceived in relation to the following aspects: scope, sequence, continuity and balance(Smith, Stanley & Shores, 1957; Beane *et al.*, 1986).

The basic curriculum organisational dimensions are vertical and horizontal. The former organisation is concerned with longitudinal placement of curriculum elements and centres on separate subject areas or disciplines of knowledge (Ornstein & Hunkins, 1998). In addition, learning objectives involve subject matter and skills within a given subject to be mastered. The concepts are first introduced in early grades and treated in detail in later grades (Beane *et al.*, 1986). This means one topic in a particular subject is taught by increasing its breadth and depth as the student progresses in the curriculum. Concepts are taught in a spiral manner (Sowell, 1996; Carl, 2009).

Horizontal organisation connects various aspects of curriculum meaningfully to focus upon broad areas with a holistic view of learning and teaching, reflecting the interactive real world. In this organisation, the concepts are arranged side by side by relating a concept from one subject to another subject (Shoemaker, 1989).

The Lesotho Curriculum and Assessment Policy advocates for horizontal organisation because it engages side-by-side arrangement of curriculum elements, which are the curriculum aspects and the learning areas (Ornstein & Hunkins, 1998; MoET, 2009). The curriculum aspects are effective communication, awareness of self and others, environmental adaptations and sustainable development, health and healthy living as well as production of work-related competencies.

These aspects highlight the life challenges and settings in which learners are projected to function as individuals and as society members (MoET, 2009). They are derived from the Basotho children's challenges and the ones facing people internationally and consequently, are assumed to address their needs. This organisation highlights depth,

range of content and varieties of educational experiences created to engage learners in learning; linking all types of knowledge and experiences in the curriculum plan (Ornstein & Hunkins, 1998). These aspects gave rise to the learning areas (LAs) that show a body of knowledge needed to provide learners with competencies necessary to address the life challenges (MoET, 2009).

The NIC is said to be integrated and to assure continuity of knowledge construction and development of suitable skills and values (Ornstein & Hunkins, 1998; MoET, 2009) rather than the categorised knowledge and acquisition of inept skills as per the previous curriculum. It comprises the core competences, strands and themes/domain and assessment principles which are essential components of an integrated curriculum (Shoemaker, 1991). The core competences that should be developed are effective and functional communication; problem solving; scientific, technological and creative skills; critical thinking; collaboration and cooperation; functional numeracy and learning to learn (MoET, 2009).

2.4.4.3 Curriculum dissemination

During the curriculum dissemination phase, stakeholders are prepared and informed of the proposed curriculum through the distribution or publication of information, ideas and notions as well as in-service training courses (Carl, 2009). The stakeholders in Lesotho education were enlightened through the media. The information was disseminated through radio and television broadcasts and newspapers. Workshops were held for teachers and the inspectorate collaborates with the district resource teachers to ensure that information is disseminated accordingly for valuable implementation of the curriculum.

2.4.4.4 Curriculum implementation

Curriculum implementation is the phase in which the relevant design is put into practice (Carl, 2009) at macro and micro levels. At macro level of curriculum implementation, curriculum authorities apply and determine policy and curriculum initiatives nationally (Carl, 2009). Carl further attests that at micro level, local decisions, which lead to the application in practice and eventual institutionalisation, are taken (delivered curriculum). During this phase, teachers put the curriculum into practice in their respective classrooms during individual lessons.

In a way, the curriculum creates a platform for classroom teaching and learning. The components of a teaching-learning/didactic situation (teacher, content and learner) are discussed in the next section.

A. Teacher as the core curriculum implementer

Teacher knowledge is regarded as the most important factor in improving student performance; it determines teachers' decisions about classroom instruction and it is subsequent to effective learning (Kim, Ham & Paine, 2011; Moru *et al.*, 2014). The teachers' attitudes, beliefs and perceptions about learning play a crucial role in shaping how teachers plan and conduct their lessons; therefore, they determine how they implement curriculum (Berglund & Lister, 2010). Teachers can be hindered by challenges in their pursuit of their duties during the curriculum implementation process (Weinstein & Webber, 2014).

Teachers are the core curriculum implementers at micro-level (schools). Their interpretation and practices are significantly affected by what they know and believe, and by their perceptions of the teaching-learning process (Goh, Zhang, Ng & Koh, 2015).

i. Teacher knowledge

Teachers should have a profound knowledge related to learners and content as elements of a didactic situation. Their knowledge determines their decisions on instructional and assessment methods, materials and activities (Moru *et al.*, 2014; Skott, Mosvold & Sakonidis, 2018). Several studies have examined teachers' knowledge in order to highlight the type of knowledge that teachers should possess for effective teaching that results in effective learning (Shulman, 1987; Groβschedl, Mahler, Kleickmann & Harms, 2014). It encompasses content knowledge, pedagogical content knowledge and curricula knowledge.

Content knowledge (CK) is described as the knowledge of concepts and principles of a particular subject that teachers should have before they teach, that promotes deep understanding of that subject (Groβschedl *et al.*, 2014). Its categories are common content knowledge (CCK) and specialised content knowledge (SCK). The former refers to the knowledge of the concepts to be taught while the latter reflects teachers'

deeper understanding of the subject matter (Ball, Thames & Phelps, 2008). CCK and SCK are necessary in the teaching field and influence fundamental comprehension of every aspect of the curriculum during the implementation.

In addition to that, teachers ought to possess subject specific knowledge (SSK), which enables them to connect the subject's aspects thoughtfully with the intended curriculum. SSK is needed only by teachers amongst all the professionals to provide explanations for what they do during teaching-learning to enhance the learning process (Ball *et al.*, 2008). Teachers should be knowledgeable of the concepts they ought to teach and they should fully comprehend such concepts. This helps teachers to decide on the quantity of the content that the learners should learn.

Pedagogical content knowledge (PCK) is defined as the knowledge about conceptions of learners that enhance the presenting and formulating of the subject to make it understandable to learners (Hashweh, 2013). It enables teachers to decide on the instructional and assessment methods and materials suitable for the respective types of learners in their particular classrooms. PCK entails the knowledge that enables the teacher to transmit subject knowledge to learners in a comprehensible way (Denby, 2012). It comprises the classroom management principles, knowledge of learners and their backgrounds that enable teachers to help students to understand what is taught (Shulman, 1987).

Curriculum knowledge is the knowledge of what the curriculum entails, the goals, the content, methods of teaching and materials and standards of the national education system (Ball *et al.*, 2008; Groβschedl *et al.*, 2014). Teachers should be familiar with the new curriculum domains, strands, student learning outcomes, instructional activities, performance level descriptors and variety of assessment tools or tasks. This knowledge enhances the alignment of curriculum objectives, instruction and assessment, which result in effective teaching-learning process. The curricular objectives and assessment should align and support one another to provide guidance for educators in their effort to facilitate learners' progress towards the desired outcomes (Roach *et al.,* 2008).

Carl (2009) concurs with Jacobs, Vakalisa andGawe, (2004), that the teachers' personal qualities, teaching styles, subject training and professional competence

should be acknowledged in content selection. Teachers require a professional knowledge that can only be acquired through studying at university or college, for them to understand the didactic situation (Denby, 2012). Subject matter content knowledge, which refers to knowing realities about a subject, how and why it exists falls under this kind of knowledge (Kennedy, 1997; Ball, *et al*., 2008).

The knowledge of teaching is situated within this particular context and is distributed among the stakeholders. Teachers' self-knowledge and their belief in the subject will often subconsciously influence how that subject is taught (Denby, 2012). Teachers should thus be able to translate their knowledge to adhere to the students' needs and prevailing situation in recognition of the societal values and norms.

ii. Teacher beliefs, attitudes, perceptions and expectations on the nature of learning

As the core curriculum implementers at school level, teachers should understand and interpret curriculum well in order to put it into practice effectively in their respective classrooms. Their ability to construe and implement a new curriculum is influenced by their epistemology (Raselimo & Wilmot, 2013). This has to be considered because teachers are responsible for classroom instruction, assessment and classroom management in general. Hence, I believe that exploring their perceptions and the challenges they face during classroom instruction and assessment is important to enhance the effective implementation of the new curriculum.

The early formation of teachers' beliefs primarily results from their experience as students while at school, and the main kinds of beliefs are knowledge-based belief and affect-based belief (Moru *et al.*, 2014). According to these authors, knowledge-based belief is reinforced by scientific knowledge and critical analysis of evidence subsequent to the choice of the most convincing explanations. The affect-based belief is grounded on good feelings about something, trusting someone and relying on faith.

Teachers have varying beliefs on the nature of learning (Anderson, 2015; Moru *et al.*, 2014). As a result, their decisions about instruction are more likely to vary. Some teachers believe that learning is a conceptual system. These teachers would relate ideas during instruction. Other teachers believe that learning is hierarchical and

learning occurs in series. Others believe that learning is problem solving and do not measure learning by learners' ability to solve problems.

Some teachers believe learning is a Platonist unified body of knowledge and integrate concepts during instruction and assessment. Some teachers believe learning to be a process whereby knowledge and skills are constructed. Consequently, they will facilitate learners to construct their own knowledge, skills and values.

Others regard learning as knowing, understanding, independent, collaborative or both independent and collaborative. To other teachers, teaching is cumulative, self-regulatory, spiral and active. Since the new curriculum is developed with reference to social constructivism, in this study my belief about the nature of learning will be based on the principles of constructivists.

There are three main categories of teacher perspectives about their work: delivery, modification and collaboration (Harris, 2010). The delivery teachers instruct learners in the same way, irrespective of their different learning needs and their classrooms are guided by classroom procedures and behaviour guidelines. They regard classrooms as the place where learners need to behave accordingly and conform. They prefer highly structured activities in delivering the set content so that learners would know what to do in class; they view learners' behaviour as being dependent on the teacher's actions and therefore enforce the learners' participation in class. They also expect learners to finish all activities as given, regardless of the quality of their work (Irvin, 2006).

In the modification category, learners are seen as important to the teaching process; teachers feel accountable for ensuring that the curriculum is interesting and achievable to facilitate learners' participation and therefore adapt the curriculum; and they regard learner disengagement because of not understanding (Harris, 2010).

They employ a range of strategies to facilitate learner engagement, although the selection of those strategies is done without the learners' opinions (Irvin, 2006). They recognise that learners' cognitive skills vary and thus they structure the work for top-level learners in a way that encourages high level thinking because they see them as capable. Alternatively, they break down the work for the middle to lower group to suit their level. The teachers' interest here is to make learning interesting to learners and

to ensure that they become successful. They believe that they should intervene and scaffold learners' potential.

The last category is collaboration. The main focus of teachers in this category is to ensure that learners learn effectively by working with them to create educational activities that align with the learning purposes to develop higher order thinking skills (Irvin, 2006). This enables learners to learn autonomously.

Teachers ought to offer learners a variety of opportunities to understand, to develop and to use ideas presented in class to develop the core competence (e.g. critical thinking, collaboration and problem solving) articulated on the policy (Shostak, 2014, MoET, 2009).

iii. Challenges facing teachers

Despite the individual needs of learners, which include achievement levels, various interests and attitudes, there are other factors that hinder teachers to perform their roles effectively in their classrooms (Weistein & Weber, 2014). These challenges may lead to mismanagement of classrooms.

Overcrowding in classrooms is one of the most common problems (Matobako & Heqoa, 2018). When classrooms are overcrowded, learners are bound to compete for everything in that class, even for the teacher's attention. They may struggle for desks, books and other resources. This kind of classroom situation does not allow for cooperative learning.

A culturally diverse classroom entails a classroom with learners from different racial, ethnic, linguistic and social class backgrounds. Weinstein and Weber (2014) indicate that cultural diversity results in disagreements among learners and between learners and their teacher. Teachers should therefore be knowledgeable and skilful enough to respond to their classroom diversity.

Learners with special needs (disabilities) educated in mainstream classrooms oblige teachers to create an environment of acceptance, interaction, cooperation and to modify instructions and norms (Weinstein & Weber, 2014). Teachers have to collaborate with the special education teachers and paraprofessionals in order to be able to address learners' special needs.

Teaching learners who grow up in circumstances that create physical, emotional and psychological problems is yet another challenge (Jordan, Orozco & Averett, 2002). Learners dealing with family problems and societal factors, such as family instability, abuse, poverty and neglect, carry all these within themselves at school. Their teachers should be capable of providing the necessary warmth and be supportive to these learners (Weinstein & Weber, 2014).

iv. Teacher empowerment

Marsh (1992) and Murray (2010) define teacher empowerment as a process whereby teachers are granted opportunities to engage in, share control of and influence events at their schools. Empowered teachers make sense of the teaching context, make important curriculum decisions during the enactment of the curriculum and adjust the objectives of the mandated curriculum (Marsh, 1992). Teacher empowerment in this study refers to teachers themselves, professional development and on principals as the instructional leaders.

Self-empowerment refers to the practice where a teacher is assertive, believes in himself/herself and has a positive attitude (Murray, 2010). For this to happen, teachers should combine their professional knowledge and skills with their personal qualities and experiences. They should cooperate with their colleagues to minimise the sense of feeling lonely. They therefore require their principals to play the necessary leadership role.

B. Principals as the instructional leaders during curriculum reform

Effective principals are characterised by an inclusive, facilitative orientation; an institutional focus on student learning; efficient management; combined pressure and support to every stakeholder (Fullan, 2009). However, since education systems are becoming complicated due to technology complexities and because the function of the school has moved to engage in the global community, research shows that principals lack curricula and instructional knowledge (Sim, 2011). Therefore, it is essential to improve their expertise and confidence.

Bush, Kiggundu and Moorosi (2011:32) assert that, “wide ranging changes in the education systems have rendered many serving principals ineffective in the

management of the schools – many of these serving principals lack basic management training prior to and after their entry into headship".

The principals of that calibre have strategies of using school improvement plans. This means they have the ability to use plans and instructional focus to attack incoherence (Fullan, 2009). They promote the following five interrelated components of school capacity: teacher's knowledge, skills and attitudes; professional community; programme coherence and technical resources. The presence of these core concepts does not guarantee success but their absence ensures failure (Fullan, Cuttress & Kilcher, 2009).

Teachers' knowledge and skills were discussed above and I have shown how they influence learning. Of utmost importance is the knowledge about why there has to be change and it is the principal's responsibility to provide the school community with the moral purposes. This is a goal and a process of engaging educators, community leaders and society with the aim of improving learning (Fullan *et al.,* 2009).

The discussed characteristics of a principal are necessary but not enough to enhance effective implementation of the curriculum in schools. The principals should promote the effective use of teacher knowledge and skills, and encourage positive attitudes for teachers by means of motivating teachers and assuring their connection with other elements (Painter & Clark, 2015). This is because, as indicated, having the necessary knowledge, skills and attitudes is not enough for teachers to influence the school culture (Fullan, 2009).

The second component is professional capacity in the school community. Building capacity involves developing new knowledge, skills and competences; new resources, new shared identity and motivation to work together for greater change and improving agencies that can deliver new capacity in the system (Fullan *et al.,* 2009). According to Fullan and his colleagues, capacity building is necessary for translating improvement into the daily cultures of how people need to work in new ways. Principals have the ability to recruit and retain capable staff. They should also promote professional development and social resources within staff to work together to solve local problems (Holland, 2009).

Principals should merge individual development of teachers with professional development of communities of the whole school to increase schools' capacities (Fullan, 2009). The schools' capacity encloses collective effectiveness of all the stakeholders working together to improve learning for all learners. So principals ought to develop cultures for learning which involve designing a set of strategies for teachers to learn from (knowledge dimension) and become collectively committed to improvement (affective dimension) (Fullan *et al.,* 2009).

Principals should further endeavour to build strong parent-community-school connections because these ties link directly to learners' motivation and school participation. The ties can provide a critical resource for classrooms. This organisational development is important for obtaining the social resources, which are fundamental to school improvement (Fullan, 2009).

As Fullan (2009) contests, professional development is inadequate if not expressed to stop the disconnections of multiple innovations by working on a programme of coherence. This is the third component. The principals, as the curriculum/instructional leaders, should provide a coherent and logical instructional guidance system. For the teachers to understand the change process, principals as leaders should lay out the purpose and plan and get on with it (Fullan *et al.,* 2009). These authors pledge that the change process is about establishing a condition for continuous improvement in order to persist and overcome the foreseeable barriers to reform. The reform therefore requires energy, ideas, commitment and ownership of all those who are implementing it and it is about innovation and innovativeness.

The principals ought to provide quality support to the individual teachers in order to ensure that learning is supported for learners and that assessment manifests what learners actually need to know. Learners and teachers' learning should be related with a focus on learning outcomes and should be nurtured.

With all these, there should be a fourth component, namely technical resources. Principals should provide equipment, materials, space, time and access to expertise for instructional improvement (Fullan, 2009). This means that the principals should coordinate effective use of materials, tools and instructional habits with content and

teaching techniques/strategies. It is understood that the last component of school capacity, principal leadership, brings all the components together.

C. Planning for instruction and assessment

Planning is defined as a process of proactively making a plan for learner-centred instruction that is rooted in assessment and blends with whole class, individual and small group instruction to provide multiple approaches to content, process and product with the goal of maximising the capacity of each learner (Tomlinson, 2014). In other words, planning refers to a process of preparing a set of detailed actions on what learners need to know and be able to do, how their achievements can be determined in order to provide them an opportunity to learn efficiently as individuals and in groups.

This process enhances instructional and assessment practices in that it increases teacher awareness of the curriculum outcomes/standards and learners' needs (MEAL, 2014). In fact, planning requires teachers to make plans that support every learner in meeting learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills and pedagogy together with their knowledge of learners and the community context (Morine-Dershimer, 2014).

Teachers plan for instruction in different ways and for various periods (Morine-Dershimer, 2014). For instance, the plan may be yearly, quarterly, weekly and/or daily. In the case of Lesotho primary schools, teachers were given templates for quarterly planning (scheme of work) and for daily planning (lesson plan) during the training workshops, preparing them for implementing the integrated curriculum (Appendix 4A, 4B, 4C, 4D).

As stipulated by the Education Act No 3 of 2010 s21 (f), principals should ensure that meaningful teaching and learning occur at their schools. They are obliged to assist teachers with the necessary material (time, knowledge) for planning and to monitor their planning. In some schools, teachers prepare the scheme of work quarterly and principals check and sign that scheme of work. In other schools, teachers scheme weekly. Principals also check lesson plans at different intervals, depending on the administration of each school.

Makokha and Ongwae (1997) describe the scheme of work as the teachers' plan of action, derived from the syllabus that should enable them to organise teaching activities and resources ahead of time. Much as this plan is necessary, as the first planning stage, there is a variety of considerations to be kept in mind when preparing the scheme. As outlined by the above-mentioned authors (hand-out 10), these are as follows: understanding the syllabus content; existing scheme of work for the subject; reference material/teaching aids and examination; as well as time estimation.

“The ultimate goal for instructional design is to produce effective instruction”, (Gagne, *et al.,* 2005:237). Teachers are expected to prepare and conduct classroom instruction based on the goals and prescriptions of the new curriculum. The aforementioned authors claim that factors such as teachers’ knowledge and beliefs, learners’ background, curricula organisation and the school environment are all important when teachers plan and carry out their instructional mandates. For instance, decisions about how teachers establish a sequence of objectives from the curriculum depend on these factors.

It is understood that most teachers design their instruction with student learning and/or improved learner performance as one of their key objectives. For that reason, teachers have to determine how successful the instruction has been for the whole class and for individual learners through assessment (Jabbarifar, 2009). Gagne *et al*. (2005) assert that teachers need to use various measures of performance (assessment) and interpret the results to establish the success or otherwise of their instructional interventions.

Moreover, Makokha and Ongwae (1997) uphold that teachers should be thoroughly conversant with the curriculum to implement it successfully; identify the integral learning content and arrange it in a logical teaching order with special attention on the preceding and succeeding syllabus content. This is the knowledge of what curriculum entails, called “curriculum knowledge”. It encompasses goals, objectives and standards of education, learning content and materials (Ball *et al*., 2008).

For teachers to perform this complex task, they should have content knowledge, which is the knowledge of concepts and principles of a particular subject in order to identify the learning content that they deem important (Groβschedl *et al.,* 2014). Teachers

should possess pedagogical content knowledge to empower them to transmit content to the learners in a comprehensible manner (Denby, 2015). Lastly, teachers require curricula knowledge regarding previous, current and next grade syllabi, as well as preceding and succeeding syllabi content, as indicated by Ball *et al.* (2008).

The other aspect outlined by Makokha and Ongwae (1997) suggests that teachers should revise the existing scheme to suit their learners and to bring it up to date. In as much as this seems to save teachers time and effort, revising the existing scheme encompasses many factors. For instance, was the teacher part of the initial scheming team? Does this teacher view learning in line with those who initially schemed? These questions are worth considering, because as Berglund and Lister (2010) emphasise, teachers' beliefs, attitudes and perceptions determine how teachers plan and conduct their lessons.

Consequently, the teachers' decisions about instruction are more likely to vary (Moru *et al.,* 2014). It seems those teachers' content selection, arrangement and organisation/sequencing, as well as decisions on the material to be used and time estimation would not correspond. According to Morine-Dershimer (2014), a statement about needed material for a unit/quarter warns teachers about the preparations to be made before the beginning of instruction. With regard to the content organisation, she indicates that bringing out an appropriate sequence of series on the topics requires skill on the teacher's side (Morine-Dershimer, 2014).

Makokha and Ongwae (1997) acknowledge the importance of reference material being available and the assessment for which learners should be prepared regarding the scheme of work preparation. The reference material and examination, in conjunction with the use of the curricula and the content knowledge, provide bases for what Biggs (2003) regards as alignment of curriculum objectives, instruction and assessment. Roach *et al.* (2008) assert that this alignment provides the necessary guidance for teachers towards attending the desired outcomes.

Teachers are supposed to provide differentiated instruction and assessment that is expected to be reflected in the planning to cater for diverse needs and learning styles of learners in their class (Shostak, 2014). On this notion, Tomlinson (2014) warns that teachers should not assume that learners of the same age or grade are necessarily

the same and that teachers should use their knowledge about their learners when planning for instruction.

i. Scheming

The format developed by the National Curriculum Development Centre for grades 3 and 4 comprises unit theme (e.g. grade 3 unit 1 – About Myself, grade 4 unit 1 – Knowing oneself and relating to others), as shown in the table below. The teaching-learning process is scheduled for five weeks. There is also a week for consolidation and another one for assessment. This makes a total of seven weeks written in the form of a table with the following column heading on the scheme of work: week, learning outcomes (LOs) and concepts for the integrated part (IP), Sesotho Window (SW), English Window (EW) and Numeracy Window (NW). The rows are just numbered to indicate the week (number) on which the concepts are to be taught.

Table 2–1: Grade 3–4 Scheme of work format

Unit…. Theme:								
Week	**LOs from IP**	**Concepts**	**LOs from SW**	**Concepts**	**LOs from EW**	**Concepts**	**LOs from NW**	**Concepts**
1								
2								

At this point, it is important to discuss the core elements of the scheme of work.

Another element is ***learning outcomes***. Kennedy, Hyland and Ryan (2006) define the learning outcomes as statements of what a learner is expected to know, understand and/or be able to demonstrate after completion of a learning process. It is a statement in measurable terms of what a learner should know, understand and be able to do by the end of a particular period (NCDC, 2013). The targeted period for achieving the learning outcome is 45 days for grades 3 and 4 whereas grade 5 learning outcomes achievement is allowed for up to a year. The learning outcomes are stated as the directives for the teaching and learning process depending on different grades in the syllabi.

Each learning outcome is stated with corresponding concepts to be learnt, the skills to be developed and the values and attitudes to be acquired by learners. In addition to that, there are suggested learning experiences, what is to be assessed and the suggested resources to enhance the achievement of each learning outcome (grades 3, 4, 5 syllabi). Learning outcomes (LOs) are therefore of utmost importance for the planning process. Apart from that, the scheme of work should show the ***concepts***. These are the general ideas that arise from a specific situation, which can be applied to different contexts to promote understanding (NCDC, 2015).

There are additional elements of the scheme of work from grade 5 where the format is designed for the individual learning areas (Table 2.2 below):

Table 2–2: Grade 5 scheme of work format

Table …: Grade 5 scheme of work format					
Learning Area: …….. Unit: …. Year: …… Grade: …					
Week	**LOs to be covered**	**Concepts**	**Periods**	**Methods**	**Resources**
1					
2					

Additionally, the grade 5–6 scheme format indicates the number of periods per week, teaching-learning methods and resources per learning outcome, the specific unit number, year, grade and learning area.

The **learningareas** are regarded as a systematic and logical cluster of the traditional subjects taught (grades 5 and 6) to enhance transition from lower grades (1–4) to the subject-based curriculum to be taught in the next level of basic education (MoET, 2015; MoET, 2009). The teaching and learning of the integrated part and the windows taught from grades 1–4 lay a foundation for the teaching and learning of the learning areas (NCDC, 2014).

The Linguistic and Literary (Sesotho [LLS] and English [LLE]) together with the Scientific and Technological (ST) learning areas are expected to be taught for seven periods each week. The former mainly focuses on the teaching-learning and use of

languages (Sesotho and English) (MoET, 2015). The latter promotes the understanding of scientific and environmental phenomena (MoET, 2009; MoET 2015).

The third learning area, Numerical and Mathematical (NM), is only taught for six periods in a week. It unfolds learners' logical thinking and enables them to acquire functional knowledge for learning in their day-to-day life (MoET, 2009; MoET, 2015). The other two learning areas (Personal, Spiritual and Social; Creativity and Entrepreneurial) are allotted five periods every week. As the name implies, PSS promotes the growth of the learners as individuals, spiritual beings and social beings to shape them into useful community members (MoET, 2015; MoET 2009). The last learning area, CE, fosters understanding and application of creative and entrepreneurial talents and abilities of learners (MoET 2015).

Teaching-learning methods reflect a "repertoire of teaching skills that facilitate students' learning" posed by the teacher towards the attainment of the intended learning objectives. In fact, the MoET (2009) advocates for the use of specific teaching-learning methods, which are divided in four major categories: teacher-centred, learner-centred, content focused and participative methods (Chapuis, 2003; Makokha & Ongwae, 1997).

The methods can be derived from the suggested activities in the syllabus, be shown on the planning books and be employed during the teaching-learning process. As illustrated by the MoET (2009), teachers should change to methods that promote learners' creativity, independence and survival skills.

The components of teachers' planning (scheme) are presented in the table below:

Table 2–3 Scheme of work for grades 1–4 and grade 5

Scheme of work for grades 1–4	Scheme of work for Grade 5–6
1. Title 2. Unit and its theme 3. Learning outcomes per window 4. Concepts per window	➢ Learning Area ➢ Unit ➢ Year ➢ Grade ➢ Week ➢ Learning outcomes ➢ Concepts ➢ Periods ➢ Methods ➢ Resources

ii. Lesson planning

Another element of interest with respect to planning, for this study, is the lesson plan. This is part of instructional planning that enhances instruction and its nature varies depending on how it is going to be used (Gagne, *et al.,* 2005). However, some components are basic for lesson plan development.

To start with, an instructional objective is a statement that describes the intended changes in behaviour or skill mastery clearly, and which should be plainly stated at the beginning of the lesson to focus the learners' attention (Shostak, 2014). Ornstein and Hunkins (1998) add that instructional objectives specify what will be learnt in a sequential way and should address cognitive, affective and the psychomotor domains. Keeping the instructional objective in mind during instruction allows the teachers and learners to remain focused throughout the instruction process (Tenbrink, 2014).

Besides the purpose of instructional objectives, a lesson plan has to show a list of instructional materials. These refer to the tools or apparatus that would be used by the teacher and/or the learners to enhance learning that alert the teacher about necessary preparations before the instruction resumes (Morine-Dershimer, 2014). Introduction is also an important element in a lesson plan. This comprises activities that evoke learners' interest and curiosity as a way to prepare them for learning activities that are about to occur (Makokha & Ongwae, 1997).

It is necessary to determine whether the instructional objectives are achieved by collecting evidence of the knowledge and skills in a systematic way (Harlen, 2004; Norton, 2009). The other element of a lesson plan is the ***development*** or body, which is a set of procedures to be followed in the lesson that require skill in inventing the appropriate sequence of activities (Morine-Dershimer, 2014).

Based on the NCDC lesson plan structure, grade 5–6 lesson development encompasses:

a) Teacher's activities
b) Learners' activities
c) Assessment methods
d) Assessment criteria

Lesson plan components for grade 3–4

1. Date
2. Grade
3. Duration
4. Concepts
5. Objectives
6. Introduction
7. Teacher's activities
8. Learners' activities
9. Conclusion

Lesson plan components for grade 5

1. Learning Area
2. Date
3. Grade
4. Duration
5. Concept(s)
6. Learning outcome (s)
7. Teaching learning methods
8. Teaching learning materials
9. Objective
10. Introduction
11. Success criteria
12. Development:
    a. teacher's and learners' activities
    b. assessment criteria
    c. assessment methods
13. Conclusion
14. Evaluation

The next step, which is expected to follow planning, is to put the planning in practice/conduct that planned lesson. This is the main stage of the curriculum implementation phase for teachers, which provides the basic evidence of their knowledge (curricula, pedagogical and content), perceptions and beliefs about learning. The following section thus provides an overview of the ideal teacher practices regarding classroom instruction and assessment.

D. Classroom instruction and assessment

i. Instruction

Instruction is the process of preparing an individual for life and work by facilitating their acquisition of knowledge, skills and work habits (Menchinskaia, Skatkin & Budarnyi, 2010). For the purpose of this study, instruction refers to any activity that teachers perform to support learning together with the experiences that learners have because of their involvement in class activities (Moru *et al.*, 2014). Ideally, classroom instruction ought to be based on the curriculum objectives reflected in the form of learning outcomes.

The selection of instructional and assessment activities depends on the learning outcome and standards to be addressed by a certain instructional objective and learner characteristics (Gagne *et al.*, 2005:260). Therefore, the alignment of all these is crucial.

Apart from that, Gagne *et al.* (2005) reiterate that the media, instructional methods and strategies to be used during the lesson determine the effectiveness of the lesson. As indicated earlier, the MoET (2008) calls for participatory, activity-centred and interactive methods, for teaching the new curriculum. Instruction can be considered successful if all the learners reach the set standards (Gagne *et al.,* 2005).

Tenbrink (2014) attests that useful instructional objectives are learner-oriented; expectations are on learners' actions, not on what the teacher does and are clear and understandable to teachers. They are descriptive of appropriate learning outcomes. They specify what learners will learn to do in a sequential manner, enlightening teachers of the developmental stages of the learners (intellectual, language, social and moral development). The objectives should further differ in nature and they should address cognitive, affective and psychomotor domains if derived from a balanced curriculum (Ornstein & Hunkins, 1998).

Teachers derive the lessons from the curricula content in order to carry out instructional activities. Effective instruction starts with proper planning and it is characterised by learner engagement, interaction with others and their teacher (Frey, 2011; Tenbrink, 2014).

According to Frey (2011:3–16), the following are the characteristics of effective instruction:

1. <u>It is organised through the gradual release of responsibility engaging learners actively in different levels (group-partner-individual)</u>

At the beginning of the lesson, the purpose is clearly stated to focus learners' attention on that particular lesson (Shostak, 2014). This helps learners to set their own standards regarding each lesson. To facilitate effectiveness of instruction, teachers ought to model the skills they want their learners to grasp until each learner

understands what is required. The advantage is, when learners see the skill in practice, they are prepared and accept responsibility for the task.

Learners should then be coached to demonstrate the skill in small groups or in pairs as a way of transferring responsibility to them. Thereafter they must be individually guided. As an expert, the teacher should guide the learners to work together and merge their understanding, shaping their efforts and preventing the anticipated mistakes. Teachers should further help them take individual responsibility based on the group task.

Groups prepare learners for tasks while accommodating their differences in terms of character and it increases participation. It is much safer for those who are uncomfortable to give their opinions in pairs rather than in front of the entire class. Again, learners have the chance to clarify and refine the various concepts taught in small groups (Frey, 2011). Learners need to be taught to pace themselves accordingly and be equipped with necessary strategies for gaining assistance, yet maintaining order. All these increase levels of work, moving learners smoothly from being the observers to being active participants in the learning process.

2. Instruction is differentiated

This means the teacher plans varied approaches, from the onset, to accommodate learners' diverse needs and learning styles, for they are different as human beings (Shostak, 2014). The varied approaches require teachers to challenge each learner, to address gender differences, to consider cultural issues and to draw on learners' individual interests and learning modalities (Tomlinson, 2014).

3. Instruction is interactive and should allow learners to help each other in groups and in pairs: say-write-do

The learning process should be planned depending on learners' understanding. Interactive instruction offers learners the opportunity to talk and to reinforce key concepts and skills through writing. It also allows them to perform the tasks as per the Chinese proverb: "I hear, I forget; I see, I remember; I do and I understand". During their interaction with the teacher and with each other, learners should obtain assistance from their peers and teacher (Frey, 2011).

4. It allows learners to learn from each other: think-pair-share

During instruction, learners should be offered an opportunity to think on their own and then be allowed to discuss their opinions with their partners to refine those opinions under the supervision of the teacher. From there they may share with the entire class.

For teachers to engage learners meaningfully in the learning process, teachers should engage learners at an individual level, which require teachers to be the skilful managers of their classrooms (Frey, 2011). Classroom management refers to the actions taken by teachers to create a respectful, caring, orderly and productive environment to foster academic achievement, to enhance social skills and learner capacity for self-regulation (Weinstein & Weber, 2014).

For the purpose of this study, only the following aspects of classroom management will be included in the discussion, as the focus of this study is to determine how teachers understand and interpret curriculum and how they deliver instruction and assess learners.

Classroom management plan

Teachers state their philosophy for the teaching-learning process (Frey, 2011). Their beliefs on how teaching and learning should occur, about community and diversity in the classroom should be made clear to the principal, learners and their parents. They should engage learners in setting the classroom roles that serve a clear message about the expected behaviour. There should be clear classroom procedures for a smooth-running setting.

Classroom setting/room arrangement

The classroom setting is the layout of the room with specific areas for storage, academic and social purposes (Frey, 2011). This physical environment directly and indirectly affects the manner in which teachers and learners feel, think and behave (Weinstein & Weber, 2014). Teachers should arrange their classroom in a way that promotes access to materials (accessibility). As articulated by Frey (2011), they should also design the seating arrangement to allow learners to have instructional presentations (visibility).

Depending on the type of interaction and the individual need of the learners, teachers should design the appropriate arrangement of learners' seats. For instance, learners would not be in rows if the teacher wants to encourage collaboration and cooperation; instead, they may be in pairs or clusters of four. The set-up should allow the teacher to reach each learner easily to provide extra instructional or behavioural support (proximity). The classroom should reflect the teacher's interests, goals and values as well as the learners' interests, activities, background and accomplishment.

Addressing absenteeism

Teachers should have a clear plan for sharing work missed by learners while they were absent and on motivating learners to attend school (Frey, 2011). Teachers should prepare some work for learners to complete during their absence in cases of planned absences. For unplanned absences, teachers may create assignment partners who will meet with their returning friends to review details of the work done. Teachers should also establish a routine in their schedule for returning learners to consult about things they have missed (Frey, 2011).

The selection and use of the said methods and techniques depend on teachers' perceptions and understanding of how to facilitate learner engagement. This means that teachers may deliver content to learners, modify the content to make it interesting or they may collaborate with learners to create activities that align with learners' needs (Irvin, 2006).

The school context and classrooms environment, as the learning environments, are also important and so are content and instructional methods. According to Tomlinson (2014), teachers should conceptualise and implement their instruction based not only on their knowledge about learners but also on what they teach (content), where they teach (classroom environment) and how they teach (instructional methods).

Most importantly, teachers' decision for planning and conducting instruction and assessment relies on, among other things, how they perceive learning (Moru, *et.al*., 2014).

> "Proactively planning learner-centred instruction that is rooted in assessment and blends whole class, individual and small group instruction to provide multiple approaches to content, process and

product with the goal of maximizing the capacity of each learner" (Shostak, 2014:91).

ii. Learning

In this study, learning is regarded as a psychological process in which long-lasting changes in an individual's knowledge, skills, attitudes or understanding of the world result from interactions with the environment (Slavik & Leahey, 2011). This implies that learning is seen through the lens of the constructivist. Based on constructivism, learning is a process of constructing meaning rather than receiving knowledge and it occurs when there is a stable change in an individual's knowledge, skills and behaviour (Saturday, Armbruster, Binkley & Thayer-Bacon, 2011).

The constructivists' further claim that learning involves the construction of knowledge as new experiences are given meaning by prior knowledge (Lawson, 2002). Prairie (2005) adds that it entails physical and mental activeness whereby the learners use constructivist processes with input from manipulating objects, from trial and error, from other people, from listening and from observing (Prairie, 2005).

The teacher and the content have a profound influence on the approach to learning, that is, whether they adopt a deep or surface approach. The nature and characteristics of the learning content need to be considered (Berglund & Lister, 2010:36). In deep learning, learners attempt to develop a genuine understanding of what they study. However, in surface learning they merely seek to complete the set task. According to Schwartz, Sadler, Sonnert and Tai (2008), engaging students in an in-depth approach, which enhances deeper understanding, bears positive results.

Qualities such as motivation, developmental factors and individual differences in capacities are the internal characteristics of the learner that influence their learning (Gagne *et al.,* 2005). These should be addressed in order to make learning effective.

Frey (2011) asserts that learning is an individual and social process. Instruction should therefore offer learners the opportunity to work independently and enable learners to learn from each other. This helps learners to acquire key concepts and skills.

iii. Assessment

The success and failure of the teaching and learning process are established through assessment, which determines the general framework within which lessons are planned and learning occurs. Assessment is the process to collect evidence of knowledge and skills learnt in a planned and systematic way, which interprets the evidence for a judgement (Harlen, 2004; Norton, 2009). That is why this study explored the teachers' instructional and assessment practices concurrently.

To determine how well learning has occurred and whether the learning objectives have been met, assessment should be conducted (Harlen, 2007; Carl, 2009). Assessment is a process of observing, recording or documenting the work learners do and how well they do it, as a basis for the variety of educational decisions that affect the child. It can be done for different purposes such as grading or diagnostic purposes.

According to constructivists, assessment and learning are linked processes, and for this reason, I explored the instructional and assessment activities. The constructivists maintain that assessment measures learning and collects evidence of the knowledge and skills learnt in a planned and systematic way (Harlen, 2004; Norton, 2009).

Just as during instructional delivery, learners should be engaged during assessment. This could be achieved if assessment is valid, reliable and fair, and has consequential relevance to learners. The content of the valid assessment measures what it is intended to measure. If the target is to determine whether learners can sort objects based on size, other issues such as colour should not influence the results. The assessment should be clear to the learner to provide consistent results. Assessment should also offer learners equal opportunities irrespective of their differences and be practical to the context within which it is administered. It should occur in a context familiar to learners, with standards that are well known to learners (Lachiever & Tardif, 2002).

Curriculum objectives are very important (Pickford & Brown, 2006) to determine how and what learners learn (delivered curriculum), although the attainment of these objectives can be influenced by assessment methods and requirements. For this reason, any mode of assessment should be aligned with the instructional activities and the objectives (content) to ensure effective learning (Biggs, 2003).

Assessment is purposed for a variety of activities such as promoting students' learning by providing the students with feedback, normally to help improve their performance; evaluating students' knowledge, understanding, abilities or skills; providing a mark or grade that enables the students' performance to be established (Norton, 2009).

Assessment can be formative or summative. Formative assessment is carried out during instruction to provide information to learners and serve as a diagnostic tool for improvement of learning (McMillan, 2004). It assists learners to identify and close the gaps in their knowledge, understanding or skills (Carl, 2009). Summative assessment is usually carried out at the end of instruction to provide information over what learners achieved in a certain period of time (McMillan, 2004). Tests and examinations are commonly used in schools for summative assessment.

Gass (2012) contests that, teachers' reactions to the curriculum reform should be considered to determine timetabling constraints and curriculum coverage. The teachers' reactions to the new curriculum and assessment in terms of instructional and assessment strategies/methods as well as their reactions to changes brought forth by the educational paradigm shift should also be taken into account.

2.5 Research on curriculum reform implementation and teachers' sensemaking

An educational reform policy is basically designed to change the functioning within the schooling system. As such, policy makers, as the initiators of reform, are endlessly searching for a blueprint that would have an everlasting impact in the classroom (Gawlik, 2015). These reforms are laden with ideas of what would work best and therefore challenge the status quo. But turning these ideas into school reality is a complex process (OECD, 2017). This results into the continuous gap between reform policy and practice continues that exists.

Policy implementation seems to be the problem. Conventional policy implementation research sought ways to describe this problem (theoretical explanations). But, based on empirical findings, contemporary literature on policy implementation focuses on the interaction between reform policy, the agents and their context (Gawlik, 2015; Porter, Fusarelli & Fusarelli, 2015).

Heavily associated with this empirical literature is the sense making theory. Sense making has gained ascendency because of its explanatory power regarding the problem of implementation (Walls, 2017). Sense making seemed to offer a plausible explanation of how implementing agents come to understand reform initiatives. Understanding policy intentions is an individual, social as well as a contextual matter and cognition and prior experiences form the basis for an individual's understanding and there is potential for decoding multiple messages from a single policy stimulus (Spillane *et.al.,* 2002). Implementation succeeds when the agents understand the curriculum policy prescriptions.

The implementing agents may fail to understand curriculum requirements due to the following conditions: inadequate in-service training, un-conducive school environment, a lack of resources (Okoth, 2016). This author considers the following as other factors that hinder understanding of curriculum: the absence of information regarding the reasons for change and its theoretical underpinnings. Teachers' prior knowledge is also a determinant for conceptualising the policy prescriptions of the proposed curriculum (Spillane *et al.,* 2002).

Policy makers often fail to create dissonance in the extant practices of the agents who ultimately implement the reform but rather impose reforms on agents in the hope that they would divorce their old habits for the proposed ones (Coburn, 2005).

Reforms seems to suffer similar fate pertaining to their implementation as they are considered to be rejected, adjusted or superficial implemented (Mutch, 2012). This is because to implement a reform is not merely to execute policy prescriptions but a complex process (Marz & Kelchtermans, 2013). Agents are naturally biased towards aspects of the reform that align to their prior experiences or beliefs. As a result, implementing agents may concentrate on what they know and disregard what they do not know. This indicates that capacity and expertise of the agents is crucial for implementation (Spillane et al., 2002).

A perfectly designed reform which is based on sound theoretical underpinnings may fail to penetrate into classroom to change practice(Schechter, Shaked, Ganon-Shilon, Goldratt, 2016). Implementation is subjective because it is dependent on interpretations of individual agents involved in its implementation(Coburn,

2016).Agents may interpret new ideas as familiar thereby missing the fundamental issues in that reform (Gawlik, 2015).

The impact of reform on practice is often minimal, superficial or non-existent. In most cases, practice changes policy. Agents often 'cobble new ideas onto old practices' creating a melange of practices that have a great effect on reform policy (Cohen, 1990:312).

2.6 Prior research on the implementation of the integrated curriculum

The main purpose of integrated curriculum is *to develop a holistic view of learning* (Ibraimova, 2017:11). This curriculum is preferred over variety of curricula because of its nature. Because it is learner centered and promotes learner engagement (Lam, Alvia-Martin & Sim, 2013). It is considered as the curriculum that prepares learners to face real life challenges by equipping them learners with 21st century skills (Dambudzo, 2015; Kahveci & Atalay, 2015).

The proper and sustainable implementationof the integrated curriculum requires teachers to have theoretical framework for curriculum integration; to know their roles and understand the curriculum (Park, 2008). In addition, time for planning and compatibility of working hours affect the implementation of integrated curriculum (Fu & Sibert, 2017).

Institutional and learners' appreciation about integrated curriculum, fixed teaching schedule, facilitation of skills, curriculum management and the provision of feedback were found to be the challenges in the implementation of the integrated curriculum (Shankar, 2014). Besides these, integrated curriculum implementation requires the use of participatory methods which are suitable only for small groups of learners (Kucharcikova & Tokarcikova, 2016). As a result, the assumption is that it is challenging for the instances where there are large groups of learners.

2.7 Summary

This chapter provided the literature review on curriculum development in different countries including Lesotho. Theoretical lens for teachers' understandings of the policy prescriptions and the manner in which they enact on the guidelines during the implementation of reform was a combination of social cognitive theory and sense-making theory. The current curriculum reform is one of the several reforms that

Lesotho education system had undertaken since 1833. The major focus of the study is at the implementation phase of the curriculum development where the core agents of reform, teachers, enact the integrated curriculum. The next chapter discusses the research design and methodology followed in this study.

CHAPTER 3 RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

The main aim of this study was to explore instructional and assessment practices of primary school teachers in Lesotho during the implementation of the NIC. As a result, this chapter provides thorough descriptions of the research design and methodology highlighted in chapter 1 (cf. section 1.3). Data gathering and analysis were based on the theoretical framework discussed in the previous chapters (cf. section 1.2 and 2.2) to achieve the following objectives:

1. To determine the teachers' understanding of the Curriculum and Assessment Policy (CAP) in Lesotho in terms of its prescriptions for classroom instruction and assessment.
2. To discover teachers' actual practices in implementing the curriculum and assessment guidelines during classroom instruction and assessment.
3. To explain the teachers' understanding and practices of the new curriculum.
4. To recommend improvements in the implementation of the new curriculum in Lesotho.

To achieve this aim and the objectives, I employed the research design and methodology illustrated in Table 3.1 below.

Table 3–1: Research design and methodology

Research title	Integrated curriculum in Lesotho: Exploring primary school teachers' instructional and assessment practices
Research design	Case study design
Research approach	Qualitative research
Research paradigm	Interpretivism
Sampling	Purposive and convenience
Pilot study	A pilot study was conducted with two primary school teachers to test trustworthiness of the instruments and analysis strategies on the collected data
Data collection method	Case study method
Data collection techniques	Document analysis, observations, interviews
Data collection instruments	Scheme book, lesson plan book, observation schedule, interview protocol
Data documentation	Photocopies of schemes and lesson plans for the observed lessons, photographs of the outstanding events during observations, audio and video recordings of the observations and audio recordings of interviews, transcriptions
Data analysis	Descriptive (content analysis)
Ethical considerations	Permission from the Ministry of Education and Training, school principals, teachers; ethical clearance from UFS
Quality evaluation	Trustworthiness, credibility

3.2 Research design

A research design is a structured framework of how the researcher intends to conduct the research process to answer the research questions (Babbie & Mouton, 2002; Johnson & Christensen, 2012).

A case study is employed when a researcher explores a programme, event, activity and process of one or more individuals in-depth (Creswell, 2014). This design capacitated me to explore teachers' practices during the process of implementing the

new curriculum by using different data collection techniques to answer the following secondary questions:

1. What are the teachers' understanding of the New Curriculum and Assessment Policy (CAP) in Lesotho in terms of its prescriptions for classroom instruction and assessment?
2. How do teachers implement the curriculum and assessment guidelines during classroom instruction and assessment?
3. How can the teachers' understandings and practices of the new curriculum be explained?
4. What recommendations can be made for improvements in the implementation of the integrated curriculum in Lesotho?

3.3 Research approach

I followed a qualitative approach whereby literature is used in line with the assumptions of learning from the participants (Creswell, 2014). In the previous chapter, literature on the curriculum reform, integrated curriculum model, instruction and assessment was explored. I discussed the curriculum issues pertinent to the teachers' practices, their interpretations of the new curriculum with regard to their perspectives about effective learning as well as the attitudes, beliefs and challenges surrounding the implementation of that curriculum reform.

The qualitative approach involves an in-depth inquiry by means of subjective data collection from a variety of realistic materials (such as personal experience, introspection, interview, artefacts, observational, interactional and visual texts) to form the basis for analysis and understanding (Takona, 2002; Denzin & Lincoln, 2005). It entails using data in the form of words, pictures, descriptions or narratives, which relies primarily on the collection of qualitative data (Sullivan, 2001; Johnson & Christensen, 2012).

The study explored the participants' cognitive and social behaviour from their perspective to bridge the existing gap where the majority of the studies on implementation of curriculum reform disregard teachers' perspectives and contexts for curriculum interpretations and practices (Tabulawa, 2009; Raselimo, 2010; Raselimo & Wilmot, 2013; Raselimo & Mahao, 2015).

3.4 Research paradigm

A research paradigm is a perspective held by a community of researchers that is used as a frame of reference to organise reasons and observations on how the world works based on a set of shared assumptions, concepts, values and practices (Babbie, 2010; Johnson & Christensen, 2014). For this study, the phenomenon is viewed through the interpretivists' lens.

The interpretive paradigm is based predominantly on the centrality of human consciousness and forms the basis for the presumed comparison between the study of man and the study of society (Babbie & Mouton, 2002; Babbie, 2010). For instance, the new curriculum in Lesotho might seek to improve the society or to transform it in a certain manner. In this way, this curriculum is used as a vehicle for social and personal developments (Stears, 2009). The discrepancies that might exist between curriculum objectives and teachers' interpretations, knowledge, skills and attitudes could influence the manner in which teachers teach and how learners learn, which might have a negative impact on society if not considered and addressed.

This paradigm is based on the assumptions related to the nature of reality, the relationship of the researcher to what is being researched, the role of the researcher and the role of values in a study (De Vos, Strydom, Fouché & Delport, 2005). These are discussed below to elaborate on the idea that this paradigm is not only based on assumptions, but also on concepts, values and practices held by a community of researchers (Johnson & Christensen, 2012).

3.4.1 Nature of reality

The interpretivists acknowledge that reality arises out of the creation and exchange of social meanings during the process of social interaction (Sullivan, 2001; Babbie, 2010). They also attach subjective and personal meanings to the people studied with what those people do (Babbie, 2010). The participants were studied in their social world (classroom) where they instruct and assess learners. This paradigm therefore enabled me to interact with the participants as I talked to them to find how they interpret the curriculum policy prescriptions, to determine their challenges and to observe how they conduct instruction and assessment in their respective classrooms.

I analysed schemes and lesson preparations made by teachers; observed and noted how they instruct and assess learners during the lessons. Thereafter, I interviewed the respective teachers to determine the challenges they are facing and to determine their perspectives regarding the implementation of the NIC. These provided the qualitative data to address the objectives.

Interpretivists also attach subjective and personal meanings to the people studied with what those people do (Babbie, 2010). Therefore, the participants' stories were told based on their individual practices and the researcher's experiences during the observations. These were done to determine what the policy to be implemented means for the implementing agents and to show that it is constituted in the interaction of their existing cognitive structures, their situation and the policy signals (Spillane *et al.*, 2002).

3.4.2 Relationship of the researcher the researched

This relates to the underplaying reasons for the individual researcher to conduct the research on the participants. I was taught according to the old curriculum objectives during my primary school years (1987–1993). I am a primary school teacher, familiar with the old and the new curricula. I have also implemented the old curriculum during my teaching career (2004–2014). I was assessed and taught learners who have been assessed in the traditional ways.

I implemented the integrated curriculum (since 2015) whereby I dealt with various learning areas (grades 5 and 6) and different subjects (grade 7): Personal, Spiritual and Social (PSS), Creativity and Entrepreneurial (CE), Scientific and Technological (ST), Linguistic and Literary English (LLE), Numerical and Mathematical (NM) learning areas; Art and Entrepreneurship, Science and Technology, English and Mathematics.

In addition, I have worked with the Examination Council of Lesotho (ECoL) in developing the assessment blueprints, items, tasks, marking guides and rubrics together with performance level descriptors based on the new curriculum and assessment framework for the Grade 4 Numeracy Window (NW) and Integrated Part of new curriculum (IPoNC/IP). I also assisted with the grade 5 and 6 Personal, Spiritual and Social (PSS) and Creativity and Entrepreneurial (CE) learning areas. I have

further developed bank items for grade 7 examination papers together with performance level descriptors based on the new curriculum.

I have also been a moderator and evaluator of integrated curriculum learners' textbooks and teachers' guidebooks (grade 6), working under the National Curriculum Development Centre (NCDC).

3.4.3 Role of the researcher

I was a non-participant observer in this study. During the interviews, I discussed the participants' experiences as I observed and determined their perspectives and beliefs about instruction and assessment. During the classroom observations, I observed without intervening. This allowed for voluntary consent by participants while at the same time allowing the researcher to have an insider and an outsider's view (Johnson & Christensen, 2012). I, the researcher, collected and analysed data.

3.4.4 Role of values in a study

Values help researchers acquire an accurate body of knowledge about human social behaviour and enhance the researchers' credibility as interested experts (Dyson & Brown, 2006). I adhered to the moral values and ethics of conducting research. The participants' values and those of the relevant authorities were considered. Permission was acquired from the relevant authorities before conducting the research.

I obtained permission from the University of the Free State Ethics Committee, as well as from the Ministry of Education and Training (MoET), before conducting the research (Appendix A). With the consent of the MoET, I also obtained permission from the respective participants' school principals (Appendix A). I further received the go-ahead from the participants and they completed the consent forms.

The participants' values and those of the relevant authorities were considered. The participants' schools and names are concealed in this report. Audiotaping and photography were done with the consent of the participants. The focus was on the practices of the individuals, not their faces. The collected data was protected by putting it in a safe and keeping the soft copies on computers protected with passwords.

3.5 Research methodology

Research methodology refers to the methods, techniques and procedures for scientific investigation that are employed to put the research plan in action together with the underlying principles and assumptions underpinning their use (Babbie & Mouton, 2002; Babbie, 2010). As an overall approach of studying one's topic, it includes issues such as the constraints, dilemmas and ethical choices within one's research (Johnson and Christensen, 2008).

3.5.1 Data collection

Carl (2009) suggests that the nature and characteristics of the learning content, society, the mission and aims of education, in general, also need to be considered when examining curriculum implementation at the classroom level. For that reason, I employed various data collection methods and strategies that enabled me to cover these aspects. That is, the inquiry process entailed data gathering through document analysis, classroom observations and structured interviews (Flick, 2007).

Data collection in qualitative research involves using multiple sources of data with the sole purpose of obtaining rich data to facilitate deep understanding of the phenomenon that is studied. I specifically selected the case study design because it allows for the use of multiple methods and techniques with the purpose of providing an in-depth analysis of a person, a group of people, a method, an organisation or event (Takona, 2002; Johnson & Christensen, 2014).

3.5.1.1 Data collection method

Data collection was done by means of a case study. This method focuses on providing a detailed account of one or more cases (Johnson & Christensen, 2014). This research method provides a narrative detail of realistic events, with extensively descriptive reports in an attempt to discover new ideas about relationships to answer the "how and why" questions (Takona, 2002) as required by this particular study research question.

To have a holistic description of how teachers implement the NIC at primary school level, three types of the case study method (intrinsic, instrumental and collective) were

adapted to bridge the weaknesses of the individual methods. This is because each has advantages and disadvantages (Johnson & Christensen, 2014).

The intrinsic case study helped me to obtain an understanding about a phenomenon while focusing on a single case. The instrumental case study was used to find out how and why a phenomenon operates as it does, by choosing an extreme, unique or typical case (Johnson & Christensen, 2014). Lastly, a collective case study, which according to these authors, entails studying multiple cases in one overall research study, was used.

My interest was to understand the teachers' instructional and assessment practices and their sense making on the implementation of the integrated curriculum (intrinsic). As researcher, I endeavoured to provide an in-depth description of what happened during the implementation of the new curriculum in the school situation (intrinsic). The results of this research study may be used by the NIC evaluators to describe and evaluate its operational effectiveness and may thereby be used as the instrumental case study.

I explored the primary teachers' instructional and assessment practices to gain more understanding about this little-known phenomenon (intrinsic). That is, implementation of the integrated curriculum in Lesotho, particularly how teachers conduct instruction and assessment and the reasons for their practices. I studied each case in detail, first to develop an in-depth understanding of the individual cases (intrinsic).

The case study method was employed because the existing literature (from secondary data) contains much of the international studies on curricula reform, integrated curriculum and teacher instructional and assessment practices (Cohen, 1990; Spillane & Healey, 2010; Haug & Ødegaard, 2015;Yan, 2015). This literature, for instance, entails the relationship between instructional policy, teacher practices, and reform initiatives and reviews the incentive opportunities as well as the capacity of teachers to change their practices.

My study has characteristics of exploratory and programmes implementation case studies. First, it sought to answer the "how and why" questions about a phenomenon, and is used where there is uncertainty about the operation and results of a programme. It is also conducted when the existing literature and knowledge base are poor

(exploratory) (Takona, 2002). Therefore, the exploratory nature of my study allowed me to determine how teachers carry out their instructional and assessment practices and their reasons thereof.

The disadvantage of the exploratory case study is that the findings may be convincing enough and lead to the release of premature conclusions. However, cases provided information that was accumulated and compared to determine the differences and similarities that would facilitate the development of the theoretical generalisation.

Secondly, this study focused on the implementation of a programme (NIC). It sought to uncover whether the curriculum implementation complies with its intent, focusing on problems encountered during the programme implementation (Takona, 2002). I adapted the narrative inquiry to explore the teachers' practices in their respective classrooms to determine their conformity with the curriculum developers' intention.

Narrative inquiry refers to the study of experience when that experience is understood as lived and told stories (Johnson & Christensen, 2014). It requires collaboration between the researcher and the participants, over time, in a place and in social interaction with their social milieus. This relational inquiry is open to where participants' stories take a researcher. Researchers inquire into participants' stories as well as their own stories, move beyond regarding stories as fixed entities and begin to retell participants' stories.

The qualitative research approach is emergent rather than tightly prefigured and it is fundamentally interactive (Marshall & Rossman, 1999). As understanding deepens or situations change, researchers avoid the condition of being fixed into the rigid designs that prevent them from being responsive and pursue new paths of discovery as they emerge (Johnson & Christensen, 2014).

3.5.1.2 Sampling

Sampling is a way of selecting a sample, which is a set of elements from a population, which is assumed to be the representative of that population (Johnson & Christensen, 2012; Verma & Mallick, 1999). It is important therefore for the researcher to choose the best sampling design to elicit rich data. That is how curriculum implementation is carried out in medium and large schools.Sampling for this study had characteristics of

the following non-random sampling techniques, purposive and convenience sampling because qualitative research is flexible with respect to sampling techniques (Gall, Borg & Gall, 1996).

Non-probability sampling allows the researcher to use discretion on what would be a reasonable sample size (De Vos *et al.,* 2005). This kind of sampling reduces the cost of sampling, as compared to probability sampling, because the size of the sample is subjective to the researcher (Takona, 2002). Purposive sampling is a non-random sampling technique whereby the sample is selected based on specific characteristics of the population of interest (Johnson & Christensen, 2014). I purposively decided to conduct this study with qualified teachers who work in schools where educational reform is currently taking place.

Furthermore, I employedconvenience sampling for selecting the district, dissemination center and schools from which the participants work. This is a sampling technique whereby a sample is selected from subjects, groups or items that are reasonably accessible to the researcher to document how a phenomenon occurs in that particular group (Johnson & Christensen, 2012).

A. Sampling of the participants

Four qualified teachers were selected to be the participants for this study. This is because teachers'professional knowledge, is considered important for effective instruction and leads to students' progress (Groβschedl *et al.,* 2014). The teachers' personal qualities, teaching styles, subject training and professional competence should be acknowledged during content selection (Carl, 2009).

The original focus of the study was on grade 4 teachers' practices because it marks the end of the first level of basic education. From grades 1–4, learners are taught Sesotho, English and Numeracy Windows to reinforce the teaching-learning of the integration of the subjects that were taught as fragments in the old curriculum. These integrated subjects are referred to as the "Integrated Part of the New Curriculum" (IPoNC), which is abbreviated as IP in this study.

It was critical therefore to determine what happens during instruction of the IP, in part because it is designed to lay the foundation for three out of the six learning areas

(Personal, Spiritual and Social; Creativity and Entrepreneurial, and Scientific and Technological) to be taught from grade 5. It thus serves as a foundational programme for further study in the primary school curriculum. However, it was necessary to explore not only grade 4 teachers' practices based on the preliminary data that was collected, regardless of what they taught (grade and learning area).

One of the four teachers was allocated to grade 3; two were still in grade 4 and another one had moved to grade 5 during the following year. This made the explorations of teachers' practices even more interesting. This sample was used to collect data in respect of the ethical considerations outlined below in a country that has reformed its education system.

As a qualitative study, the aim is to determine the theoretical generalisations not necessarily the statistical generalisations (Creswell, 2014). For this reason, the sample was selected purposively.

B. Sampling of district

Lesotho is my home country where a new curriculum is implemented in primary schools. It is a landlocked country located in Southern Africa where it is completely surrounded by the Republic of South Africa. The total area of Lesotho is approximately 30 355 km², with a total population of 2,184,744. It is divided into four different regions, namely: lowlands, Senqu river valley, highlands and foothills. It is further divided into ten administrative districts, with respective towns. Each districthasdissemination centres with various schools.

This study was conducted in the Maseru district, which is found in the lowlands. It is an exceptional district, in that it is the only district whose one and only town is the capital and the only city in Lesotho. The Maseru district covers an area of 4 279 km². The city is also called Maseru. According to the World Population Prospects (WPP, 2018), Maseru currently has the largest share of the Lesotho population (about 118 355).

Maseru comprises different types of schools: church, private, community and government schools; which are officially registered with the MoET. The schools are located in the urban and rural areas, as is the case in other districts.In this particular

district, there are 17 dissemination centres for the primary schools. The largest centre consists of 33 primary schools, followed by the centre with 28 schools.

This district was purposively selected because it has the largest share of the population out of the ten administrative districts of Lesotho as well as the largest number of schools (Lerotholi, 2001). Plenty of schools have streams for different grades and are therefore categorised as medium or large schools, depending on the school roll. This is the district where I live and work. I am therefore familiar with the context and the administration of the schools of this district.

C. Sampling of schools within the district

I selected one dissemination centre, which is the largest and which administers all the different types of schools located in the rural and urban areas. These schools are all implementing the new curriculum that was introduced in 2013.My preference was on the schools with at least two teachers per grade.

Based on the characteristics of the chosen dissemination centre, I was at liberty to select schools that would provide rich data in a cost-effective way. Gathering data in this centre was cost effective in that the various schools were within my reach in this region and thus easily accessible (convenience sampling). I was also able to deal with two participants in each school, as there were two or more streams of grade 4s in the selected schools. This enabled me to select eight participants from only four schools. However, only four of them were considered as the main participants, as discussed in section 3.5.2.7 below.

The sample schools were purposely selected based on the idea that the interpretation of the curriculum may be disrupted due to the varying and sometimes contradictory messages from the policy makers, district officers, district resource teachers and the inspectorate (Spillane *et al.*, 2002). Therefore, all the selected schools fall under the same district office and are guided by the same district resource teachers and the same inspectorate (purposive sampling).

My choice of the sample schools for these investigations was based on the list of schools implementing the new curriculum. They are within a radius of ten kilometres from my school. Again, I wanted them to be free and know that a person with the same

experience is researching them. This made it easier to interact with the participants and to make observations from their sites.

D. Sampling of lessons to observe

One common characteristic of a qualitative study is that it is interpretive in nature, so I believe that each individual forms a personal understanding of the world in which s/he lives (Schreuder & Coetzee, 2011; Dyson & Brown, 2006). For this reason, teachers were offered the freedom to choose the day on which they would be observed. The lesson for the day that the participant agreed to present for observation was observed. The implication is that they were not given the topic to present; they were just expected to present the lesson according to their schedules. The lessons had to align with the particular days' lesson plans and that unit's scheme of work.

E. Sampling of scheme of work

The scheme books were chosen as the official documents of the teachers because these books should directly align the curriculum with classroom planning. Apart from that, these books reflect the teachers' understanding of the curriculum, their knowledge, beliefs and perspectives on how learning ought to occur.

The scheme books were photocopied for each quarter in which I observed the teachers. The teachers' scheme for each quarter of the school year is called a "unit". During teacher training at the curriculum dissemination period, they were given a scheme of work template, among other things.

F. Sampling of lesson plans from the available lesson plan book

Lesson plan books and the scheme books, were chosen from all the official documents of the teachers because they ought to directly align with the scheme for classroom planning and practices. The nature of each lesson plan reveals an understanding of each teacher's curriculum, their knowledge, skills, beliefs and perspectives in relation to effective learning. All these are crucial for effective implementation of the curriculum at classroom level.

3.5.1.3 Pilot study

A pilot study is a small study done prior to the main research to determine the adequacy and appropriateness of sampling, methodology and instruments. It is used

to pre-test the aspects of the main study (De Vos *et al.,* 2005). The pilot study helped me to address important aspects of the main research, such as objectives, resources, data collection procedures, and all possible errors that could occur during the actual research study. As a result, it provided information for determining the feasibility of the main research study. Apart from that, it enabled me to test the instruments prior to using them, which provided the opportunity to make the necessary modifications to the instruments.

Through the pilot study, I reviewed the lesson plan and the observation schedule. I included aspects that seemed to be valuable and excluded those that seemed to be irrelevant, yet included in the schedule. I had the opportunity to test the interview schedule and I made amendments, especially on some points that seemed irrelevant to the topic.

Teachers were reached through their principals. Those who participated during the pilot study were not part of the main study. Whilst the principals were welcoming, some teachers were not positive towards participating in the pilot study but others gave their consent. During the pilot study I also discovered that some teachers were not confident being observed. Two teachers from one school had to be substituted because they really did not like being observed.

Another teacher objected to being video recorded during the pilot study. She did not mind being observed by means of taking notes and photos. Some teachers had difficulty in expressing themselves in English during the interview, hence the code switching to Sesotho. At the beginning of the interview of the real study, I therefore made them feel comfortable to use Sesotho when they felt the need to do so because Sesotho is our native language.

The camera distracted learners. They ‘posed for photos’ when they realised that the camera was focusing on them and this kind of behaviour disrupted the lesson. Learners were not concentrating because they waited for the moment the camera faced them. As a result, teachers were asked to talk to learners about the purpose of the observations and I also personally told learners how they were expected to behave. That is, to do things as if there is no camera at all, just ignore it. The majority obeyed, but there were exceptions in some classes.During the pilot study, I obtained

grade 4 teachers' practices, which brought me to a deeper understanding of teachers' experiences in implementing the new curriculum.

As articulated by Enrich (2003), a key to determining human experience is to ask participants to write down their experiences. However, Johnson and Christensen (2014:236) argue that people can say they do what they do but then not actually do it. To avoid believing completely in what the participant said, I analysed their lesson plan books and scheme books to find out how they actually plan for classroom instruction and assessment.

In addition, I used the observation technique as a way to enter the real-life world of the individual participants. Based on Enrich's idea that art objects can be used as sources of lived experience (Enrich, 2003), photographs were taken during the observations and used to reveal the (varying context) situation in which teachers work. Enrich indicates that concrete experiences should be searched for. I therefore also gathered the participants' perspectives and challenges on the implementation of the new curriculum through the interviews.

3.5.1.4 Data collection procedures, techniques and instruments

The qualitative research approach employs data collection and fieldwork strategies that afford researchers freedom to develop and adapt methodologies in gaining new insights into the phenomena being studied (Gall *et al.,* 1996; Johnson & Christensen, 2014). Conforming to the interpretive argument that data is brought into being through the process of inquiry (Flick, 2007), document analysis, observation and interviews were chosen among other data collection techniques for gathering data for this particular study. These techniques provided data for research questions 1 and 2.

A. Document analysis

Documents are examples of secondary data that may be personal or official (Johnson & Christensen, 2014). I used data from the teachers' scheme books and lesson plan books in collaboration with other official documents, namely the NIC syllabi, teacher's guides, assessment guiding documents and CAP. As shown above, document analysis assisted in addressing the first research objective. I used the interpretivist perspective to explore the teachers' intentions, the manner in which teachers

established a sequence of strands and learning outcomes and how they planned their lessons.

A qualitative approach involves a careful review of the documents, which is crucial for understanding the phenomenon (Takona, 2002; Johnson & Christensen, 2014). This review is called document analysis. It refers to the systematic procedure for reviewing or evaluating documents (such as books which are found in institutional files) to find, select, make sense of and synthesis data in documents (Bowen, 2009). The analysis of the documents involved using the scheme of work analysis schedule, lesson plan analysis schedule and the interview transcripts. This provided information that helped to determine the teachers' practices and the reasons underpinning their actions.

This study was based on the data from the documents (scheme books and lesson plan books) on how the teachers' practices looked like from inside the classroom and on the transcripts of the interviewed teachers. It therefore involves the use of data in the form of words, pictures, descriptions or narratives, which relies primarily on the collection of qualitative data (Sullivan, 2001; Johnson & Christensen, 2012).

In order to collect the relevant data and to use its strategies effectively, I read the relevant documents to familiarise myself with their contents. These included the New Curriculum and Assessment Policy 2009, from which I determined policy prescriptions for teachers' practices; the syllabi (provides curriculum content, learning outcomes and teachers' guides of the integrated curriculum for the grades taught by the observed teachers and provides additional information for teachers regarding content and methodology). The information obtained from such documents provided the backdrop against which teachers' scheme books, their lesson plan books and teachers' actual practices would be understood and interpreted.

i. Rationale for document analysis

This data collection method allows for the use of various methods to reduce the impact of biases that result from using only one method (Bowen, 2009). I was able to corroborate the findings from the analysis of teachers' books, those from observations and interviews to reduce the impact of biases that exist under the use of a single method. In short, it provided supplementary data to verify the findings from other sources (Bowen, 2009).

ii. Analysing documents

The analysis of the schemes and lesson plans helped to answer the first secondary question. It was done to establish how teachers interpret the curriculum. The manner in which teachers arrange the content from the curriculum in their preparation books (scheme of work to be covered per quarter and daily lesson plan) informed me of how they make sense of the curriculum. For instance, those whose understanding is that the curriculum requires learners to acquire knowledge, skills and attitudes by means of inquiry, scheme their work beginning with the topics that form the basis for such inquiry.

Inquiry is an approach whereby learners generate hypotheses or tentative solutions, gather relevant information by means of process skills, evaluate the data and make conclusions (Tolman, 2002). Such teachers engage learners in inquiry learning, consequently employing inquiry teaching. Inquiry learning is a learner-based exploration of an authentic problem using the processes and tools of the discipline (Wilke & Straits, 2005). Armbruster (2011) describes inquiry teaching as a form of instruction whereby teachers provide learners with information, experiences or problems that serve as the focus for learners' research activities.

Literature proves that it is a rare lesson plan that is a perfect fit for any individual learner (Morine-Dershimer, 2014). However, a lesson plan that incorporates specific activities intended to inspire learners to express their personal feelings, experiences and opinions that are related to subject matter accommodates individual learners. As articulated by the aforementioned author, this helps teachers adjust their lessons to provide a better fit for all learners.

As indicated earlier, individual teachers' beliefs determine how each teacher plans a lesson. For instance, a teacher who plans a lesson that appeals to each learner's performance believes in the importance of the learners' work habits. Another teacher, with a different belief, plans a lesson that engages learners more actively, making them more self-directed. This is mainly because such a teacher believes that all learners are capable to learn, that they are all talented and that they can contribute certain ideas during the lesson.

The lesson plan content analysis was done to determine teachers' intentions about the lessons, the existence and alignment of lesson plan components, such as learning outcomes, objectives, success criteria and activities. It was also important to determine how individual learners were accommodated and how content and skills were integrated. To analyse the lesson plans, I used the lesson plan analysis protocol, which is based on literature on instruction and assessment, together with integration.

B. Observations

Observation usually consists of detailed notations of behaviours, events and the context surrounding the events and behaviours (Best & Kahn, 2003; Johnson & Christensen, 2012). Teachers' classroom behavioural patterns were observed to obtain data about a phenomenon of interest when presenting three different lessons implementing NIC. Although observations are time-consuming and costly, this technique was of utmost importance to this study because it provided information that determined the classroom practices, since people do not always do what they say they will do (Johnson & Christensen, 2014).

Observations provided a first-hand experience with the participants enabling me to observe teachers' practices as they were revealed (Creswell, 2003), rather than only obtaining reports of their intended behaviour from their preparation books. I described the observations in written form and used the observation schedule to minimise bias. Photographs were also taken during the lessons to add to the observations.

By using this technique, I recorded teachers' actual behaviour rather than reporting their intended behaviour as is the case with other techniques. Therefore, observations were used to complement other methods such as interviews (Johnson & Christensen, 2012). Consequently, I was able to gather data directly from the experiences of the participants based on the way in which they perceive their world (Mouton, 2001; Castellan, 2010).

Although researchers are cautioned to minimise the possibility of affecting what is observed by being discreet, observation proves best for collecting information about the actual behaviour of participants since people do not always do what they say they do, which means that their attitudes and behaviour are not congruent (Johnson & Christensen, 2014).

Observations in a natural setting can be very time-consuming, as people may not display particular behaviour even over an extended observation period (Pasco, Gordon, Howlin & Charman, 2008). As a result, I used an observation schedule to save time and to maintain focus. I noted the participants' individual behaviour on the observation schedule focusing on the learner-centred approach, and the instruction and assessment methods envisaged by the curriculum objectives (Pasco *et al.,* 2008). A digital camera was used to take photographs of the setup before and during the lessons.

With regard to the second secondary question, teachers were observed during their actual lessons to determine their instructional and assessment practices while teaching. The observations incorporated the instructional and assessment methods, styles/techniques and materials; the degree to which learners are involved and types of activities conducted. These observations were conducted based on the observation schedule (Appendix D) to minimise bias, enabling the observer to take note of activities valuable to the exploration.

Observation is also an indispensable method of collecting data about participants because it reveals actual practices, as it had already been mentioned. For this reason, the researcher may choose to be as unobtrusive as possible in order to not influence that which is being observed. One advantage of observation is that it allows the researcher to obtain and record the actual behaviour of the participant as opposed to obtaining reports about intended or preferred behaviour.

I used this technique while the teachers were conducting the instructional and assessment activities. This provided a first-hand experience with the participants, enabling me to record information as it was revealed (Creswell, 2003). Photographs (visual data) were taken during the lessons to add to the observations. These qualitative observations contributed greatly in determining the actual teachers' instructional and assessment activities. I was able to observe the participants in their classroom climate because I needed first-hand information regarding their instructional and assessment practices.

C. Interviews

An interview is a data collection technique in which the researcher asks the research participant questions to gather information on the phenomenon of interest (Takona, 2002; Johnson & Christensen, 2014). Since I intended to explore teachers' understandings and practices, semi-structured interviews conducted added thein-depth information, to the one provided by other data gathering techniques, about the teachers' knowledge, beliefs and perceptions, and the challenges they faced during the implementation of the new curriculum.

Through the interviews I gained an understanding of the participants' world and perspectives because I probed to obtain greater clarity of what they said. The interviews followed the interview guide approach whereby I explored my topic by asking the participants specific open-ended questions from an interview schedule written before the interview session (Takona, 2002; Johnson & Christensen, 2014). This allowed me to ensure that I compose the relevant questions with appropriate level of language that did not hinder communication nor neglected the importance of the interviewees.

The qualitative research approach entails interviews that capture direct quotations about peoples' personal perspectives and experiences (Johnson & Christensen, 2014). Interviews offered the participants an opportunity to air their views regarding the teaching of the integrated curriculum. The interview, as a data collection technique, provided data for determining the teachers' perspectives regarding NIC classroom instruction and assessment.

The interviews were audio recorded and then transcribed. The transcripts of interviews yield detailed descriptions and in-depth inquiry (Takona, 2002). During the interviews, the participants reflected on their experiences, which I also observed during the lessons, such as the use of certain teaching methods and teacher-learner interaction.

Furthermore, the respondents and I used the personal experiences and insights obtained from the observations to inquire and critically understand the reality of the individual teachers and how they attempt to understand this 'own' meaning (Johnson & Christensen, 2014). Some of the interview questions were developed based on the experiences I had during observations to help in understanding the experiences of the

individual teachers. Teachers were therefore regarded as unique even in cases where they teach at the same school. They were not just treated as the passive followers in social, political and historical happenings of curriculum implementation, but also acknowledged to possess the inner capacity which allows their individual judgement, perspectives and agency (Schreuder &Coetzee, 2011).

Semi-structured interviews were employed because of their ability to elicit rich data which helped to understand the meaning-making of the participants as they reveal their own experiences (Johnson & Christensen, 2014).

i. Semi-structured interview

Welman and Kruger (2005) define the semi-structured interview as an interview that consists of an interview guide/protocol, which comprises the aspects of the topics that have a bearing on the given research question(s). The researcher raises any of these during the interview. Participants are asked the same questions and the interviewer can adapt the formulation and terminology to fit the background and the educational level of the participants (Johnson & Christensen 2014).

The semi-structured interview includes the use of exploratory questions to initiate discussions allowing the participants to speak freely and encouraging them to elaborate. During the interviews, rich data was obtained by rephrasing and summarising the participants' responses to enable them to validate my understanding of their viewpoints.

ii. Rationale for using semi-structured interviews

Most importantly, semi-structured interviews were used to maximise the credibility and trustworthiness of the measurement of key concepts (Anney, 2014). This type of interview allows for the use of an interview guide/protocol/schedule as articulated by Anney. To maintain focus, to cover the necessary aspects during the interview, and to increase the comprehensiveness of the data collection, I used an interview protocol. It allowed for the data to be systematically generated through the interactions with each participant.

iii. Preparing the interview schedule

The preparation of the interview schedule was a result of a quest to answer the third research question. I first formulated the interview questions in a way that would help to answer research questions using comprehensible and relevant language to the interviewees (Johnson & Christensen, 2014). Then I asked for permission to record the participants' profiles which was useful when contextualising participants' answers (recording of e.g. name and gender).

iv. Conducting the interviews

Firstly, I contacted the participants through their principals, to explain what I intended to do and arranged for an appointment. I explained that participation was voluntary and teachers who agreed completed the consent forms. At the interview session, I again gave a brief explanation of how the interview was to be conducted. When the interviewee was at ease, I started asking questions. I stimulated the participant to respond as if in a conversation. During the interviews a voice-recorder was used with the consent of the participant. As the interview progressed, I noted gestures, tone and emphasis of the participant. After the interview, I thanked the participant and asked for permission to contact him or her again for clarification of certain information, if necessary.

The qualitative research approach is purposively empathetic and mindful. The researcher adopts an empathic stance in interviewing, seeks vicarious understanding without judgement by showing openness, sensitivity, respect, awareness and responsiveness. In observation, this means being fully presented (Johnson & Christensen, 2014). This approach also has dynamic systems. Attention is paid to the process where the researcher assumes that change is on-going, whether the focus is on the individual, an organisation, a community or an entire culture. Therefore, the researcher is mindful of and attentive to system and situation dynamics.

D. Data documentation

The qualitative research approach is an approach which relies on written words, spoken words or behaviour of the participant who is a prime source of data. That data

is subjective and forms the basis for analysis and further understanding (Takona, 2002).

Documents such as the copies of the lesson plan and scheme of work (written words) are kept safely as confidential documents. The pictures and videos captured during the lessons, the voice clips of the interviews and their transcripts are kept safely as well. The soft copies (pictures, videos and transcripts) are protected with a password and the hard copies are kept in a safe.

3.5.2 Data analysis

Johnson and Christensen (2014) define data analysis as a search for patterns, themes and holistic features and appreciate difference and/or variations. The data collected were text data from the documents together with the descriptive data obtained from the interviews. Analysis matrices aided the process of data analysis.

The qualitative approach is a unique case orientation guided by analytical principles rather than rules. The researcher assumes that each case is special and unique (Johnson & Christensen, 2014). By using the discussed data collection techniques, I obtained data about teacher instructional and assessment practices. I therefore sought to capture the *details and specifics* of the individual cases with the intent to discover important patterns, themes and interrelationships of teacher classroom practices. Data analysis was done based on the principles of content analysis because the collected text and auditory data was presented in a written format (Taylor-Powell & Renner, 2003). The graphics were only meant to add value to that text.

A direct content analysis approach was used in collaboration with the principles outlined by Taylor-Powell and Renner (2003) and Bowen (2009). The researcher is required to know the data; focus on the analyses by group; categorise information; identify patterns and connections within and between categories; interpret data using themes and connections as well as explain findings by attaching meaning and significance to the analysis through the identification of the major lessons and new things learnt. The researcher must also determine what would be most interesting to those who will use the results of the evaluation.

Content analysis is defined as a process in which the researcher carefully reviews a document to detect pertinent information from non-pertinent information, and organise that information into categories related to research questions (Bowen, 2009). Among different approaches of content analysis, I followed the directed content analysis approach.

The directed content analysis approach involves using an existing theory or prior research (Hsieh & Shannon, 2005). First, the key concepts are identified as initial coding categories and then the operational definitions of each category are determined using theory. They further indicate that if the aim is to identify and categorise all instances of a phenomenon, the researcher should read the entire transcript and highlight the text that seems relevant to the research question(s). The highlighted text should be coded using the predetermined codes and new codes should be provided for any text that could not be categorised.

I used direct content analysis because my study is exploratory. As a result, the existing theory on teacher instructional and assessment practices can be supported or extended under this approach. To prepare for the content analysis, I completed a different analysis protocol sheet that I developed with the sole purpose of analysing teachers' scheme of work, lesson plan and the real classroom practices. The field notes helped in doing this task by providing details concerning the observations. I made notes of the outstanding events during the observations on the note pad.

The incorporation of interview field notes and transcriptions of the interview data from audio recordings provided a detailed account; an important and accurate verbatim record. Furthermore, field notes helped me to contextualise and interpret the transcripts.

I familiarised myself with the collected data by reading it several times. The analytical focus was on the participants' interpretations of curriculum, how they instruct and assess learners and on their perspectives regarding classroom practices. The collected information was organised into categories in the next chapter. The findings were explained, major lessons were identified and applications to other settings were identified. The aspects that would be most interesting to those who will use the results are also stipulated in Chapter 4. These aspects include the best ways in which

teachers adapt the new curriculum for effective instruction and the suggestions given by teachers for the improvement of their various contexts to enhance the implementation of the new curriculum.

The whole phenomenon under study is understood in terms of a holistic viewpoint because the focus is on the complex interdependencies and the system dynamics that cannot meaningfully be reduced to a few discreet variables and linear cause-effect relationships (Johnson & Christensen, 2014).

While conducting this study, I was context sensitive because I placed findings in a social, historical and temporal context. My focus was mainly on the context and slightly on comparative case analyses and inferring patterns for possible transferability to and adoption in new settings. I was reflective about my own voice and perspective as a researcher and primary teacher conveying authenticity and trustworthiness. Complete objectivity being impossible and pure subjectivity undermining credibility, my focus was on balancing understanding and depicting what is actually happening in schools.

The analysis for the collected data was made based on various aspects about instruction and assessment.

3.5.2.1 Data analysis of documents

Data should be examined and interpreted in order to extract meaning, gain understanding and expand knowledge (Bowen, 2009). In examining the data from the documents used for planning the classroom instruction and assessment (scheme of work and lesson plan), I was aware that plans vary in form and time frame (Morine-Dershimer, 2014). The scheme of work is a plan for each quarter and lesson plan is a day-by-day plan. I also acknowledged that teachers plan in different ways, striving to achieve the instructional objectives.

Therefore, data obtained through document analysis was analysed by means of content analysis using the analysis protocols as discussed below.

3.5.2.2 Scheme of work

The data for analysis was presented on the scheme of work analysis protocol (Appendix D). It focussed on determining the existence and nature of integration

between content and skills, and checking the extent to which content, skills and necessary prior knowledge integrate. Again, the scheme was analysed to determine the content alignment. Lastly, the intention was to establish the sequence for cognitive, social and affective objectives.

3.5.2.3 Lesson plan

Data was collected by analysing the lesson plan. This data was presented on the analysis protocol sheet. That sheet was used for the data analysis to determine contents of the lesson plans. This helped to determine how teachers perceive learners, their context, how the curriculum should be taught and how they plan to instruct and assess learners. Again, the category in which each teacher falls was determined by how the lesson was planned. The analysis protocol sheet is attached (Appendix D).

3.5.2.4 Data analysis on lesson observations

- Lesson orientation (prior knowledge, lesson objectives, success criteria)
- Lesson development (teachers and learners' activities: uses of instructional methods, assessment methods and materials)

The analysis of the lesson development entailed information on how teachers interpreted the curriculum in terms of their perspectives on effective learning and assessment. Delivery, modification and collaboration are the three categories of teacher insight on facilitating learner engagement during the lesson that guided the analysis on lesson developments (Irvin, 2006).

The observations are presented descriptively and with graphic representations (Johnson & Christensen, 2012) in the next chapter. Information from the observation notes and videos are presented in the form of text, and photos are attached to strengthen what was articulated in the form of words. The analysis of the qualitative data was done using the information on the observation analysis protocol (Appendix D). I relied on the following data analysis principles:

- Defining the research questions to be addressed:
  - What are the teachers' understandings of the new curriculum and assessment policy in Lesotho in terms of its prescriptions for classroom instruction and assessment?

- How do teachers implement the curriculum and assessment guidelines during classroom instruction and assessment?
- How can the teachers' understanding and practices of the new curriculum be explained?
- What recommendations can be made for improvements in the implementation of the integrated curriculum in Lesotho?

- Defining the population from which units of text are to be sampled:
  1. Documents
  2. Classrooms
  3. Teachers
- Defining the context of the generation of the document
- Defining the units of analysis
- Deciding on the codes to be used in the analysis
- Constructing the categories for analysis
- Real coding and categorising of the data
- Actual data analysis (synthesising)
- Summarising

3.5.2.5 Data analysis on interviews

Analysis of the transcripts was also content analysis and followed the principles stated above (3.2.5.3). Information from field notes contributed to writing the transcripts because they are written in a narrative way. The individual teacher's transcript was analysed depending on the quality of the individual case using inductive analysis and creative synthesis. This analysis technique explains associations of real life complex contexts (McGuiggan & Lee, 2008).

3.5.2.6 Triangulation

Triangulation is a quality verification approach whereby the researcher uses multiple methods, data sources and theoretical perspectives to search for conversions in the results of the findings of the study (Johnson & Christensen, 2014). I collected data by means of document analysis, where I analysed the teachers' scheme of work and lesson plans. I further conducted classroom observations with the focus on instructional and assessment practices. I also interviewed the teachers.

Using these multiple sources of data, I intended to find corroborating information about teachers' instructional and assessment practices and the reasons for those practices. I therefore examined differences in descriptions and conclusions across the findings. The triangulation of the findings from various sources increased the trustworthiness of the results (Johnson & Christensen, 2014).

This data triangulation helped to determine the instructional and assessment practices of the teachers in selected primary schools during new curriculum. Concisely, by answering the secondary questions, the main question for this study was answered.

Therefore, analysis began by exploring, then comparing the findings, followed by a creative synthesis and explicit discussion in the following chapters.

3.5.2.7 Elimination of participants

Based on the data initially gathered from eight participants' planning books, classroom observations and interviews for a grade 4 lesson, it was deemed necessary to explore their practices further by adding two more observations per participant. Data was therefore gathered on two additional consecutive lessons given by the four primary participants in this study. The other four who were observed once, are considered the subordinate participants. Their data was used to compare and validate the analysis of the main participants. The key arguments for extending the data collection and analysis of the primary participants are discussed next.

The initial data provided evidence that some participants actually did what they thought I needed as a researcher. For instance, the participants from one school provided incomplete lesson plans; a plan for the Integrated Part of the New Curriculum (IPoNC) lesson only and therefore excluded the Sesotho, English and Numeracy Windows from the lesson plans. These windows are said to reinforce the integrated part lesson.

One of these participants indicated during the interview that the lesson plan provided was only meant for my observations. It was not how they usually plan.She indicated that they prepared different lessons just to avoid giving me the same lesson. This issue escalated when she explained the cause of the differences I had picked up in their lessons. She articulated that the teachers work together when scheming and when planning daily lessons.

The concern was that they claim to deal with the same concepts during the lesson yet their lessons for the IPoNC were not addressing the same content on that particular day. This raised my interest and suspicion. Teachers were informed on how the observations were to be conducted by means of invitation letters and through face-to-face discussions with the researcher before they confirmed observation dates.

Moreover, at another school, one teacher repeatedly enquired if what he was telling me was actually what I needed. During this participant's observations, it was salient that he had taught the lesson before and that what was being observed was just a repetition. I realised that he had taught it the previous week as demonstrated by the date that appeared on learners' marked exercise books.

It is possible that it had to be taught again because the learners had not understood it the first time. However, if that were the case, the teacher would have made adjustments and would not have given all the learners the same exercise as in the previous lesson, including those who got the answers right during the first lesson. Besides, he cancelled a date on his lesson plan and wrote the one corresponding to the observation day. In addition, the participants were expected to invite the researcher for lessons during which they introduced the new concepts, not when they were revising work done previously.

The final selection of the primary participants was still purposive although it was no longer based on the type of schools where they work. Rather, the focus was now on data-rich subjects, their willingness to participate and on the convenience of going to their schools for more observations.

3.6 Ethical consideration

Ethics in research are the principles and guidelines that make it easy for the researchers to conduct their investigations while not harming the participants (Johnson & Christensen, 2012). The deontological and utilitarianism approaches to ethical considerations were followed. The former is an approach in which ethical issues are judged based on some universal code while the latter entails making judgements of the study depending on the consequences the study has for the research participants and the benefits that might arise from the study against the potential costs (Johnson & Christensen, 2012; Mandal, Pannambath & Parija, 2016).

I followed the guidelines prescribed by the University of Free State, Faculty of Education's Ethics Committee during the ethical clearance process. Participation was voluntary because nobody was forced to participate in this study (Strydom, 2007:59). I requested permission from the Ministry of Education and Training (MoET), the schools' principals and teachers (Appendix A). I disclosed the purpose of the study to the participants and they were at liberty to sign the consent forms. Being cognisant that I was going to work with people from different cultures, gender and other factors, I ensured that the respective participants' differences were respected.

The participants' rights were safeguarded because their names and their schools' names were concealed in reporting. Confidentiality was maintained for the participants' protection, as the researcher is obliged to protect their identities (Ryen, 2004). They were allowed to withdraw from the study at any time they wanted (Sullivan, 2001; Shenton, 2004; Johnson & Christensen, 2012).

3.6.1 Permission to access schools

Firstly, I requested permission from the MoET, by means of a letter, to conduct the research in schools. The MoET granted me permission to undertake the research by giving me an approval letter that I had to photocopy and give to prospective principals (Appendix A). Subsequently, I wrote to the principals of selected schools to seek their permission. After receiving letters of permission, I then went to those schools where I met the principals. I explained the purpose of my research and the processes involved. I did this to build rapport and to ensure that the principals embrace the objective of the research.

Having talked to the principal, I allowed time for the principals to contact the teachers of the classes concerned. This was done to allow the teachers to consider the matter on their own. I later phoned the principals to find out if teachers had agreed to participate in the research. Where teachers gave permission, I returned with consent forms to discuss the aims and procedures for the research and then set the appointments. In one of the schools, the principal agreed that I could conduct the study, but the teachers were not willing to participate. I therefore left them and used another school.

3.6.2 Informed consent and voluntary participation

Participation was voluntary because nobody was forced to participate in this study (Strydom, 2007). The teachers were duly informed of how the information would be obtained and used, including the photocopying of preparation books, taking of photographs (observations) and voice recording (observations and interviews). Teachers were further informed that their participation in the research was voluntary and that they were not under any obligation to participate. I tried to explain all the details of the research that the teachers asked about. Those who agreed were given the consent form to complete and sign.

Learners were told how the observations were to be conducted in their class. The focus was on what they do, on the classroom layout and not on their identity. In the rare cases where their faces were captured, such faces were concealed during data presentation. This was to safeguard their rights.

3.6.3 Confidentiality of data, anonymity, privacy and safety of participation

The participants' rights were safeguarded because the names of their schools were omitted when findings were reported. Confidentiality was also maintained for the participants' protection and the names used are pseudonyms. The participants' respective names were concealed during the analysis. It was obligatory to protect their identities (Ryen, 2004). They were allowed to withdraw from the study at any time when they chose to and were substituted by other teachers from the same schools (Sullivan, 2001; Shenton, 2004; Johnson & Christensen, 2012). The participants were informed that their participation would not involve any risks or harm.

In order to implement the said research design, the aforementioned sample was used in respect of these ethical considerations while executing the research methodology below.

3.6.4 Quality evaluation

A study is qualitative when it is trustworthy and credible. A trustworthy study provides answers to the research questions while a credible study entails consistency and repeatability and therefore can be relied on (Maree & Pietersen, 2007; Belli, 2008).

3.6.4.1 Trustworthiness

Anney (2014) indicates that researchers need to address the following concerns regarding trustworthiness:

A. Establishing truth value concern (Pilot study)

A pilot study was conducted to establish whether this study would investigate what it intended to measure and to remove questions that may potentially provide unwanted data (Bell, 2006:128). The observations and interviews were piloted. Two qualified grade 4 teachers from one primary school in the chosen centre were observed and interviewed as part of the pilot study.The pilot study was conducted to establish whether this study would answer the research questions and to remove items that would potentially provide unwanted data (Bell, 2006).

Therefore, the pilot study was also meant to determine whether aspects in the observation schedule were observable and to test whether teachers understood the interview questions when using the interview protocol. The information obtained during the pilot study was used to make the necessary alterations on the observation schedule and interview schedule. This pilot study therefore strengthened the trustworthiness of this study (Weijun, 2008).

B. Applicability

The participants were people from diverse backgrounds and experiences with different beliefs and perceptions pertaining to the new curriculum. Findings from their respective cases were analysed by means of cross-case analyses to establish the applicability of the findings.

C. Consistency concern

Using document analysis schedules, observation schedules and interview schedules together with the analysis protocols played a critical role in this regard. These tools ensured that the document analysis, observations and interviews were conducted in the same way with all participants.

D. Neutrality

Data collection focused on the mentioned schedules, and the presentations involved direct verbatim transcriptions from interviews and observations. Segments from the analysed documents were included. Therefore, the interpretations were based on that presented information.

3.6.4.2 Credibility

Credibility refers to the confidence placed on the truth of the research findings (Anney, 2014). I observed the participants at different times to discern their qualities and unusual characteristics. I analysed their scheme and lesson plan books; observed their classrooms practices; interviewed them and triangulated the findings to cross-examine the integrity of participants' responses and actions.

I minimised bias and increased the credibility of the study by discussing my conclusions with the participants (member checking) to clear up areas of miscommunication. Moreover, I used low inference descriptors to give the reader the participants' actual words, dialect and personal meaning. In addition, using photographs produced a permanent record that increased the credibility of the findings, because a picture is worth a thousand words in a research study (Johnson & Christensen, 2012).

A. Use of various methods and techniques

Using document analysis, observations and interviews to collect data deepened the understanding about teacher practices. In what way does teachers' planning reflect in what was observed? This was the question addressed in relation to whether the teachers' utterances during the interview were consistent with the planning.

The participants' individual behaviour was noted according to the observation guide. The data collected with the observation guide complemented the document analysis results. It added to the trustworthiness and credibility of the findings, because it assisted me in observing and recording the practices demonstrated by the participants (Lather, 1986:270). This minimised possible problems that could stem from the subjectivity of observation and possible bias (Bell, 2006).

The photographs produced a permanent record that increased the trustworthiness and credibility of the test findings, because pictures convey complex messages precisely (Johnson & Christensen, 2012). The observation guide, note taking and photographs provided alternative means to assess the extent to which participants understand the curriculum and on how they implement the new curriculum.

I crosschecked information and conclusions by using multiple procedures to find corroboration and/or divergence, which increased the quality research methods, instruments and findings thereof (Johnson & Christensen, 2008). This triangulation ensured the quality of results obtained.

Moreover, data analysis involves triangulation. The triangulation of the techniques in general increases the credibility of the findings (Bell, 2006; Johnson & Christensen, 2008). “Triangulation is a validation approach of using multiple investigators, methods, data sources and or theoretical perspectives in the search for convergence of results,” (Johnson & Christensen, 2008:451). I triangulated information from the document analysis, observations and interviews. Triangulation will occur when the results lead towards the same conclusion, but if the results diverge, they should be regarded as useful to help investigate the objects of the study differently and learn from the different methods and perspectives.

B. Member checking

I further discussed my interpretations and conclusions with the participants to check whether I attached the same meaning as they do to their responses. I had these discussions over the phone with some participants and face-to-face with others. This process, called member checking also helped me to verify my interpretations and gain deeper understanding.

C. Rigour

Morse (2004) defines rigour as the adequacy and appropriateness of the method and the solidity of the research design to address the proposed objectives. Even though there was little relevant information regarding the implementation of the integrated curriculum within the study’s context at primary level, the observations and interviews were made based on the studies that were conducted before within the curriculum reform and implementation disciplines, to ensure rigour (Van Aswegen *et al.*, 2010).

3.7 Summary

The major purpose of a qualitative approach is to understand human experience by revealing the process in which people construct meaning about their worlds and reporting on what the meanings are (Takona, 2002). This approach contributed much in understanding participants' challenges and opportunities experienced when implementing the integrated part of the new curriculum instruction and assessment. It fulfilled an interest in understanding the participants' sense-making process about the curriculum and the experiences of the participants in their world.

This study can be classified as descriptive research that followed an interpretive paradigm. This paradigm influenced the researcher's decision to triangulate qualitative methods to gather and analyse data. Ethics were considered and no one was intended to be harmed by this research project and its findings

The researcher observed and interviewed qualified teachers, analysed their preparation books and interviewed them on matters relating to instructional and assessment under the new curriculum. The results obtained from the three methods determined the teachers' interpretations of the curriculum, their knowledge, beliefs and efficacy to the implementation of the NIC. Observations were intended to determine the teachers' instructional and assessment practices of the NIC.

The next chapter (Chapter 4) presents the analysis of the data collected through the research design and methodology discussed in this chapter.

CHAPTER 4 DATA PRESENTATION

4.1 Introduction

Qualitative data for this study were collected using document analysis, observations and interviews. Document analysis was done to examine the participants' schemes of work and lesson plans. This was conducted with consideration of the curricula materials such as the Curriculum and Assessment Policy (CAP), syllabi, teachers' guide and the guide to continuous assessment booklet. Lessons were observed in classrooms during the teaching-learning process. Lastly, the participants were interviewed after their lessons.

The presentation of the collected data on teachers' instructional and assessment practices draws on the Sense Making Theory (SMT) and the Social Cognitive Theory (SCT) (*cf*. Chapter 2), to provide the basis for answering the following research questions:

1. What are the teachers' understandings of the new curriculum and assessment policy in Lesotho in terms of its prescriptions for classroom instruction and assessment?
2. How do teachers implement the curriculum and assessment guidelines during classroom instruction and assessment?
3. How can the teachers' understandings and practices of the new curriculum be explained?
4. What recommendations can be made for improvements in the implementation of the integrated curriculum in Lesotho?

This chapter, therefore, provides an elaborative presentation of the collected data per case under study.

On my first visit to the schools in 2015, all the main participants (Mamo, Thandy, Themba and Tiny) taught grade 4. In the 2016 follow-ups, however, some had been allocated to different grades. Only Mamo and Thandy remained in grade 4. Tiny had gone back to grade 3 and Themba had moved to grade 5. These changes created opportunities to define teachers' interpretations (understandings) and practices (behaviour) in differing contexts of teachers (same classes, new ones and the once taught classes) further. In essence, the additional exploration of the teachers'

experiences was done after the first round of data analysis. The analysis for each case, in the subsequent sections, starts with a concise biography and summary of teaching experience of each individual teacher.

Data analysis and presentation are organised into four themes in line with predetermined and emerging issues namely: (a) planning; (b) classroom instruction and assessment; (c) perspectives, beliefs and attitudes of teachers on the curriculum reform as well as (d) contextual challenges. The first two themes have direct influence on planning and classroom practices. This is summarised in Figure 4.1 below.

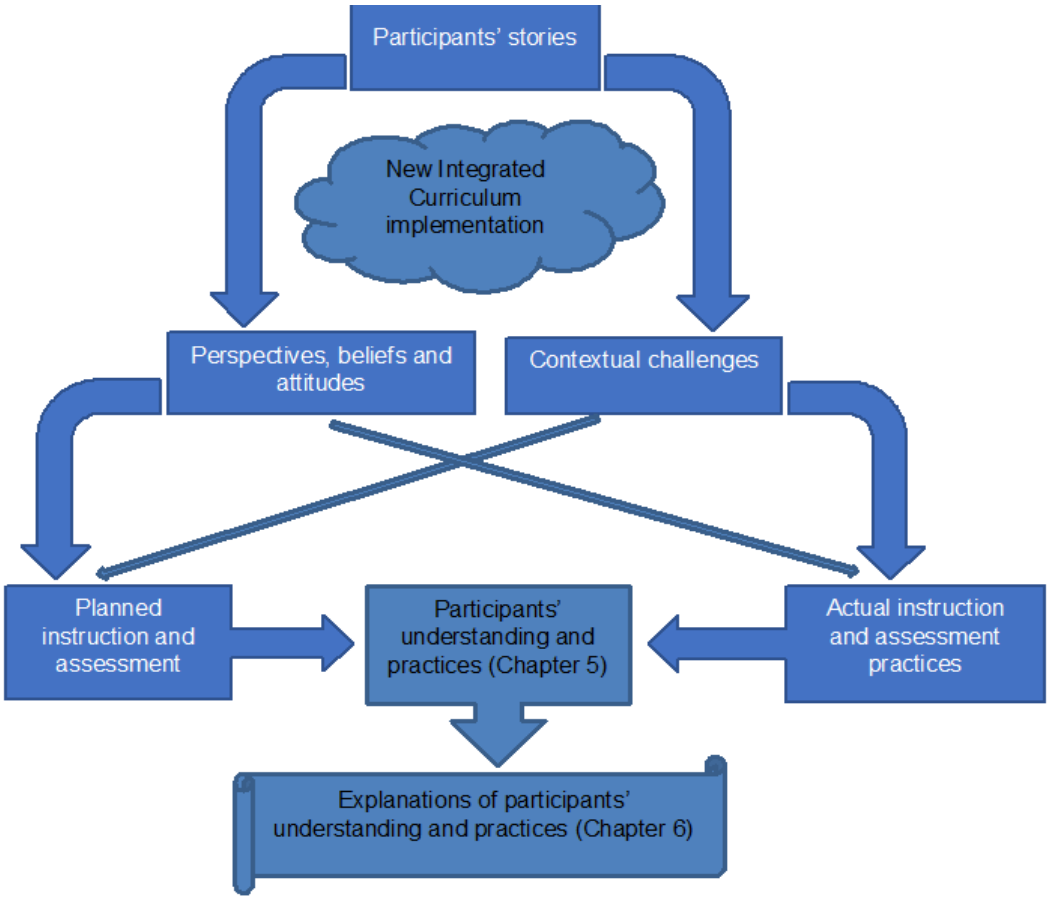


Figure 4-1 Summary of data presentation, analysis and interpretation processes

4.1.1 Planning

This section focuses on teachers' long- and short-term planning which entails the scheming and lesson planning. Teachers' schemes and lesson plans books are used as sources of data. The issue of interest is how teachers planned to conduct instruction and assessment.

4.1.1.1 Scheming

Their planning books comprised relatively different components as presented in Tables 4.1–4.3 below.

Table 4–1 Collective components of participants' grade 4 scheme of work

Concepts/LO Week	Integrated Part (IP)	Sesotho window (SW)	English window (EW)	Numeracy window (NW)
1				

The first column in the schemes was titled differently; some titled this column as "*concepts"* while others named it "*learning outcomes"*. The contents also differed based on the respective titles given. In cases where "concepts" was written as a column heading, "learning outcomes" were shown in words or just in numbering under such a column. In other instances, where "learning outcomes" was used as a column title, concepts were listed under that heading (cf. Appendix BA, BB, BD).

Unlike the grade 3 and 4 schemes of work, the grade 5 scheme of work is done separately for each of the learning areas (LLS, LLE, NM, CE, AE, PSS and ST). Its elements are as follows: unit, week number, LOs to be covered, number of periods, methods and resources (cf. Appendix BC).

4.1.1.2 Lesson planning

Teachers' understandings of the new curriculum were further explored by examining their lesson plans. I noted that the teachers used different lesson plan formats for grades 3–4 and grade 5, as prescribed by the MoET (*cf.* Tables 4.2 and 4.3 below).

Table 4–2Components of participants' grade 3–4 lesson plan

A	**Unit:** **Date:** **Class size:** **Theme:** **Grade** **Concepts:** **Learning outcomes:** **Time:** **Duration:**							
B	Objectives -By the end of the lesson: * learners should have begun to: learners should/will be able to:							
C	**Activity content**	**Teaching methods**	**Stages/steps**	**Teacher's activities**	**Learners' activities**	**Assessment materials**	**Assessment methods**	**Materials**
			Introduction ***Link*** ***Development*** ***Conclusion*** ***Evaluation***					

In grades 3–4, the format includes the IP and the windows (SW, EW and NW) in one lesson plan. The first section (A) in the table above is general because it appears once on the lesson plan. The second section (B) also appears once but indicates separate lesson objectives per window under each category. Section C appears three more times, to cater for IP and each of the three windows that have their own sections.

Table 4–3: Components of participant's grade 5 lesson plans

Learning Area: **Unit:** **Date:** **Class size:** **Grade:** **Duration:** **Time:** **Concepts:** **Learning outcomes:**			
Objectives -By the end of the lesson:			
***Learners should have begun to:**		***Learners should be able to:**	
Introduction :		**Teaching methods:** **Teaching materials:**	
Success criteria:			
Development			
Teacher's activities	**Learners' activities**	**Assessment criteria**	**Assessment methods**
Conclusion		***Evaluation***	

In grade 5, however, the format allows for separate lesson plans for each of the six learning areas viz.: linguistic and literary Sesotho (LLS), linguistic and literary English (LLE), numerical and mathematical (NM), creative and entrepreneurial (CE), personal, spiritual and social (PSS) and scientific and technological (ST).

The presentation and analysis of data under planning is thus made based on the planning books (scheme of work and lesson plan books) and is backed up with data from the interviews.

4.1.2 Classroom instruction and assessment

Data is presented and analysed based on classroom observations by using verbatim transcriptions and pictures to provide thick descriptions of teachers' instruction and assessment of learners during class.

The classroom instruction and assessment data presentation commences with the *lesson introduction,* which illustrates what teachers did to begin their lessons. This includes the lead-in-statements/link and the presentation of the success criteria to learners. The *lesson development* stage follows the introduction and deals with how the participants used the selected instructional and assessment materials and methods to engage learners during the lessons.

Depending on the individual participant's story, the other phases of the lesson, *conclusion* and *evaluation*, are also presented. For the participants who did not have an evaluation phase, data on this issue was obtained from the interviews.

The observations were used to determine teachers' actual instructional and assessment practices and the challenges experienced in the context of the classroom. In this study, classroom refers to the environment intended for promoting instruction and/or assessment by the teacher, that is, any teaching-learning milieu.

4.1.3 Understandings: Perspectives, beliefs and attitudes

In this regard, data is presented and analysed based on segments from participants' lesson plan books, direct quotes from lesson observations and the interview segments. The sections on understandings therefore provide the descriptive information on participants' perspectives, beliefs and attitudes in relation to the policy prescriptions for classroom instruction and assessment. Their understandings varied

on some issues pertaining to what integration entails, how to go about it, the envisaged roles of the teacher and learners and pedagogy for instruction and assessment.

4.1.4 Contextual challenges

Data relating to challenges faced by participants are presented and analysed based on their respective schools and classroom contexts when implementing the new curriculum. Their contexts revealed some common and exceptional instances that influence the effective implementation of the New Integrated Curriculum (NIC) in schools.

The following section presents individual participants' cases. Each case (narrative) description is followed by a short summary of the analysis relating to the themes identified.

4.2 Thandy's story

4.2.1 Background

Mrs Thandy is a female teacher in her early 40s. She obtained her Primary Teacher's Certificate (PTC) at the National Teachers Training College, now called Lesotho College of Education (LCE). Apart from that, she has a Diploma in Adult Education. She has been teaching at her present school since 2000. She has taught different classes during this period. She was initially observed during her second year (2015) of teaching the integrated curriculum. In our conversations, she claims to have attended a short workshop on the integrated curriculum. The aim of the workshop was to prepare, train and equip teachers with the necessary skills and knowledge about the NIC. Other than that, Thandy has not been trained on the NIC that she was implementing.

At the time of my second visit, Mrs Thandy had three years' teaching experience of the new curriculum (in 2016) and previously taught the old curriculum. The majority of the learners that she taught in grade 4 (2015) came along with her from grade 3, but in 2016, she taught a new completely group of learners coming from grade 3.

4.2.2 Thandy's planning

Thandy's planning comprised the scheme of work and lesson planning. This section presents her scheme of work for two different units during which she was observed,

together with three lesson plans. The grade 4 teachers did their schemes together on a weekly basis and her scheme (Grade 4A) was found to be similar to that of her colleague's (Grade 4C), supporting the claim on common planning by the grade 4 teachers.

4.2.2.1 Scheme of work

In this sub-section, I present data on how she went about scheming, which involves the structure and contents of her scheme of work. This was done to help me explore the teachers' understandings and experiences of the NIC.

A. Chronological ordering of LOs and concepts

Table 4.4 below shows the arrangement of learning outcomes and concepts in Thandy's scheme of work (Appendix B).

Table 4–4 Segment of 2016 unit 1 scheme of work showing the arrangement of LOs and concepts

Week	IP	Concepts	SW	Concepts	EW	Concepts	NW	Concepts
5	9	Family tree	7	Moqoqo	7	Articles	12	Lines
	10	Types of councils	10	Tsomo	8	Short story	13	Shapes
	17	Ethnic groups	12	Baamani	9	Relatives & in-laws		Polygons
	18	Lines	13	Maele	10	Job	6	Currency
	19	Shapes						

According to the syllabus, the numbers indicated in the table above represent the learning outcomes' numbers for the Integrated Part (IP), Sesotho Window (SW), English Window (EW) and Numeracy Window (NW) respectively. These numbers correspond with the LOs as stated in the syllabus. For example, *Family tree* is a concept under LO9 "…*use kinship terms correctly to talk about genealogy."*

The learning outcomes that were selected for that particular scheme of work appeared to be arranged in chronological order except for the last column, for instance, the LO numbers for IP were: 9, 10, 17, 18 and 19. However, the NW learning outcomes numbers were 12, 13 and 6. One important observation here, which was supported by her utterances during the interviews, was that she clustered the learning outcomes to

establish integration of concepts within and across the windows as prescribed by the curriculum policy.

4.2.2.2 Lesson planning

The following sub-sections are about aspects of Thandy's lesson plans that relate to the LOs that were covered in her lessons: lesson objectives, introduction, development and evaluation. She did not list the materials to be used in her lesson plan that seemed to have an impact on how she used the materials during the lessons as discussed in section 4.2.3.2.

A. Nature of lesson objectives

i. Turning learning outcomes into lesson objectives

Table 4.5 below is an illustration of the learning outcomes from the syllabus and her 2015 lesson objective.

Table 4–5 Segment of IP and NM unit 4 learning outcomes with the corresponding 2015 lesson objective

Segment of IP and NM unit 4 learning outcomes with the corresponding 2015 lesson objective	
Learning outcomes: At the end of this unit, learners should be able to:	**Lesson objective – By the end of the lesson learners will be able to:**
7. practise sack racing [IP unit 4-2015]	***** practise sack racing and apply bar chart in different contexts.
6. apply bar chart to different contexts [NM unit 4-2015]	***** practise sack racing and apply bar chart in different contexts.

When formulating lesson objectives, Thandy appears to have just changed the stem of the LOs and fitted the lesson objective stem. Her lesson objectives may suggest that she equated the learning outcomes to lesson objectives.

ii. Writing up a lesson objective from two learning outcomes

It is evident from Table 4.5 above that Thandy combined the IP and NW learning outcomes in her formulation of lesson objectives as shown above. The combination of the two learning outcomes seems to indicate her awareness of "integration". However, that learning objective was too broad to be achieved within one lesson, because the

learning outcome on its own is broad as it indicated that learners should demonstrate that by the end of the unit. This is even more evident when the LOs are combined in one lesson. Nevertheless, this combination raised the expectation that the lesson would be an integrated one.

iii. One objective versus two objectives within a lesson

Table 4.6 below consists of learning outcomes from the syllabus and the segment of Thandy's lesson objectives.

Table 4–6 Segment of NM Unit 1 learning outcomes with corresponding lesson objectives (2016)

Learning outcomes – At the end of this unit, learners should be able to:	**Lesson objectives – By the end of the lesson learners:**
12. draw vertical, horizontal, diagonal and curving lines [NM unit 1-2016]	*will be able to identify different lines and draw patterns using them. *should have begun to differentiate different lines and draw the lines.
13. identify regular and irregular polygons: pentagon and hexagon [NM unit 1-2016]	*will be able to draw different pentagons and hexagons and say their properties. *should have begun to identify pentagons and say their properties.

This is how Thandy explained her lesson planning:

> In this new curriculum ... you have to make two ... objectives per lesson... so they [learners] all came to the objectives that I have. Their intelligence level is different ... others can identify the lines, draw patterns and label lines, others can only identify the lines and draw the lines but they can't draw patterns.

As indicated (cf. table 4.6) there was one lesson objective on the 2015 lesson plan and two objectives for each of her 2016 lesson plans, which had a common stem. "By the end of the lesson, learners …". The first objective indicated what "learners will be able to do" while the second one stated what "learners should have begun to do". Based on her explanation, by setting two objectives she seemed to try to cater for learners' different intellectual abilities. She seemed to have a changed view of a lesson objective in 2016 compared to 2015 although the nature was the same as shown in Table 4.7 below.

iv. Complex lesson objectives

Table 4.7 below shows the segments of objectives taken from Thandy's lesson plan.

Table 4–7Segments from 2016 lesson objectives

Lesson on	**Objective 1 – *By the end of the lesson learners will be able to:***	**Objective 2 – *By the end of the lesson learners should have begun to:***
Patterns	Identify different lines(1) and draw patterns(2) using them	Differentiate different lines(1) and draw them(2)
Shapes	Draw pentagons(1) and hexagons(2) and say their (*pentagon*, *hexagon*) properties(3, 4)	Identify pentagons(1) and say their properties(2)

Thandy set objectives that comprised two to four targets (*cf.* Table 4.8). For example, learners were expected to "identify different lines and to draw patterns"as objective 1 under patterns. For objective 1 on shapes, it was anticipated that learners would first draw pentagons, secondly draw hexagons, then give the properties of pentagons, and lastly give the properties of hexagons. Her lesson objectives therefore seemed too complex and difficult to measure.

B. Lesson introduction

i. Question and answer

The table below (4.8) shows the introductions for three respective lessons addressing different concepts as planned by Thandy.

Table 4–8Segments from introduction stages of Thandy's lesson plans

Segments from introduction stages of Thandy's lesson plans		
Concept	**Teacher's activities**	**Learners' activities**
Sack race and bar chart	Teacher asks learners the kind of races they know.	The learners tell the teacher the kind of races.
Lines	Teacher draws lines on the board and asks learners what they are.	Learners tell the teacher their observations.
Shapes	Teacher draws different shapes on the board and asks learners what they are – circle, triangle, square and asks them to identify different lines.	The learners name the shapes

Her lesson plan showed that she planned to introduce the lessons by asking questions and writing on the board. The learners' activities section revealed that she expected

learners to observe and respond to her questions only. For instance, during the *lines* lesson, she aimed at drawing lines on the chalkboard and then asked learners what they (lines) are.

ii. Link versus success criteria

All three of her lesson plans had the link statements with no success criteria. For instance, she indicated: "teacher informs the learners that they are going to do sack racing" in the "sack race-bar chart" lesson. Regarding the lesson about lines, she wrote, "the lesson for today is lines" and for the third lesson, she showed, "the lesson for today is about pentagons and hexagons". It seemed therefore that she intended to inform learners of what the lessons would be about. She however left out the specific concrete description of what their success criteria in sack racing, learning about lines, pentagons and hexagons would be.

C. Lesson development

i. Mismatch between lesson objectives and activities

Table 4.9 provides an example of Thandy's objective, the teacher's and learners' activities.

Table 4–9 Thandy's lesson plan segment showing lesson development section

Objectives: *By the end of the lesson learners:* (1) *will be able to* identify different lines and draw patterns using them; (2) *should have begun to* differentiate lines and draw them	
Teacher's activities	**Learners' activities**
The teacher draws (1) different lines and (2) tells the learners their names	
The *teacher asks learners* (3) to observe their classroom and identify different lines similar to the ones she has just shown them.	The learners *identify lines* (1) from their class and name (2) them.
The *teacher draws a pattern* (4) with different lines and asks the learners (5) to label the different lines	The learners label the different lines (3) on the teacher's pattern.

The objective stated that, "… learners will be able to identify different lines and draw patterns using them". However, the teacher's activity was "draws patterns with different lines", while learners were expected to identify lines, name and label the lines

on the patterns to be drawn by the teacher. The activities seemed to deprive the learners of the opportunities to act towards achieving the set lesson objectives.

The development activities seemed to indicate that learners were to act in response to the activities initiated by the teacher (*cf.* Table 4.9). The objective on the lesson plan about shapes was, "… learners will be able to draw pentagons and hexagons and say their properties". None of the learners' activities indicates that learners would deal with drawing of the said shapes. Rather, drawing pentagons and hexagons only appear under the teacher's activities: "the teacher adds the drawings of hexagon and pentagon and asks learners to identify their properties through probing: how many sides/corners?" As a result, the learners' task was to, "observe the hexagon and say their properties".

ii. Assessment

Of the three lesson plans, assessment criteria were stated in only one lesson plan as shown in Table 4.10.

Table 4–10 Thandy's lesson plan segment 2 showing lesson objectives development section

Objectives: By the end of the lesson learners: 1. will be able to draw pentagons and hexagons and say their properties. 2. should have begun to identify pentagons and say their properties		
Stages	**Assessment criteria**	**Assessment methods**
Introduction	Name shapes	Oral
Development	Observe and say properties Identify regular and irregular shapes' properties.	Oral
Evaluation	Page 47 Activity 3 oral Page 53 Activity 3 written	Oral and written

The stated criteria on the first two steps were to be conducted orally yet the objective stated that learners were expected to draw. During the evaluation stage, learners draw shapes and write their (shapes') properties. To do this, the intended assessment methods were oral and written. Based on this, Thandy had a plan on how learners would be assessed although her planned assessment activity, draw shapes, was not developed during the lesson. Assessment appeared at the lesson evaluation stage where the teacher should indicate what went right/wrong and the way forward for the next lesson (that is according to the MoET lesson plan template given to teachers).

D. Lesson evaluation section serving as assessment

Table 4.11 exemplifies Thandy's three lesson plan evaluation stages' contents:

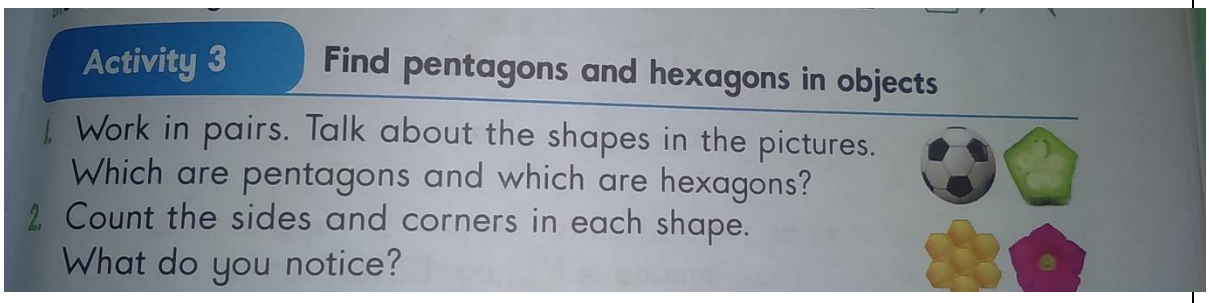
Table 4–11 Lesson plan segments (1 and 3) of the evaluation stages

	Teacher's activities	**Learners' activities**
Segment 1 (sack race)	Teacher asks the learners to give a record of pupils who participated in the sack race and she helps them to record them in tally marks and bar graphs.	The learners record the data they have in form of bar and tally. (*cf. Appendix C*)
Segment 3 (patterns)	Teacher asks the learners to draw a pattern showing the vertical line, horizontal line and diagonal line and label them.	The learners draw patterns showing different lines and label them.

i. <u>Mismatch between objectives, instruction and assessment</u>

These development stage activities revealed that the teacher was the one to draw the "pattern", while the learners were to identify and label the lines on the "pattern". However, the assessment required them to draw a pattern, yet the instructional activities did not provide opportunities for learners to construct patterns. In another instance, the lesson objective on shapes was to enable learners to draw pentagons and hexagons as well as to mention the properties of these polygons (*cf.* Table 4.7). However, as illustrated on picture 1 below, the assessment activities address the issue of identification of the polygons and properties, leaving out the drawing aspect.

Activity 3 on page 47 of grade 4 learner's book (*cf.* Table 4.11above)

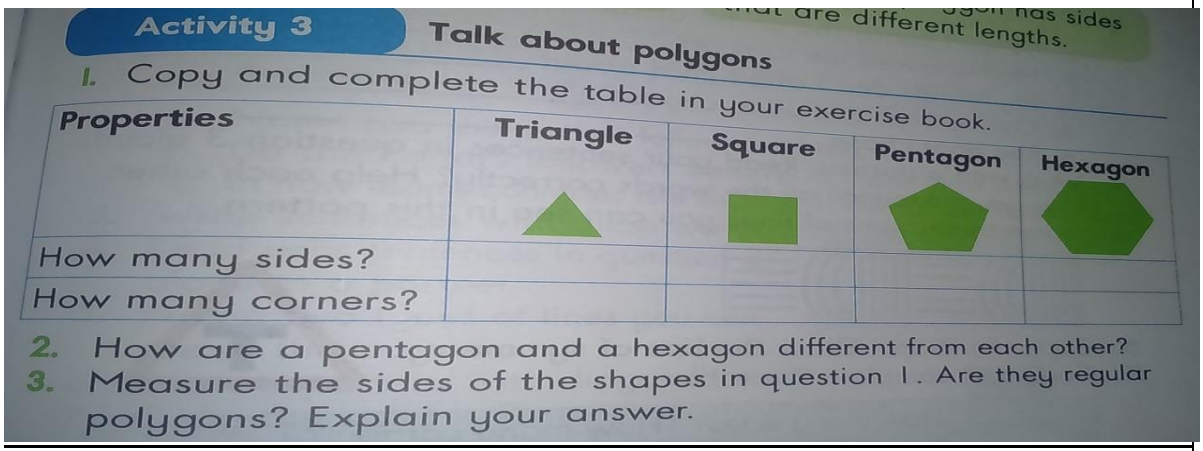


(Khuts'oane *et al.*, 2015:47)

Picture 4-1Activity 3 on page 47 of grade 4 learner's book

Picture 4.2 below illustrates the activities of segment 2 in Table 4.11 above.

Activity 3 on page 53 of Grade 4 learner's book (*cf.* Table 4.11 above)



Activity 3 Talk about polygons

1. Copy and complete the table in your exercise book.

Properties	Triangle	Square	Pentagon	Hexagon
How many sides?				
How many corners?				

2. How are a pentagon and a hexagon different from each other?
3. Measure the sides of the shapes in question 1. Are they regular polygons? Explain your answer.

(Khuts'oane *et al.*, 2015:53)

Picture 4-2Activity 3 on page 53 of grade 4 learner's book

The drawing element is addressed in the above activity, whereby the intended learners' activity was to copy and complete the table. It was anticipated that they would also draw the shapes in the table. However, the instructional activities deprived learners of the opportunity to develop their drawing skills, yet they were the ones expected to demonstrate this skill at the end of the lesson.

ii. <u>Using only two assessment methods</u>

Thandy planned to use oral and written assessment predominantly and confessed to relying on the two methods:

> …we did oral work mostly. The last exercise I gave was written. I was asking questions orally and they were answering…

As indicated in Table 4.10 she used "oral and "written" as the assessment methods while in other cases the assessment methods were not shown at all. It seemed therefore that she intended to use only oral and written assessments in her lessons. This coincided with her interview segment above and the one below on the use of oral and written assessment:

> Interviewer: Do you use only the oral and the written work to assess learners?
>
> Thandy: Mostly, yes.
>
> Interviewer: Which are the other (assessment) methods that you rarely use?
>
> Thandy: We use oral and written

E. Lesson conclusion mainly based on teacher activities

The following segment illustrates Thandy's lesson plan conclusion in the lesson plan about shapes. It showed only the teacher's activities:

- A hexagon is a 6-sided shape.
- A pentagon is a 5-sided shape.
- A regular shape has equal parts while an irregular shape has sides that are not equal.

The conclusions comprised only the teacher's activities and noticeably reflected the main points derived from the teacher's activities from the development stage. There was nothing indicated under learners' activities and she seemed to be the one giving the conclusion of the lesson.

4.2.3 Classroom instruction and assessment

Having analysed the lesson plans; in this section, I present and analyse data from the real classroom observations supported by the interview transcripts. It is worth noting that Thandy's observed lessons corresponded well with her planning.

4.2.3.1 Lesson introduction

A. Asking questions coupled with telling during lesson introductions

Table4.12 shows how Thandy introduced her different lesson plans.

Table 4.12 Verbatim observationsbased on observed lesson introductions

Table 4.12 Verbatim based on observed lesson introductions		
2015 Lesson (sack race-bar chart)	**2016 Lesson 1 (Patterns)**	**2016 Lesson 2 (Shapes)**
***Teacher**: What is a race?* ***Learner**: A race is when you race someone*	***Teacher**: What did we talk about in Numeracy yesterday?* ***Learner:** Yesterday we talked about lines* ***Teacher**: Is she correct?* ***Learners**: Yes, Madam* ***Teacher**: Can you remind me of the lines we talked about yesterday? Yes…!* ***Learner**: Diagonal lines*	***Teacher**: Can you please remind me what we did yesterday in Numeracy?* ***Learner**: We talked about lines* ***Teacher**: Can you remind me of the different lines that we talked about?* ***Learner**: Horizontal line* ***Teacher**: Horizontal line, yes!* ***Learner**: Vertical line* ***Teacher**: Ok, today I want us to look at these things that I'm going to write on the board (turns to the board to draw three shapes and asks learners to name them)*

The 2015 lesson was about “sack race” and the “bar chart” while in 2016 lessons 1 and 2 were about patterns and shapes respectively. In the first instance, she required learners to define a “race”. In the next two illustrations, she asked them to tell/remind her of what was done during the previous lessons. From the three lesson introductions, it is evident that she begins her lessons by asking learners the questions and reviewing what was done during the prior lesson. In short, she uses questioning as a strategy to introduce her lessons. The learners just respond to the questions, recalling almost anything they learnt in the past.

4.2.3.2 Lesson development

A. Non-systematic use of resources in learner involvement

It was indicated earlier that her lesson plans had no section where she specified the materials to be used either by listing or within the activities. During the lessons, she haphazardly used any materials that she saw in class. For instance, she asked learners to identify the lines found on a meter stick (*cf*. Picture 3 on the left). She also encouraged learners to identify lines that weredrawn on the board, as per Picture 3 (on the right).

Picture 4-3 Learner showing a vertical line on meter stick (left) and learner pointing at horizontal line (right)

B. Relying on textbooks

Regarding the use of resources, she attested:

> … sometimes you teach them how to sew, how to knit. They don’t have sewing needles … threads … cloths, knitting needles … Honestly speaking, sometimes we decide to show them … the books have very good diagrams.

She opted to refer learners to pictures instead of engaging them in practical work such as knitting due to a lack of resources. For example, during the observations, she used textbooks for different instructional and assessment activities and to engage learners when other resources were lacking. For instance, when dealing with polygons.

In the interview segment above she disclosed that, in cases where learners do not bring the necessary materials and where teachers could not afford to buy materials, learners are shown the diagrams of stitches in the textbooks. This happened when they learnt about the sack race and polygons. She asked learners to bring the sacks from their homes in advance and the sacks were used during the lesson. While dealing with polygons she showed the learners her drawing on the board and the diagrams in their textbooks.

She further complained that the lack of resources prevents her from equipping learners with the required skills such as knitting because “seeing something from a diagram is different from doing it”.

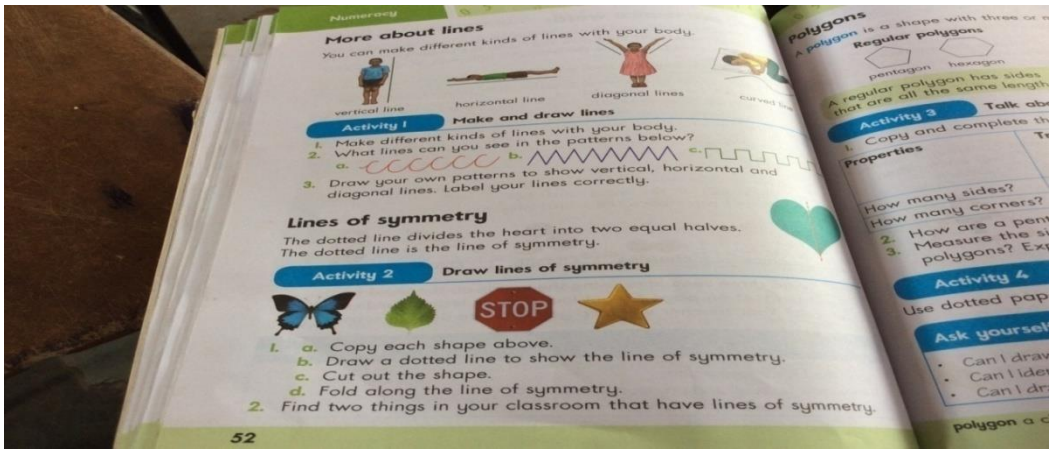
C. Use of textbook activities to engage learners kinaesthetically

I observed that Thandy derived activities from the learners’ textbooks to engage them kinaesthetically. She involved learners actively by referring them to the textbook activities as shown in Picture 4.

Picture 4-4 Learners demonstrating a vertical line (left) and learner making a horizontal (right) using their bodies

She instructed learners to demonstrate different lines with their bodies (Pictures above, left and right) based on the textbook activity. However, all these activities were

done as a class activity (large group) and the teacher could not see the learners from all angles.



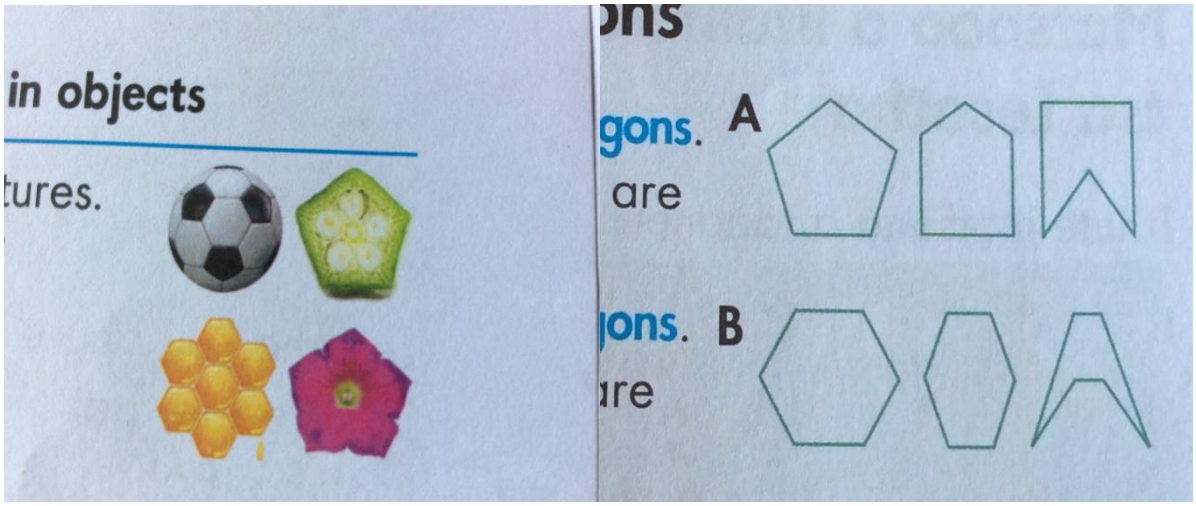
(Khuts'oane *et al.,* 2015)

Picture 4-5 Activity in the learners' book about demonstrating different lines with the body

D. Mismatch between lesson objectives and teaching practice

As was the case with her lesson plan, Thandy's actual lessons (teaching practice) were mismatched with the objectives she set. She performed most of the activities while learners mostly just responded and observed. She even carried out the activities that could serve as the building blocks in developing learners' skills towards achieving the objectives. For instance, during the shapes (pentagon, hexagon) lesson, the objective was that learners should be able to draw the shapes. However, she drew the shapes then asked the learners to identify the properties of those shapes.

Picture 4-6 Teacher using a chalkboard duster to demonstrate that the sides of the shape drawn are equal in length



(Khuts'oane *et al.,* 2015)

Picture 4-7 Shapes illustrated in the textbook

E. Time constraints limiting learner engagement

Owing to time restrictions, Thandy may have compromised activities that engaged learners in practical work. For instance, she assigned them an activity in the textbook that required them to draw the shapes, but she then rephrased the question and instructed them simply to complete a table without drawing the shapes due to time constraints:

> May I please not see any person who has drawn? I'm giving you five minutes.

Thandy said they should not draw due to time constraints. As a result, limited time prevented learners from discovering the properties of polygons by means of drawing.

F. Theoretical integration as opposed to practical integration

Thandy seemed to understand integration theoretically, but struggled to integrate concepts during instruction and assessment. She presented a lesson to integrate bar chart and sack race concepts from NW and IP respectively. Learners were grouped according to their ages, Team 9 (group of nine-year-olds) up to Team 12 (group of 12-year-olds). They were informed that the groups were to compete in a sack race outside. They read about the sack race in the textbook. Thereafter, they were given the sacks and started the race outside. They had three rounds and Group 10 won the first two races. Learners informally recorded the results. Then they were told to return to class.

It was evident from Thandy's plan that she aimed to integrate bar chart and sack race concepts. When it came to practice, she treated them independently. They had the

sack race and gathered no data to present except that they knew which group won many races. When they returned to the classroom, Thandy guided them to present data about the number of members each group had using tally marks. She also wrote on the board for the other learners. The learners were required to show the number of members per group in tally marks and then in numerals (*cf*. Table 4.13).

Table 4–12 Table completed by learners on the board in tally marks and numerals

Team	Tally marks	Numerals
Team 9	~~IIIIIIIIIIII~~ II	22

The data about the number of members per group was further presented on a bar graph drawn on the chalkboard. This information was obtained when learners formed the groups based on their ages, meaning it became available even before learners went outside for the sack race.

Thandy seemed to know about integration but this lesson suggested that she had a narrow understanding of integration. She taught the sack race and the data presentation each in its own right, that is, she first grouped learners, dealt with the sack race and thereafter presented the data based on the groups formed before the race. The presented data had nothing to do with the race. Notably, the aforementioned lesson was the only one that seemed to endorse integration of the concepts from different windows.

G. Disregarding learners' decisions

Thandy seemed to overlook the learners' decisions during the activities. She offered them the opportunity to choose their representatives to run the sack race, and they did. Team 10 won the first two races. Thandy overruled the learners' decisions for Team 10, after they had chosen their representatives for the third race. She substituted a team member with another learner stating that the one chosen by the learners was a group leader. However, learners complained that the one she selected would make them lose the race. They lost that race out of the three they had. Her behaviour affected the race results; she compromised Team 10's chance of winning and they were therefore disappointed.

H. Vague instructions causing learners a dilemma

Thandy seemed to give unclear instructions and questions during the lessons, which left learners hanging:

> Complete the table by using the tally marks to show your number.

The table referred to what Thandy had drawn on the board (*cf*. Table 4.13). After she had given the instruction on the segment above, one learner (Tefo) from Team 9 went to the board and wrote the number "nine" (9) in tally marks. This seemed to stir disagreements among learners. Some seemed to believe that he was correct and others wanted him to write 22.

A member of Tefo's group went to the board and made 16 more tally marks. Even though Tefo and other learners seemed to be confused; the final answer was 22. There seemed to be a problem regarding group numbers and the number of members in a group. The groups were labelled in terms of numbers (e.g. Team 9) and the number of group members was a quantity (22 members). During this confusion, the teacher emphasised that learners should "bundle" tally marks correctly. She seemed not to be aware of the confusion that her instruction caused.

I. Teacher's self expression and questioning

Despite giving vague instructions to learners, Thandy also asked unclear questions that prompted learners to recall almost anything they grasped in the previous lesson. For instance:

> **Teacher**: Can you please remind me what we did yesterday in Numeracy?
> **Learner**: We talked about lines

The previous lesson was about "patterns"; therefore, the expectation was that learners would recall that they had learnt "patterns". Instead, the learner indicated that they had learnt about lines. The learner's response that they had learnt about "lines" tallies with Thandy's words. While evaluating the previous lesson, she indicated that it did not go well:

> "… maybe I used the wrong terminology, I didn't explain myself well … So, in the next lesson we are supposed to be doing shapes and shapes are drawn using lines. Basically, I will try to clarify the fact that pattern is anything that you can draw; anything that is drawn is a pattern".

It seemed that the concept of patterns was not well understood by the teacher and her learners. Thandy was able to evaluate her lesson because she seemed to be aware that the learners did not grasp the concept of patterns well.

Learners drew “anything” that came into their minds while they were asked to draw patterns as the teacher told them that a pattern is “anything”. For instance, some just drew lines; some sketched pictures of people and others drew shapes such as squares, rectangles and triangles. This ultimately shows the ambiguity of her instruction as she admitted that:

> I didn’t explain myself well…maybe they did not understand that a pattern could be anything…and this…maybe the results of…communication…not being able to express ourselves well and not understanding well...

However, the definition of the pattern she provided seems to be from the Integrated Part (IP) rather than Numeracy window (NW) which she was dealing with.

J. Dealing with one concept in a lesson

It was evident from the three observed lessons that she dealt with one LO per lesson on average. She treated a topic or LO in one lesson regardless of problems she discovered. She seemed to concentrate on a topic or concept in only one lesson notwithstanding the challenges that arouse from the previous lesson. The next lesson, after “patterns”, was on the topic “shapes”. While teaching about shapes, issues were raised about lines. However, Thandy did not attempt to clarify anything about “patterns” as she had promised during the interview. Even though she seemed to be willing to clarify the “fact” about pattern, the point she promised to clarify here seemed to be the main cause of learners’ confusion during the lesson on “patterns”.

K. Old versus new ways of teaching

In terms of pedagogy, Thandy seems to be caught between the old and the new use of resources and methods for instruction and assessment. Her lessons had the same pattern except for a lesson about lines where learners seemed to be actively involved. She asks questions and learners answer her questions during the lesson introduction by defining the terms or by recalling the topics covered previously.

4.2.4 Perspectives, beliefs and attitudes

A. Weekly scheming

Thandy developed the scheme of work per week and indicated that this allows them to see how much they have covered so that they "could carry over the concepts" that were not covered to their satisfaction:

> … preparing a scheme every week allows flexibility …

She regards this way of scheming useful as opposed to scheming quarterly.

B. Relating concepts

i. Regarding integration as "linking" concepts

Thandy reported that the new curriculum requires the teachers to integrate concepts. She regards integration as linking concepts. She had a view that integration involves relating the easily relatable concepts and putting those with no obvious relationship together.

> "In this new syllabus, we really integrate, you don't go straight to the concept; you integrate it to linking concepts to make a whole thing … that is, you can't say you are teaching nouns. Nouns will be related to something else … maybe … household items … their names are nouns, so household items relate to nouns".

ii. Relating concepts within a window

Relating concepts within a window was an important aspect of scheming she considered. She beamed with confidence as she explained the procedure for making the scheme of work, elaborating with an example:

> "When we are scheming, we take a sort of relating concepts ... These concepts (pointing to the IP column) talk about people ... in different places. It's a sort of pattern but found at different places ... we have a group of people called a family and if we have many families we make a village, ... they [villages] end up making district ... we pick from those families, people who represent the whole district. That makes a council. And these people belong to different ethnic groups. So they [concepts] link, except for lines and shapes. Lines also link with shapes ... to draw shapes you are using lines. So they [lines and shapes] are related".

Starting with how they schemed for the Integrated Part (IP), she illustrated how the concepts were related by establishing a link among them such as "family tree", "types of councils" and "ethnic groups". In the same way, she showed integration within the

other windows. The segment above illustrates how she makes sense of integration in terms of the concepts across the windows using the Integrated Part as the base.

iii. Relating concepts across two windows

She further discussed integration of concepts across the windows as per Table 4.10 above. She was also aware that one of the Integrated Part's learning outcomes and its concepts are similar to those of the NW.

> ... Here in the English Window (EW) we find articles, short story, relatives and in-laws, job... and from Integrated Part (IP) we also talked about ... family tree, types of councils, ethnic groups, lines, shapes ... the people who are elected to the council ... hold positions ... do different jobs. So they [IP concepts] relate to the "job" in EW.... So they [learners] end up relating people ... in the councils with their jobs and ... Under "shapes", it is polygons ... hexagons and pentagons so they relate to those shapes ... learning outcome number 19 on Integrated Part. Otherwise currency is an isolated one [concept]...

Two approaches for integrating concepts emanated from the interview.

iv. Establishing links among concepts

She integrated concepts by establishing links between them:

> … you will find that we normally relate concepts that are easily relatable … we don't think outside the box. We want those that are related to relate them, we don't want to relate those that do not have very visible relationship. So that is how we do it.

She, however, showed that some concepts do not integrate with concepts from the other windows. Therefore, she admitted that there are some of the concepts on the scheme that are not related to others:

> … *Joale maele* [Now, Proverbs] are sometimes isolated concepts. You find that we have *maele a tsamaisang baamani* [Proverbs about relatives]. But sometimes we isolate them, sometimes we relate them.

It seemed that they habitually look for the obvious associated concepts when scheming. This showed the inconsistent effort they apply when integrating the concepts.

C. Contradictory perspectives and practice

According to Thandy, lesson planning is very demanding because it involves plenty of work. Despite that, Thandy claimed that she has a routine of making lesson plans after working hours at school, but she regards lesson planning as a taxing exercise in the new curriculum.

> ... normally we do our [lesson] planning after school... it entails too much lesson planning…

Moreover, she regards a lesson plan as the outline of her intentions that she is not bound to follow. She also expressed her discontent with lesson planning:

> I take a lesson plan as a framework or as a scope of what I intend to teach. But not basically a restriction as to the methods and the activities … that is why I don't like lesson plan that much.

This was in agreement with my observations. She prepared a lesson plan just before conducting a lesson in 2016 (lesson about lines). The following lesson was observed without a lesson plan (shapes/polygons). She then wrote it after teaching because I asked for a copy of the observed lesson. Her perspective concerning lesson planning was depicted in her words and practices and this contradicts her envisaged role.

D. Subject-teaching due to personal preferences

i. Dealing with specific windows (learning areas) and LO

Thandy seemed to use the subject-teaching approach. She dealt with specific windows and learning outcomes even though she made detailed lesson plans for the LOs she agreed to teach with her colleague.

> My colleague said she is not good in Numeracy ... so she has decided to tackle mostly Sesotho Window (SW) and English Window (EW)...

Interestingly, personal preferences come into play during the lesson planning:

> … we share the learning outcomes, she plans for her learning outcomes but on the objectives she will show the objectives that I will have to do...my learning outcomes as well as her learning outcomes will appear on her lesson plan and on the objectives, only my objectives will appear. The person who comes will see that here the learning outcomes that have to be [achieved] are this and this, then she will be planning for her own and I'll plan mine.

According to the above segment, Thandy and her colleague shared the work of teaching the four windows such that each taught two windows. However, they share

the learning outcomes across the windows based on individual interests. She therefore dealt with scientific and numerical learning outcomes that were mostly found in the IP and NW:

> Most of the Numeracy Window learning outcomes and Integrated Part learning outcomes especially those that are Scientific and Mathematical are tackled by me.

Based on the above interview segments, Thandy and her colleague used a subject-teaching approach in their class whereby they individually prepared detailed lesson plans for the respective windows. Her lesson plan comprised the LOs to be addressed during her and her colleague's lessons. However, the details of her lesson plans focused mainly on LOs to be taught by her.

E. Lack of resources

Thandy claimed that the prevailing lack of resources results from the Free Primary Education (FPE) programme introduced in 2000. Although the implementation of the NIC was from 2013, the challenge regarding resources in the implementation of the New Integrated Curriculum was attributed to the implementation of Free Primary Education (introduced way back in 2000):

> ...this has been...it's an ongoing thing ever since. You find that we don't have appropriate materials, in a sense that with implementation of Free Primary, schools do not have funds

F. Observed contradictions

i. Theory versus practice

Thandy's sayings contradicted her actions pertaining to the implementation of the new curriculum. She seemed to be aware of the benefits of integration but she was challenged by using the advantages that she was cognisant of:

> …it makes work easier...when you know how to link your things…learning is not that difficult...it flows [because] learners learn in a relaxed way not seeing that now it is time for English, Sesotho...because some learners have phobia for certain subjects...

However, the observed lessons revealed that she treated concepts in isolation. For instance, on the "sack race and bar charts" lesson, the two concepts were treated

separately yet she regarded them as linked. Moreover, it was observed that each of her subsequent lessons dealt with one topic or concept with no apparent integration.

ii. Work simplified yet overloading

She perceived the new curriculum as the curriculum that simplifies the work. At the same time, she regarded it as overburdening due to the difficulty of integrating concepts as well as the broad planning she had to do. However, she regarded the technical knowledge of making connections within curriculum content necessary for simplifying the work. This was her real challenge because she mentioned that:

> ...we try too hard to relate concepts and they give us headache…lesson planning for it…it is too broad…you have to plan for many concepts in one lesson plan…but putting pen to paper sometimes it becomes a lot of work, paper work…

iii. Prevention of subject-phobia versus subject-teaching

She added that the new curriculum creates a tranquil learning atmosphere that prevents learners from realising that they are engaged in distinct windows during the learning process. However, as indicated on section 4.2.3, she conducted her lesson in a manner that prohibited learners to learn freely without fear of subjects. She provoked learners to recall concepts based on the distinct windows. They had to tell or remind her of what they had learnt during the particular lessons, such as the Numeracy window, to answer her questions. However, she postulated:

> … a learner does not see that he is doing Maths after doing the race, when he is recording what was happening at the race.

Interestingly, she taught the mathematics concept (bar chart) and the integrated part concept (sack race) independently. Data collected during the sack race was not used during data presentation on the bar chart. Rather, the data presented after sack race was gathered while learners were forming groups before the sack race.

G. Teacher's and learners' roles

The teaching-learning process reflects Thandy's view of her role and the learners' roles from the planning stage up to the real classroom context.

i. Teacher's role

Thandy perceived her role as preparing independent learners in the implementation of the new curriculum:

> It's to groom a child…independent learners, learners who could be able to do things for themselves. Study independently, do their researches, do their household chores…That is independent learners–complete human beings.

She revealed that one of her roles is to equip learners with the skills that would enable them to tackle the out of school life on their own: "…being able to handle a crotchet, knitting some stitches ... basic skills that would help them at home".

However, in this regard my observations diverged from her perceptions of her role. The information presented in the above sections indicates that her planned and actual teacher's activities were more elaborate than the learners' activities. She initiated every activity in all of her lessons. It means that classroom discourse depended on her. What she said about the teacher's roles and learners' roles contradicted her practice.

ii. Contradictory views on learners' roles

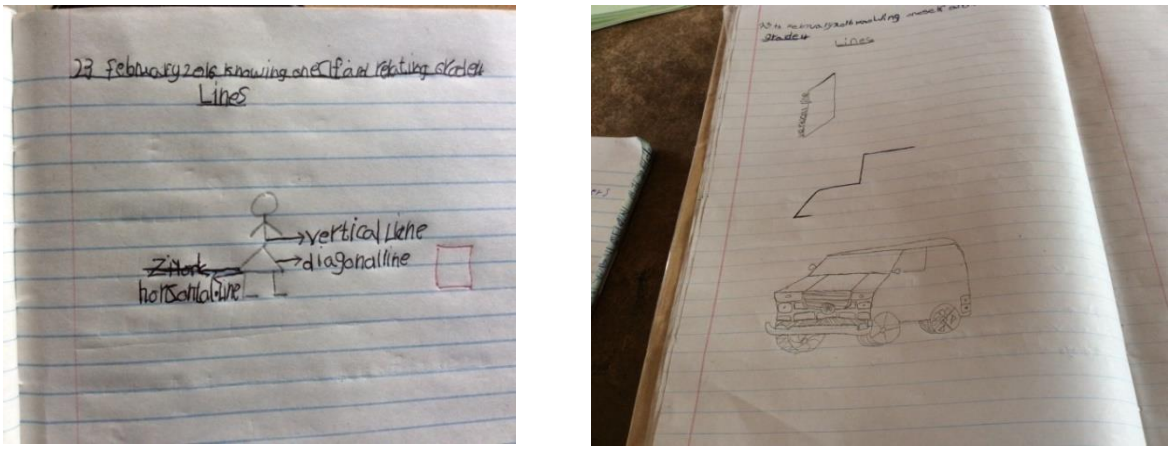
Thandy has divergent views on teachers and learners' roles. Her view that the teacher's role is to equip learners with skills to handle the out of school life is inconsistent with her statement about the learners' role: "… learners should be able to read and understand what they are reading ... so that they can respond to questions that are being asked". It seems that the purpose of equipping learners with reading and writing skills is to enable them to answer the questions. This shows no connection with the type of learners she believes should be produced. In fact, the activities were dominated by questioning and answering.

iii. Gendered expectations and misconceptions

Thandy had higher expectations for boys as opposed to girls. For instance, when marking the class work during a lesson on patterns, she indicated that she expected good drawings from the boys, especially a particular boy (Takotso – pseudonym) known to be good at drawing. When asked about this kind of expectation, she said:

> ...because from their work, I know that boys are very artistic, they can draw beautiful diagrams, I was really expecting that...

However, learners generally drew different shapes including rectangles and triangles, which Thandy regarded as "patterns". As she continued, Thandy came across an exercise book of a girl who used different lines to draw a diagram below (Picture8.



Picture 4-8 Diagram drawn by a girl (left) and Drawing made by a boy (Takotso) (right)

The girl was praised for her creativity and Thandy regarded that diagram to be outstanding although she indicated that she expected more from the boys. The segment below provided evidence that she had gendered expectations for her learners:

> …you know boys like drawing…most of them are very artistic…Eh! … I had a great expectation in terms of the diagrams that were supposed to be drawn; unfortunately, I didn't get what I was expecting.

She acknowledged that boys did not perform to her expectations. Having lost hope, to her surprise, as she continued marking, Takotso submitted a drawing of a car (see Picture 8 (right) above).

Takotso's work was at first rejected by Thandy telling him that he has potential to make good drawings. This time Thandy praised him, "very good drawing", comparing it with what he drew at first. She emphasised that she had been expecting this kind of drawings from the boys – especially from Takotso. Thandy thereby demonstrated that she had different expectations for the boys and the girls in her class.

4.2.5 Contextual setting challenges

Thandy faced several challenges during the implementation of the new curriculum, including unavailability, shortage and inappropriate materials; attending unfruitful workshops; having to motivate learners to speak English; overcrowding and having a broad range of ages in one classroom (9–12 years of age).

4.2.5.1 Availability of materials

Thandy worked in an environment where the resources necessary for implementing the new curriculum were not available, insufficient or inappropriate. She believed this was problematic particularly for teaching practical subjects.

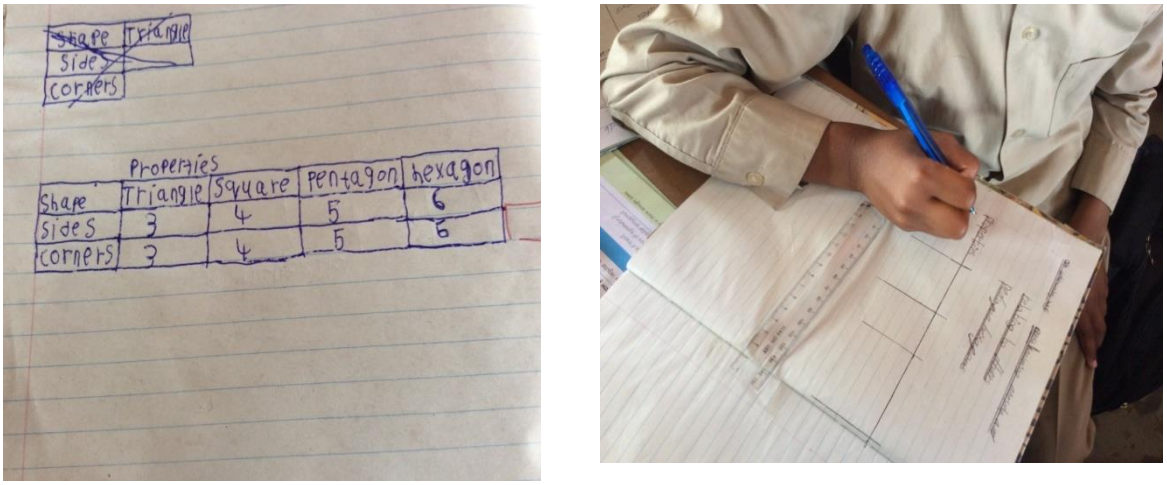
A. Failure to equip learners with the required skills

She remarked that unavailable materials complicate her work, citing an instance where the NIC requires learners to develop computer skills yet there were no computers at their school to use for equipping the learners with the necessary skills.

> Some of the material we really don't have…there are some computer skills that learners must have, we don't have computers in our school…it becomes difficult.

B. Messy work from learners due to lack and in appropriate materials

There was a lack of materials to be used during the lesson, which led to using inappropriate materials. This resulted in messy work from learners and became a barrier during the teaching-learning process.



Picture 4-9 Classwork underlined freehand (left) and Class-work underlined with a ruler (right)

Learners who had the necessary materials, such as rulers, produced clean work as opposed to those who did not have such materials. For instance, the latter produced untidy tables because some of them opted to use freehand while others improvised and used things such as wires.

C. Purchasing/acquisition of learning materials

Unavailability of materials cost Thandy and her learners. She claimed that there are three possible ways of addressing the issue of unavailable resources. She could ask learners to bring the materials, improvise or buy them. This costs the teacher and her learners.

> …you find that some of the things that should be used, you really need to buy them, not improvise, and you find that these people can't bring them. So it is difficult to teach such things especially practical subjects...

She added that teachers face a challenge of using their own money to buy the materials that cannot be improvised. However, other materials are still necessary which neither the teacher nor her students can provide, as shown in the above sub-section.

D. Use of inappropriate materials

Using inappropriate materials prolonged the lessons and provided incorrect feedback to Thandy. She was concerned that they receive inappropriate feedback pertaining to learners' progress due to insufficient materials such as pens, pencils and rulers. It caused learners to wait for others to complete their work so that they could borrow the materials to perform the assigned task. It also seemed that this problem prolonged the lessons and negatively influenced learners' behaviour and the kind of feedback she received too.

> It makes the periods longer. The time planned for, if we have one-hour lesson, it will extend to two hours because…it also promotes copying…it provides not a clear picture of the understanding of learners.

4.2.5.2 Training workshop on the New Curriculum

Thandy seemed to consider the workshop on the implementation of the new curriculum short and unproductive because of poor organisation, which included having no materials to use during the workshop. She was dissatisfied about the workshop.

> The workshop for me, it was short…it was a bit of an abstract in a sense that we did not even have materials such as syllabus… we were just…fiddling…

4.2.5.3 Overcrowding

Thandy had a class of 72 learners in 2015 and she taught 82 in 2016, and these large classes seemed to prevent her from responding appropriately to help learners. Furthermore, she indicated that overcrowding in classrooms was exhausting and led to unproductive work:

> In this big school we have two teachers in a very big class…We have 72 children …follow up becomes difficult…I have to check each and every one of them… sometimes we tire on the way because we are only human…we share the task …but it is not effective.

Picture 4-10 Teacher stretching to give a learner the exercise book after marking

It was evident during the lesson observations that overcrowding negatively influenced her lessons (Picture 10). While marking, she realised that some learners encountered problems. She therefore explained to these learners and had discussions with them. However, this only occurred with learners near the aisles. She struggled to collect the exercise books and return them to the other learners, let alone discuss the feedback after marking. She was unable to reach all learners in an equitable manner.

4.2.5.4 Valuing English speaking

Thandy seemed to regard speaking English as an important aspect in learning and she avidly promoted it among her learners. She had even made a policy that she would communicate in English with her learners to reinforce speaking English among those who seem to prefer to be taught in their mother tongue (Sesotho).

> …it [English] can help them to…communicate easily so that they can read their material easily because most of the subjects are done in English…I have

> realisedthat these kids have a tendency [of preferring Sesotho] …what I have made as my policy is that, I no more talk to them in Sesotho. I really use English as a medium of instruction.

She considered English-speaking learners as the good learners. She seemed to use every opportunity available to motivate and encourage her learners to speak English:

> …The [student] had a pen but it was not writing, and because we [teachers] encourage them [students] to speak English, he approached me in English and told me the problem…so I decided to give him the pen, for being a good student, speaking English…

However, she seemed to encounter challenges from learners who are reluctant to speak English. This type of learner becomes passive and refuses to speak, notwithstanding her efforts to encourage them.

> …they really don't want to speak English. We have tried everything…they rather go passive. If you ask them to speak English, they keep quiet…

As a result, she forced them to speak by using *"teacher's medicine"* (lashing them). However, she later devised an alternative strategy and made a deal with them that:

> … you keep quiet completely or you make noise in English, so we have a deal: you make noise in English, I have no problem.

4.2.6 Summary of preliminary findings from Thandy's story

In Thandy's school, teachers made the scheme ofwork together on a weekly basis, of which the priority was to group the easily relatable concepts from the syllabus. She arranged the concepts in chronological order. She considered this process of linking the concepts as integration. When constructing lesson objectives, she turned/changed Learning Outcomes (LOs) into lesson objectives; hence, lesson objectives resembled LOs. Occasionally, two LOs were merged to formulate one lesson objective. However, in other lessons, she formed two objectives from one LO. Based on the lesson plan format she followed, no success criteria were stated. Her lesson objectives were complex in nature and were not aligned with the lesson activities.

She regarded lesson planning as a demanding task as it compelled her to remain at school beyond working hours. Thandy shared lessons with her colleague and they

each dealt with the preferred subjects (windows), even though she perceived the NIC as the curriculum that prevents subject-phobia.

The activities were mostly characterised by question and answer. The evaluation section in the lesson served the assessment purposes that entailed oral and written assessment only. The teacher performed most of the instructional activities, even though the assessment tasks required learners to demonstrate knowledge and skills acquired through observation rather than practise. Her questioning was mostly oral and required learners to retrieve information, yet she considered her role as grooming independent individuals.

She used any material she came across during the lesson, even if it was not listed in the lesson plan. She relied on textbook activities to engage learners kinaesthetically. However, time constraints limit learners' engagement. As a result, she cut out some learners' activities. During instruction, she used vague instructions and questions that caused learners to have varied understandings and at times causeddilemmas. She attributed this to her problem of self-expression. In some instances, she disregarded learners' collective decisions and she had gendered expectations.

She encountered a number of challenges such as a broad range of learners' ages; overcrowding; motivating learners to communicate in English; unavailability and/or shortage of resources as well as inappropriate materials. She also limited learner engagement due to time constraints. Nonetheless, she indicated that the in-service workshops she attended, which were on the implementation of the NIC, provided little or no help in dealing with the aforementioned challenges.

4.3 Tiny's story

4.3.1 Background

Tiny was chosen to be one of the primary participants because she was engaged in the implementation of the integrated curriculum from the first year it was introduced in Lesotho. Compared to the other participants, she was believed, by her colleagues, to have the best sense of curriculum coherence based on her experience under the new curriculum. Tiny taught grade 3 learners (pioneers of the NIC implementation) in 2013 when they were first introduced to the new curriculum. She stayed with grade 3 in 2014

and then moved to grade 4 with these learners in 2015. She then went back to grade 3 in 2016.

Her case is presented and discussed in relation to her experience of teaching the NIC since 2013, having taught grade 3 several times but, most importantly, also having the experience of moving to grade 4 with her learners. While data was presented and analysed as indicated in the introduction section above, the focus is on how Tiny's teaching forms connections between the concepts for instruction and assessment. Tiny was observed teaching grades 3 and 4. In addition, she was interviewed and had an opportunity to justify her observed practices. From her explanations, it seems that she has a good grasp of the scheming procedure and lesson planning but her planning books showed some inconsistencies.

4.3.2 Planning

4.3.2.1 Scheming

In preparing her scheme of work, Tiny used the syllabus as she mentioned following a format that was somehow common for grade 3 and 4 whereby the content is split into windows.

A. Arranging the selected LOs chronologically

She arranged the selected LOs in terms of their order in the syllabus per week. The two segments of Tiny's scheme of work below (Tables 4.13) serve as an illustration on how she arranged the LOs within and across the windows. The 2015 scheme differs from the 2016 scheme in terms of column headings:

Table 4.13 A segment of Tiny's 2015 Unit 3 week 1 scheme of work

Table 4.13: A segment of Tiny's 2015 Unit 3 week 1 scheme of work showing LO numbers and concepts

Week	LOs from IP	Concepts	LOs from SW	Concepts	LOs from EW	Concepts	LOs from NW	Concepts
1	1 2 5 6	Identify physical features in their local environment. Demonstrate understanding of equivalent and not equivalent sets. Describe effective ways of managing their environment. Preserve insects	1 3 7 9	*Bala lipale tse khuts'oanyane tse fanang ka tsebo.* *Hlalohanya mabitso a likokoanyana.* *Pheta ts'omo ea leeba le motinyane.* *Hlalosa likhoeli tsa selemo.*	1 2 3 10	Use phonics to decode and read difficult words in a text. Use present tense correctly. Use simple past tense correctly. Spell selected words correctly.	5 3	Round off whole numbers to the nearest 10. Compare 4-digit numbers using signs (<, >, =)

B. Mix-up of learning outcomes with concepts

Tiny seems to have confused learning outcomes (LOs) with concepts. As indicated in the above segment, she wrote the LO numbers to denote the LOs. The columns labelled "concepts" reflect the detailed LOs instead of the concepts. For instance, according to the syllabus, the EW's LO 1 reads as "At the end of this unit learners should be able to use phonics to decode and read difficult words in a text", while the concepts are letter sounds, phonics, spelling and punctuation. However, her concepts column comprised learning outcomes instead of concepts.

Table 4–134 Segment from Tiny's 2016 scheme of work Unit 1 week 2

Segment from Tiny 2016 scheme of work Unit 1 week 2								
Week	**LOs**	**Integrated Part**	**LOs**	**Sesotho window**	**LOs**	**English window**	**LOs**	**Numeracy window**
2	1 2&3 4 5 20 21	Family tree Elements of sets Clans & totems Games-Boleke Counting and reading numbers	1 2 3 5 6 10	*Tumeliso* *Litaelo* *Tlhompho* *Liboko* *Ho thella* *Ho bopa mantsoe*	1 2 3	Greetings - Formal - informal Titles Tense-irregular verb -simple past tense	1 2	Sets - symbols -elements Counting numbers Manipulation of numbers

She listed the learning outcomes' numbers with abbreviations of their corresponding windows as shown in the first row of Table 4.14. The concepts and LO numbers seemed to correspond with the learning outcomes in the syllabus as discussed in section 4.3.2.2 below.

In both years (2015/16), the LOs were written in terms of their numbering on her scheme. The term "concept" was no longer used in 2016, instead she just wrote the windows (e.g. Sesotho Window) and, this time, the concepts appeared under each column of the windows.

C. Difficulty in explaining integration based on scheme of work

Tiny struggled to clarify the integration of the concepts she chose for her scheme of work. It is noteworthy that she was talking about what may happen, not what actually happened. Her statements lead to questioning whether she actually practises what she says. In describing how the concepts integrate within the Integrated Part, she explained:

> When we identify features in the local environment and effective ways of managing their local environment, this features…the physical features, we may have…Mmm… When we were talking about equivalent sets and non-equivalent

> sets...maybe sometimes you may make a set with these [physical features]…with their number maybe…

She showed that identification of physical features integrates with managing the environment without elaborating how they integrate. She indicated that the local environment may have features such as wells and dongas and these may be managed. However, she established no integration of equivalent sets with any other concept within the Integrated Part:

> Mmm... when we were talking about the equivalent and not equivalent sets…maybe sometimes you may make a set with these (physical features) …

She said, “Preserving the insects and managing the environment do integrate”. She stated that insects are part of the local environment. Therefore, preserving the insects means that they are managing the environment.

> …we preserve insects because we are managing our local environment, so insects are part of our local environment…

D. Own definition of learning outcomes

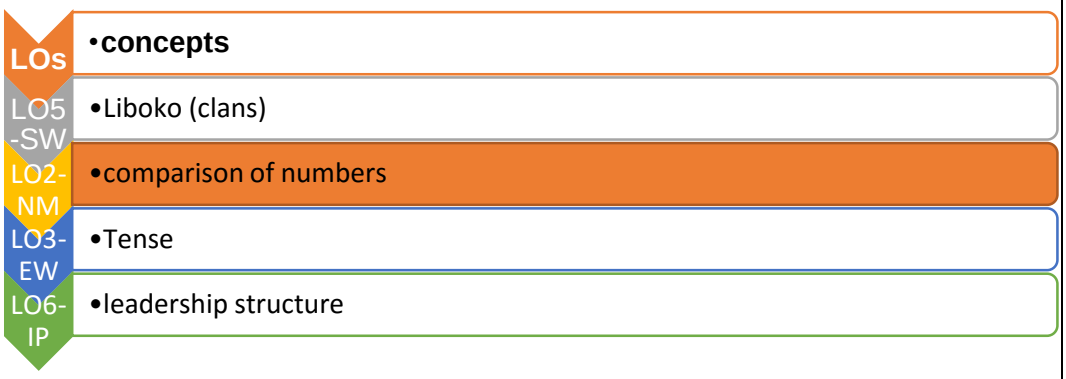
From the interview, it became apparent that Tiny regarded the term learning outcomes (LO) as synonymous with topics and main concepts of the lesson. Her definition of learning outcomes actually discloses her understanding of this term and possibly explains how she treats learning outcomes in her planning:

> The learning outcomes are the topics, the main concepts of the lesson.

Below is a segment of her scheme of work, showing LO numbers and concepts.

Table 4–14 Segment from Tiny's scheme of work

Segment from Tiny's scheme of work



E. Approach to scheming

i. Start by checking the overview content in the syllabus

Scheming began with the selection of concepts from the Integrated Part in the syllabus.

> We start by looking at the overview [in the syllabus], the concepts from overview, then move to the activity plan. So from the activity plan, that is where we read about this and what was done and what to be done.

Tiny's scheme of work was derived from the syllabus, whereby she and her colleagues identified the IP concepts. She claimed to start her planning with the selection of concepts that relied on what was learnt previously. Reading the activity plan in the syllabus hinted to her what was done and what should be done next. She further indicated that, after doing so, they move to other windows (SW, EW or NW)

ii. Clustering concepts across windows

Then these IP concepts were integrated with the selected concepts from the other respective windows.

> ... the windows, then we select the concepts that can integrate with these ones [IP concepts] from each window.

The Integrated Part learning outcomes and concepts were therefore in the beginning columns of her scheme of work although there seemed to be a challenge in distinguishing between the LOs and concepts as discussed earlier (4.3.2.1d).

i. Clustering concepts in weeks

From there the concepts were clustered in weeks based on the value of the content of each. This formed the basis for her lesson planning.

> Then we select which ones can be taught from the first week, the second week...but we weigh them...after we have selected the concepts and integrated them, we arrange them according to the weeks. From there then we prepare the lesson plan.

Although she only pointed out concepts on this segment, her scheme also comprised headings that included “LOs” that were used for lesson planning.

4.3.2.2 Lesson planning

A. Major parts of the lesson plan

Her lesson plan comprised four major parts for each window and there are also sections such as date, time, theme and a list of the learning outcomes (LOs) numbers and concepts per window: English Window (EW), Sesotho Window (SW), Numeracy Window (NW) and Integrated Part (IP).

The four major parts are the lesson objectives, introduction, teachers and learners’ activities.

B. Nature of lesson objectives

i. Vague lesson objectives

While it is a common practice for a lesson plan to have two objectives, Tiny’s objectives seemed to be vague. Some of her lesson objectives were as follows:

> Objective 1: By the end of the day, learners should have begun to classify living things as animals and plants by naming cold- and warm-blooded animals.
>
> Objective 2: By the end of the day, learners should be able to classify living things as animals and plants by naming cold-and warm-blooded animals correctly.

It is perplexing how “classifying living things as animals and plants by naming cold-and warm-bloodedanimals” could be done.

ii. Two categories of lesson objectives per window within a lesson plan

Tiny’s lesson plans comprised two objectives as shown on the segment below (Table 4.16):

Table 4–15 Lesson plan segment depicting the nature of lesson objectives

Lesson plan segment depicting the nature of lesson objectives	
Objective 1	**Objective 2**
By the end of the day learners should have begun to: -construct simple sentences in present tense (EW) -compare numbers using the signs =, <, > (NW) *-bolela liboko tsa bona* (Mention their clans) (SW) -name the leaders in their families (IP)	**By the end of the day learners should be able to:** **-**construct simple sentences in present tense correctly (EW) **-**correctly compare numbers using the signs =, <, > (NW) **-***bolela ka nepo lintho tseo ba anang ka tsona* (correctly mention their totems) (SW) **-**draw leadership structure in their families (IP)

The stem of the objectives seemed to be copied from the lesson plan format provided by the MoET to teachers (cf. Table 4.2 section B). Moreover, the four phrases per category of the objectives were taken from different learning outcomes of the various windows. Looking at EW and NM objectives, the difference between each pair of the two categories was only the use of the word “correctly”. These objectives were not measurable because they did not specify how the correctness was to be determined.

However, the SW and IP objectives distinguished between learners’ abilities. The targeted objective 1 (IP) was for a learner to at least name the leaders in their families while others were expected to be able to progress and draw the leadership structure in their families, so that “by the end of the day learners should be able to correctly construct simple sentences”. This objective only showed the expected behaviour which was “to correctly construct simple sentences”.

C. Lesson introduction

i. Inconsistencies within a lesson plan for respective windows

It is noteworthy that Tiny structured her lesson plan such that it comprised four major parts: EW, SW, NW and IP. Every SW part of her lesson plans had an introduction stage while only one IP part consisted of this stage. However, none of her EW and NW lesson plan sections had the introduction stage (illustrated in Table 4.17) below.

Table 4–16 Segments from Tiny's lesson plan sections relating to the introduction stage

Activity content	Teaching methods	Stages	Teachers activities
Leadership LO6 IP	Explanation Question and answer	Introduction	Teacher asks learners questions about their families
Liboko (clans) LO5 SW	*Puisano* (discussion) *Potso le karabo* (question and answer)	*Selelekela* (introduction)	*Pina- tlou ena(a song about an elephant)*

She planned for the windows separately within one lesson plan. The lesson plans comprised stages that were shown for the respective windows; although in some cases, other stages were excluded.

The elements from the various stages were not aligned. To cite an example, under the IP introduction stage, "teacher asks learners questions about their families", engaging the two methods: explanation and question-and-answer. The activity revealed nothing about the former while the latter was encompassed.

ii. Uses teacher-centred methods

It is evident from Table 4.17 that most of the methods she intended to use were teacher-centred. Moreover, she only indicated the teacher's activities and none of the learners' activities regarding the introduction stage. This shows that most of the attention was given to the teacher's duties rather than on what the learners would do.

iii. Revision of prior work

This implied that she regards the link-in stage as the lesson stage where the work done during the previous lessons ought to be reviewed. In all her lesson plans, Tiny wrote a phrase denoting the review of a prior topic under teacher's activities near the link-in stage,for example, "revision on verbs in the present tense"; and "revision on regular verbs". In some cases, there was a corresponding learners' activity: "Learners revise regular verbs with teacher".

D. Lesson development

i. <u>The development activities served as the assessment activities</u>

The lesson development stage comprised teachers, learners and assessment activities. This stage covers the teacher's activities that mostly began with the phrase "teacher asks learners to…" Learners' activities followed and they were based on what the teacher asked the learners to do. Therefore, the learners' activities were in response to what the teacher requested.

Table 4–17 Segments of teacher's activities and learners' activities from a lesson plan (Appendix CB)

Teacher's activities	Learners' activities
• Teacher asks learners to use verbs to construct sentences in simple present tense. • Teacher asks learners to construct sentences correctly.	• Learners use verbs to construct sentences in simple present tense. • Learners construct sentences correctly.

In essence, these activities reflected assessment – not activities – that learners were to engage in to grasp the concepts. It is as if learners already knew how to make the sentences in simple present tense, because the teacher's activity is to ask them to make sentences and their activity is to make the sentences.

ii. <u>Teaching methods and materials</u>

She listed the teaching methods and materials in her lesson plan. For instance, discussion, question-and-answer and explanation were her teaching methods while the learning materials were word card, chart and pupil's book. This method shows how Tiny intended to deliver her lesson. However, the teacher and learners' activities were seemingly dominated verbal exchanges between the teacher and the one learner overall.

E. Inconsistencies on lesson conclusions

There were inconsistencies in lesson plan conclusions: one deviated from its heading; another one denoted an assessment activity and the other served as the summary of the lesson. The three segments of conclusions from her lesson plan differ as shown on the Tables (4.17, 4.18 and 4.19) below.

i. <u>Conclusion content deviating from its heading</u>

The heading for this conclusion differed from the contents, although it is linked to the lesson objectives. There was a heading about classifying living things into plants and

animals. This conclusion's content comprised the notes on classification of animals into warm- and cold-blooded animals. The content had nothing to do with plants.

Table 4–18 Segment of lesson plan conclusion on classification of living things

Classification of living things as animals and plants	
Warm-blooded animals:	Cold-blooded animals:
Mammals – cat, cow, man	Reptiles – crocodile, lizard
Birds – eagle, dove	Amphibians – frog, tadpoles
Fish – whale, shark	

However, this content was marginally related to the lesson objectives: "by the end of the day learners should be able to/have begun to classify living things as animals and plants by naming cold- and warm-blooded animals correctly. The conclusion addressed the classification of animals into warm- and cold-blooded animals. Living things were not classified into plants and animals.

ii. Conclusion denoting assessment activity

Tiny's conclusion also signified an assessment activity. Below is an example of the conclusion on construction of simple sentences. It indicated that the verbs (wash and bake) were to be used by learners to construct and write sentences.

Table 4–19 Segment of lesson conclusion on constructing simple sentences

Segment of lesson conclusion on constructing simple sentences
Constructing simple sentences
Teacher gives learners two regular verbs and asks them to construct sentences and write them. -wash -bake

This conclusion served as the assessment of learners' ability to make sentences and to write the sentences.

iii. Conclusion serving as summary of the lesson

Table 4–20Segments of lesson conclusions from different lesson plans

Segments of lesson conclusions from different lesson plans
Simple sentences in present tense
(I, you, we, they) I close the door. You walk to school. We dance every day. They cook food.

The last segment was a summary of the lesson on construction of sentences in simple present tense. It consisted of some personal pronouns. It also entails the sentences in simple present tense whereby verbs are underlined. This was aligned with the heading under the conclusion stage and with the lesson objective, although the activities seemed to be assessment activities, as illustrated above (cf. Table 4.20). The variations of the conclusion phases may denote that Tiny is grappling with this part of the lesson.

4.3.3 Classroom instruction and assessment

4.3.3.1 Lesson introduction

A. Asking about previous work

Her actual lesson introductions align with the ones in her lesson plans. She usually began the lessons by asking questions based on what was previously done as illustrated in the following segment of her lesson:

Teacher: What is a verb?

Learners (in chorus): A verb is a word that shows action.

Teacher: Mention the verbs that we discussed yesterday.

Learners (individuals): love, kick, stand, shake…

Teacher: “Stand” is a verb but not the one discussed.

She wanted them to mention the verbs that were dealt with during the previous English Window (EW) lesson in this case. During the introduction of another lesson, she did the same but this time, learners were lost. They provided answers based on what was done during other windows’ lessons. She probed them and emphasised that their responses should be on the previous EW lesson. She influenced learners to provide

answers based on a particular EW lesson. This provides evidence of inadequacy pertaining to integration, as lessons were not integrated.

4.3.3.2 Lesson development

A. Writing certain answers on the chalkboard

Tiny had her own style of accepting learners' responses. She wrote only the answers she concurred with on the chalkboard. In cases where learners' responses were correct but not what the teacher anticipated, such responses were accepted (written on the chalkboard) but the written responses were not used for further activities. For example, after they had mentioned the verbs they discussed in the previous lesson (*cf*. lesson segment about verbs), the teacher gave them other regular verbs to use in constructing sentences, "jump, love and kick".

B. Initiating the majority of the activities

She started all the classroom discourses during the lessons. She either asked questions as part of her activities whereby learners participated by answering or gave instructions to the learners. For instance, the lesson on verbs:

> Teacher: Stand up Pule, come to me. (Pauses on his way to teacher) Open the door! (Pule opened the door) What do you do Pule?
>
> Pule: I am open the door.
>
> Teacher: I am … He said "I am open the door" Do not use "am", use "I" only. I … (leading Pule)
>
> Pule: I open the door
>
> Teacher: A-g-a-i-n!
>
> Teacher & learners: I open the door (repeating several times in chorus led by teacher).
>
> Teacher: Close the door Pule (pause while watching Pule). What are you doing?
>
> Pule: I close the door

As revealed on the above segments, for learners to talk, she asked a question and they had to repeat it. Once again, she told them what to do. She called upon Pule and told him what to do (to stand up, to go to the teacher, to open the door, to respond to the question). Her target verbs were "open" and "close" but so many verbs came up while she was telling him what to do such as "stand" "do" but they were not considered.

Tiny initiated almost all the lesson activities. Much as she tried to engage Pule actively, the rest of the learners were passive.

C. Ambiguity on marking symbols

Tiny used slanting and horizontal lines together with triangles while marking learners' work and she encountered difficulty when interpreting her feedback. She explained that they were told to do so and to record learners' performances using triangle symbols at the workshop:

> We were told to use triangles but ... I can say, it was not clear as to how we use them because when we came back, we had different explanations ... everybody has her explanation ...

She sounded unsure about the explanations for using the symbols and therefore was unclear about this. However, she indicated that they had attended a workshop that was aimed at rectifying some misconceptions about marking learners' work:

> … they wanted to correct the mistake they made during the initial workshop, they said there was confusion in some aspects, so the aim was to correct those mistakes … It was about marking/the way of marking. They said we give a dash when a child is below average that is, that child does not have anything …

It is therefore important to note at this stage that the Ministry had arranged another workshop to address the issue of the varied interpretations of teachers who attended the first workshop. However, Tiny was still unclear about the use of symbols even after attending this workshop which was meant to provide clarity on marking symbols. Therefore, she even demonstrated a concern that the new way of marking did not provide feedback to the learners since the teachers could not interpret the symbols either.

> …this way we do [mark]…does not give feedback to the learner even to the teacher. They [ways of marking] don't say anything because we are unable to explain what they mean to the child even we teachers do not understand them.

Therefore, the ambiguity of the marking symbols created difficulties in feedback interpretation. This led to the concern that her assessment could be ineffective as she indicated that it provided no feedback to the teacher and the learners. This may have attributed to her lack of understanding of the marking symbols.

4.3.4 Perspectives, beliefs and attitudes

4.3.4.1 Contradiction on practice and utterances on lesson planning

A. Tools for lesson planning

According to Tiny, lesson planning is directed by the prepared scheme of work not the syllabus although she obtains orders from the syllabus for directions:

> *... when we are making a lesson plan we base ourselves on the scheme, so the syllabus is only to guide us on what is expected to be taught.*

The segments of the syllabus where she took the learning outcomes addressed in one of her lessons (used as an example) are combined below.

Table 4–21Syllabus segments showing learning outcomes, concepts, skills, values and attitudes per window

Syllabus segments showing learning outcomes, concepts, skills, values and attitudes per window		
Window	**Learning outcomes: at the end of this unit, learners should be able to:**	**Concepts, skills, values and attitudes**
EW	3. use words that refer to actions that took place in the past	**Concepts:** Simple past tense, regular verbs (-d/ -ed) **Skills:** Listening, speaking, reading, writing
SW	5. *bolela lintho tseo ba anang ka tsona* (mention their totems)	***'Moko-taba*** **(Concepts)** *Liboko* (clans), *lintho tse anoang* (totems) ***Tsebo-ketso*** **(Skills):** *Ho mamela* (listening), *ho bua* (speaking), *ho thella* (reciting)
NM	2. know the value of numbers, compare and associate them with names and symbols. Count numbers from 1–1000 Write numbers from 1–1000 Compare numbers using symbols =, > and <	**Concepts:** Number manipulation, comparison of numbers, symbols =, <, > **Skills:** Decision, counting of numbers, writing of numbers, comparing numbers **Values and attitudes:** Appreciation
IP	6. identify leaders in different social institutions	**Concepts:** Leadership structure: Family, school, church and community **Skills:** Discussion, cooperation, self-awareness, representing structure **Values and attitudes:** Appreciation, respect, tolerance

It should be noted that only the learning outcomes addressed in one of the lessons observed were selected as highlighted above.

B. Lesson planning requires more than the use of scheme and syllabus

Even though she claimed to use the scheme of work for making lesson plans and the syllabus for directive purposes only, she explained that lesson planning requires certain things:

> It's the selection of concepts, their LOs, then … we use both the syllabus and the scheme.

This depicts her uncertainty about the purpose/use of tools for scheming and lesson planning. The selection of the LOs and their concepts to be addressed per week was done during scheming.

4.3.4.2 New Integrated Curriculum (NIC) and pedagogy in practice

A. Integration is challenging

Scheming entails integration, which Tiny regarded as a very challenging process. However, she said that she is able to overcome this challenge by consulting other teachers to discuss areas where she encountered problems.

> …it is challenging. If I have a problem, I may go to other teachers, then we discuss it…

B. Contradictory views on NIC

i. <u>NIC simplifies work</u>

Tiny had conflicting perceptions on integration in the current curriculum. She believed that it simplified her work although she related it to repetition. She indicated that if the concepts of the three windows integrate, then,

> it makes it easier for you to teach because it's like repetition, you teach it in Numeracy, then you move forward to English and Sesotho.

She regarded integration as repetition. This implies that if a concept appears in the three windows, she will actually teach it three times.

ii. <u>NIC necessitates a lot of paperwork</u>

Although she liked some qualities of the NIC, she loathed the writing that she ought to do. She stated that the NIC involves:

> a lot of writing ... when preparing the lesson plan, making the records ... Hey! It's too much work ... paperwork is too much ... there is a lot of work, that one I hate.

Her practices corresponded with this view as I noted that some observation appointments had to be postponed because she had not completed her lesson plan.

iii. NIC is advantageous yet changing pedagogy was difficult

Tiny was aware of the opportunities of the new curriculum for the learners and the teacher:

> What I like is that it [NIC] does not make learners who are stereotyped … that is a learner does not focus on one thing, it opens the channels … you teach here and while teaching here, you are dealing with one thing there … that is, it gives a learner life in general – it is wide.

She indicated that the NIC provides opportunities for enabling open-minded learners. She also alluded to its impact on her instruction by implying that it involves integration. However, given the manner in which she delivers her lessons, as discussed in the previous sections, her challenge would be to adjust her pedagogy to be in line with her perspectives.

C. Lack of resources impact on methodology

Tiny remarked that a lack of resources hinders her intended way of teaching:

> …the concepts found in it [NIC syllabus] are the ones that give us problems when we have to transfer to children because some material should have been provided...Now you will see that you teach some concepts as if you are reading a Bible to them [learners].

From the above, she admitted that some of her practices promoted the stereotype that she seemed to detest. That is, she ended up teaching as though she was“reading a Bible”to learners because of insufficient materials. However, in some instances during observations, where she used the available materials, she used them in a teacher-centred way. She used a “word card” written with a pen that was only seen by learners sitting close to her.

As shown already, the use of the *“door”* was also done in a teacher-centred manner (Pule scenario above). This reveals her lack of understanding of the expected pedagogy for the NIC and provides evidence to support why she used the teacher-centred methods.

In addition, she indicated that they encountered problems when transferring the content/concepts to learners. This made it explicit that Tiny plays a traditional role in

the teaching-learning process, because she focuses on transferring concepts to learners as was observed during her lessons, as opposed to engaging learners in learner-centred, participatory and activity-oriented learning (MoET, 2009).

4.3.5 Contextual setting challenges

4.3.5.1 Controversy regarding planning together

One of the challenges she faced was that her colleagues did not support doing lesson plans together because it was inconvenient.

> We are supposed to plan together, but we stopped it because they [colleagues] said our learners' pace is not the same. So if we decide to plan together, maybe today we are planning on teaching "time", then my learners are very slow, so tomorrow or maybe next week, I may be still sticking on that but others need to move forward so it [non-cooperation] makes convenience.

Moreover, she revealed that planning together had stopped, because it became unproductive as it was characterised by quarrels among the teachers. They stopped this practice despite its benefits. She stressed that:

> …it was helpful…we discussed the lesson together, so you only go to the class fully equipped…I saw that we always quarrelled…because others don't want to listen or be corrected…

4.3.5.2 Lack of cooperation

Tiny regarded it as being more convenient when they planned lessons individually. On the contrary, her prior experience reflected some advantages of planning together:

> It was true but when I was in grade 3, still the learners' pace was not the same but when we meet together we talked about the ... how did it [lesson] go, that's when we will talk about the ... "no, my learners are still behind, yours are moving forward, so what can we do, how do you help me".

The difference of opinion, regarding planning above (cf. sub-section A), point to the lack of teamwork among the teachers who teach the same grade.

4.3.5.3 Taking advantage of planning together to help those falling behind

From Tiny's contradictory experiences, she developed concerns regarding the cooperation among the teachers at her school. It seemed that during the previous years (2014–2016), grade 3 and 4 learners were learning at different paces. However, her colleagues during these years appeared to perceive this differently. Those she

was working with in 2014 and 2015 took advantage of planning together to help others whose learners were lagging behind.

4.3.5.4 Considering the varied learners' pace as a barrier

On the contrary, her 2016 colleagues seem to regard the varied pace of learning as an obstacle towards planning together. Owing to these beliefs/attitudes, they opted to plan individually. Tiny's experiences indicate that the teachers' perspectives on learning are different.

Even though she differed with her colleagues in terms of lesson planning, they seemed to have a common understanding that the scheme of work is expected to be common for teachers within a grade:

> We only work together when we scheme but as for planning [lesson planning], now, each class handles its [own].

4.3.5.5 Principal's inability to assist teachers

Apart from the above-mentioned challenge, Tiny complained that her principal could not assist teachers in the implementation of the new curriculum. According to her, this was a result of the principal's limited knowledge of the NIC.

> She [principal] doesn't know it…she comes to us for some help, so I cannot say we really get help from her…maybe she can pick one of us to explain some of the things…I can say she has little knowledge about the new curriculum. I suggest that even the principals should be taken to the workshops so that they may be able to help their teachers.

Her suggestion on a principals' workshop indicated that only teachers were trained in implementing the new curriculum. The question is, how do the principals perform their role as instructional leaders in such a case?

4.3.6 Summary of preliminary findings from Tiny's story

For Tiny, scheming entailed selecting learning outcomes (LOs) from the syllabus and arranging them chronologically. It also involved clustering the concepts of each window and distributing them into weeks. However, in her scheme she used LOs and concepts interchangeably. She equated "LO" to lesson objective.

Tiny's lesson plans were characterised by inconsistencies across the windows. Some sections were missing in other plans. Each plan had two categories of objectives and

seemed to be intended to cater for two levels of learners (slow and fast). The objectives were vague because they did not meet the basic requirements of a lesson objective.

Her lessons commenced with a review of the previous lesson. The planned activities and methods were teacher-centred because they revealed that the teacher was to initiate activities while learners just had to respond. These activities also served as the assessment activities. Lesson conclusions were inconsistent within her lesson plans. They were used as an assessment or a summary and even deviated from lesson content.

The actual lesson presentation proceeded as planned. The lesson began by reviewing prior work. The teacher initiates all the activities and learners respond. The teacher's predetermined answers were the only responses accepted by the teacher and were written on the board. Tiny showed that she was still unclear about the meaning of the marking symbols she was using.

She had several challenges. She was uncertain about the procedure for scheming and she found integration challenging. She even said the NIC meant an increased workload. However, she held a contradictory view that NIC simplifies her work but a lack of resources hinders her intended way of teaching.

She indicated that a lack of cooperation among her colleagues hinders them from planning together, which she considered beneficial. Moreover, she regarded her principal as not being informed about the NIC and therefore unable to help teachers.

4.4 Themba's story

4.4.1 Background

In 2015 when I met Themba, he was teaching grade 4 and he proceeded to grade 5 in 2016. Therefore, 2016 was his second year dealing with the New Integrated Curriculum (NIC). Although the new curriculum was phased in from 2013, Themba taught it for the first time in 2015 without attending any kind of training regarding the implementation of the NIC. Thus, that year he relied on his own resourcefulness and the support from his colleagues teaching grade 4 with him.

His case was a test of Lachiever and Tardif's (2002) argument that teacher empowerment through special training workshops should be put in place to guarantee the successful use of new educational programmes. He had only attended a grade 6 teachers' workshop for teaching the integrated curriculum in 2016 even though he was to teach grade 5 that year. In grade 5, he and his four colleagues employed what is usually termed "subject teaching" to teach the two grade 5 streams. This is a situation where each teacher specialises in teaching a specific learning area, for instance, Themba taught the numerical and mathematical learning area.

Again, the story explains how he dealt with the transition from grade 4 to grade 5. In grade 4, he taught the Integrated Part of the New Curriculum (IP) that was envisaged to be reinforced with the SW, EW and NW but in grade 5, he only taught the numerical and mathematical learning area (NM).

4.4.2 Planning

4.4.2.1 Scheme of work (arrangement of LOs and concepts)

A. Quarterly scheming

Themba and his colleagues partake in the scheming process every quarter. While teaching grade 4 (two teachers per stream), they had similar scheme of work that comprised all the windows. Scheming is a collective exercise.

> We scheme on a quarterly basis … we converged together to look into what is supposed to be schemed

However, in grade 5, Themba was with his other three colleagues during the scheming process while the 4thcolleague schemed on her own.

> … it was not easy to scheme as a complete team because one of the colleagues had already schemed for LLE [Linguistic and Literary English] on her own.

He seemed to have a concern towards scheming together in grade 5, which was not the case in grade 4. This lack of cooperation seemed to make scheming difficult for them.

B. Doubt own potential

Having not attended training, Themba doubted his capabilities when he was supposed to explain the scheming process. He indicated that collaboration was fundamental for scheming even though there were some challenges.

> … for the fact that I haven't been to the workshop pertaining to this, I cannot really say these are the steps which are supposed to be followed … we were struggling because … most of us were new on this…

As a result, only the data presented for the grade 4 scheme was perceived as the collective effort of the grade 4 teachers. In addition to that, Themba and his other colleagues' scheme books were found to have the same information as they did during the 2015 data collection. On the contrary, the grade 5 work seemed to be done by individuals.

C. Comparison of the scheme of work

i. Scheming for all windows versus one learning area

Themba's scheme of work for grade 4 and 5 differed, although they were similar in some way. The former covered the Integrated Part and all the windows done in grade 4.

Table 4–22Segments from Themba's grade 4 scheme of work (Unit 3 week 5)

Segment from Themba's grade 4 scheme of work (Unit 3 week 5)				
5 (02.11.15)	**Integrated**	**Sesotho Window**	**English Window**	**Numeracy Window**
	32. Classifying livestock (uses) 14. Reuse & recycle materials 15. Craft making 26. Manmade disasters 25. Dramatise disasters 34. Football	4. *Ho ts'oants'isa baphetoa* 7. *Moqoqo oa tsome*	3. Use of conjunctions 12. Composition from pictures 10. Read for information	11. Factors & multiples up to 100 10. Parts of a circle

The grade 5 scheme, on the other hand, was specific and concerned with only one learning area, numerical and mathematical (NM) in a much detailed manner, but leaving out the other learning areas dealt with in grade 5. It was detailed in a sense that it outlined the number of periods, learning outcomes, methods and resources to be used (*cf.* Table 4.24 below). On the contrary, the grade 4 scheme only showed the concepts for the Integrated Part and the windows.

Table 4–23 A segment of Themba's 2016 grade 5 scheme of work (Unit 1 week 4)

Week	Concepts for integrated curr.	No. of periods	LOs to be covered	Methods	Resources
Week 4 15/02	Addition Place value	6	LO:4 Addition of 5 digit numbers	Critical thinking Manipulation Communication	Mathematics kit, abacus, word card, electoral list, teacher's guide

ii. Sequential ordering of LOs

Asked about how he carried out the scheming process he replied:

> … what we did was to look at every LO that is in that quarter, then we decided which ones would come first and which ones would… go across the spectrum… like I am teaching Integrated, how is it going to help… prepare learners in other learning areas. …if for example, there is something that has to deal with animals, taking care of the animals, how to feed them, surely there is something that is similar in Sesotho Literacy, that is similar if not the same. So Integrated, I was told, should be in such a way that when you scheme for Integrated you scheme in such a way that it would be a prerequisite for this other subject areas…

According to this segment, the Integrated Part was used as the base of their entire scheme of work for grade 4 as illustrated in Table 4.23. He supported this by saying:

> First… we had to determine which …outcomes are related within and across the boards. So … Integrated, the way I was taught it's more like a driving force for this other learning areas. In other words, it entails what is needed in other learning areas, so they taught me that we base ourselves on Integrated on how those things relate.

It seems that Themba's scheme of work originated from the Integrated Part. That is, the scheming for the windows, which he referred to as "other learning areas", was done depending on what was decided upon in the Integrated Part. This was in line with the curriculum developers' view of the Integrated Part where the windows are considered to complement and build on the Integrated Part of the syllabus (MoET, 2014).

It was not surprising to find the phrases such as "I was told… they taught me that…" from his interview segments because he indicated from the beginning that he only relied on what teachers who once attended the teacher training workshop said. Therefore, he was not sure if what they were telling him was what was expected of

him. He explicitly said the following while he was asked about the scheming procedure:

> ….and really this is why I am saying, to the fact that I haven't been to the workshop pertaining to this, I cannot really say these are the steps which are supposed to be followed.

The workshops he referred to were those that were conducted at the beginning of each year for the teachers who intended to teach a particular grade that specific year. For instance, the grade 4, 5 and 6 teachers attended such training in 2014, 2015 and 2016 respectively. Therefore, despite his late arrival at his school in 2015, the 2015 training was offered to grade 5 teachers since the grade 4 teachers' workshop was held the previous year.

However, as indicated earlier, he attended the grade 6 teachers' workshop in January 2016, yet he was going to teach grade 5. This kind of training is important to enable the implementation of the learner-centred approaches during curricula reforms (Zhu, 2010).

iii. Headings and contents

The Grade 4 scheme entailed these headings: Integrated, Sesotho window, English window and Numeracy window. The grade 5 scheme headings were "week", "concepts for integrated curr.", "LOs to be covered", "no. of periods", "methods" and "resources". Themba's scheme of work comprised untitled columns or those with vague headings.

As shown in Table 4.23 and 4.24 above, there were cases where some columns had no headings, unclear or broad headings. However, the use of different data gathering techniques allowed for better understanding in such instances. For example, Themba was observed during the fifth week whereby he taught classification of livestock.

He indicated that the first column denoted the week number within a particular unit on his scheme of work. Therefore, this observation and interview data led to the conclusion that the first column of table 4.23, which had no heading, comprised week number and the date on which each week began. That is, the number "5" in this column was the week number while the date denoted the first day of each week.

iv. Breadth

Unlike on the grade 4 scheme (Table4.23) where column one had no heading, the first column of the grade 5 scheme (Table 4.24) was titled “week”. However, its contents were the same as the grade 4 scheme. Even though all the grade 5 scheme columns had headings, the heading of the second column, “concepts for the integrated curr” contradicted the observation.

Themba only dealt with the numerical and mathematical learning area but the column heading refers to integrated curriculum rather than a learning area within the syllabus (NM). This heading was too broad because the integrated curriculum is extensive and it is even divided into many syllabi that have learning outcomes with the specific concepts per learning area. However, the contents of this column were place value and addition,which corresponded with LO4 concepts of the numerical and mathematical learning area of the grade 5 syllabus (Table 4.25 below).

Table 4–24 Segment of NM learning outcome 4 and its concepts as per grade 5 syllabus

Segment of NM learning outcome 4 and its concepts as per grade 5 syllabus	
Learning outcome: at the end of grade 5, learners should be able to:	Concepts
4. add 5-digit numbers with and without carrying	Place value, addition

The heading ‘curr.’ (curriculum) was broad because it was evident that he schemed only for the learning area he dealt with in grade 5, which was the numerical and mathematical learning area (Table 4.24).

v. Difficulty in distinguishing between learning outcomes and concepts

The numbers written in from column 2 to 5 and column 4 (in the respective tables above) were the LOs’ numberings as per the syllabus (*cf.* Table 4.23, Table 4.24).

Table 4–25 Segments of IP LOs and their concepts as per grade 4 syllabus– Unit 4

Segments of IP learning outcomes and their concepts as per grade 4 syllabus – Unit 4	
Learning outcomes: At the end of this unit, learners should be able to	**Concepts**
15. Use grass and trees to make crafts.	*Craft making
32. Classify livestock according to their uses.	*Uses of livestock

For example, he wrote “32. Classifying livestock (uses)” under the heading “Integrated” (Table 4.23). The number matched with the learning outcome numbering and the

phrase that followed seemed to be derived from the statement LO 32 (Table 2.26). This was a case with “4”under the heading “LOs to be covered” on grade 5 scheme (table 2.24). He wrote “LO: 4 Addition of 5 digit numbers”. Even though he did not write LO4 as it is written in the syllabus, what he wrote seemed to be taken from the LO4 statement: “… add 5-digit numbers with and without carrying” (Table 4.24 versus 4.25).

His scheme of work also comprised phases that were either the concepts or segments from LOs, related to the LOs and concepts from week 1–8 but nothing was written for week 9 and 10. For instance, under the heading “integrated” (table 4.25), Themba wrote a number, “32”, followed by the words “classifying livestock (uses)”.

These matched with learning outcome 32 in the syllabus, which read as “… classify livestock according to their uses”. The words after the number 32 seemed to be taken from the learning outcome statement’s column not from the concepts column of the syllabus, as was the case with LO15. The concept for LO32 in the syllabus was “uses of livestock”.

The SW column content was similar to the content under the concepts column on the syllabus (*cf*. table 4.23 and 4.26 above). For example, in table 4.23, “*baphetoa* (characters)” and “*moqoqo oa tsome* (impromptu speech)” appear as the concepts for LO4 (… *bapala ts’oants’iso ka nepo*) and LO7 (…*bua taba eo ba sa itokisetsang eona ka boits’epo*) respectively.

Table 4–26 Segment of SW LOs and their concepts as per Grade4 syllabus - Unit 4

Segment of SW LOs and their concepts as per grade4 syllabus – Unit 4	
Learning outcomes: At the end of this unit, learners should be able to	**Concepts**
4. *Bapala ts’oants’iso ka nepo* (dramatise accordingly).	**Ho ts’oants’isa* (dramatising) **Baphetoa* (characters)
7. *Bua taba eo ba sa itokisetsang eona ka boits’epo* (confidently talk about what they did not prepare for).	**Moqoqo oa tsome* (impromptu speech)

This means he presented the SW learning outcomes number and concepts in line with the syllabus.

In short, he completed his grade 4 scheme of work by writing learning outcomes’ numberings and the concepts from other learning outcomes. He also used some

phrases from the LO statements from the syllabus. The column on the grade 5 scheme titled LOs to be covered was completed with phrases made from the LO statements. This was the case with the grade 4 scheme instances where he did not write the concepts.

vi. Targeted LOs per week

The content of his scheme reveals that he aimed to achieve nine to thirteen LOs per week across the windows as opposed to one LO in NM. Twelve learning outcomes was the target for Unit 4 during the fifth week in 2015. That is, five LOs from the IP column (LO14, 15, 25, 26 and 32), two from the SW column (LO4 and 7), three from the EW column (LO3, 10 and 12) and two from the NW column (LO10 and 11).

In grade 5, Themba schemed for the NM learning area in isolation from others as revealed by this scheme, observation and interview. This seemed to be promoted by the provided scheme layouts. The grade 4 scheme layout accommodates the Integrated Part, the SW, EW and NW while the grade 5 scheme allowed for one learning area at a time (*cf.* Tables 4.23 and 4.24).

D. Mix-up of terms

i. Learning outcomes and concepts

He wrote sets, intersection and Venn diagram as concepts for week 2 (row 2, column 2) in Table 4.24. These three were written in exactly the same way under column 3. The only difference was that he included LLE24/17 under column 3, which was not written in column 2. When asked about LLE24/17, he indicated that LO17 and LO24 are two learning outcomes in the linguistic and literary English (LLE) learning area that integrate with this NM:

> LO 17: … read and use words with silent letters properly
>
> LO 24: … describe people according to their nationality and language

He stated that this integration was realised during the teaching-learning process and therefore this deserved attention, which was why he noted it on his scheme. However, the repetition of the contents of this column was not accounted for. This showed that he could not distinguish between “learning outcomes” and “concepts”. These are very important aspects at the curriculum implementation phase because they are the directives for the learning process (NCDC, 2013).

ii. Skills, methods and resources

Themba provided no clear distinction between skills, methods and resources. As shown in Table 4.24, he labelled the skills that should be developed by learners as the methodsto be used in the process. The contents, in the "methods" and "resources" columns deviated from their headings of these columns (grade 5 scheme). Critical thinking, manipulation and communication were listed as teaching methods (grade 5 scheme and lesson plan). However, they are the skills that learners should be equipped with in the process of achieving LO4 (NM grade 5 syllabus). In the same way, "ordering, manipulation and communication" which were written as the methods to be used to address LO3 (Table 4.28 below) appeared to be the skills in the syllabus.

Some of the things listed under the resources column (Table 4.24) were ambiguous: Mathematics kit, abacus, word card, electoral list and teachers' guide. The mathematics kit comprises many objects and it was not clear what would be used from the mathematics kit to achieve LO3. Apart from that, the use of a teachers' guide with learners is questionable.

E. Arrangement of LOs

The grade 4 scheme of work showed LOs' numbers followed by LOs' phrases that were jumbled with concepts. These were arranged in no particular order as shown in table 4.4.2c above. For instance, LO 32, 14, 15, 26, 25 and 34 were in the second column. He dealt with one LO per week in grade 5 and he arranged the LOs in a spiral way. That is, LOs' concepts build on one another. Since LO4 was the only learning outcome planned for that week (Table 4.24), there was no learning outcome integration within and across for this week. However, the concepts of the preceding LO (3) written for week 3 (cf. Table 4.27 below) led to those of week 4 (Table 4.24).

Table 4–27 Segment of Themba's 2016 scheme of work (grade 5 unit 1 week 3)

Segment of Themba's 2016 scheme of work (grade 5 unit 1 week 3)					
Week	**Concepts for integrated curr**	**LOs to be covered**	**No. of periods**	**Methods**	**Resources**
3	*Ordering *Place value *Expanded notation	LO3: Number patterns	6	Ordering Manipulation Communication	Mathematics kit, word cards, electoral list

For instance, the concepts for week 3 (ordering, place value, expanded notation) seemed to form the basis of week 4 (place value, addition). Consequently, Themba

arranged the LOs in a spiral order within this learning area and there seemed to be no integration. The arrangement of LOs is therefore linear within NM.

A further discussion on delusion of the terms, (such as “methods”, “resources” and teaching-learning materials) is illustrated in relation to lesson planning below.

4.4.2.2 Lesson planning

A. Nature of lesson objectives

i. Two categories of objectives per lesson

Table 4.29 below provides pairs of lesson objectives set for different lessons.

Table 4–28Segment of lesson objectives from Themba’s lesson plan

Segment of lesson objectives from Themba’s lesson plan		
Grade	**Objectives: By the end of the day, learners should**	
4	**1.have begun to** *learn about uses of livestock **ithuta ka sebopeho sa thothokiso*	2.**Be able to** -class livestock according to their uses *-qapa thothokiso ho latela melaoana ea eona*
5	**Objectives: At the end of the lesson, learners should**	
	1. have begun to: lay down 5 digit numbers using place value preparing for addition.	**2. be able to:** arrange logically and add 5 digit numbers without carrying.

His lesson plans comprised two objectives for both grades (Table 4.29). Grade 4 lesson plan objectives addressed two targets derived from the Integrated Part and from the Sesotho Window (LO32 and LO10 respectively). For instance, in objective 1, learners had to learn about uses of livestock and about poems. Moreover, both objectives for grade 5 were from addition although they differed in terms of the levels of learners they addressed.

The first one was at a very low level and the second one at a slightly higher level. Each of the second objectives for both grades was pitched. That is, they catered for the learners who could go beyond what other learners could achieve under objective 1. For example, writing 5-digit numbers in a way that would help them to further arrange and add the numbers without carrying. The pairs of objectives were rooted in one concept.

B. Lesson introduction

Asking questions or providing lesson overview

His lesson was introduced by either asking a question or indicating what will happen during the lesson. The following segments were taken from the lessons plans for the observed lessons:

> Lesson 1 (grade 4): Why do you keep animals at your homes?
> Lesson 2 (grade 5):Today we are coming to use our knowledge of place value to manipulate addition of 5 digit numbers or today we are going to add 5 digit numbers.
> Lesson 3 (grade 5): Today we are coming to add 5-digit numbers

He planned to introduce lesson 1 by asking learners a question and showed learners activities that, “They indicate why”. That is, they indicate why they keep animals at their homes. However, in lesson 2 and 3, he indicated what would be done during the lesson. In short, he treated the introduction stage as the platform for asking questions or for informing learners about what they would do in the lesson for that particular day.

C. Lesson development

It was indicated earlier that the grade 4 and 5 planning formats varied but contained certain common elements. The grade 4 lesson development section entailed teachers’ activities, learners’ activities, assessment criteria, assessment methods and teaching materials. The only difference was that teaching materials were written as part of the development section on the grade 4 lesson plan while it appears before the development section on the grade 5 lesson plan.

The discussion in the following subsection incorporates the use of teaching methods and materials listed in the lesson plan even where they do not appear on the development section.

i. Teacher’s and learners’ activities

Table 4.30 shows the development stage’s activities on Themba’s lesson plan.

Table 4–29Segment from Themba's lesson plan development sections

Segment from Themba's lesson plan development sections		
Lesson	**Teacher's activities**	**Learners' activities**
1 (Grade 4)	*What is the importance of the animals we keep at our homes? *On page 61 of your hands-on which animals are pictured? *Explain the importance of each animal pictured	They respond to questions correctly
2 (Grade 5)	*Arrange the following 2 sets of numbers such that one is over another with digits of the same value vertically corresponding: 23425 and 12332. *When do you place numbers like you have done?	*23425 12332 *We do when we add all numbers in one vertical column one after the other.
3 (Grade 5)	*Which is the place value of such a digit? *Again arrange following sets of numbers and then show to your teacher	* Its place value is Units * a) 23425 and b) 61202 c) 12332 d) 37421

Themba designed the teacher and learners' activities as instructions, questions and expected responses. For instance, according to the first bullet under teacher's activities, the teacher should arrange the numbers while he listed numbers as learners' activities (cf. Table 4.30). Another teacher's activity was a question: "When do you place numbers like you have done?" He indicated his expected response under the learners' activities, "We do when we add all numbers in one vertical column one after the other". According to these activities, the teacher intended to implement a highly structured lesson with questions and/or statements together with corresponding predetermined learner responses.

ii. Listed materials and the activities

It is evident from the above section that lesson 2 and 3 teacher and learners' activities were not related to the use of materials: "Teacher's guide, electoral list real and fictitious". However, each lesson plan comprised a list of teaching-learning materials, methods and activities. That is, for both of these lesson plans, materials were not incorporated in the activities section. These activities excluded the use of the listed materials.

As for lesson 1, he seemed to be intending to use "*Pictures of animals*" as indicated under the teaching materials section. This was supported by the teacher's activity 2, "on page 61 of your hands-on (learners' textbook) which animals are pictured there?"

(cf. Appendix CC1). The "*Pictures of animals*" was incorporated in teacher's activity 2. This seemed to be found on page 61 of *Hands-on*, the learners' book. The impression was that he intended to refer learners to pictures of animals from their textbooks.

iii. Assessment criteria and methods

The following is the segment of the assessment criteria from Themba's lesson plans:

> **Lesson 1:** To classify livestock appropriately
>
> **Lesson 2:** Arrange numbers (5 digits) logically vertical; – mention the reasons (possible) for arranging numbers in this phenomenon etc.
>
> **Lesson 3:** Determine which digit value is the first in a number system; determine the place value of other digits in a number according to their values.

Lesson plan 1 comprised only one assessment criterion. He wrote the criterion for almost every activity in lesson plans 2 and 3 that seemed to be aligned with each activity. The segment below is a list of what he considered the assessment methods. Some of these appeared in all of his lesson plans while others were mentioned either in two lesson plans or in only one lesson plan.

> Methods: Asking questions, directing through discussion
>
> Discovery, questioning, written, oral

D. Lesson conclusion and evaluation

Another difference was that the grade 4 lesson plan had nothing for conclusion and evaluation sections but he showed this section on the grade 5 lesson plan. However, the contents of his conclusion and evaluation sections served as the lesson evaluation purpose. For instance, although the following statement appears as a conclusion, it showed what learners managed to achieve.

> They have arranged 5-digit numbers vertically using place value knowledge and skills they acquired... A handful of learners still need to be carried through place value and expanded notation.

He provided the way forward under evaluation. Therefore, his lesson conclusion consisted of the evaluation elements.

In short, Themba's planning was derived from the syllabus in that the LOs and/or concepts were taken from the syllabus and actually put in the scheme and lesson plan. This is despite the fact that most of the LOs are turned into lesson objectives and skills labelled as methods. As a result, his planning has plenty of inconsistency. For

instance, the headings in his scheme of work and lesson plans do not match the contents under such headings. Another example is that the materials listed are barely included in the teaching-learning activities.

4.4.3 Classroom instruction and assessment

The observations were conducted in the classrooms where learners were sitting in groups.

4.4.3.1 Lesson introduction

A. Review of the prior work

Themba began the lessons by reviewing the work done during the prior lesson through questions and answers. For example, during the lesson on “classification of animals”, he asked learners questions about the products of some animals as discussed in the previous lesson. The following lesson segments illustrate the learners’ responses regarding the products of a cow (grade 4):

Learner 1: Cow can give us milk.

Learner 2: Cow can give us meat.

Learner 3: Cow can give us another cow.

The other instance is a lesson where he indicated that he was “preparing for addition”. He began a lesson by going over the template they previously used to show place value. He then drew it on the chalkboard, requested the learners to answer questions based on that table and finally asked them to complete the table. Themba’s lessons were all introduced in a similar fashion by mainly asking questions on what was done in the previous lessons.

4.4.3.2 Lesson development

A. Reliance on the use of the chalkboard

Themba had no prepared materials except the textbooks and relied on the use of the chalkboard to aid instruction and assessment. For example, he allowed several learners to go to the chalkboard to identify place value for different digits and to answer the questions. His tendency to teach with no prepared instructional and assessment materials caused problems in his class. For instance, while trying to help learners realise the applicability of the concept “add”, he saw a bottle near the window. He then asked one learner to read the instructions found on the container. It indicated the word

“dilute” but not the word “add’” (Picture 11). He then got frustrated because he thought the word “add” was written on the bottle.

Picture 4-11 Bottle of a concentrated drink

B. Relating concepts to learners’ daily lives

Themba related the lesson about classification/uses of animals with learners’ life. He had a discussion with the learners during which he linked the uses of donkeys in learners’ villages and districts. Learners then indicated that donkeys are used to carry water from distant sources to their villages. They further indicated that, in other districts, especially those in the highlands, donkeys are used for ploughing, carrying heavy items and to transport people from one area to another. In this instance, Themba’s lesson related concepts to learners’ daily and/or local life experiences.

C. Deductive approach

Themba used the deductive approach during the lessons. He indicated that he prepared learners for addition before the actual addition lesson for a reason:

> So we were simply today putting the numbers in columns depending on their values, that is units, tens, hundreds, thousands and ten thousands, so that when we start adding they don’t miss out on the fact that the units have to be added to the units, tens to the tens … So they don’t jumble them like that. I have discovered that learners tend to jumble numbers and they get it wrong, not because they don’t know how to add but because they don’t know how to follow logic.

Themba gave the impression that he followed the deductive approach during the lessons and this seemed to influence his perspective of the learners. His views of learners with regard to addition of numbers caused him to first plan to place the digits and later on to do real addition. His discovery is that learners have a habit of jumbling

numbers when adding and consequently get incorrect answers because they do not follow rules and formulae.

4.4.4 Perspectives, beliefs and attitudes

4.4.4.1 English speaking

Themba believed that learners needed to be persuaded to use English during the learning process. Even though he is aware that speaking English creates a communication barrier, he is steadfast in his belief that the learners will eventually adapt.

> Some of them do not want to talk, probably because I use English most of the time when I teach them… they will ultimately understand…they will ultimately have to accept that they have to use English whenever I teach them.

4.4.4.2 Teacher's and learners' roles:

A. Reaching all learners

He believed that he should reach all the learners he taught. He indicated that due to a large number of learners in his class reaching all the learners is time consuming. It also affected the breadth of content coverage:

> I have to make sure that at the end of the learning process I actually tried my level best to cater for them [learners]…make sure that you don't fail, not even one learner…we have around seventy or seventy-one learners and…I really have to cater for all of them. It takes my time; I do not cover most of the LOs as broad as I should be…that's where the problem is…

B. Questioning and answering

Based on the lesson planning and observations, Themba seem to perceive his role as asking questions while learners' role is to respond to questions. As indicated on section 4.4.2.1 and 4.4.2.2 he mainly asked questions and even had the predetermined responses. He even wrote questions under the teacher's activities in his lesson plan.

C. Changed role for teachers and learners

In further clarifying his role in the new curriculum, Themba put it this way:

> ...my role would...be lesser teaching and more learner...the learner has to do...a lot of thought, a lot of activities and you as an educator have to play a guiding role...not

> be as in the old curriculum where a teacher would be the one who knows everything and you just dump everything on the learner

Themba's explanation shows that he was aware that the teacher's and the learners' roles ought to change. It also implies that learners should be engaged cognitively and are to perform much of the activities while the teacher does little teaching and acts more as a guider in the process. This, he said, is contrary to what happened during the implementation of the old curriculum where the teacher was considered as the only source of knowledge and did most of the work while the learners just received what was dumped on them.

This is in line with the MoET's expectation of teachers' role in the new curriculum. It is stated that teachers should be facilitators of learning while allowing learners to assume greater responsibility for their own learning (MoET, 2009:6).

D. Laying foundation for learning

In describing his role further, he put it this way:

> My role would be related to what I teach… Integrated Part, which happens to be the epicentre or the grassroots of most if not all learning areas, so I have to play a vital role... I prepare learners in advance to be able to assimilate, that is, to go into the learning process in other learning areas easily by starting first with me... I put them where they should be easily taught in these other learning areas... if I fail on my side, the whole process has failed.

That is, he also believed that his main role, as the Integrated Part (IP) teacher, was to prepare learners for the subsequent learning. Specifically, to make it easy for them to absorb what they would be taught thereafter because he regarded the IP as the foundation for other learning areas.

Themba's view that the Integrated Part forms the foundation for learning the other learning areas is validated by the NCDC (2014: 5) when stating that the Integrated Part forms a foundation for three other learning areas done from grade five onwards. It seems therefore that Themba is aware of this curriculum requirement.

4.4.5 Contextual setting challenges

Themba's contextual challenges, during the implementation of NIC, were cooperation, teachers' training workshop and availability of resources.

4.4.5.1 Cooperation

A. Teachers scheming on their own

Themba pointed out that they did not scheme as a complete team of grade 5 teachers. As a result, they could not integrate concepts across learning areas. While talking about integration across the learning areas he explicitly said:

> … across the learning areas, integration is a little bit and amounts to nothing.

He added that one of his colleagues schemed alone the previous year and when they returned from the workshop, she was done scheming:

> ...it was not easy to scheme as a complete team because one of the colleagues had already schemed for LLE (linguistic and literary English) on her own.

B. Subject teaching approach

It was indicated earlier that Themba taught one learning area (NM) in grade 5 and each of his four colleagues taught the other learning areas. This means they adopted the subject teaching approach. However, Themba indicated that the LLE teacher schemed on her own and therefore LLE was omitted from the other four teachers' scheming. Again, the teachers made the lesson plans on their own. This approach is embedded in compartmentalised teaching. As a result, integration of concepts across learning areas was ineffective due to this lack of cooperation.

C. Teaching large class

Themba relayed how a large class created a challenges and he gave the impression that teaching and learning could be difficult. He preferred a smaller class instead.

> We have an infested class, that is too many learners upon one teacher ... we have around seventy-one learners, … if it was not of such a large class I think teaching and learning would be much easier and be better. That is a challenge...

D. Adopting the established classroom setup

Themba compromised by using the ability grouping system that he found when he arrived at this school in grade 4 and 5.

> Honestly, since I came... I came late and I found them already grouped. But what I understood was that, she grouped them according to their performance. Those who were performing worse were in group ten because we have ten groups and those who were performing excellently, the best, were in group one. That is how she grouped them

However, he preferred the mixed ability groups. His main reason is that this type of grouping allows brilliant learners to help slower learners; a strategy that he believes is effective.He therefore sees the role of the brilliant learners as that of helping the others.

> I prefer mixed ability... usually when I group learners, I take two best if they are too many, in a group of five I take one of the best, I give him four learners to group with, ... Because I know very well that, if they work together, he gives to them, they are able to listen to him better than they would do to me and also he acquires in his studies.

E. Learners moving classrooms

Apart from that, teachers had to exchange classes at the end of each lesson. However, in some cases when a teacher did not want to move, the teacher would request learners to move to the other class. Themba said this was time consuming when compared to teachers moving from class to class:

> It [movement of learners from class to class] happened Friday or Thursday last week … she brought up the idea that learners should be changing classes and I objected to the idea … because I saw the time was limited we couldn't let the learners be wasting time by moving to and fro. It would be easier for us as teachers to move.

4.4.5.2 Workshop

Themba believed that implementing the NIC before attending the workshop on the new curriculum led to the problems he encountered. However, he seemed to appreciate the opportunity of attending such training at last and regarded it as beneficial, as he said:

> Last year...it was a mess for me because I was struggling with some of the things which are very essential to the learners…I have been to the training lately. So only after the workshop, I realised that I was not doing the good thing…the content of my lesson plan was not placed well for the learners…I was not even aware of how to integrate…it [the workshop] helped me a great deal.

Even though he believed that the workshop helped him in terms of making a lesson plan and integration, the planning and lessons conducted after the workshop showed the following.

A. Lesson planning

Having a close look at the contents of his lesson plans, despite the variance in format, there was a difference in the formulation of objectives while the teaching methods and activities sections were the same prior to and after attending the workshop.

i. Formulation of objectives

Lesson 1 objectives (Table 4.31 below) seemed to be addressing LO 32 of the Integrated Part (Unit 4) (Table 4.26): At the end of this unit, learners should be able to classify livestock according to their uses.

Table 4–30 Segment from Themba's lesson plan objectives

Segment from Themba's lesson plan objectives		
Lessons	**By the end of the day, learners should:**	
1	1. have begun to learn about uses of livestock.	1. be able to: class livestock according to their uses

However, he just expected learners to start learning about the uses of livestock in objective 1. Learners were expected to be able to class livestock according to their uses (objective 2) not to classify them as indicated in LO32. In essence, he turned this learning outcome into a lesson objective but substituted the word classify with class. This was not the case for lesson 2 and 3 as shown (Table 4.30). For these lessons, he unpacked LO 4 (Numerical and Mathematical) to formulate specific lesson objectives: add 5-digit numbers with and without carrying.

Table 4–31Segment from Themba's lesson plan objective

Segment from Themba's lesson plan objectives		
Lesson	**At the end of the lesson, learners should:**	
2	1. have begun to: lay down 5-digit numbers using place value preparing for addition.	2. be able to : arrange logically and add 5 digit numbers without carrying
3	1. to logically arrange 5-digit numbers using place value preparing for addition	2. add 5 digit numbers that don't need carrying

Even though he did not complete the evaluation section for lessons 1 and 3, he included an evaluation section in lesson 2:

> A handful of learners still need to be carried through place value and expanded notation

Cognisant of this statement, lesson 2 and 3 objectives had nothing on expanded notation. Rather, lesson 3's objective seemed to be the continuation of lesson 2. In this case, the evaluation of lesson 2 did not influence lesson 3's activities.

ii. Identification of teaching methods

Table 4.33comprises lists of Themba's teaching methods for the three analysed lesson plans.

Table 4–32A segment of teaching methods

Segment of teaching methods		
Lesson 1	**Lesson 2**	**Lesson 3**
To discuss, to ask	Critical thinking, manipulation, communication	Critical thinking, manipulation, communication

Although he indicated that through the workshop he attended he was able to identify areas where he was working incorrectly, the teaching methods he listed do not concur with that. To discuss and to askwere somehow related to discussion and questioning. Lesson 1 was conducted prior to the workshop. As for the other two lessons, they had the same list. According to the syllabus, those are the skills for LO4 that his lessons sought to develop.

iii. Nature of activities

Despite his belief that the workshop facilitated his lesson planning, his post-workshop lesson plans comprised similar teacher and learners' activities as the lesson plans prior to attending the workshop. He indicated that before attending the workshop he was not even aware that he was doing things wrong. However, the teacher's activities were questions with few instructions while the learners' activities were the anticipated responses (cf. section 4.4.2.2) for all the lesson plans.

B. Integration

As indicated earlier, Themba was challenged by teaching the NIC before attending the workshop. Despite being helped by his colleagues, he indicated that he was not able to scheme as expected, his lesson plans were not well prepared and he was not able to integrate. He reported that after attending the workshop, he corrected some aspects that he did wrong prior to the workshop.

However, Themba affirmed that after attending the workshop, integration amounted to nothing (*cf.* 4.4.5.3). According to the MoET (2009), integration entails the holistic treatment of issues. He attributed the lack of integration to the lack of cooperation. Furthermore, he suggested that,

> … teachers be taken to workshops at least after every two years to be reminded of what is expected of them in terms of curriculum implementation.

This is because his colleagues who attended a workshop prior to him had varied perspectives pertaining to how they are expected to implement the new curriculum.

4.4.6 Summary of preliminary findings from Themba's story

Themba doubted his own knowledge and potential pertaining to scheming before attending the dissemination workshop. In grade 4, he schemed for the Integrated Part and worked together with his colleagues on all the other windows. He relied on them for all the information pertaining to the NIC. He encountered problems when scheming for grade 5 where learning areas were treated independently. Terms were misunderstood on his scheme of work and lesson plans for 2015 and 2016. He used headings that did not correspond with the contents. He interchangeably used terms that have different meanings.

Each of Themba's lesson plans had two categories of objectives that seemed to cater for fast and slow learners. His lessons were based on asking learners questions and to evoke their responses. His lesson showed a list of materials and methods that did not match with the intended the teacher and learners' activities.

He showed heavy reliance on the use of the chalkboard. He also attempted to relate concepts to learners' daily lives. Even though he seemed to like the deductive approach to learning, the kind of activities he designed were created as if the learners already knew what he wanted and it was a mission to guide them to grasp what he intended and he gave them the answers.

He used oral and written assessment and in some cases confused teaching-learning methods with skills to be developed. Lesson conclusion and evaluation sections were inconsistently filled.

Initially, Themba did not believe that he was capable of delivering the new curriculum because he did not attend the dissemination workshop. However, after attending the workshop he expressed positive feelings about his teaching capabilities. However, lesson observations revealed little improvements. He was a firm believer in teaching learners using English as a medium of instruction. He believed that hispersistence in using English, the learners would encourage learners to use it and learn well.

He believed that his role involves preparing the learners to learn other learning areas. His learning area is the foundation for other learning areas. For him, the teacher's role is asking learners the questions while the learners' role is to answer the teacher's questions.

Themba and his colleagues adopted a subject teaching approach and ended up scheming individually due to a lack of cooperation. This approach minimised integration of content across learning areas. A lack of cooperation further forced Themba to adopt the already-established classroom routines such as ability grouping of learners. Since he was new in the school, he seemed to be bullied by senior teachers. For instance, learners were forced to move from his class to another instead of the teachers moving to the learners. Furthermore, he taught a large class that hindered him from reaching all learners during the lessons.

4.5 Mamo's story

4.5.1 Background

Mamo had been teaching since 1982, giving him approximately 33 years' teaching experience. Of these, he spent 31 years implementing the old curricula until the introduction of the NIC that he had used for at least two years. He had implemented the old curriculum for a very long time compared to the other participants. His lengthy experience of working with the old curriculum was important in establishing how he interprets the new curriculum as past experiences influence the way in which teachers engage in curriculum reform (Jansen, 1998:5).

In addition, he was unique in that he claimed that he had been scheming and planning incorrectly until one of his colleagues made him aware of the errors. As a result, the

initial observations were helpful to track the changes and developments in his interpretations and understanding of the curriculum expectations.

4.5.2 Planning

4.5.2.1 Scheme of work

Mamo's scheme of work comprised unit number, theme and the headings per column. He was observed teaching grade 4. In 2015, the theme shown on his scheme for unit 3 was "understanding and sustaining the environment". In 2016, the theme for unit 1 was *"knowing oneself and relating to others"*.

A. Confusing learning outcomes and concepts

The scheme of work headings for both years (2015 & 2016) were the same: week, LOs, concepts from IP, SW, EW and NW. It is interesting to note that the learning outcomes (LOs) from the Integrated Part (IP) and the respective windows (Sesotho, English and Numeracy) were written in numerals. However, in 2015, he wrote the phrases from the LOs under "concepts" while in 2016 he wrote the actual concepts as they appear in the syllabus under that heading.

Mamo considered learning outcomes (LOs) to be the numbering of the learning outcomes on the syllabus and the LO statements to be the concepts (Table 4.34 below):

Table 4–33 A segment of Mamo's scheme of work – LOs and concepts for the Integrated Part (IP)

A segment of Mamo's scheme of work – LOs and concepts for the Integrated Part (IP)		
Week	**LOs from I.P**	**Concepts**
3	17	Classify types of seeds
	20	Classify non-living things into liquids, solids and gas

That is, the LOs were written in two different ways (Table 4.34 above): as numbers from the list in the syllabus (column 2) and then as statements that were titled concepts on the last column. However, what he wrote in his scheme differs substantially from the syllabus as illustrated in Table 4.35 below.

Table 4–34 Syllabus segment showing learning outcomes, concepts, skills, values and attitudes

Syllabus segment showing learning outcomes, concepts, skills, values and attitudes	
Learning outcomes: at the end of this unit, learners should be able to:	**Concepts, skills, values and attitudes**
17. Classify different types of seeds	**Concepts:** Seeds, Monocotyledons, Dicotyledons **Skills:** Observation, identification, drawing, sorting, manipulation **Values and attitudes:** Awareness, Appreciation
20. Classify non-living things into solids, liquids and gas.	**Concepts:** solids, liquids, gas **Skills:** sorting, observations, identification, critical thinking, decision making **Values and attitudes:** patience

According to Mamo, the number “17” referred to the LOs while the phrase “classify different types of seeds” denoted “concept” which differed from what was shown on the syllabus (Table 4.34 against Table 4.35). He also omitted the word “different”. He followed the same format of scheming for the rest of the windows. For instance, under SW – week 3, he wrote “2” as LO and "*sebelisa mantsoe a ngoloang ka ho ts'oana empa meelelo e fapane lipolelong" (*use homonyms in sentences)under concepts.

However, the concept for this learning outcome from the syllabus is *"mantsoe a ngoloang ka ho ts'oana empa meelelo e fapane"* (homonyms). This on its own reflected his understanding of the LOs and concepts in the scheme of work and showed incongruity between the syllabus and the contents of his scheme of work. His scheme only showed the LOs with no concepts although both could be presumed from the heading.

B. Number of LOs schemed

There was consistency with regard to the number of LOs schemed for, especially in 2016. That is, within the IP (5–6 LOs) and the respective windows and across (13–16 LOs).

C. Classifying related and unrelated LOs chronologically

Mamo indicated that they work together to scheme with his colleagues by identifying learning outcomes that could be grouped and those that could not:

> We sit down as teachers of the concerned grade. We scheme together…when we scheme we look at the learning outcomes which appear for that…eh! IP

> maybe…we look at them and then…we classify them according to how they appear in the syllabus…we look at them…we see the ones which correspond and we put them according to how they correspond and how they do not correspond.

Even though Mamo emphasised that scheming involved a group of teachers, of a particular grade, including himself, scheming seemed to be approached with the belief that some LOs could be grouped together while others could not be. Again, it was difficult for him to provide a clear and detailed procedure for making a scheme of work even though he was thought to have schemed for at least two years. The reason is revealed in the segment below.

D. Copying of the previous year's scheme

Mamo had been teaching grade 4 since 2014. He had the scheme of work for this class from then and he uses these previous years' scheme of work. This factor negatively influenced his understanding of how to make the scheme of work:

> ...when we scheme we used to just check how we did it in 2014 and transferred those things as they were [into the 2015 scheme]...

It seemed that Mamo did not understand the procedure for scheming as was evident from his explanations of his practices regarding how to scheme. He indicated that they continued with this practice until one teacher came to their rescue by providing an alternative to their usual practice:

> …the other method was introduced by Mrs. Xxx because she attends workshops [on integrated curriculum]. She emphasised that we have to ensure that the learning outcomes that we scheme integrate within and across the windows... [Before that] we just wrote without paying attention to how they (LOs) integrate in one subject with those in another...

Mamo was observed while teaching the Integrated Part (one lesson) in 2015 and the Numeracy Window (two lessons) in 2016. The lesson planning discussed below was part of planning which followed the scheming.

4.5.2.2 Lesson planning

Mamo asserted that he prepared the lesson plan on a daily basis after school: "We remain after school preparing lesson plans". However, my observations contradicted this. Two appointments had to be rescheduled because he had no lesson plan.

His lesson plans followed a template provided by the trainers during the workshop. The headings were the same for all of his lesson plans. Each plan entailed the list of learning outcomes and objectives for the Integrated Part (IP), Sesotho Window (SW), English Window (EW) and Numeracy Window (NW), which served as the main parts of the lesson planning. The plan revealed that IP and each of the windows were treated in isolation.

A. Nature of lesson objectives

i. Two objectives per lesson

Mamo identified one difference between the new and the old curriculum lesson plans as the number of objectives per lesson:

> as for the new one [curriculum] we have to write two objectives.

Therefore, his lesson plans comprised two categories of objectives that were formulated in the following way (Integrated Part):

Table 4–36 Mamo's lesson objectives for three lessons

Mamo's lesson objectives for three lessons (Appendix C)		
	Objective 1: *at the end of the day, learners should have begun*	**Objective 2: *at the end of the day, learners should be able***
2015	*to classify non-living things into liquids, solids and gas. **Hlalosa lintho ba sebelisa lipalo ho tloha* 1-1000 *Use present continuous tense in sentences *Relate hours to days, days to weeks and weeks to months	*to classify non-living things into liquids, solids and gas correctly. **Hlalosa lintho ba sebelisa lipalo ho tloha 1-1000 ka nepo* *Use present continuous tense in sentences correctly *Relate hours, days, weeks and months correctly
2016 (1)	*Identify themselves/use list of strong points **Tichere o buisana le bana ka baamani ba bona* *Use phonics to spell words *Read and write four digit numbers in words	* Identify themselves/use list of strong points correctly **Tichere o buisana le bana ka baamani ba bona ka nepo* *Use phonics to spell words correctly *Read and write four digit numbers in words correctly
2016 (2)	*Express negative and positive feelings about themselves *Read and write four digit numbers in words and in number symbols	*Express negative and positive feelings about themselves correctly Read and write four digit numbers in words and in number symbols

The major difference was the stem of the phrase "have begun" and "be able". Besides that, he added "correctly" on the second objective of the first 2016 lesson. The rest of

the words were the same. Using two objectives was considered for accommodating learners of different levels. The sample above is contrary though.
Each set of objectives comprised IP, EW, SW and NW except for the last lesson, which had only EW and NW.

ii. Turning LOs into lesson objectives

Mamo used the LO phrases as they appear in the syllabus in writing up the lesson objectives. For instance, he copied LO 20 segment "...classify non-living things into liquids, solids and gas" as it appears in the syllabus (Table 4.35 and 4.36 above) and turned it into a lesson objective. The difference between his two categories of objectives was only seen on the stem per category. Since the LOs are too broad, he showed no attempt of unpacking the LOs for his lessons. This suggested that Mamo's IP lesson for that day was intended to cover the classification of non-living things in broad terms as if LO 20 was the lesson objective.

Mamo's lesson plans had three stages: link-in/introduction, development and conclusion. These stages were adjacent to the following headings: teaching-learning methods, teacher's activities, learners' activities assessment criteria, assessment methods and learning materials as discussed below.

B. Link-in/ introduction

He labelled the first stage as link-in or introduction. This was the stage whereby teacher's activities were: name two classification of living-things; revise place value of three digit numbers; teacher and learners revise place value of up to 4 digit numbers. The corresponding learners' activity was "they respond"for each of these activities. It seemed that he intended that the teachers' activities will stimulate learners to respond and it was implicit how.

C. Lesson development

i. Alignment among teaching methods, learning materials and activities

There was a slim match between teaching methods, learning materials and the planned activities. Only the Socratic Method related to the activities. The Socratic Method was reflected in the activities under all the lesson plans whereby the teacher asks learners to tell them something, name or list certain things (e.g. non-living things).

The use of these methods also appeared under learners' activity "they respond". However, this seemed to be question and answer without stimulating critical thinking, apart from the discussion. Therefore, the argumentative element of the Socratic Method was missing. Explanation, discussion, Socratic, free activity learning and demonstration were not embedded in the activities.

List of methods, activities and materials on the lesson plans presumably indicated how he intended to deliver the lesson. However, there was a scant alignment among these three. For instance, only one of his listed materials (pencils, chalk, papers, charts, work cards, abacus and T.G: teachers' guide) were embedded in the activity to indicate how he intended to use them. From the observation, the teacher used only chalk to write numbers on the board.

Table 4–35Teacher and learners' activities from lesson plan

Teacher and learners' activities from lesson plan		
Lesson	**Teacher's activity**	**Learners' activity**
2015	*Ask learners to name non-living things into solids, liquids or gas. (giving examples of each)	They respond
2016 (1)	*Introduces 4 digit numbers (showing place values for four digit numbers) *Writes 4 digit numbers on the board for the learners to read and write (giving examples)	*They observe *They read and write numbers
2016 (2)	*Introduces 4 digit numbers in words and symbols (then show the numbers in numerals then in both numerals and words below the statement "write the above Numbers in words")	(there was nothing written)

- **Activities divergent from listed methods and materials**

The activities did not incorporate the listed methods and materials. For example, based on the assessment criteria, it seemed that there would be listing and grouping of solids, liquids and/or gases and the assessment method would be the written work. However, the materials were all solids. The grounds for listing and grouping were not stated.

ii. Questions appearing as teacher's activities

The teacher's activities on the lesson plans were in the form of questions for learners to respond to or as the task requesting learners to do something. Therefore, the learners' activities were to respond to the questions or to say what is required by the instruction (Table 4.37 above).

iii. Anticipated responses

He also indicated the expected responses on the development section below the teacher's activity. For instance, he wrote the three states of matter with some examples: solids – stone, pens, papers, sticks; liquids – water, vinegar, milk, spirits and blood; gas – smoke, oxygen, carbon dioxide, nitrogenandEasy-gas.

The anticipated responses correspond with the fact that he regards learners' activity as responding.

iv. Assessment methods and criteria

According to his plan, he intended to use oral and written assessment only. The assessment criterion for both years varied:

2015: list examples of liquids, solids & gases' and 'group items into solids, liquids or gas

2016: Ability to read to read 4 digit numbers;

Ability to write in both: a) number symbols

b) in words

The assessment criterion appeared to be a task in 2015 and had something to do with learners' abilities in 2016.

v. Conclusion as a summary/assessment

The conclusion stage seemed to serve as a predetermined summary or assessment. Mamo already had a conclusion in the form of a summary titled "classification of non-living things" where he listed examples of solids, liquids and gases, which included the ones shown on the development activity. The other conclusions (2016) were as follows:

Table 4–36Mamo's assessments for two lessons

Mamo's assessments for two lessons	
1	**2**
Ask learners to read 4-digit number e.g. 1. 3 216 2. 7 920 3. 4 501	Ask learners to write in • Words = 7 816 • Number symbol: Three thousand five hundred and thirteen. 3 513 (He further provided the three numbers in numerals and others in numerals and words)

These conclusions were both to be done by learners. The first was a performance task and the other one was a written task. However, he only showed oral and written assessment, leaving out the performance assessment.

4.5.3 Classroom instruction and assessment

4.5.3.1 Lesson introduction

i. Reviewing the prior work by telling learners

He introduced the new lessons by reviewing what was previously done in class:

> Teacher: Remember that yesterday you learnt about the living things, their characteristics and their groups.

He reminded learners that they had previously learnt about the two classes of living things and that those classes were animals and plants. He then continued telling them about the living things.

ii. Threatening and silencing learners when they talk

Learners were expected to be silent unless they were giving answers to his questions. He did all the talking and required learners just to listen to him and only talk when replying to his questions. For instance, in a lesson where he was talking to the learners about non-living things, they became excited and started talking amongst themselves. Mamo frequently ordered them to keep quiet and listen to him, and he promised to punish those who continued talking:

> You who is talking, I will punish you if I see you talking!

iii. Lengthy introductions

The lesson introductions were lengthy. For instance, he took approximately 15 minutes out of 40 minutes to introduce the lesson about non-living things. His lesson plan indicated 40 minutes for teaching, although the objective was targeted for the end of the day. In the lesson on addition of 5-digit numbers, his introduction lasted for approximately 20 minutes (from 08:45am to 09:08am) for a 40 minutes' lesson. The lengthy introductions consumed the time that could be dedicated to teaching-learning activities.

iv. Teacher telling learners

Itis notable from the preceding paragraphs that Mamo's approach was mostly teacher-centred because it was characterised by him "telling" the learners almost everything they had previously learnt. For instance, learner engagement was limited to mentioning the characteristics of living things. The teacher was the one doing all the talking and writing on the chalkboard while the learners assumed a listening role. In fact, Mamo specifically discouraged them from speaking. He put in more effort in keeping the learners quiet. He frequently shouted:

> Hey, you! You better listen!

4.5.3.2 Lesson development

A. Imposing content

The actual lesson development was in line with the planned one. It was characterised by the teacher telling the learners most of the content. For instance, he wrote the definition of non-living things on the board and read the definition to the class. The learners repeated after him as he read. Then he proceeded to explain the definition in Sesotho, for example,

> Non-living things are all things which have no life in them...*Li* non-living things *ke lintho tsohle tse se nang bophelo* (non-living things are all things which have no life).

B. Established routines

i. Writing notes during the lesson

Learners habitually prepare their books for copying what is on the board once Mamo turned to the board. When he was writing the definition of non-living things on the chalkboard, there was silence and learners were busy opening their books. However, they seemed unsure of what to do. One of them shouted, “Sir! Should we write?”

The teacher permitted the learners to write and they copied what he was writing on the chalkboard. This behaviour seemed to be a routine in his lessons because, as the lesson continued, they kept on writing the notes. He asked a question, a learner gave the answer, he repeated the answer (if correct) and wrote it on the board. Then learners copied that into their books. The teacher speaking or asking questions and writing while learners answered questions and copied the notes typified this part of the lesson.

ii. Explaining in Sesotho

Reverting to Sesotho was almost spontaneous for him. One thing that was obvious in Mamo’s lessons was that he never failed to explain or translate most of the concepts into Sesotho. For example, he explained “characteristics” in Sesotho by saying:

> “What do living things do?”

He further explained the correct answers in Sesotho. When I asked him about the use of Sesotho in teaching, he replied that he uses Sesotho to clarify some difficult concepts:

> “We still teach in English, but where difficulty arises, we have to explain in Sesotho”.

Incorporating Sesotho during teaching may suggest the teacher’s problem with self-expression.

iii. Promised punishment

As in the introductory phase of the lesson, the teacher rebuked learners who talked. Mamo frequently called the learners to pay attention and threatened to punish those who continued to make a noise. Nevertheless, the learners continued to talk whenever he turned to write on the board. Seemingly, he preferred a quiet and orderly class in

which learners are attentive. However, he frequently had to threaten the learners, promising punishment to get them to be quiet.

iv. Presumed learner ignorance

Mamo seemed to believe that learners have empty minds. This is because every time he hastened to tell them before probing to ascertain their knowledge. For instance:

> "Let me tell you the groups of non-living things".

He asked learners to give examples of non-living things, but immediately told them that he was giving them the classes of non-living things. The three classes written on the board were solids, liquids and gases in a form of a list that was later changed into a table.

He furthermore remarked in Sesotho:

> *Teacher: kea tseba hore ha le tsebe na li-liquids le li-solid le li-gas ke lintho tse joang* (I know that you don't know what kind of things are liquids, solids and gases… or do you know?)
>
> *Learners replied,* Yes, Sir'; 'No, Sir.

However, those who said yes were ignored. He paid no attention to this apparent opportunity that could have sparked interesting discussions. He seemed determined on passing on the knowledge that he had to learners. As a result, he went on telling them what the three classes are in Sesotho and told learners to write the Sesotho names in brackets next to each class:

> "Solids *(tse thata),* Liquids *(tse metsi),* Gases *(likese)".*

Using Sesotho words instead of the scientific ones was likely to result in the loss of (the gist of what the concept really is) the meaning of these scientific words.

v. Accepting and rejecting unexpected answers

Mamo's way of handling learners' responses was particularly worth attention. He rejected the unexpected answers and those that he thought were unfamiliar. For example, one learner gave an example of solids as "planks" and Mamo said learners should give examples that are familiar to everyone

> "…you should give examples of things that we all know".

Another learner shouted the word “underwear” as an example of non-living things. Mamo repeated the word amusingly and the class burst out laughing, he then proceeded to get answers from other learners. He repeated the learners’ answers that he accepted and wrote them on the board while he did not write those answers that he rejected. In most cases, he ignored them without even giving a remark.

4.5.4 Perspectives, beliefs and attitudes

4.5.4.1 Perspective on the new curriculum

A. Danger to health

> … new curriculum has a lot of things and it will blind teachers ... that is, it strains teacher a lot because teacher spends the whole day on a pen, we even remain after school still writing ... ... It affects my life because it will cause my blindness and things that I have to attend to in my free time, I cannot attend to them because I spend most of my time on books.

To him, implementing the new curriculum differed from applying the old one because it placed teachers’ life in danger. As much as he complained about spending so much time doing the paper work, he was found unprepared during data collection, even though he was informed. His unpreparedness seems to suggest that he harbours some negative feelings towards the issue of lesson planning because it creates a lot of paperwork.

B. Increased work load

Mamo complained about the increased workload and the low salary:

> …the new curriculum gives me headache…I don’t have enough time to do my other private chores…We work very hard, because we do too much writing and that means it is too much work which does not correspond with the salary.

Mamo reported that the new curriculum involves plenty of writing by teachers when they prepare lessons. He also indicated that their salaries should increase to match their increased workload and to supplement their private time spent working. He emphasised that implementing this curriculum negatively affected his life,

> … it strains a lot because a person spends a lot of time on a pen, it is as if we are students or still under training. It affects my life because it will cause my blindness and things that I have to attend to in my free time, I cannot attend to them because I spend most of my time on books.

He emphasised that writing takes much of his time yet on several occasions he was found without a lesson plan and the appointment had to be rescheduled. His utterances contradicted what he actually did.

C. Teaching one class for long

...but what is helpful is that we refer because we are in the second year but…

Mamo relied on the previous year's work. Since he taught grade 4 for consecutive years, he takes advantage of this and he pointed out that he refers to the previous year's work.

D. Likes the new curriculum

He likes some aspects about the new curriculum as he articulated above. He revealed that learners are expected to be hands-on instead of depending on cognitive learning and that their career opportunities will broaden during the implementation of the NIC. The entrepreneurs among them would survive by using things around them.

> What I like about it is that...eh! Maybe the children will be able to do things with their hands; it does not rely much on classroom teaching whereby learners would rely on subjects. There is where learners do things with their own hands than relying on the classroom, when they work; they want to be hired but that one who does not want to be hired will earn a living with things around him… production of hands-on learners

4.5.4.2 Teacher's and learners' roles

A. Asking questions versus answering

He asserted that learners should respond to the teacher when asked questions. He seemed to regard learning as a process of answering or responding to teachers' questions. The lesson plan consisted of questions and answers as the teacher and learners' activities respectively. During the lesson presentation, he mostly asked questions and the learners duly answered them.

> I teach, I explain things, I help learners where they need help as a teacher ... the learners are expected to follow the lesson, to show that, to show the teacher that they are following by raising up their hands maybe they ask questions where they don't understand, they answer questions when teacher raises them, so that is the role of the learners.

4.5.4.3 Principals' roles

4.5.4.3.1 Checking planning books and disciplining learners

> We send the schemes to the office to be observed by the principal, we write the lesson plans and the principal examines them…Principal helps when the children have problems from home to school… they fight at home and take the fight which started at home to school.

Mamo regards the role of the principal as checking the scheme books and lesson plans of teachers and helping teachers deal with learners' behaviour. This may also imply that planning is done to satisfy the principal.

4.5.5 Contextual setting challenges

4.5.5.1 Overcrowding

Mamo taught 79 learners in 2015 and 85 learners in 2016. Overcrowding causes learners to compete for everything. In Mamo's case, learners struggled to get his full attention even though they were given feedback on the written work. He was unable to give one-on-one feedback to each due to the large number and limited time in the lesson period. Furthermore, there were insufficient benches and tables in his class. Learners were mostly squeezed together on their seats owing to the large number of students.

4.5.5.2 Time constraints

There was no lesson, out of the three observed, where he managed to give all the learners feedback on the written work. He marked a few exercise books during his lessons and then asked learners to pile the books at the end of their rows after he had given them written work. He marked them while his colleague was teaching. Those who had a table at the end of each row placed the books on their tables, while those who did not have a table put them on the floor. Attending to all the learners individually during a lesson seemed impossible.

4.5.6 Summary of preliminary findings from Mamo's story

Mamo's scheme suggests that he used the terms learning outcomes(LOs) and concepts interchangeably. He further also used numbers to denote LOs. He showed that scheming was done collectively by copying the previous year's scheme and later

relied on somebody to present a different view. His lesson plan consisted of two categories of objectives that were formed by turning LOs into lesson objectives. The alignment among teaching methods, learning materials and activities was slim. The only listed materials that were incorporated in the activities were board and chalk, while the question-and-answer method was the only method used from the listed methods. The teacher's planned activities were questions while the learners' activities were predetermined responses. His intended assessment was oral and written.

The lesson commenced with lengthy introductions that were characterised by a review of previous work done by means of telling learners. In fact, he encouraged learners to listen to him and threatened to punish those who did not listen throughout the lesson. He was imposing content on learners and presumed that they were ignorant. There were established routines in his class whereby learners wrote down notes during the lesson. Moreover, he explained/translated the content of the lesson in Sesotho. He also had a specific way of handling learners' responses. Only the predetermined answers were written on the board and he rejected unexpected learner responses.

He perceived the NIC as a health hazard because he said that it was strenuous on his eyesight. It has also increased his workload. However, he likes the NIC because it promotes entrepreneurship among learners. In addition, he liked teaching one class continuously, which enabled him to copy/refer back to the previous year's work. He regarded his role as asking questions and learners' role as answering them. He considered the principal responsible for checking teachers' planning books and for disciplining learners. Overcrowding inhibited him from giving all the learners timely feedback. It also made him fail in reaching individual learners and caused them to compete for everything.

4.6 Summary

As indicated in figure 4.1 above, this chapter presented the stories of the individual participants that revealed how they carry out the planning and actualisation of instruction and assessment during the implementation of the NIC. Their way of planning together with how they carried out classroom instruction and assessments indicated their interpretations of the policy prescriptions, their practices and the challenges they are faced with during the current curriculum reform.

The next chapter interprets each participant's story and provides a cross-case analysis of the stories narrated above.

CHAPTER 5 CROSS-CASE ANALYSIS: THE COMMON AND THE DIVERSE

5.1 Introduction

This chapter presents the cross-case analysis of the teachers' practices during the implementation of the NIC. This analysis unpacks the prescriptions of the Curriculum and Assessment Policy (CAP) and its guidelines for classroom instruction and assessment. The four teachers had common and diverse characteristics, interpretation and practices.

Table 5–1 Summary of the comparison of teachers' experiences

Experience		**Tiny**	**Thandy**	**Themba**	**Mamo**
Workshops attended		two	one	one	one
Teaching experience	Old curriculum	1	5	2	31
Teaching experience	NIC	3–4yrs	2–3yrs	0–1yrs	2–3yrs
Grade	1st year	4	4	4	4
	2nd year	3	4	5A & 5B	4
Number of learners	1st year	78	72	71	78/79
	2nd year	81	80	77 each	85
Number of teachers per class	1st year	2	2	2	2
	2nd year	2	2	5	2
Learning Area(s)/ window(s) taught	1st year	IP	IP	IP	IP
	2nd year	EW	NW	NM	NW

First, it is important to acknowledge that the participants' experiences of the old and new curricula differed. Tiny and Themba spent a few years teaching the old curriculum after completing the Diploma in Education qualification. Thandy and Mamo studied for and obtained their Diploma in Education while they were already employed as teachers.

Although Thandy has taught for a longer time compared to Tiny and Themba, before the introduction of the new curriculum, Mamo has the most experience of teaching the old curriculum. In terms of the new curriculum, Themba had no experience of teaching the new curriculum in 2015. Thandy (grade 3 and 4) and Mamo (grade 4 twice) were in their second year of teaching the new curriculum, while Tiny (twice in grade 3 and then in grade 4) was in her third year.

They were all teaching grade 4 during the 2015 observations. However, in 2016, Thandy and Mamo were still teaching grade 4, while Tiny was teaching grade 3 and Themba grade 5. The fact that they were teaching the same grade (grade 4 in 2015) provided the basis for comparison of their practices. Moreover, their varied allocation of classes (grade 3, 4 and 5) in 2016 also added more on the type of experiences teachers have in the long run in their respective teaching contexts.

At the implementation stage where all teachers are involved, each teacher is expected to prepare/plan before presenting the lessons in class: “in discharging his/her duties in relation to the learners, be… prepared and recognise his/her responsibilities with regard to academic and personal development of the learners” (Lesotho Code of Good Practice, 2011:216).

Teachers used the format provided by the MoET for all the grades in terms of planning for all and/or specific learning areas. Thandy and Mamo developeda scheme of work for grade 4 Integrated Part (IP), Sesotho Window (SW), English Window (EW) and Numeracy Window (NM) for both years. Tiny also developed a scheme for IP and the three windows for grades 3 and 4. Themba developed a scheme of work for IP and the three windows too in grade 4. However, he only made the scheme for the Numerical and Mathematical learning area in his grade 5 scheme.

The grade 3 and 4 teachers developed the scheme of work together and then prepared lesson plans for the Integrated Part (IP), Sesotho Window (SW), English Window (EW) and Numeracy Window (NM) individually in most cases (*cf.* 4.1.1). That is, in a scheme of work and in a lesson plan. On the contrary, grade 5 teachers plan for the distinctive learning areas and write a separate lesson plan for each area.

Tiny and Mamo attended a formal teacher-training workshop before engaging in the implementation of the new curriculum. Tiny attended the workshop before teaching grade 3 in 2013, while Mamo attended just before teaching grade 4 in 2014. Thandy attended the workshop, which was meant to clarify certain issues (with Tiny and Mamo), after the pioneer workshops. Only Themba taught the new curriculum before attending the workshop. He attended the workshop a year after embarking on the implementation of the new curriculum.

However, teachers' experiences regarding these workshops varied. Tiny confirmed this and indicated that after the pioneer workshop (that was held prior to implementation of NIC), there was another workshop to bridge the gap on the interpretations of the information obtained earlier. The teachers who attended the first workshop had diverse interpretations of the given information and picked up problems during implementation. They were also unable to interpret the marking system to be used. The major question to explain here is, why?

Although Thandy had not attended this pioneer workshop, her experience of another workshop, which she attended with Tiny and Mamo, may provide part of the answer. The latter two teachersreceived the abstract and poorly organised training whereby there were no materials – including the syllabi. A lack of time for teachers to learn pedagogy resulted in teachers encountering problems during the NIC implementation. The workshop apparently did not prepare these teachers for practice. They were similar to Themba during his first year under NIC who characterised his teaching as a mess before he had attended the workshop. According to Mokhele and Jita (2014) the cascade model used for teachers' professional development is ineffective and does not equip the teachers with the necessary skills to deal with contextual challenges.

The four teachers were specifically selected for observation in 2016 for various reasons. It was interesting to explore Thandy's practices based on her experience of implementing the NIC in grade 4 for two consecutive years. Again, having presented a lesson that comprised the Integrated Part and Numeracy Window, she seemed to be striving for learning beyond individual subjects which is supported by MoET (2009).

Similarly, it was alsointeresting to explore Tiny's practices. Her practices seemed to promote curriculum coherence. She was again teaching grade 3 (in 2016) as she had taught it for two consecutive years before shifting to grade 4 in 2015. My expectation was that she would be capable of making sensible connections and coordination between the topics taught in each subject within a grade and understand how they develop and advance through the grades. Moreso because learners become successful when teachers establish connections across content areas (Walkowiak *et al.,* 2017).

Furthermore, I was interested in establishing the possible impact of the teacher-training workshop on the implementation of the NIC that Themba had attended by evaluating his subsequent practices. This is because curriculum reform necessitates professional development and learning (Colmer, Waniganayake & Field, 2015). Likewise, Mamo's lengthy teaching experience under the old curriculum versus his experience regarding the NIC was worth exploring.

The cross-case analysis allowed me to compare the different cases of the four participants/teachers to determine the similarities and differences in their practices from their respective classroom contexts. By using this method, I was able to describe issues that seemed to influence the teachers' instructional and assessment practices.

The analysis is founded on the research questions shown in Table 5.2 in relation to the major themes derived from the previous chapter on the individual participants' practices and perceptions in terms of planning, classroom instruction and assessment.

Table 5–2 Synopsis for the cross-case analysis based on themes

Synopsis for the cross-case analysis based on themes	
Research questions	***Themes***
5.2 What are the teachers' understandings of the Curriculum and Assessment Policy (CAP) in Lesotho in terms of its prescriptions for classroom instruction and assessment?	5.2.1 Integration 5.2.2 Pedagogy 5.2.3 Roles
5.3 How do teachers implement the curriculum and assessment guidelines during classroom instruction and assessment?	5.3.1 Instruction 5.3.2 Assessment
5.4 How can the teachers' understandings and practices of the curriculum be explained?	Explaining understandings and practices

The participants' understandings of the CAP prescriptions were discussed based on how they perceive integration, pedagogy and the roles of the following stakeholders: principals, teachers and learners. The various roles played by these stakeholders are considered important in the implementation of the curriculum at school level.

How the participants planned and conducted their lessons and what they said during the interviews revealed their understandings. It further encompasses factors that are perceived to prevent the stakeholders from performing their roles effectively (cooperation and clarity of focus).

5.2 Understanding of CAP prescriptions

The Curriculum and Assessment Policy 2009 (CAP) advocates for three main changes that revolve around instruction and assessment: integration, changed pedagogy and changed roles of teachers and learners. I begin with a description of the curriculum developers' views of the concept "integration"; the expected pedagogy is described and the stakeholders' roles in the implementation of the NIC in CAP are then defined.

5.2.1 Integration

The policymakers regard integration as "the holistic view and treatment of issues related to intelligence, maturity, personal and social development of the learner for survival purposes and economic development of the nation" (MoET, 2009:15). It demands that the teaching-learning process be conducted in a way that promotes the incorporation of cognitive development in learners as individuals and members of various communities with useful skills, values and attitudes. Walkowiak *et al.* (2017) postulate that integration can assist learners to transform new knowledge more effectively.

Embedded in this concept is the quest to respond to increasing challenges facing the learners by considering their daily experiences relating to school life, community life and individual learners' life. According to Shoemaker (1989:5), anintegrated curriculum views teaching and learning in a holistic way and reflects the real world, which is interactive. The integrated curriculum is also considered to be a powerful approach to education (UNESCO, 2017).

Based on the definition of integrationinthe CAP, instruction and assessment should be conducted to develop learners into complete/rounded and productive citizens. In the following subheadings, some emerging themes pertaining to integration from the teachers' point of view are explored. Thereafter, the teachers' understanding of integration, as one of the policy prescriptions, is investigated. Firstly, from the view that it entails recognition that learning ought to consider the learners' daily experience as part of their varying communities and secondly, that school life, community life and the individual learners' life be integrated during the learning process. As a result, it is important for the teachers to have a theoretical understanding of integration because it aids the implementation thereof(Park, 2008).

5.2.1.1 How teachers understood integration

A. Relating concepts/LOs in the scheme of work

Thandy interprets integration as identifying the easily relatable concepts within IP and across the windows based on those selected for IP and chronologically arranging them on her scheme of work (*cf*. 4.2.2.1 Table 4.4). Again, she regards integration as bringing learning outcomes (LOs) together in the scheme of work and in some cases in the lesson plan. Being cognisant that LOs from different learning areas (IP, NW) can be integrated in a lesson (*cf.* Table 4.4), she identified related LOs and planned one of her lessons taking that into consideration (*cf.* Table 4.5). Formulating a lesson objective out of two learning outcomes was an indication of her awareness of the difference.

Tiny's understanding in this regard was that integration entails identifying related concepts from the overview as the basis for the selection of concepts from SW, EW and NW. She further regards integration as clustering the selected concepts in weeks across the windows, arranging them chronologically; with the exception of NW concepts (*cf*. section 4.3.2.1; Tables 4.13 and 4.14). Tiny further regards integration as repetition, in other words, teaching a particular concept under IP and teaching it again under each of the respective windows means a teacher is integrating.

On the contrary, Themba understands integration as a process of identifying LOs that should be taught first in IP, choosing the related LOs from the windows depending on the IP's learning outcomes (*cf*. 4.4.2.1). He also sees it as the sequential ordering of the selected LOs and clustering them in weeks (Table 4.23, 4.24 and 4.28). While dealing with the NM learning area, he had the same understanding but did that based only on one learning area.

Unlike Themba, Mamo interprets integration as classifying the related and the unrelated LOs and chronologically arranging them in the scheme of work (*cf*. 4.5.2.1). He understood it as a process of choosing LOs that are related under IP and relying on that choice, to identify those related with the IPs from the windows.

The identification of the integrating LOs/concepts was based on the Integrated Part for grades 3 and 4. This also formed the basis for integration within each window and across the windows per week on the scheme of work. Although Thandy's scheme of work differed from the others' schemes in that she developed the scheme for a week

as opposed to the rest who prepared the scheme for a quarter, she followed the same procedure. She even emphasised the importance of making a scheme of work daily against the one done per unit. Scheming for grade 5 differed from the prior two grades in that Themba only concentrate on the learning area he dealt with. His integration was done within one learning area.

B. Writing up complex objectives

Thandy set objectives that comprised up to four targets with no indication of how success would be measured (Table 4.9). Tiny's objectives were seemingly vague regarding their parameters and pertaining to indicators of progress. The LOs were turned into objectives. This can be attributed to her misconception of learning outcomes and lesson objectives.

Themba's grade 4 lesson objectives targeted two areas (Integrated Part and Sesotho Window) as opposed to grade 5 objectives where his focus was only on the Numerical and Mathematical learning area (Table 4.24 and 4.28). The former objectives were too broad because they were also LOs turned into objectives. The latter were a bit more specific and Themba tried to unpack the LO in forming his objectives by addressing individual concepts from the LOs. They seem to have difficulty in distinguishing between the lesson objectives and learning outcomes. As a result, they set complex lesson objectives that seemed to prevent them from achieving the target.

A. Learning that considers learners' everyday experiences; relating school life, community life and individual learners' life

It is evident that the teachers had varied understandings of integration in relation to the consideration of learners' daily encounters during the learning process. Thandy related the concepts inher scheme with the learners' real life (learners' close relatives) and with the community life (making up councils), when explaining how she developed the scheme of work (section 4.2.4). She merged the sack race and data presentation LOs when formulating one of her lesson objectives, although the activities for this lesson were segmented on a plan and in practice (*cf*. 4.2.2.1).

She attempted to relate the concept "lines" with the classroom structure, although this was only for identification purposes (section 4.2.3.2). She further requested learners

to use lines in drawing different patterns. However, she interpreted “pattern” in her own way resulting in learners not doing what she expected.

Thandy explained that her scheming process provided evidence that she was aware that school life ought to be related to the community life as well as with the learners’ daily life (*cf*. 4.2.4). However, she seemed to be challenged by putting this into practice. Similarly, Tiny tried to relate verbs (open, closed) with real situations. She directed a learner from his seat until she requested him to open and close the door (*cf.* 4.3.3.2). It seemed difficult for her to explain what is done when dealing with integration.

Themba probed learners to mention the uses of animals from their home experiences (*cf.* 4.4.3.2). He also tried to use what is written on a juice bottle to define the concepts “addition”. Since he did not check to confirm before instructing learners, learners did not find what he anticipated.

Mamo told learners that he knew that they did not know and told them about living and non-living things. He asked them questions and only acknowledged the answers he anticipated.

B. Recognition of individuals’ capabilities

i. Forming two objectives per lesson/ objectives setting per lesson

At first, Thandy had one objective per lesson and later two objectives per lesson even though she was teaching the same grade (4). In the first instance, she merged an LO about sack race with the bar chart LO and turned that into a lesson objective. In other cases, her lesson plans comprised two objectives each. The stems for the respective objectives (1 and 2) seemed to serve as the main distinction between each set of objectives. She turned the learning outcomes (LOs) into lesson objectives (Table 4.2.2) by just replacing the LOs’ stem with the lesson objectives’ stem.

Tiny’s lesson plans comprised two objectives per lesson in grade 4 and even in teaching grade 3. The majority of her set of objectives differed regarding the stem and the use of an adjective on the second objective (*cf*. Table 4.16). That is, by the end of the day learners should have started to do something and should be able to do something correctly.

All of Themba's lesson plans consisted of two objectives while dealing with IP (grade 4). The same was true of his lesson plans for the Numerical and Mathematical learning area (grade 5). Mamo also set pairs of objectives that differed regarding the stem and the use of "correctly" at the end of the phrase taken from the learning outcomes, similar to Tiny (*cf*. table 4.36).

The stem of the objectives seemed to be copied from the lesson plan format that the MoET provided to teachers.

> "By the end of the day/lesson, learners will/should be able to… and … learners should have begun to…"

The formation of two objectives may indicate the awareness that learners are different and cannot reach the same level of achievement in a particular lesson. However, teachers seemed to be following the given format without catering for learners' differences.

The teachers only followed the format, because when the stem of each objective is left aside, the other phases of these pairs of objectives were complex, the same and/or varied by using the adjective "correctly". Thandy's case, however, shows that even when teachers do not depend on the objectives' stem (i.e. where there was one objective); the nature of their lesson objectives remains the same.

Tiny seemed to have trouble in explaining how they integrated at her school. She used words such as "maybe, may" and showed that teaching a concept under one window and teaching again under another window is integration. That is, she equated integration with repetition.

ii. Linking instruction and assessment

> "The framework advocates the establishment of a very strong link between curriculum and assessment so that the feedback on the learning progress should be used to formulate strategies that will improve the teaching and learning processes", (MoET, 2009: vii).

> "Assessment strategies should assist in improving the learning process and the achievement of the curriculum goals and objectives", (MoET, 2009:15).

There is mismatch between lesson objectives, instruction and assessment activities. Instruction and assessment are treated as separate entities to teachers. Assessment

does not inform instruction (assessment for learning). Instruction and assessment are not linked from the planning stage or even during the lessons.

5.2.2 Pedagogy and roles (teachers' and learners' roles)

Pedagogy refers to all the methodological issues of the teaching-learning process and the manner in which curriculum is imparted (Dambudzo, 2015). As indicated in the CAP,

> "pedagogy must shift more towards methods that can develop creativity, independence and survival skills of learners; to the use of participatory activity-centred and interactive methodologies; and to construction and/development of knowledge, skills and attitudes" (MoET, 2009: viii).

The success of pedagogy is determined by the focus of the teaching-learning process (Dambudzo, 2015). If teachers plan and present their lessons in line with the envisaged pedagogy, then the outcome is likely to lead to the development of the learner with the competencies stipulated in CAP.

This section shows the pedagogy used during the implementation of the NIC. It reveals the methodologies employed during instruction and assessment that incorporates the perceived roles of teachers and learners during knowledge construction and development of skills, attitudes and values.

5.2.2.1 How teachers understood pedagogy

A. Alignment of objectives, activities and assessment

Thandy's set lesson objectives were not aligned with the instructional activities and assessment activities (Tables 4.7, 4.9 and 4.10). Where the objective targeted learners being able to do something, learners responded to questions based on what they observed her doing rather than performing activities themselves. The assessment sections also only indicated oral and written assessment and no performance task; therefore, learners were not assessed in line with the objectives.

The teacher performed most of the instructional activities, even though the assessment tasks required learners to demonstrate knowledge and skills acquired through observation rather than practice. This even led to the non-alignment of objectives, instruction and assessment.

Thandy's lesson activities were dominated by asking questions (teacher) and responding to questions (learners). She gave learners a platform to determine the correctness of their classmates' responses to questions during the observations. However, where learners vary in opinion, she mostly left them uncertain (*cf.* section 4.2.3.2F and G).

In cases where practical tasks such as drawing had to be done she indicated that she performed such tasks on learners' behalf or requested learners to omit such activities due to time constraints (section 4.2.3.2). Tiny's lesson activities relied more on telling, supplemented by question and answer. She also initiated almost of the activities (section 4.3.3.2B). Themba seemingly used the deductive approach and relied on using the chalkboard. He designed activities as if he were assessing learners on what they have already learnt (section 4.4.3.2). Mamo imposed content on learners and established routines in his class; he explained in Sesotho and promised to punish learners who did not comply (section 4.5.3.2).

Learners were treated the same way irrespective of their individual differences and capabilities using teacher-centred methods.

B. Subject teaching

Thandy and her colleague shared lessons and each dealt with the preferred window although she indicated that the new curriculum prevents subject-phobia. Thandy handled the integrated part, which encompasses scientific, social and creativity aspects together with the numerical and mathematical window. She indicated that her interest was in the non-linguistic LOs, which were the favourites of her colleague.

5.2.2.2 Promoting creativity, independence and survival skills

In this respect, there was nothing either observed or found on the lesson plan that showed an attempt at encouraging or promoting learners to be creative, independent or equipping them with survival skills. Rather, Thandy indicated that she fails to engage learners in such activities due to insufficient and unavailable resources (section 4.5.5.1).

5.2.2.3 Using participatory activity-centred and interactive methodologies

All four teachers were mainly lecturing, asking questions and expecting learners to listen and respond to their questions. They also treated learners in the same way and therefore did not accommodate differences. As a result, learners were passive receptors of knowledge imposed on them by the teachers in the structured classroom. Most of the classroom set-ups (three) were based on the nature of these objectives and the kind of lesson activities planned and conducted. Teachers did not accommodate learners' differences.

The classes were overcrowded and classroom arrangement did not allow a group set-up, except in Themba's case. His class was spacious, equipped with furniture and the learners were sitting in groups. However, the groups were not functional in terms of promoting interaction among learners. He used the groups for administrative purposes not to enhance learning. He requested learners to put the textbooks together after use and the exercise books together for marking.

C. Principals' role

The policy is silent on the role principals should play during the implementation of the curriculum reform. However, there are other documents referred to as the legal frameworks on rights and responsibilities of teachers (including principals), such as the Education Act (no 3 of 2010) and the Code of Good Practice (2011).

i. Checking teachers' planning books

According to the Code of Good Practice (2011), teachers are expected to be prepared with respect to the academic development of the learners. One way to demonstrate preparedness is by creating a scheme of work and lesson plan. Teachers, therefore, regard the role of principals as checking their preparation books (scheme of work and record of work done as well as the lesson plan books).

The teachers' perspectives in this regard emanate from the repetitive practice performed by their principals who check and sign the planning books. This practice is in line with the principals' responsibilities of ensuring "that meaningful teaching and learning occurs at schools" (Education Act, no.3 of 2010:179). As a result, teachers at various intervals submit their planning books that principals can check and sign. The signature serves as the indicator that the books are checked (Appendix A and B).

One of the participants' lesson plan book was checked and signed on a daily basis. However, these lesson plans still had flaws that would have been spelt out by the principals who knew what to look for in the NIC lesson plan. Based on these, the principals perform their role of monitoring the teachers' planning books even though they do not provide the necessary guidance to teachers. Therefore, the effort is not on assisting teachers, but on other agendas. Their role as the curriculum leaders is thus not focused on providing support on planning.

Checking the lesson plan is seen as a routine that has little impact on the contents of the planned work. This is because these checked and signed schemes and lesson plan books show anomalies that principals would rectify if they knew how the planning should be done.

Although most of the participants did not directly state (as Tiny indicated) that they had all requested some kind of help from their principals on the NIC implementation, the opposite occurs. That is, instead of receiving the anticipated assistance, Tiny claims to be the one helping the principal, who is perceived to have little knowledge regarding the NIC. This is because teachers had attended training several times before the principals did.

Tiny's argument is apparent, especially when considering the kind of misunderstandings of the key elements of lesson planning, such as the instructional method. Themba's principal, for instance, signed the lesson plan where skills to be developed were listed as the teaching-learning methods.

Another perceived role of the principal is that of being the problem solver or conflict manager. In this regard, participants viewed the principal as a person whose tasks include resolving disputes between learners and maintaining discipline in the school. The principal's roles, according to the teachers, include checking the planning books and resolving learners' social issues.

D. Teachers' role and responsibilities

This section discusses teachers' perceived responsibilities and the eminent challenges confronting implementation of the NIC.

All teachers were aware of the necessity of planning their work in terms of scheme, lesson plan and material preparation, but they do not have the necessary materials at

their schools. They therefore see themselves as the sources of knowledge using teacher-centred methods for instruction and assessment. Apart from that, teachers seem to consider themselves as the only ones supposed to ask questions, as demonstrated by evidence from their lesson plan activities, interview segments and classroom observations. Teachers also tended to regard their roles as providing learners with knowledge, being arbiters and regulators of activities. Teachers also administer assessment tasks, both oral and written, to learners and in most cases, these teachers were playing the role of arbiter regarding the responses provided by learners.

E. Learners' role (cooperation with teachers in performing their role)

Learners were seen as the people who should give answers and should retrieve information when required. In other words, learners were regarded as the receptors of knowledge and they were expected to memorise the information for recall or retrieval when answering the questions.

The education system in Lesotho is aimed at developing skills for personal and social development and not only on knowledge acquisition, hence the change in pedagogy (MoET, 2009:22). However, the teachers mostly use a subject-teaching approach where they engage learners through question and answer. They chose and used teacher-centred methods and in cases where teaching-learning materials were used, it not planned. This prevented teachers from actively engaging learners in learning.

The teachers' understanding of the policy prescriptions was further reflected in how they implement the curriculum and assessment guidelines during classroom instruction and assessment.

In rare cases, learning was related to the learners' life. Themba did this once while talking about uses of animals. Thandy regularly did so during lessons where learners were identifying lines in the classroom, where they brought mealie-meal bags for sack racing and when grouping learners according to their age.

5.3 Implementation of curriculum guidelines: Instruction and assessment

The Curriculum and Assessment Policy requires a new and different approach to instruction and assessment. It necessitates learners to be more accountable for their education, to construct knowledge, to analyse, synthesise, evaluate and apply

information, to develop knowledge, skills and attitudes. It further obliges teachers to facilitate learning and to use participatory, activity-centred and interactive methodologies (MoET, 2009: vii). In addition, the CAP advocates for a connection between instructions and assessment, whereby teachers would use integrated and learner-centred methods (MoET, 2009).

5.3.1 Instruction

According to the CAP, instruction should be changed from being teacher-centred to learner-centred. This involves the use of methods and materials. However, teachers were more teacher-centred and learners became the receivers of knowledge, which was recalled when answering their teachers' questions.

5.3.1.1 Emerging themes on conducting instruction

A. Preference on windows/learning areas

Thandy dealt with the windows she preferred and focused on learning outcomes that were mathematically and scientifically oriented (*4.2.4D*). Although Tiny and Mamo were not specific on which "windows" they prefer, all of Tiny's lesson plans comprised of the IP, EW, SW and NW. Mamo also planned for these four in his lesson plans except for one lesson plan where he only planned for IP and NW (*Appendix C: CB and CD*).

Themba was clear in this issue because in his school they use the subject teaching approach. He focused only on IP and SW in Grade 4B in 2015 and in 2016 he specialized in NM teaching in Grade 5A and 5B which led to learners exchanging classrooms (cf. *4.4.5.1E* and *Appendix C*).

Teachers did not deal with all the subjects even those who showed the lesson plans of all the windows. They shared the work within their classes with their colleagues. They used mutual agreement rooted on preference in deciding would handle which learning areas.

B. Terminology

Some of the words used in the lesson plan and in the syllabus were not explicit to teachers. For instance, Thandy's definition of the term pattern and the use of the lesson evaluation section revealed this (*cf.* section 4.2.2.2 D). According to her, pattern

means anything and the evaluation section on her lesson plan was a section for indicating questions or assessment tasks (*cf.* table 4.11).

Other teachers were not exceptional regarding terminology. Distinguishing between other terms such as “learning outcomes” and “concepts” seemed challenging to teachers as evident from their planning books. Tiny mixed up these terms on her scheme of work (section 4.3.2.1B) and further defined “learning outcome” her own way (section 4.3.2.1D).

In the same way, Themba also seemed to have a misunderstanding of: “learning area”- (NM) versus “curriculum”; skills, methods and resources (section 4.4.2.1C and D) among other terms.In the same way, Mamo confused “learning outcomes” with “concepts” (section 4.5.2.1A) and could not distinguish the “learning outcomes” and “lesson objectives” (4.5.2.2A). The latter seemed to be a general problem which led to poor formulation of lesson objectives on the lesson plans (Thandy-4.2.2.2Ai; Tiny-4.3.2.2B; Themba- 4.4.2.1Cv versus 4.4.2.2A; Mamo-4.5.2.2Aii).

Terminology used seemed to pose a challenge to teachers, hence to curriculum implementation because teachers are the main characters at classroom level.

C. Dealing with a concept once or LO as a lesson objective

Thandy dedicated concepts under each learning outcome to respective single lessons, for example: lines and shapes respectively (*cf*. section 4.2.3.2A,J and Appendix CA). That is, she dealt with a concept in one particular lesson and moved to the next during the following lesson under the respective windows (*cf*. Table 4.6) as shown on the scheme of work.

Tiny was different in that she seemedto have tackled a concept more than once. For instance, she seemed to have dealt with the use of present tense in more than one lesson. The first observed 2016 lesson seemed to be the continuation of the other previous lessons based on its introduction section (Appendix CB2). This concept was further done even on the next lesson. Mamo dealt with number reading and writing in two consecutive lessons just as Themba did with addition of numbers. But Mamo like others turned LO into a lesson objective (*cf.* 4.2.2.2; 4.5.2.2.)

These leave questions regarding the practicality of the scheme of work in terms of lesson planning. Teachers have many learning outcomes/concepts per week. This

might be Thandy's reason for treating a concept only in one lesson. Although Thandy said they write up the scheme of work weekly so as to carry over the learning outcome they may fail to address on a particular week, the concern is what happens at the end after taking them forward week after week.

D. Fictitious use of resources/lack of variety in the use of resources

Some teachers' lesson plans showed no teaching-learning materials and others did. However, in most cases they used the readily available materials in class, which were not necessarily shown on the lesson plan (cf. Appendix C; 4.3.2.2; 4.3.2.2). There was much reliance on textbooks usage due to insufficient resources or unavailable materials, especially for practical work such as sewing and knitting (4.2.4). Material usage seemed to be ineffective because those listed in the lesson plans are not used during the actual lessons.

5.3.2 Assessment

In this regard, teachers included elements of assessment in the lesson plans, such as assessment criteria, methods and activities (*cf.* 4.3.2.2; 4.5.2.2). Even though the assessment guideline indicates that teachers are obliged to practise continuous assessment (CASS) that involves using different assessment modes and strategies, attention was only given to oral and written assessment (*cf.* 4.2.2.2; 4.4.2.2; 4.5.2.2). Essentially, the teachers assessed learning.

In general, the methodology used by teachers does not seem to have changed and therefore does not comply with the envisaged methodology for the reform (*cf.* 4.2.3; 4.3.3; 4.4.3; 4.5.3). The typical pedagogy employed seemed to defeat active engagement of learners. Teacher-centred methods and strategies were dominant from the planning stage to the implementation stage of instruction and assessment. The teachers and learners played their roles as it happened before the implementation of the new curriculum. This could be attributed to the way in which teachers understood the policy prescriptions as well as the challenges they face that are discussed below.

5.4 Challenges

Though teachers acknowledged that the NIC has a potential of simplifying learning, as indicated by Thandy, its successful implementation is evidently faced with a number of challenges. The main challenges were unavailability, insufficient and inappropriate resources, and overcrowding and teacher training (*cf.* 4.2.5.1). Others include teacher

training and a lack of cooperation, which inhibits the process of integration pertaining to scheming and prevents teachers from creating lesson plans together (*cf. 4.3.5.2; 4.5.5.1*).

Further challenges include inadequate leadership, which deprives the teachers of the opportunity to be guided through the curriculum reform, guidance on pedagogy and curricula aspects (*cf.*4.3.5.5). Most importantly, the teachers claimed that the dissemination process was problematic as well (*cf.*4.2.5.2; 4.3.3.2). They said it was disorganised, there were no resources (including the syllabi) and teachers interpreted information from the same workshop differently. Teacher training was done according to the CASCADE model, which seems to have been less effective in this case (*cf.* 4.4.5.2).

5.5 Summary

Table 5–3 Summary of key findings and interpretations against research questions

Research questions	Key findings	Interpretations
What are the teachers' understandings of the CAP in Lesotho in terms of its prescriptions for classroom instruction and assessment (integration, pedagogy and roles)?	A. Integration refers to the process of identifying and clustering the relating LOs/concepts B. Including all subjects in IP scheme C. Integration is rigid D. Implementing the NIC is the same as teaching the old curriculum E. Teachers and learners' roles are the same in the NIC and the phased out curriculum	Their understanding of integration is about linking the related LOs/concepts. Instruction and assessment are separate/mismatched entities, learning process and learners' daily life can be related where possible (planning and practice). The roles played by the teachers and learners are incongruent with the envisaged ones. There are conflicting structural demands on teachers.
How do teachers implement the curriculum and assessment guidelines during classroom instruction and assessment?	They instruct and assess learners in a way that contradicts the policy prescriptions	Teachers implement the NIC in a manner that contradicts the curriculum and assessment guidelines practices due to their varied interpretations and the contexts that are not conducive.
How can the teachers' understandings and practices of the new curriculum be explained?	Policy and curriculum content organisation; planning formats Prior experiences; interactional genres; cascade model; misunderstanding of terminology; incongruous messages	Teachers' divergent interpretations and practices on the CAP prescriptions and practices are due to the conflicting structural demands on the teachers on top of their varying backgrounds, beliefs, attitude and contextual challenges regarding instruction and assessment.

The main findings for the study are teachers' practices seem to contradict the new curriculum and assessment policy in some important waydue, in part, to their varied interpretations and the contexts that are not conducive to effective implementation. Their understanding of integration is about linking the related LOs/concepts. Instruction and assessment are treated as separate entities which is the case for the teacher-centered learning). In most cases learning was separated from the learners' daily life.

The roles played by the teachers and learners are incongruent with the envisaged ones. For instance, teacher imparting knowledgeon the learners was an observable

matter. The policy prescription in this regard endorsesa constructivist view since it requires active involvement of learners (MoET, 2009; Alam, 2017). Contrary to the policy prescription, learners seemed to be passive and not responsible for their learning. According to Bado (2015), this situation reflectsa positivist perspective as opposed to the envisaged constructivists' perspective.

There are conflicting structural demands on teachers. The curriculum development unit, the assessment body and the education administration assign teachersthe tasks that seem to be misaligned in many ways. Teachers are requested to change their roles (MoET, 2009) but the training offered to teacher has shortcomings they were just told what to do. However, changing roles requires authentic training that could enable them to do so(Omollo*et al.,*2017).

In addition, the current school context appears to be unfavourable for the effective implementation of the new curriculum and assessment policy. The policy requires teachers to employ participatory, activity centered methodsand use continuous assessment (MoET, 2009), which are suitable for small groups (Kucharcikova & Tokarcikova, 2016). Therefore, thefactors including overcrowded classes hinder the use of such methods in their situation. The additional contextual changes are the human resources and the materials necessary for putting the curriculum into practice which seem to be in short supply.

In the following chapter, the interpretations from the cross-case analysis are linked to the literature on curriculum reform, curriculum integration, instruction and assessment. Therefore, Chapter 6 seeks to provide the explanations of the participants' understandings of the Curriculum and Assessment Policy (CAP) prescriptions in terms of their roles, integration and pedagogy. Furthermore, it explains their understanding and practices of the NIC, and establishes how teachers implement the curriculum guidelines during instruction and assessment. Lastly, it provides recommendations for improvements pertaining to the implementation of curriculum reform and the integrated curriculum.

CHAPTER 6 DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This final chapter presents the discussion of the findings, the conclusions drawn, and recommendations made based on the findings. The chapter begins with a brief summary of the study, which is followed by a discussion on how the research questions were examined to address the aim of the study. The key findings are then linked to literature and related with theory before engaging with the implications of the study and its significance.

Sense making and social cognitive theories are used to frame the interpretations and discussions of the findings, giving rise to the theoretical implications of the study. Lastly, the chapter presents conclusions and makes recommendations for improving the implementation of theNew Integrated Curriculum (NIC) in primary schools in Lesotho.

6.2 Research summary

How do teachers suddenly negotiate their way in bringing the policy prescriptions into classroom reality? The present study was designed to explore how primary school teachers construct instructional and assessment practices when implementing the New Integrated Curriculum (NIC). Firstly, the teachers' understandings of the Curriculum and Assessment Policy (CAP) prescriptions were determined. Secondly, the ways in which teachers actually execute instruction and assessment during the lessons were explored. The aim of these explorations was to shed light on the teachers' practices and the reasons for adopting them, together with the challenges teachers encounter in the process of implementing the curriculum reform that emphasises integration.

In the previous chapter, I put forward the evidence of the teachers' practices and challenges resulting from their understandings and their varying working environments. On the basis of the findings, curriculum developers and policy-makers could develop insights into the teachers' real-life experiences with the current reforms; most importantly, because teachers are the main implementing agents of curriculum change.

Knowledge of the actual experiences, practices of the core agents of the reform and the reasons underpinning such are necessary to empower the various stakeholders on curriculum development. It could help them to take the necessary measures to enhance and facilitate effective implementation of the reform (from policy making to classroom level).

6.3 Discussion of the findings

Depending on an individual country's context, curricula are often evaluated periodically and, in most cases, the evaluation process results in reform proposals. In various countries, all over the world, curriculum reform occurs for a reason. As Inlow (1965) aptly observed several decades ago, reform is generally done for the purpose of imparting culture, adapting the environment or for personal development. In the case of Lesotho, among many reasons, the recent curriculum reforms were brought in order to enhance acquisition of knowledge, skills, and attitudes of learners for promoting individual and societal developments(MoET, 2009).

The Curriculum and Assessment Policy of Lesotho proposes the adoption of an integrated curriculum model for all primary schools. Theintegrated curriculum prescribed by CAP is known for variety of fruitful purposes. To cite a few, it fosters active engagement of learners andimproves the conceptual understanding and literacy of the learners, among other things (Lam, Alviar-Martin, Adler & Sim, 2013;Hall & Williams, 2015). Despite the strengths of this curriculum model or reform as argued in current and prior literature (Fogarty & Stoehr, 1991; Raselimo, 2010; Dambudzo, 2015;Kahveci & Atalay, 2015; Corlu & Aydin, 2016), the question of how teachers understand and implement the policy prescriptions in real classroom contexts remains.

Subsequently, in sections 6.3.1 and 6.3.2, I discuss my interpretations of the findings of this study on the first two research questions and provide explanations for each of the findings, thereby answering the third research question.

The policy advocates for the use of integrated approaches to teaching and learning in schools for developing learners as individuals and as members of various communities with useful skills, values and attitudes to influence rapid social and economic change (MoET, 2009). This proposition suggests that learning should be holistic and the curricula content should be linked with learners' experiences and real-life challenges.

6.3.1 Teachers' understandings of the CAP prescriptions for classroom instruction and assessment

6.3.1.1 Teachers' understanding of "integration"

It is interesting to note from the findings that the teachers in this study believe that they understand integration. However, my evidence suggests that they did not seem to understand the components of the envisaged integration.

Embedded in the concept, 'integration,' is the quest to respond to increasing life challenges facing the learners by considering their daily experiences, relating learning with school life, community life, and individual learners' life (MoET, 2009). Integration maximises learning, boosts both teacher and learner motivation and improves high order thinking skills (Drake, 1998). Therefore, it is important to enhance teachers' understanding of teaching and learning in a holistic way, reflecting the real world in an interactive way (Shoemaker, 1989). When explaining why agents may develop limited understanding of policy, Spillane *et al.* (2002) explain that due to lack of expertise in the change, agents may sometimes only focus on superficial features of the reform.

There are several possible explanations for this kind of understanding for 'integration' on reform in Lesotho. Firstly, the misunderstanding of integration may be promoted by the stimuli obtained from the various documents. These documents include the policy itself; the supplementary documents such as syllabi, scheme and lesson plan formats.

A. Policy and organisation of content in the syllabi

The present study found that the contents of both the policy and the syllabi are not aligned with the notion of integration as espoused in the CAP. Curricula content is, for example, organised in learning areas and subjects in the syllabi and this is approved by the policy (MoET, 2009). Paradoxically, the same policy advocates against compartmentalisation by suggesting integration. Raselimo and Mahao (2015) point out that the organisation of content into learning areas would prompt teachers to adopt a subject-teaching approach which overlooks integration, an approach that requires teaching and learning to be holistic.

Contrary to its own expectations regarding integration, the policy indicates that the learning areas are the categorisations of the body of knowledge–yet, the learning areas are meant to foster an integrated approach (MoET, 2009). This is a contradiction

to the said curriculum model because the content in this kind of curriculum ought to be organised in an integrated sequence. For this sequence, content needs to be unified to address the cognitive, affective, and psychomotor needs of the learners with emphasis on the horizontal relationships among different topics to enable learners to obtain a unified view of knowledge and gain an in-depth content meaning (Ornstein & Hunkins, 1998).

B. Scheme and lesson plan formats

Furthermore, the findings show that the scheme and lesson plan formats encouraged teachers to conceptualise planning as a process to be done for individual *windows* / learning areas. This kind of approach undermines the notion of integration, especially because planning is a prerequisite for enactment of instructional and assessment practices (Gagne *et al.,* 2005; Vrieling, Stijnen & Bastiaens, 2018*).*

Although grade 3 and 4 teachers plan for IP and the three windows in one lesson plan, their scheme and lesson plan format encourages compartmentalisation. That is, it comprised four separate sections where each of the following, IP, SW, SW and NW, is planned. Likewise, the grade 5 lesson plan format caters for individual learning areas. As a result, the two formats encourage teachers to plan for distinct*windows* / learning areas instead of integrating them.

It is important to note that the organisation of curriculum content into learning areas, together with the documents provided by the ministry, may discourage teachers from preparing and presenting integrated lessons that treat issues holistically as suggested by the policy. It therefore becomes difficult for teachers to bring together content from various learning areas (i.e. compartmental content), especially because of their limited expertise in integration. Therefore, promoting the required integration from the already compartmentalized curriculum content really seem to be a tall order for teachers. This could hinder them from enhancing learners' acquisition of the envisaged skills and attitudes. This somewhat supports Raselimo and Mahao's (2015) argument that the content organisation of the current curriculum may be responsible for encouraging teachers to specialise within the learning areas.

It is equally important to bear in mind in this case that teachers' limited understanding of integration cannot be explained in terms of limited attention to policy or resistance. While their attention towards integration should be appreciated, it is notable that these

attempts may be stifled by factors that conflict with this prescription. Insufficient information regarding integration, organisation of content in the syllabi, the scheme and lesson plan formats were found to be the constraints in the teachers' efforts towards integration.

C. Separating instruction and assessment

A second possible explanation for teachers' limited understanding of integration is that teachers regard assessment as a process that should follow instruction. However, assessment should be intertwined with instruction (MoET, 2009; ECoL, 2012). Their understanding therefore contradicts the use of assessment which isstipulated in CAP and assessment guidelines.

Contrary to expectations, this study found that teachers are not cognisant of the idea of "assessment for learning*"* and "assessment as learning*".* They mainly consider assessment where it is used as "assessment of learning*"*. That is when assessment (of learning) is used only as a process to determine whether learning has occurred or not, after instruction (Norton, 2009).

The teachers tended to omit the other two important purposes of assessment, namely: to assess for learning and assess as way of learning. These are useful for determining learners' achievements and challenges during learning and form the basis for providing descriptive feedback that would enhance learning. Carl (2009) and Harlen (2007) indicate that this feedback is crucial for enhancing learning. As a result of the omission, learners were not given immediate and constructive feedback that would improve their learning. Therefore, Takeuchi, Mori and Suzukamo (2017), McMillan (2004) advocates that immediate and constructive feedback is necessary in learning.

The element of assessment is described in detail in the supplementary documents of the policy, such as "Guide to continuous assessment" which advocates for the use of "assessment for learning", "assessment as learning" and "assessment of learning" (ECoL, 2012:10; ECoL & Burdett, 2012:23). These three types are the building blocks for CASS) and promote the attainment of the continuous assessment. Surprisingly, the CAP emphasises that 'curriculum' (in this case assumed to refer to instruction) and assessment should be strongly linked. Scholars have argued that continuous assessment enhances learning because it informs feedback, remediation, and enriches learners' targets (Muskin, 2017).

The proposition on the use of integrated approaches illuminates the fact that learning should be holistic by also linking instruction and assessment. Therefore, how teachers understand 'integration' is not only based on their knowledge, beliefs and attitudes, but also on their capacity to do what they are expected to do and which contributes much to teachers' understanding of the policy prescriptions.

6.3.1.2 Perceived roles for teachers and learners

Based on the findings in this study, teachers understand the new roles for teachers and learners envisioned in the policy differently. Teachers tend to view themselves as knowledge transmitters whereas the CAP prescribes that teachers should be 'facilitators'. The teachers also view the learners as knowledge recipients whereas they are expected to be knowledge constructors. In spite of calls for teachers to transform their practices, old practices still persist in classrooms seemimgly because of teachers' beliefs about learning, teaching, learners, and subject matter. As argued by Spillane *et al*. (2002), these beliefs influence teachers' interpretation of messages about changing their practice.

The prescribed roles of teachers and learners imply that teachers are expected to see learners as individuals capable of regulating their own learning and constructing their own knowledge rather than being the recipients of knowledge imposed by the teacher. As articulated by Frey (2011), this kind of perception, as prescribed by the CAP, capacitates teachers to enhance learner engagement through gradual release of responsibility. Accordingly, assessment should also be part of learning whereby learners play a larger role in judging their own progress (Prairie, 2005).

On the contrary, teachers in this case appear to view learners through a positivist lens. They perceive the learners' role as to passively receive the imparted knowledge which they have to retrieve during assessment as a way of showing that learning has occurred. This finding agrees with Vavrus, Thomas and Bartlett's (2011) theoretical discussion on seeing learners from the positivistic view point. As articulated in the policy, this perception entails rote learning since it hinders learners from using knowledge to adapt to real life situations (MoET, 2009).

The policy articulates a radical shift towards learner-centred pedagogy (MoET, 2009). According to Boholano (2017), learner-centred pedagogy is a global trend of the 21st century. The benefits of this pedagogy include active participation by learners,

individualised learning and collaboration among learners (Moate & Cox, 2015). The policy therefore seems to empower learners and challenges the dominant teacher-centred pedagogy which Raselimo (2010) shows that it exists in Lesotho. However, contrary to the CAP's prescriptions, the findings in this study reveal that teachers still prefer teacher-centred methods in the implementation of NIC.

A. Prior experience

A possible explanation may be traced to the teachers' prior experiences in the use of teacher-centred methods. Prior experience has been found to be influential in teachers' understanding of reform initiatives (Spillane & Anderson, 2014). As such, the prolonged reliance on the use of teacher-centred methods, which has been a common feature in Lesotho schools (Nketekete& Motebang, 2008), may have prompted teachers to continue using these methods in spite of the CAP's prescriptions on pedagogy.

B. Interactional genres

Moreover, the durability of interactional genres may further explain this finding. According to Lefstein (2008), the established patterns of interaction between the teacher and learners are hard to break. For instance, the common Initiation-Response-Evaluation/Feedback is one durable interactional genre which may reinforce the current teacher and learner roles and constrain new pedagogy.

C. Cascade Model

Furthermore, the findings show that the curriculum dissemination process did not seem to capacitate teachers with knowledge and skills to enable them to understand their new roles. The dissemination process is critical for preparing and informing stakeholders about the proposed curriculum (Carl, 2009).

A possible explanation may be the use of the cascade model for training teachers, which has been found to be less effective in equipping teachers with necessary skills (Mokhele & Jita, 2014;Bett, 2016;). Even though it is imperative for teachers to fully comprehend what their roles entail for them to meet the demands(Jagtap, 2016), the findings suggest that the dissemination workshops using the cascade model tended to provide information that was diversely interpreted by teachers.In addition, the workshops were short and poorly organised with no materials–including the new syllabi–for training teachers. As a result, teachers being told verbally that their new role has now changed to be being 'facilitators' did not seem to enhance their

understanding of their new roles. Hence, a lack of professional training pertaining to integration tends to restrict teachers' commitment to performing their roles(Lam and Chan, 2011).

6.3.2 Teachers' actual practices in implementing curriculum and assessment guidelines during instruction and assessment

6.3.2.1 Classroom instructional and assessment practices and CAP

One major finding is that the instructional and assessment practices of the teachers were incongruent with the CAP prescriptions. Teachers' and learners' activities, pertaining to teaching and learning in their classrooms, differ from what the CAP prescribes. According to the CAP, teaching and learning should reflect a radical shift from categorisation of knowledge to knowledge integration and from teacher-centredness to learner-centredness (MoET, 2009).

The shifts envisaged by the CAP regarding knowledge integration and learner-centredness are supported by literature and are regarded as a new trend for teaching 21st century learners. For instance, Alenvert and Evaldson (2015) show that one of the benefits of knowledge integration is that it promotes the development of the right product for the world of work. Furthermore, TEAL (2010) indicates that learner-centred pedagogy enables learners to develop a variety of skills, including thinking, communication, and social skills.

However, this study found that changing, from teacher-centred to learner-centred pedagogies, seems to be challenging for the teachers due to many factors, such as overcrowded classrooms, and lack of resources in schools. The findings by Metto and Makewa(2014) attest to the fact that contextual factors tend to constrain teachers' efforts towards prescribed change.In addition, the contextual challenges influence the implementation of the integrated curriculum as it was a case in Singapore, whereby the teachers blamed the implementation failure on the shortage of relevant resources (Lam, Alviar-Martin, Adler & Sim, 2013).

A. Treating learning outcome(s) per lesson and equating LOs to lesson objectives

An interesting finding is that some teachers address a Learning Outcome (LO) just once in a lesson while other equate it to a lesson objective. This threatens the integration and learner-centeredness that the CAP stresses. Presenting a LO within a lesson of about forty minutes necessitates teachers to compress what should be learnt

over considerable time into one lesson. As Tomlinson (2014) observes, teachers will often compromise differentiated instruction which is advocated for as the learner-centred approach.

Differentiated instruction entails the use of varied approaches to accommodate individual learners' needs (Shostak, 2014). Learning Outcomes indicated in the syllabi have to be achieved at least by the end of a unit or a year (NCDC, 2014). Compressing LOs into a lesson renders such LOs unattainable because LOs are too broad to be achieved in one lesson, especially given a time frame of a unit or a year allocated to them in the syllabi.

Teaching an LO on its own undermines integration. This was a surprising finding, given that teachers clustered LOs and concepts during the scheming process. Their scheming was an initial plan with integration as intention,in spite of treating the *windows* and learning areas individually. However, their practical lessons did not reflect that intention. This phenomenon can be attributed to perhaps teachers' lack of expertise regarding integration. Spillane et al. (2002) note that reform ideas about changing extant classroom practice crucially depend on teachers' expertise in the type of change expected.

A. Treating learning outcomes as lesson objectives

Treating learning outcomes as if they were lesson objectives may be related to lack of pedagogical content knowledge by the teacher-trainers who taught teachers to divide the number of LOs per learning area by the number of periods per year/unit. Similarly,teachers' lack of pedagogical content knowledge (PCK) may also explain why they equate learning outcomes to lesson objectives. This knowledge (PCK) enables teachers to decide on content to teach, instructional and assessment methods, and instructional materials in consideration of the kind of learners they have (Hashweh, 2013). Since the new curriculum stresses learner-centredness, PCK would help teachers when making decisions about content, methods, materials, and learners to be taught.

B. Incongruous messages

Another likely explanation why teachers seemingly equate learning outcomes to lesson objectives is the confusion that stems from incongruous messages borne from the definitions of 'learning outcome' in terms of time. In the syllabi LO is described as

“a statement in measurable terms of what a learner should know, understand or be able to do by the end of a unit or year” (NCDC, 2015:x).

However, a learning outcome is defined as “a statement that describes what learners should know, understand or be able to do at the end of a lesson(s)” (ECoL, 2012:12). The latter is a prevalent definition among the teachers and they focus on a lesson as their time frame for achieving the LO, irrespective of its weight. This finding confirms the assertion by Spillane et al. (2002) who shows that inconsistencies in policy messages may undermine implementation.

6.3.2.2 Presenting compartmentalised lessons

It was interesting to note that teachers’ instructional and assessment practices are parallel to the envisaged integration. Each learning area was taught on its own with no evidence of drawing content from other learning areas, even in a case where a lesson objective was derived from different areas (IP and NW). This finding is contrary to the policy prescription which stipulates that teachers should present a unified body of knowledge and skills to equip learners with skills to face real life challenges (MoET, 2009).

Yet, according to constructivism, assessment and learning are linked processes because assessment measures learning and systematically collects evidence of knowledge and skills learned (Harlen & Qualter, 2009).As a result, this finding may be explained in terms of the organisation of the curriculum content, as well as the format of the scheme and lesson plan.

A. Curriculum content organisation

In pursuit of integration, the curriculum is organised into learning areas (MoET, 2009). However, this organisation is similar to the subject approach of the old curriculum. Now, given the teachers’ prior experience with the subject approach, this finding confirms Raselimo and Mahao’s (2015) prediction that the current organisation would encourage teachers to specialise.

However, according to Beane, Toepfer and Alessi (1986) integration should strive to dissolve the subject boundaries.The notion of integration, as espoused in the CAP, seems to be based on the assumption that there are collegial relations among teachers in a given school context. Conversely, the findings in this study show it is not always possible to draw content across other learning areas. This echoes Raselimo’s

(2010) finding that teachers' beliefs and school structures tend to hinder collegial environment in schools.

B. Formats for planning

This finding is further explained in terms of the formats of scheme and lesson plans which compel teachers to plan and conduct their lessons in a compartmentalised manner. Teachers use the prescribed scheme and lesson plan formats to draw up their intentions for instruction and assessment. Scheme and lesson plan are used as tools for preparing for their lessons (Makokha & Ongwae, 1997). The planning process requires them to draw upon their curricula knowledge, content knowledge and pedagogical knowledge and their cross-disciplinary skills to organise activities in line with teacher's intended actions (Morine-Dershimer, 2014; Tomlinson, 2014). However, according to the prescribed formats, teachers have to plan for each learning area separately and this undermines the envisaged integration.

6.3.2.3 Teacher-centred pedagogy, unchanged teachers' and learners' roles

Contrary to the prescribed pedagogy, the findings further reveal that teachers predominantly use teacher-centred pedagogy that requires learners to reproduce content during assessment. The policy seeks a shift from these teacher-centred methodologies which promote memorisation of information (MoET, 2009). It is valuable to note that the roles and pedagogy is expected to radically change, as indicated earlier (cf. 6.3.1).

Special attention should therefore be paid to the instructional methods that teachers employ and activities in which learners engage. The use of teacher-centred methods denies learners the opportunity to engage actively and interact with others and the environment during the process (Tomlinson, 2014). This finding is consistent with prior studies which show that teacher-centred pedagogy is a common practice in Lesotho schools (Nketekete & Motebang, 2008; Raselimo, 2010). However, the pedagogy espoused in the CAP is participatory, activity-centred and interactive (MoET, 2009). Through the use of teacher-centred methods, teachers seemed to promote memorisation and to treat learners in their respective classes as if they were identical. Teachers generally kept to their old ways of teaching and their traditional roles.

The possible explanation for these is the way teachers interpret their roles, and different contextual challenges. Firstly, the teachers seemingly regard themselves as

the transmitters of information and view the learners as information receptors. As a result, they are more likely to adopt teacher-centred methods. In this regard, Sahin, Deniz and Topcu (2016) asserts that the epistemological beliefs of the teachers about teaching and learning determine their approaches in the classroom. Secondly, the contextual challenges such as overcrowding seem to compel the teachers to use the teacher-centred methods.Soysal and Radmard (2017) assert that teachers in overcrowded classrooms find it difficult to implement learner-centred methods envisaged in the reforms.

6.3.2.4 Isolation of instruction and assessment

Due to their limited understanding of the policy prescriptions and guidelines, as explained earlier, teachers tended to isolate instruction from assessment. Therefore, they present the lessons on the identified concepts or LOs in isolation under the distinct learning areas using teacher-centred methods in classrooms. They also used assessment as a process that should be done at the end of instruction. In some cases, teachers used assessment unconsciously.

In terms of facilitating learner engagement during instruction and assessment, the findings reveal that teachers fall mainly in the delivery and slightly under modification and collaboration categories of curriculum implementation. Therefore, the unchanged pedagogy, roles and the isolation of instruction and assessment could be explained in terms of teachers' levels in curriculum implementation and how the reform was disseminated to them.

A. Levels in curriculum implementation

As indicated by Harris (2010), there are three main categories of teachers in curriculum implementation. In the first category, learners' activities and discipline are prescribed by teachers; in the second category, teachers cater for learners' interests by adapting the curriculum; and the last category scores highest in curriculum implementation. This last category regards teachers working jointly with learners to make the curriculum appropriate to learners' aims for them to develop necessary thinking skills for learning.

Looking at the pedagogy and learners' roles envisaged by the CAP, these categories of teachers are useful in determining how learners are engaged during the

implementation of the reforms. In the case of Lesotho, learners are at the core of the curriculum reform. I consider the teachers to fall in the delivery category based on the methods teachers decided to use, the kind of teachers and learners' activities designed and enacted. According to the findings, teachers stipulated activities and regulations for learners and disciplined the learners who did not conduct themselves accordingly. They also regarded learners as objects that should depend on the teachers' guidance. Learners were either threatened with punishment for not complying or promised a reward for doing what was expected.

Learners were basically expected to answer questions and complete the tasks given during the lesson as anticipated by the teacher regardless of the quality of their work. In short, teachers maintained order and planned in a way that encouraged learners' compliance. Therefore, teachers proved to fit best in the delivery category.

However, there were a few instances where teachers showed some characteristics of the modification category, in cases where learners' interests were somewhat catered for. Children are people who like to play and Thandy accommodated them by engaging them practicallyin a sack race. Again the use of colourful textbooks during different lessons also encouraged some learners' interest, although the textbooks were mostly used in a teacher-centred way. For this reason, teachers seem to have some qualities found in the modification categories.

As a result, the teachers plan activities that indicate how learners are expected to participate, to answer questions, complete the tasks given during the lesson regardless of the quality of their work. The teachers maintain order and plan in a way that encourages learners' compliance, while anti-social behaviour is prevented by means of certain consequences for the learners who disturb others.

In some cases, teachers fall in the modification category. According to the findings, they adjusted some activities and content to suit the level of learners and encourage participation. However, they rarely promoted high-level thinking of learners through the activities they planned because they misunderstood their roles and that of the learners.

The learners should be responsible for their own learning (MoET, 2009). As a result, from the planning stage throughout instruction, teachers are expected to facilitate

learning in the current curriculum. They are encouraged to rather use a variety of teaching techniques to promote the distribution of power from teacher to learners and play a facilitative role to advance active learning on the side of the learners (Frey, 2011; Shostak, 2014). Through this method they ought to guide learners to analyse, synthesise, evaluate and apply knowledge (MoET, 2009). In this way, learners would no longer be regarded as the passive receptors of knowledge but as the active agents who should be supported to develop knowledge, skills, values and attitudes.

B. Cascade Model

The observed discrepancy between teachers' pedagogy and the envisaged one, roles as well as the separation of instruction and assessment, could again be attributed to the use of the cascade model during the curriculum dissemination process. This model seemingly denied teachers the opportunity to learn more about their envisaged role. As indicated earlier, literature shows that this model, despite being cost effective, is ineffective for continuing professional development of teachers (Dichaba & Mokhele, 2012).

6.4 Limitations of the study

6.4.1 Limited number of participants

Due to the qualitative nature of this study, I only managed to explore the practices of a few participants. To ensure the trustworthiness and credibility of the study, I first conducted a pilot study and made the necessary alterations to the research instruments. Furthermore, each participant was observed during three lessons and were interviewed after each of these lessons. I then analysed their scheme of work for two quarters and three of their lesson plans corresponding with the observed lessons. The findings from these varied methods and techniques were triangulated to increase the credibility of the study. I was able to provide "thick descriptions" of the teachers' practices due to the nature of this study. The purpose is not to generalise but to learn more about the teachers' specific challenges and opportunities during the implementation.

6.4.2 Teacher allocation

It should be pointed out that data were collected in the third and fourth years of the implementation of the new curriculum. All the teachers were initially teaching Grade 4 but were later re-assigned to different grades (Grade 3, 4 and 5) in the subsequent year. Grades 3 and 4 teachers still dealt with the Integrated Part of the syllabus, the

English Window, Sesotho Window, and Numeracy Window butthe teacher who had moved to Grade 5 changed his teaching focus to the Numerical and Mathematical Learning Area only.

Given the above situation, I could not explore the practices in the same grade over time. Moreover, in some schools, teachers use a subject teaching system, while others taught all the learning areas. These conditions and changes did not permit comparison of the teachers' practices for the two consecutive years of implementing the new curriculum. However, observing the different grades provided me with the opportunity to explore teachers' practices across various grades. This expanded the scope of this study and brought a wider picture of the teachers' practices that would have been possible in one grade only.

6.5 Conclusions

The purpose of the study was to explore the instructional and assessment practices of teachers in Lesotho's primary schools while implementing the NIC (reform) by:

1. Documenting the teachers' understandings of the Curriculum and Assessment Policy prescriptions using data obtained from document analysis, classroom observations, and interviews.
2. Establishing the patterns of implementation of the curriculum and assessment guidelines mainly based on classroom observations, document analysis, and interviews.

With the stipulated purpose of this study in mind and being aware that teachers are at the forefront of the implementation process at school level, it was important to consider teachers' interpretation of the key aspects of the CAP and how they enact the reform.

Current debates on reform implementation continue to show that reform depends on a number of factors such as the policy intentions, the implementing agents, and the context where the reform occur (Bandura, 1989; Spillane *et.al.,* 2002; Riley, 2013;Ramberg 2014;Yu, 2015). The policy requires change in pedagogy and the teachers need to understand what is required of them and be skilled enough to enact what the policy suggests in conducive school and classroom situations. It becomes a tall order for teachers to enact the curriculum as prescribed in the policy when they

are not fully empowered with relevant knowledge and skills and when the conditions hinder attainment of the desired implementation.

Furthermore, teachers' knowledge of the policyprescriptions, curriculum content, and pedagogy shapes how teachers execute their tasks of implementing the curriculum (Fullan, Cuttress & Kilcher, 2009; Tam, 2015; Yu, 2015). When teachers have no or limited knowledge of what is required of them as mandated by the policy, their interpretations may diverge from the policymakers' intentions. In the case of this study, teachers need in-depth knowledge about curriculum content, policy prescriptions and skills about methodologies they have to employ in implementing the integrated curriculum.

That is, teachers knowledge of what ought to be taught (curriculum content), the envisaged roles and methodologies (pedagogy) they are expected to employ in implementing the new curriculum. This knowledge would help teachers on their decision making as to what kind of learning experiences would promote the attainment the policy prescriptions. These includes deciding on the methods and strategies that would be more activity centered, learner-centered;ensuring holistic learning and facilitating learners to construct knowledge and acquiring relevant skills to make them complete beings.In addition, they need to be equipped to execute their roles and to help learners play their roles.

Curricula knowledge encourages teachers' positive perspectives, beliefs and attitudes for making connections between the various elements of the curriculum (Painter & Clark, 2015). It enhances teachers' ability to make connections between various concepts and LOs, thus to integrate the concepts within and across learning areas, and to relate learning with curricula elements. Therefore, this empowers them to internalise and create instructional and assessment events that promote the achievement of the educational goals.

Content knowledge determines the choice and organisation of content to be learnt (Groβschedl, Mahler, Kleickmann & Harms, 2014). Teachers' decisions on how to conduct the lessons, incorporate what should come first during instruction and assessment, and depend on their knowledge of the content of the curriculum.

Likewise, pedagogical knowledge facilitates effective use of media, methods and strategies for instruction and assessment (Gagne *et al*., 2005). Their knowledge pertaining to pedagogy reinforces their decisions on the kind of material and methods for instruction and assessment. So teachers who have no knowledge of the policy prescriptions are likely to miss the pedagogy prescribed by the policy

Teachers' understandings and practices are incongruent with the policy prescriptions due to the seemingly conflicting structural demands on teachers and their past experiences. They were found to limit integration to clustering learning outcomes and relating concepts while scheming. They also act as the transmitters of knowledge where learners act as recipients of the transmitted knowledge. Furthermore, they equate learning outcomes to lesson objectives and isolate instruction and assessment processes. Apart from that, they presented compartmentalised content and lessons using teacher-centered pedagogy and without changing roles.

This study is a foundation; it takes us into a new direction in terms of exploring teachers' instructional and assessment practices. It provides explanations of teachers' understandings and how those understandings translate into actual classroom experiences for teachers and learners.

This study does not make a conclusive claim on these issues, but suggests a need for further exploration of the instructional ecology in order to provide relevant information about the real school and classroom conditions. From that exploration, decisions could then be made regarding whether the conditions in which Lesotho primary school teachers implement the NIC are conducive for successful implementation.

While I have identified that teachers' understandings and practices may be incongruent to policy prescriptions, I cannot make conclusive claims that the findings apply to all primary teachers because this study was designed to look at understandings and practices of only four teachers. Although this study has potential to compare across different schools/teachers in the country, it was only able to look at four teachers in three out of seven grades. It may be that there is a lot more to learn from a larger sample that includes more teachers from other grades. It would be interesting to explore the understandings and practices of teachers in a wider context in order to come to a general conclusion.

Furthermore, the inclusion of other stakeholders such as curriculum developers, education officers, principals, parents and learners may enrich the findings on the impact of their understandings on the curriculum reform implementation.

This study makes an authentic contribution to the curriculum studies field by showing how the implementation of the integrated curriculum can be improved.

6.6 Theoretical implications

Teachers' limited understanding of integration (e.g. linking concepts/clustering learning outcomes observable on the scheme of work; perceiving instruction and assessment as separate processes), leads to partial integration on the implementation of the integrated curriculum. Regarding instruction and assessment as separate processes result into reliance on assessment of learning leaving out assessment as learning and assessment for learning. However, these provide the useful feedback that could be used to enhance learning

Teachers' interpretations of envisaged pedagogy and roles make them to stick to teacher-centered methodologies and consequently unchanged teachers' and learners' roles. They transfer knowledge instead of facilitating learners to construct their knowledge and fail to equipping learners with the necessary competence as per CAP. Default to use the envisaged pedagogy and to change their roles is further attributed to teachers' contextual challenges such as overcrowding and lack of cooperation. Overcrowding in their classrooms prevents teachers to cater for differentiation and to attend individual learners which is against the policy.

The state of implementing curriculum reform places emphasis on learning for both teachers and learners. According to constructivism, learning is said to be socially constructed (Amineh & Asl, 2015), lack of cooperation impacts the necessary collaboration which could enhance the implementation of the reform. Teachers'interpretations of CAP's prescriptions directly and indirectly influence their decisions on instruction and assessment methods and activities (practices).

The combination of findings provides some support for the conceptual premise that from the platform provided by Social cognitive Theory, sense-making can be viewed from the cognitive, social, and behavioural scope. My study contributes to the previous application of sense-making in that it offers a way to explain how interpretation

influences implementation. It focuses on policy messages, context where teachers enact reform, and how these influence their practice. It further incorporates more strongly, the issue of teacher capacity as a key component in explaining why teachers who are seemingly positive about the NIC, and who are also aware that the pedagogy, their role, and learners' role ought to change, failed to implement the change.

Sense Making Theory and Social Cognitive Theory explain how teachers' interpretations of policy influence their practices by showing that interpretation as a cognitive process determines the observable behaviour of teachers in the classrooms. However, the two theories accentuate the role of capacity/skills in implementation. This study found that despite having limited understanding of policy prescriptions, teachers seemed to lack the necessary expertise/skills in the type of change envisaged and that was critical.

What if teachers understood the CAP prescriptions? Would their practices be congruent to the prescriptions? Would they be capable of implementing the curriculum as prescribed? Would their interpretations guarantee that their practice changes? Possessing robust and practical skills in integration, learner-centred pedagogy, and the ability to facilitate learning, are equally as important as understanding the prescriptions.

The study has uncovered teachers' interpretations of the curriculum policy prescriptions, their actual classroom practices, and the reasons underpinning these practices. It has further clarified particular concerns regarding the implementation of curriculum reform in Lesotho as a developing country. I hope that the findings of this study will assist in decision-making regarding the organisation of curriculum content, discussing the breadth and depth of the content that is taught in schools, professional development of teachers, supply of materials used, and engagment with teachers' pedagogical content knowledge of the new curriculum.

The study therefore fosters awareness of the developments pertaining to the implementation of the new integrated curriculum and thereby contributes to knowledge regarding the key challenges and opportunities of curriculum implementation in Lesotho. The results and recommendations of this case study could even be used by

programme evaluators whose goals might be to describe the integration programme and to evaluate its operational effectiveness.

As a teacher, I have learnt that teachers are faced with many challenges: knowledge and skills deficiency, as well as contextual factors such as overcrowding in classrooms and a lack of resources, among others. However, because the nature of their work is not adequately understood, policy makers sometimes make decisions based on assumptions about teachers' work. This further complicates the teaching profession and the work of the teachers.

As a researcher, I also learnt that it is important to equip teachers with the necessary skills for implementing change. Skills are as important as understanding. Therefore, I propose the development of Continuing Professional Development (CPD) programmes that focus on knowledge and skills' development, that are context specific and that would be run by experts in the field of curriculum reform and integration. Currently, the findings of this study suggest that teachers have superficial information about the new curriculum, especially when the cascade model is used for disseminating curriculum information.

In a nutshell, the combination of SMT and SCT gives a useful lens in exploring teachers' instructional and assessment practices pertaining to the implementation of integrated curriculum during the reform. It highlights the importance of teachers' understanding of curriculum and assessment policy prescriptions on the actual enactment of the curriculum.

6.7 Recommendations for policy and practice

6.7.1 Teacher professional developmentas an opportunity for constructing understanding of the policy prescriptions

The policy makes several suggestions for changing teaching in schools. However, teachers showed limited understanding of the policyprescriptions in terms of what integration and pedagogy entail, as well as regarding their roles and those of the learners when implementing instruction and assessment.

In spite of attending workshops, the availability of curriculum and assessment policy documents (e.g. syllabi, teachers' guides and the guide to continuous assessment), teachers did not seem to understand the principles underpinning the NIC. It therefore seems that the messages that teachers received during the dissemination phase, which encompasses documents and training, discouraged the implementation of the policy prescriptions.

The findings indicate that teachers may still require further in-depth information and training on what is expected of them in terms of integration, pedagogy and their roles regarding the new curriculum. Teacher training is a prerequisite for gradual curriculum reform implementation in order to link curriculum policy and teacher practices. Failure to promote the understanding of curriculum aspects is attributed to a lack of teacher training (Zhu, 2010).

I therefore recommend in-depth professional development programmes (in-service and pre-service) that would, among others, focus on important aspects of curriculum implementation concerning the CAP prescriptions. Such programmes should focus on the rationale for reform, on what integration is and how it ought to be implemented, on the main roles of the teachers as facilitators of learning, and on the roles of learners in constructing their own knowledge, skills and attitudes. It should also specifically target influencing teachers' sense-making processes regarding effective implementation of the curriculum in order to achieve the envisaged outcomes of the reform. To facilitate sense making, teachers' CPD should engage them for extended period of time in order to create dissonance in their extant practices.

In this regard, I suggest clarity of boundaries, responsibilities and duties of the various education technocrats. This study thus recommends that teacher training on the implementation of curriculum reform be undertaken by experts with deep knowledge and experience in the field of curriculum integration rather than generalists who may themselves be lacking in expertise and exposure. I further recommend that the concept of integration should be included in teacher training at college and university levels.

6.7.2 Instructional leadership workshops for principal

The study found that teachers received limited instructional leadership from their principals. I therefore recommend in-depth preparation programmes for principals that would enable them to facilitate school based support for teachers. The focus of these programmes should be on capacity building of principals so that they can lead curriculum change effectively.

Specifically, principals should be equipped with skills and knowledge regarding the integrated curriculum, instruction and assessment, as well as school improvement strategies. These skills could assist principals in monitoring teaching and learning, and in building new systems to align assessments with instruction. It is vital to capacitate principals to achieve sustained reform (Fullan et al., 2009). There should be alignment of issues addressed by the Ministry of Education and Training on the practices at schools. The workshops could provide guidance on how principals ought to lead the reform processes.

Inadequate curriculum leadership appeared to be one of the challenges that teachers face when implementing the NIC (section 5.4). As a result, I recommend for consideration of a specific leadership course on both instructional and curriculum leadership at the Lesotho College of Education and in the Faculty of Education at the National University of Lesotho. The availability of such a course would be indicative of deliberate efforts to improve school leadership rather than leaving its development to chance or ad hoc workshops by the ministry.

6.7.3 A critical review of the organisation of curriculum content,thescheme of workformat and lesson plan format

The study also found that by prescribing integration, the policy stipulates a reform which reflects a transformational perspective. However, the content organisation in the syllabi contradicts this articulated change. The broad-field approach used to organise curriculum content, whereby the two or more subjects are combined into learning areas, mimics the subject approach. As a result, I recommend that NCDC should consider developing an integrated curriculum, based on the transformational perspective (as articulated in the policy). It should design a curriculum in which content is organised in an integrated sequence to dissolve subject boundaries that seem to

emerge between learning areas. This would minimise the existing compartmentalisationwithin the curriculum content.

The findings of this study show that the prescribed scheme and lesson plan formats contradict the policy on integration. Rather these formats promote compartmentalised planning and undermine the envisaged integration. I therefore propose a critical review of the current scheme and lesson plan formats. The new formats should promote integration and allow for teachers' creativity. The shortcomings of the current formats impact the classroom instructional and assessment practices because effective instruction and assessment originate from efficient planning (Morine-Dershimer, 2014).

6.7.4 Further research

6.7.4.1 Assessment of school ecology

A thorough investigation of the school ecology could push further the findings of this study. An assessment of how various variables in the school interact in support of the overarching goals of the school would be valuable. It is important to ascertain the factors that may hinder or promote the core business. Moreover, when the school ecology is well known, educational policies may be developed accordingly rather than in a top-down and 'one size fits all' approach. Again, such an assessment would help to establish the capacities that need to be developed to avoid having Continuous Professional Development programmes that do not address contextual problems.

6.7.4.2 Other stakeholders' understandings and practices

This study could be further extended by exploring the understandings and practices of other stakeholders who have direct influence on teachers' implementation of the NIC. Firstly, the National Curriculum Development Centre is responsible for developing curriculum materials (e.g. syllabi used by teachers in planning for instruction and assessment; textbooks used by both teachers and the learners they teach). Secondly, the Examination Council of Lesotho (ECoL) is responsible for developing assessment materials (used by teachers for a variety of purposes (e.g. assessing and reporting on learner progress). Thirdly, these two bodies should disseminate information to teachers directly or through Education Officers and School Supply Unit. Fourthly, learners should assume a greater responsibility for their own learning, which all decisions and activities teachers perform centres on. Lastly, both teachers and learners require parents' support for the teaching-learning process to be successful.

Knowing the understandings and practices of these stakeholders would provide a better platform to implement the new curriculum successfully.

References

Afsahi, S. 2016. *The role of evaluation in curriculum design*. Online: http://www.researchgate.net

Alam, M. 2017. Constructivism and classroom curriculum. *The International Journal of Indian Psychology,* 5(1): 1-29.

Alenvret, C. & Evaldson, J. 2015. *Creating customer value through knowledge integration: How internal stakeholders can be involved in the product development process*. (Master's thesis). Linköping, Sweden: Linköping University.

Alsubaie, M. 2015. Hidden curriculum as one of current issue of curriculum. *Journal of Education and Practice*, 6 (33): 125–128.

Althauser, K. 2018. The emphasis of inquiry instructional strategies: Impact on pre-service teachers' mathematics efficacy. *Journal of Education and learning*, 7(1): 53–70.

Amakiri, H. 2017. Subject interest and Biology Achievement of Senior Secondary Student in Rivers State: Effect of Assessment for Learning Strategies. *Journal of Educational Assessment in Africa*, 12:21-31.

Amineh, R. & Asl, H. 2015. Review of constructivism and social constructivism. *Journal of Social Science, Literature and Language.* 1(1): 9-16.

Anderson, D. 2015. The nature and influence of teacher beliefs and knowledge on the Science teaching practice of three Generalist New Zealand Primary Teachers. *Research in Science Education,* 45 (3): 395-423

Anney, V. 2014. Ensuring the quality of the findings of qualitative research: Looking at trustworthiness criteria. *Journal of Emerging Trends in Educational Research and Policy Studies*, 5(2): 272–281.

Armbruster, B. 2011. Inquiry teaching. In J. Collins III & N. O'Briens. *The Greenwood dictionary of education.* Westport, Conn: Greenwood Press.

Atibuni, D. & Olema, D. 2017. Incorporating Assessment of Learning in Assessment for Learning: Shifting from Foundational Competences to Practical and Reflexive Competences in Learning Institutions. *Journal of Educational Assessment in Africa*, 12: 32-42

Avenstrup, R. 2004. *Kenya, Lesotho, Malawi and Uganda: Universal primary education and poverty reduction.* Available at http://www.siteresources.worldbank.org [Accessed 21 October 2009].

Babbie, E. & Mouton, J. 2002. *The practice of social research.* Cape Town: Oxford University Press.

Babbie, E. 2010. *The practice of social research.* Belmont, CA: Wadsworth Cengage Learning.

Bado, S. 2015. Constructivism learning theory: A paradigm for teaching and learning. *Journal for Research and Methods in Education,* 5(6):66-70.

Ball, D. Thames, M. & Phelps, G. 2008. *Content knowledge for teaching: what makes it special*? 1-13. Available at http://www.uen.org/utahstandardsacademy/math/downloads/level-1/3-1-Content-knowledge-for-teachers.pdf [Accessed 21 September 2014].

Bandura, A. 1989. Social cognitive theory. In R. Vasta (Ed.). *Annals of child development*, *Vol.6: Six theories of child development*. Greenwich, CT: JAI Press. 1-60.

Bandura, A. 1997. *Self-efficacy: The exercise of control*. New York: Freeman.

Beane, J., Toepfer, C. & Alessi, S. 1986. *Curriculum Planning and Development.* Boston: Allyn and Bacon.

Bell, J. 2006. *Doing your research project: A guide for first-time researchers in education, health and social sciences.* New York: Open University Press.

Belli, G. 2008. *Non-experimental quantitative research*. Available at http://media.wiley.com [Accessed: 06 July 2010].

Bentley, M., Ebert, C. & Ebert II, S. 2000. *The nature of investigator: A constructivist approach to teaching elementary and middle school.* Belmont, CA: Wadsworth Thomson Learning.

Berglund, A. & Lister, R. 2010. Introductory programing and the didactic triangle. Proceedings 12th Australasian Computing Education Conference (ACE 2010) Brisbane, Australia.

Best, J. & Kahn, W. 2003. *Research in education.* Boston: Pearson Education Inc.

Bett, H. 2016. The cascade model of teachers' continuing professional development in Kenya: A time for change? *Cogent Education*, 3(1):1-9.

Biggs, J. 2003. *Teaching for quality learning at university: what the student does.* Buckingham: Open University Press.

Bobbitt, F. 2004. Scientific investigations in the classroom: Engaging learners in different types of investigations. In U. Ramnarain (Ed.). *Teaching scientific investigations.* Gauteng: Macmillan SA.

Boholano, H. 2017. Smart social networking: 21st Century teaching and learning skills. *Research in Pedagogy,* 7(1):21-29.

Bokova, I. 2012. *Literacy is key to unlocking the cycle of poverty.* US: Houston Chronicle.

Bowen, G. 2009. Document analysis as a qualitative research method. *Qualitative Research Journal,* 9(2): 27–40.

Bowers, N. 1963. Psychological forces influencing curriculum decisions. *American Education Research Association*, 33(3): 268–277.

Breault, D. & Marshall, J. 2010. Curriculum, definition of. In C. Kridel, *Encyclopaedia of curriculum studies*. Los Angeles, CA: Sage.

Bush, T., Kiggundu, E. & Moorosi, P. 2011. Preparing new principals in South Africa: the ACE: School Leadership Programme. *South African Journal of Education,* 31(1): 31-43.

Carillo, K. 2010. Social cognitive theory in IS research literature review, criticism, and research agenda. *International Conference on Information systems, Technology and management* (pp.20–31). Berlin, Heidelberg: Springer.

Carl, A. 1995. *Teacher empowerment through curriculum development: Theory into practice.* Epping: Creda Press.

Carl, A. 2002. *Teacher empowerment through curriculum development: Theory into practice.* Lansdowne: Juta and Co.

Carl, A. 2009. *Teacher empowerment through curriculum development: theory into practices.* Cape Town: Juta.

Castellan, C. 2010. Quantitative and qualitative research: A view for clarity. *International Journal of Education*, 2(2): 1–14.

Central Intelligence Agency (CIA). 2018. *The world factbook*. Available at https://www.indexmundi.com [Accessed 05 March 2018].

Chapuis, L. 2003. *Pedagogy: Embedding learning technologies Module 1*. Available at http://www.principals.in/uploads/pdf/Pedagogy.pdf [Accessed 24 December 2016]

Chimombo, J. 2005. Quantity versus quality in education: Case studies in Malawi.*International Review of Education*, 51: 155–172.

Chisholm, L. & Leyendecker, R. 2008. Curriculum reforms in post-1990 sub-Saharan Africa. *International Journal of Educational Development,* 28(2): 195–205.

Clements, D. & Battista, M. 1990. Constructivist learning and teaching. *The Arithmetic Teacher*, 38(1): 34-35.

Coburn, C. & Talbert, J. 2006. Concept of evidence used in school districts: Mapping the terrain. *American Journal of Education,* 112(4): 469-495.

Coburn, C. & Woulfin, S. 2012. Reading coaches and the relationship between policy and practice. *Reading Research Quarterly,* 47(1): 5–30.

Coburn, C. 2005. Shaping teacher sense-making: School leaders and the enactment of reading policy. *Educational Policy*, 19(3): 476–509.

Coburn, C. 2016. What's policy got to do with it? How the Structure-Agency Debate Can Illuminate Policy Implementation. *American Journal of Education,* 122: 465-475.

Cohen, D. 1990. A revolution in one classroom: The case of Mrs Oublier. *Educational Evaluation and Policy Analysis Fall,* 12(3):311–329.

Colmer, K., Waniganayake, M. & Field, L. 2015. Implementing curriculum reform: insight into how Australian early childhood directors view professional development and learning. *Professional Development in Education,* 41(2), 203-221.

Cooper, J. 2014. The effective teacher. In J. Cooper. *Classroom teaching skills*. Belmont, CA: Wadsworth Cengage Learning.

Corlu, M. & Aydin, E. 2016. Evaluation of learning gains through Integrated STEM projects. *International Journal of Education in Mathematics, Science and Technology,* 4(1): 20-29.

Creswell, J. 2003. *Research design: Qualitative, quantitative and mixed methods approaches.* London: Sage.

Creswell, J. 2014. *Research design: Qualitative, quantitative, and mixed methods approaches*. USA: Sage Publication

Dambudzo, I. 2015. Curriculum issues: Learning for sustainable development in developing countries: Zimbabwe case study. *Journal of Education and Learning,* 4(1):11-24.

Daries, G. 2009. CUP 622: Part-disciplines of didactics. Bloemfontein: University of the Free State.

De Vos, A. Strydom, H. Fouché, C. & Delport, C. 2005. *Research at grass roots for the social sciences and human service professions.* Pretoria: Van Schaik.

Dempster, N. 2012. Principals leading learning: Developing and applying a Leadership Framework. *Education, 3-13.* 40(1): 49-62.

Denby, N. 2012. *Training to teach: A guide for students*. Los Angeles: Sage.

Denzin, K. & Lincoln, S. 2000. *Handbook of qualitative research.* 2nd ed. Los Angeles: SAGE.

Denzin, K. & Lincoln, S. 2005. *Handbook of qualitative research*, 3rded. Los Angeles: Sage.

Dichaba, M. & Mokhele, M. 2012. Does the cascade model work for teacher training? Analysis of teachers' experiences. *International Journal of Scientific Education,* 4 (3):249-254.

Doll, C. 1974. *Curriculum improvement decision making and process*. Boston: Allyn and Bacon. Inc.

Drake, S. 1998. *Creating integrated curriculum: Proven ways to increase student learning*. Thousand Oaks, CA: Corwin Press.

Dudley-Marling, C. 2012. Social Construction of Learning. In: N.M. Seel, *Encyclopedia of the Sciences of Learning*. Springer, Boston, MA.

Dumciuviene, D. 2014. The impact of education policy to country economic development. Procedia-social and behavioural Sciences, 191 (2005): 2427-2436.

Dyson, S. & Brown, B. 2006. *Social theory and applied health research.* Berkshire: Open University Press.

Ekanem, S. & Ekeng, N. 2014. Philosophical Foundation of Curriculum Development in Nigeria: The Essencist Model. *Journal of Educational and Social Research*, 4 (3): 265-271.

Enrich, L. 2003. Phenomenology: The quest for meaning. In T. O'Donoghue & K. Punch. *Qualitative educational research in action: Doing and reflecting*. London: Routledge Falmer

Etsey, Y. & Gyamfi, A. 2017. Improving Assessment of Learning in Mathematics through Assessment as Learning. *Journal of Educational Assessment in Africa*, 12:11-12.

Evers, W., Brouwers, A. & Tomic, W. 2002.Burnout and self-efficacy: A study on teachers' beliefs when implementing an innovative educational system in the Netherlands*. British Journal of Educational Psychology*, 72: 227–243.

Flick, U. 2007. *Using visual data in qualitative research.* London: Sage.

Flinders, D., Noddings, N. & Thornton, S. 1986. The null curriculum: Its theoretical basis and practical implications. *Curriculum Inquiry,* 16(1): 33–42.

Fogarty, R. & Stoehr, J. 1991. *Integrating curricula with multiple intelligences: Teams, and threads.* Palatine, IL: Skylight Publishing.

Frey, N. 2011. *The effective teacher's guide: 50 ways to engage students and promote interactive learning*. New York: Guilford Press.

Fullan, M. 2009. The principal and change. In M. Fullan, *The challenge of change: Start school improvement now!* Thousand Oaks, CA: Corwin.

Fullan, M., Cuttress, C. & Kilcher, A. 2009. Eight forces for leaders of change. In: M. Fullan (Ed.). *The challenge of change: Start school improvement now!* Thousand Oaks, CA: Corwin.

Gagne, R., Wager, W., Golas, K. & Keller, J. 2005. *Principles of instructional design.* Belmont, CA: Wadsworth Cengage Learning.

Gall, M., Borg, W. & Gall, J. 1996. *Educational research,* 6th ed. White Plains, New York: Longman Publishers.

Gass, J. 2012. Need analysis and situational analysis: Designing an ESP curriculum for Thai nurses. *English for Specific Purposes World*, 36(12): 1–21.

Gawlik, M. 2015. Shared sense making: how charter school leaders ascribe meaning to accountability. *Journal of Educational Administration,* 53 (3): 393-415.

Glatthorn, A. 2000. *The principal as curriculum leader: Shaping what is taught and tested.* Thousand Oaks: Sage Publications.

Glatthorn, A., Boschee, F. & Whitehead, B. 2006. *Curriculum leadership: Development and implementation.* London: Sage.

Goh, C., Zhang, L. Ng, C & Koh, G. 2015. Knowledge, Beliefs and Syllabus Implementation: A study of English Language Teachers in Singapore. *Research Gate*: 1-183.

Gopinathan, S. 2011. *The education system in Singapore: The key to its success*. Available at www.fedea.net>political-educatives [Accessed: 30 June 2016]

Government of Lesotho. 2012. *Kingdom of Lesotho: Poverty Reduction Strategy Paper- National Strategic Development Plan 2012/13-2016/17: Growth and Development Strategic Framework- Towards an accelerated and sustainable economic and social transformation*. International Monetary Fund: Washington, D.C.

Groβschedl, J., Mahler, D., Kleickmann, D. & Harms, U. 2014. Content-related knowledge of biology teachers from secondary schools: Structure and learning opportunities. *International Journal of Science Education*, 36(14): 2335–236.

Hall, K. & Williams, L. 2015. Science trade books and buddies: Involving 3rd-graders in informational texts. *Childhood Education.* 91(2): 123-134.

Hanushek, E. & Wobmann, L. 2007. "The Role of Education Quality in Economic Growth." *Policy Research Working Paper 4122*. World Bank, Washington, D.C.

Haris, L. 2010. Delivering, modifying or collaborating? Examining three teacher conceptions of how to facilitate student engagement. *Teachers and Teaching*, 16(1): 131–151.

Harlen, W. & Qualter, A. 2009. (5th ed.). *The teaching of science in primary schools.* London: Routledge.

Harlen, W. 2004. *Teaching, learning and assessing science (Grade5-12).* London: Athenaeum Press.

Harlen, W. 2007. *Assessment of learning.* Hong Kong: McMilian.

Harris, L. 2010. Delivering, modifying or collaborating? Examining three teacher conceptions of how to facilitate student engagement. *Teachers and Teaching*, 16(1):131-151.

Hashweh, M. 2013. Pedagogical content knowledge: Twenty-five years later. In C. Craig, P. Meijer, & J. Broeckmans, From teacher thinking to teachers and

teaching: The evolution of a research community. *Advances in Research on Teaching,* 19: 115-140.

Haug, S. & Ødegaard, M. 2015. Formative assessment and teachers' sensitivity to student responses. *International Journal of Science Education*, 37(4): 629–654.

Hearne, J. & Cowles, R. 2001. Curriculum development: A critique of philosophical differences.*Education,* 108(1): 53.

Heath, C., Knoblauch, H. & Luff, P. 2000. Technology and social interaction: The emergence of 'workplace studies'. *British Journal of Sociology,* 51(2): 299–300.

Hill, J. 1986. *Curriculum evaluation for school improvement*. Springfield, III: Thomas.

Hlebowitch, P. 2010. Curriculum development. In C. Kridel. *Encyclopedia of curriculum studies.* Thousand Oaks, CA: Sage.

Holland, P. 2009. The principal's role in teacher development. *Southeastern Regional Association of Teacher Educators Journal*. 18(1): 16–24.

Hsieh, H. & Shannon, S. 2005. The three approaches to qualitative content analysis. *Qualitative Health Research* 15(9): 1277–1288.

Huitt, W. 2004. *Values*. *Educational psychology interactive.* Valdosta, GA: Valdosta State University.

Husbands, C. 2015. Which knowledge matters most? In J. Simons & N. Porter. *Knowledge and the curriculum: A collection of essays to accompany E.D. Hirsch's lecture at policy exchange,* 43-50. London: Policy Exchange.

Hussain, S., Tadesse, T. & Sajid, S. 2015. Norm-Referenced and Criterion-Referenced Test in EFL Classroom. *International Journal of Humanities and Social Sciences Invention*, 4(10): 24-30.

Inlow, G. 1965. Factors that influence curriculum change. *Educational Leadership,* 23(1): 39-44.

Irvin, L. 2006. *Teacher conceptions of how to facilitate student engagement.* Paper presented at the AARE Annual conference: Adelaide.

Jabbarifar, T. 2009. The importance of classroom assessment and evaluation in education system. *Proceedings of the 2nd International Conference of Teaching and Learning*. INTI University College, Malaysia.

Jackson, P. 1992. Conceptions of curriculum and curriculum specialists. In: P. Jackson (Ed.), *Handbook of research on curriculum.* New York: MacMillan.

Jacobs, M., Vakalisa N. & Gawe N. 2004. *Teaching-learning-dynamics: A participative approach for OBE*. Johannesburg: Heinemann.

Jagtap, P. 2016. Teachers' role as facilitators in learning. *Scholarly Research Journal for Humanity Science & English Language*. 3(17): 3903-3905.

Jansen, J. 1998. *Curriculum reform in South Africa: A critical analysis of OBE.* Durban: University of Durban Westville.

Jenkins, D. & Shipman, M. 1976. *Curriculum: An introduction.* Shepton Mallet: Open Books.

Jenkins, L., Hall, H. & Raeside, R. 2018. Applications and applicability of social cognitive theory in information science research. Manuscript of paper submitted to *Journal Librarianship and Information Science.*

Johnson, B. & Christensen, L. 2008. *Educational research: Quantitative, qualitative and mixed approaches.* London: Sage Publications.

Johnson, B. & Christensen, L. 2012. *Educational research: Quantitative, qualitative and mixed approaches.* London: Sage Publications.

Johnson, B. & Christensen, L. 2014. *Educational research: Quantitative, qualitative and mixed approaches.* London: Sage.

Jordan, C., Orozco, E. & Averett, A. 2002. Emerging Issues in Schools, Family and Community Connections. National Centre for Family and Community Connections with Schools, Texas: *Southwest, Educational Development Laboratory (SEDL).*

Kahveci, N. & Atalay, Ö. 2015. Use of Integrated Curriculum Model (ICM) in social studies: Gifted and talented students' conceptions. *Eurasian Journal of Educational Research*, 59: 91-112.

Kennedy, D., Hyland, A. & Ryan, N. 2006. Writing and using learning outcomes: A practical guide. Article C 3.4-1. In E. Froment, J. Kohler, L. Purser & L. Wilson. *EUA Bologna handbook – Making Bologna work.* Berlin: Raabe Verlag.

Kennedy, M. 1997. Defining optimal knowledge for teaching Science and mathematics. *National Institute for Science Education*, 10: 1–15

Khama, D. 2018. Church and state relations in the development of education system in Lesotho: A Historical Perspective. In M. Lekhetho. *Educationina comparative and globalizing world education in Lesotho: Prospects and Challenges*, (pp.13-32). New York: Nova Science Publishers.

Khuts'oane, M., Majoro, L., Ntlatlapa, M., Perez, N. & Schmitt, E. 2015. *Hands on (Lesotho) grade 4 learner's book: Unit 1 Knowing oneself and relating to others.* Lesotho: Oxford University Press ORBIS (Pty) Ltd.

Kilpinen, E. 2008. Pragmatism as philosophy of action. *First Nordic Pragmatism Conference,* Helsinki, Finland, June, 1–16.

Kim, Y., Ham, S. & Paine, L. 2011. Knowledge expectations in mathematics teachers preparation programs in South Korea and United States: Towards international dialogue. *Journal of Teacher Education*, 62(1): 48–61.

Kiraly, D. & Sascha, H. 2016. Towards a post-positivist curriculum development model for translator education, In: D. Kiraly *et al.* Towards authentic experiential learning in translator education. V and R Press, Page 67-88.

Kucharcikova, A. & Tokarcikova, E. 2016. Use of participatory methods in teaching at the university. The Online *Journal of Science and Technology*, 6 (1): 82-90.

Lachiever, G. & Tardif, J. 2002. Fostering and managing curriculum change and innovation. *32nd ASEE/IEEE Frontiers in Education Conference* (November 6–9, 2002) Boston, MA (F2F).

Lam, C. & Chan, K. 2011. How schools cope with a new integrated subject for senior secondary students: an example from Hong Kong. *Curriculum Perspectives*. 31(3): 23-32.

Lam, C., Alviar-Martin, T., Adler, S. & Sim, J. 2013. Curriculum integration in Singapore: Teachers' perspectives and practice. *Teaching and Teacher Education.* 31: 23-34.

Lather, P. 1986. Issues of validity in openly ideological research: Between a rock and a soft place. *Interchange*, 17(4): 63–84.

Lawson, A. 2002. *Science teaching and development of thinking.* Belmont, CA: Wadsworth.

Lefstein, A. 2008. Changing classroom practice through the English National Literacy Strategy: A micro-interactional perspective. *American Educational Research Journal,* 45(3):701-737.

Lekhetho, M. 2018. Education in Lesotho: An overview. In M. Lekhetho. *Education in Lesotho: Prospects and Challenges,* (pp.1–11). New York: Nova Science Publishers.

Lemmer, E. & Badernhost, D. 1997. *Introduction to education for South African teachers: An orientation to teaching practice.* Kenwyn: Juta.

Lephoto, C. 2005. Assessment of the impact of Free Primary Education policy in Lesotho. Unpublished Master's dissertation. Bloemfontein: University of Free State.

Lephoto, M. 2008. The needs and support of adolescent orphans in selected Machache secondary schools: a qualitative exploration.Unpublished Master's dissertation. Bloemfontein: University of Free State.

Lerotholi, L. 2001. *Tuition fees in primary and secondary education in Lesotho: the levels and implications for access, equity and efficiency.* Available at http://www.unesdoc.unesco.org/iiep [Accessed 14 January 2010].

Lesotho. Code of Good Practice. 2011. *Supplement No.2 to Gazette No.49 of 10th June*. Maseru: Government Printers.

Lesotho. Education Act 2010. 2010. *Government Gazette Extraordinary*. Maseru: Government Printers.

Lesotho. Examinations Council of Lesotho (ECoL) & Burdett, N. 2012. *Assessment strategy.* Maseru: ECoL.

Lesotho. Examinations Council of Lesotho (ECoL). 2012. *Guide to continuous assessment: Implementing the curriculum and assessment policy and improving learning and achievement in Lesotho.* Maseru: ECoL.

Lesotho. Government Constitutional Matters (LGCM). 1993. *The Constitution of Lesotho*. Maseru: Government printers.

Lesotho. Ministry of Education and Training (MoET). 2001. *Education statistics bulletin*. Available at http://www.education.gov.ls/index.php [Accessed 03 December 2008].

Lesotho. Ministry of Education and Training (MoET). 2005. *Education sector strategic plan 2005–2015.* Maseru: BeePee Printers and Stationers

Lesotho. Ministry of Education and Training (MoET). 2006. *Education challenges in Lesotho: Overview and country perspectives.* Available at http://www.siteresources.worldbank.org [Accessed 01 January 2009].

Lesotho. Ministry of Education and Training (MoET). 2009. *Curriculum and Assessment Policy: Education for individual and social development*. Maseru: The Age Multimedia Publishers.

Lesotho. National Curriculum Development Centre (NCDC). 2013. *Integrated primary curriculum Grade 3 syllabus.* Maseru: NCDC.

Lesotho. National Curriculum Development Centre (NCDC). 2014. *Integrated primary curriculum grade 4 syllabus.* Maseru: NCDC.

Lesotho. National Curriculum Development Centre (NCDC). 2015. *Integrated primary curriculum Grade 5 syllabus.* Maseru: NCDC.

Lewy, A. 1991. *The international encyclopedia of curriculum.* New York: Pergamon Press.

Louis, K., Mayrowertz, D. Murphy, J. & Smylie, M. 2013. Making sense of distributed leadership: How secondary school educators look at job redesign. *International Journal of Educational Leadership and Management,* 1(1): 33–68.

Makaran, D. 2015. Factors influencing curriculum development process in secondary school education in Mogadishu, Somalia. Published Masters Dissertation. University of Nairobi.

Makokha, A. & Ongwae, M. 1997. *A 14-day teaching methodology course: Trainers' handbook.* German Development Service. Kenya (DED.) [Available at: http://www.nzdl.org/gsdlmod].

Mandal, J., Ponnabath, D. & Parija, S. Utilitarian and deontological ethics in medicine. *Ethics in Research,* 6(1): 5-7. Available from: http//www.tropicalparasitology.org

Maree, K. & Pietersen, J. 2007. The quantitative research process. In K. Pietersen. *First steps in research.* Pretoria: Van Schaik.

Marsh, C. 1991. Curriculum approaches. In C. Marsh & P. Morris (Eds.). *Curriculum development in East Asia*. London: Falmer Press.

Marsh, C. 1992. Key *concepts for understanding curriculum*. London: Falmer Press.

Marsh, C. 1997. *Planning, management and ideology: Key concepts for understanding curriculum.* London: Falmer Press.

Marshall, C. & Rossman, G. 1999. *Designing qualitative research,* 3rd edition. Thousand Oaks, Calif: Sage Publications.

Marz, V. & Kelchtermans, G. 2013. Sense making and structure in teachers' reception of education reform: A case study on statistics in Mathematics curriculum. *Teaching and Teacher Education,* 29: 13-26.

Matobako, S. & Heqoa, S. 2018. The Implications of a new integrated curriculum for crowded and multigrade classes in Lesotho primary schools. In M. Lekhetho.

Education in Lesotho: Prospects and challenges. (pp. 63-80). New York: Nova Science Publishers.

Matsuura, K. 2005. *Education for all: Literacy for life. EFA global monitoring report*. Paris: UNESCO.

McCormick, R. & James, M. 1983. *Curriculum evaluation in schools*. Britain: Croom Helm and Routledge.

McGuiggan, R. & Lee, G. 2008. Cross case study analysis: An alternative methodology. *Proceedings from New Zealand Marketing Academy Conference*. Auckland, New Zealand.

McMillan, J. 2004. *Classroom assessment: principles and practice for effective instruction.* Boston: Pearson.

Menchinskaia, N., Skatkin, M. & Budarnyi, A. 2010. *Instruction in the free online encyclopedia*. Available at http://encyclopedia2.thefreedictionary.com[Accessed 20 October 2010].

Metto, E. & Makewa, L. 2014. Learner-centred teaching: Can it work in Kenyan public primary schools? *American Journal of Educational Research,* 2(11A):23-29.

Ministry of Education and Advanced Learning (MEAL). 2014.*Manitoba Education and Advanced Learning: Annual Report 2013-2014.* Manitoba.

Mitchell, B. 2016. Understanding curriculum. *Asian Journal of Humanities and Social Studies,* 4(4): 299–311.

Moate, R. & Cox, J. 2015. Learner-centred pedagogy: Considerations for application in a didactic course. *The Professional Counsellor,* 5(3):379-389.

Mokhele, M. & Jita, L. 2014. Whenteacherclusters work: Selected experiences of South African teachers with the cluster approach to professional development. *South African Journal of Education,* 34(2)1-15.

Monaheng, N.M. 2007. *Implementing tension and population education project in Lesotho changes in donor funded curriculum projects: A case study analysis of environmental and.* Grahamstown: Rhodes University.

Morine-Dershimer, G. 2014. Instructional planning. In: J.M. Cooper, *Classroom teaching skills*. Belmont, CA: Wadsworth Cengage Learning.

Morse, J. 2004. Preparing and evaluating qualitative research proposals. In C.G. Seale. *Qualitative research practice.* London: Sage.

Moru, E., Qhobela, M. & Maqutu, T. 2014. The impact of instruction in enhancing teachers' knowledge of teaching mathematics in some Lesotho primary schools. *Teacher Development: An International Journal of Teachers' Professional Development*, 18(2): 246–263.

Mouton, J. 2001. *How to succeed in your master's and doctoral studies: A South African guide and resource book.* Pretoria: Van Schaik.

Mupa, P. & Chinooneka, T. 2015. Factors contributing to ineffective teaching and learning in primary schools: Why are schools in decadence? *Journal of Education and Practice*, 6(19): 125-132.

Murray, A. 2010. Empowering teachers through professional development. *English Teaching Forum,* 1: 1–10.

Muskin, J. 2017. Continuous assessment for improved teaching and learning: A critical review to inform policy and practice. *Current and Critical Issues in Curriculum, Learning and Assessment* [Available at unesco.org]

Mutch, C. 2012. Curriculum change and teacher resistance. *Curriculum Matters, 8:* 1-8.

Muzvidziwa, V. N. & Seotsanyana, M. 2002. *Continuity, change and growth: Lesotho education system*. Available at http://www.radicalpedagogy.org/radicalpedagogy/Continuity,_Change_and_Growth__Lesothos_Education_System.html [Accessed 04 February 2015].

Nabavi, R. 2012. Bandura's Social Learning Theory and Social Cognitive Learning Theory. *Theories of Developmental Psychology,* 1-23.

Nketekete, M. & Motebang, M. 2008. Entrepreneurship education in Lesotho secondary schools: Pedagogical challenges. *Education, Knowledge and Economy: A Journal for Education and Social Enterprise*, 2(2):121-135.

Nketekete, M. 2002. *Report of evaluation of the secondary revised curriculum in trial schools leading towards localized O' Level curriculum.* Maseru: National Curriculum Centre.

Nkhoma, W. 2013. *The role of the education sector in providing care and support for orphans and vulnerable children in Lesotho and Swaziland*. Available at http//www.osisa.org. [Accessed 04 February 2015].

Nkosana, L. 2013. Theoretical Insight into Curriculum Reform in Botswana. *International Journal of Scientific Research in Education,* 6(1): 68–75.

Norton, L. 2009. Assessing student learning. In Fry, H. (Ed.). *Teaching and learning in higher education: Enhancing academic practice.* New York: Routledge. pp. 132-149.

OECD, 2017. Education Policy Implementation: A literature review and proposed framework. *OECD Education working Paper*, 162:1-63

Offorma, G. 2014. Approaches to curriculum development. In: A. Nicholls, Developing a Curriculum: A Practical Guide. Research gate: 77- 92.

Ogburn, W. 1937. Social forces: Culture and sociology. *University of Chicago,* 16(2): 161–169.

Okoth, T. 2016. Challenges of Implementing a Top-down Curriculum Innovation in English Language Teaching: Perspectives of Form III English Language Teachers in Kenya. *Journal of Education and Practice*, 7 (3):169-177.

Omollo, A., Nyakrura, B. & Mbalamula, Y. 2017. Application of Participatory Teaching and Learning Approach in teaching and Teacher Training Colleges in Tanzania. *Journal of Scientific research and report,* 16 (6): 1-10.

Ormerod, R. 2006. The history and ideas of pragmatism. *Journal of the Research Society,* 57: 892–908.

Ornstein, A. & Hunkins, F. 1998. *Curriculum foundations, principles and issues.* Boston: Allyn and Bacon.

Ozturk, I. 2001. The Role of Education in Economic Development: Theoretical Perspective. *Journal of Rural Development and Administration,* xxxiii (1): 39-47.

Painter, S. & Clark, C. 2015. Leading change: Faculty development through structured collaboration. *International Journal of Doctoral Studies,* 10*:*187–198.

Pasco, G. Gordon, R., Howlin, P. & Charman, J. 2008. The classroom observation schedule to measure intentional communication (cosmic): An observational measure of the intentional communication of children with autism in an unstructured classroom setting. *Journal of Autism Development Disorder*, 38: 1807–1818.

Pickford, R. & Brown, S. 2006. *Assessing skills and practice: Key guides for effective teaching in higher education.* London: Taylor and Francis Group.

Polaki, M. & Khoeli, M. 2005. *A cross-national comparison of primary school children's performance on mathematics using SACMEQ II Data for Botswana, Lesotho and Swaziland.* Available at http//www.sacmeq.org.[Accessed 04 February 2015]

Porter, R., Fusarelli, L. & Fusarelli, B. 2015. Implementing the common core: How educators interpret curriculum reform. *Education Policy,* 29(1): 111-139.

Prairie, A. 2005. *Inquiry into math, science and technology for teaching young children.* Florence, KY: Thomson Delmar Learning.

Ralebese, L. 2014. *Exploring the nature of alignment between the primary science curriculum objectives and the science primary school leaving examination.* Bloemfontein: Unpublished Master's dissertation. University of the Free State.

Ramaqele, T. 2002. Adults in the mainstream: Free primary education in the Southern districts of Lesotho. Unpublished Master's dissertation. Durban: University of Natal.

Ramberg, M. 2014. What makes reform work?–School-based conditions as predictors of teachers' changing practice after a national curriculum reform. *International Education Studies*, 7 (6): 46–65.

Raselimo, M. & Mahao, M. 2015. The Lesotho curriculum and assessment policy: Opportunities and threats. *South African Journal of Education,* 35(1):1-12. https://www.ajol.info/index.php/saje/article/viewFile/113861/103573 [Accessed: 10.04.15].

Raselimo, M. & Wilmot, D. 2013. Geography teachers' interpretation of a curriculum reform initiative: The case of the Lesotho Environmental Education Support Project (LEESP). *South African Journal of Education*, 33(1): 1–15.

Raselimo, M. 2010. *Curriculum reform in Lesotho: Exploring the interface between environmental education and geography in selected schools*. (PhD thesis). Grahamstown: Rhodes University.

Rasheed, S. 2000. Defining quality in education. *The International Working Group on Education Florence, Italy (June)* (pp. 1–44). New York: UNESCO.

Riley, P. 2013. Curriculum reform in rural China: An exploratory case study. *Research & Issues in Music Education,* 11(1): 1–12.

Roach, A. Niebling, B. & Kurz, A. 2008. Evaluating the alignment among curriculum, instruction and assessment: Implications and applications for research and practice. *Psychology in the Schools*, 45(2): 158–176.

Ross, K. 2010. How successful are textbooks provision programmes? *SACMEQ Policy Issues Series*, 6:1-3.

Roychoudhury, A. & Kahle, J. 1999. Science teaching in the middle grades: Policy implications for teacher education and systemic reform. *Journal of Teacher Education*, 50(4): 278-289.

Rutten, K. & Soetaert, R. 2012. Revisiting the rhetorical curriculum. *Journal of Curriculum Studies,* 44(6): 727–743.

Ryen, A. 2004. Ethical issue. In C. Seale. *Qualitative research practices.* London: Sage.

Sahin, E. A., Deniz, H. & Topcu, M, S. 2016. Predicting Turkish pre-service elementary teachers' orientations to teaching science with epistemological beliefs, learning conceptions and learning approaches in science. *International Journal of Environmental and Science Education,* 11(5), 515-534.

Saturday, J. Armbruster, B., Binkley, R. & Thayer-Bacon, B. 2011. Constructivism. In J.W. Collins III. *The Greenwood dictionary of education.* London: Greenwood Press.

Saxon, D., Levine-Brown, P. & Boylan, H. 2008. Affective assessment for developmental students. *Research in the Development Education*, 22(1): 1–4

Schechter, C., Shaked, H., Ganon-Shilon, S. & Goldratt, M. 2016. Leadership Metaphors: School Principals' Sense-Making of a National Reform. *Leadership and Policy in Schools.* DOI:10.1080/15700763.2016.1232836.

Schmidt, W., Wang, H. & McKnight, C. 2005. Curriculum coherence: An examination of US mathematics and science content standards from an international perspective. *Journal of Curriculum Studies*, 37(5): 527–559.

Schreuder, A. & Coetzee, M. 2011. *Careers: An organisational perspective,* 4th Edition. Cape Town: Juta.

Schwartz, M., Sadler, P., Sonnert, G. & Tai, R. 2008. Depth versus breadth: How content coverage in high school science courses relates to later success in college science coursework. *Science Education*, 93(5): 798–826. DOI: 10.1002/sce.20328.

Scott, C. 2015. The futures of learning 3: What kind of pedagogies for the 21st century? UNESCO *Education Research and Foresight: Working Papers,* 15: 1–21.

Shankar, P. 2014. Challenges in Implementing an Integrated Curriculum in Xavier University School of Medicine, *Aruba Education in Medicine Journal (Commentary),* 6(10):74-77.

Shenton, A. 2004. Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22(2): 63–75.

Shoemaker, B.1989. Integrative Education: A curriculum for the twenty-first century. *Oregan School Study Councilbulletin*, 33(2):1-46.

Shostak, R. 2014. Involving students in learning. In: J. Cooper. *Classroom teaching skills*. Belmont, CA: Wadsworth Cengage Learning.

Shulman, L. 1987. Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57(1): 1–21.

Sim, Q. 2011. Instructional leadership among principals of secondary schools in Malaysia. *Educational Research*, 2(12): 2141–2161.

Skott, J., Mosvold, R. & Sakonidis, H. 2018. Classroom practice and teachers' knowledge, beliefs and identity. *Research gate*: 162-180.

Slavik, P. & Leahey, C. 2011. Learning. In J. Collins III. *The Greenwood dictionary of education.* London: Greenwood Press.

Smith, B., Stanley, W. & Shores, J. 1957. *Fundamentals of curriculum*. Yonkers-on-Hudson, New York: World Book Company.

Sowell, E. 1996. *Curriculum: An interactive introduction.* Englewood Cliffs, NJ: Prentice Hall.

Soysal, Y. & Radmard, S. 2017. An exploration of Turkish teachers' attributions to barriers faced within learner-centred teaching. *Educational Studies,* 43(2), 186-209.

Spillane, J. & Anderson, L. 2014. The architecture of anticipation and novices' emerging understandings of the principal position: Occupational sense-making at the intersection of individual, organization and institution. *Teachers College Record,* 116(7):1-42.

Spillane, J. & Healey, K, 2010. Conceptualizing school leadership and management from a distributed perspective: An exploration of some study operations and measures. *The Elementary School Journal,* 111(2): 253-281.

Spillane, J. Reiser, B. & Reimer, T. 2002. Policy implementation and cognition: Reframing and refocusing implementation research. *Review of Educational Research*, 72(3): 387-431.

Spillane, J., Halverson, R. & Diamond, J. 2004. Towards a theory of leadership practice: A Distributed Perspective. *Journal of curriculum Studies*, 36(1): 3-34.

Spillane, J., Reiser, B. & Gomez, L. 2006. Policy implementation and cognition: The role of human, social and distributed cognition in framing policy implementation. *New directions in education policy implementation.* 47-66.

Stears, M. & Gopal, N. 2010. Exploring alternative assessment strategies in science classrooms. *South African Journal of Education,* 30: 591–604.

Stears, M. 2009. How social constructivism can inform curriculum design: A study from South Africa. *Educational Research*, 51(4): 397–410.

Strydom, H. 2007. Ethical aspects of research in social sciences and human service professions. In A.S. De Vos (Ed.). *Research at grassroots: For social sciences and human professions* (pp. 23–36)*.* Pretoria: Van Schaik.

Sullivan, J. 2001. *Methods of social research.* Orlando: Harcourt College.

Tabulawa, R. 2009. Education reform in Botswana: Reflections on policy contradictions and paradoxes. *Comparative Education,* 45(1): 87–107.

Takeuchi, N., Mori, T. & Izumi, S. 2017. Integration of teaching process and Learning Assessment in the Prefrontal Cortec during video Game Teaching-learning Task. *Fonters in Psychology.*

Takona, J. 2002. *Educational research: Principles and practice.* Lincoln: Writers Club Press.

Tam, A. 2015. The role of a professional learning community in teacher change: A perspective from beliefs and practices. *Teachers and Teaching: Theory and Practice*, 21(1): 22–43.

Taylor-Powell, E. & Renner, M. 2003. *Analysing qualitative data*: *Program development and evaluation*. Madison, WI: University of Wisconsin.

Teacher Excellence in Adult Literacy (TEAL), 2010. Student-Centered Learning. *American Institute for Research (AIR)*, (6):1-3.

Tenbrink, T. 2014. Instructional objectives. In J.M. Cooper,.*Classroom teaching skills*. Belmont, CA: Wadsworth Cengage Learning.

Tolman, M. 2002. *Discovering elementary sciences: methods, content and problem-solving.* Boston: Allyn and Bacon.

Tomasini, R., Maspero, E., Van Wassenhove, L. & Ittmann, H. 2008. *World Food Program Lesotho: building sustainable operations.* Available at https://www.insead.edu/facultyresearch/centres/isic/015HRG.pdf.[Accessed 27 February 2015].

Tomlinson, C. 2014. Differentiating instruction for academic diversity. In: J. Cooper. *Classroom teaching skills*. Belmont, CA: Wadsworth Cengage Learning.

Ts'ephe, E. 2004. Free and compulsory primary education in Lesotho: Democratic or not? M.Ed. dissertation. Stellenbosch: Stellenbosch University.

UN. 2015. The Millennium Development Goals Report 2015. New York: United Nations.

UNESCO. 2014a. *Education For All Global Monitoring Report 2013/4 – Teaching and learning: Achieving quality for all*. UNESCO Publishing.

UNESCO. 2014b. Country classification: Data sources, country classification and aggregation methodology. *World Economic Situation and Prospects (WESP).* Online: www.un.org (Retrieved: 07.03.2018).

UNESCO. 2015. *Sustainable development- A central concern*. Rethinking Education: Towards a global common goal. France: UNESCO.

UNESCO. 2017. *What is Education 2030.* Unpacking sustainable development goal 4: Education 2030 Guide.

UNESCO. 2018. Fact Sheet no. 48: One in five children, adolescents and youth is out of school. *UNESCO Institute for Statistics,* 1–13.

United Nations Development Programme (UNDP). 2016. *Human development for everyone: Briefing note for countries on the 2016 Human Development Report*. Available at www.hdr.undp.org [Accessed 07 March 2018].

Van Aswegen, S., Fraser, W., Nortje, T., Slabbert, J. & Kaske, C. 1993. *Biology teaching: An information and study manual for students and teachers.* Pretoria: Acacia Books.

Vavrus, F., Thomas, M. & Bartlett, L. 2011. *Fundamentals of teacher education development: Ensuring quality by attending to inquiry: Learner-centred pedagogy in Sub-Saharan Africa.* Addis Ababa: UNESCO: International Institute for Capacity Building in Africa.

Verma, G. & Mallick, K. 1999. *Researching education: Perspectives and techniques.* Philadalphia, PA: Falmer Press.

Vrieling, E., Stijnen, S. & Bastiaens, T. 2018. Successful learning: balancing self-regulation with instruction al planning. *Teaching in Higher Education,* 23 (6): 685-700.

Walkowiak, T., Minogue, J., Harrington, A. & Edgington, C. 2017. Re-envisioning the school day: Integrating mathematics, science and reading through students' engagement and practices. *Journal of Interdisciplinary Teacher Leadership.* 1(2): 7-12.

Walls, J. 2017. Sense-making and school failure: Lessons from two cases. *Journal of Organisational Theory in Education,* 2: 1–26.

Wang, S. & Lin, S. 2007. The effect of group composition of self-efficacy on computer-supported collaboration. *Computers in Human Behaviour,* 23: 2256-2268.

Waugh, R. & Godfrey, J. 1995. Understanding teacher's receptivity to system-wide educational change. *Journal of Educational Administration*, 33(3): 8–54.

Weijun, T. 2008. *Research methods for business students*. Available at http://www.drtang.org [Accessed 10 September 2015]

Weinstein, S. & Webber, A. 2014. Classroom management. In J.M. Cooper. *Classroom teaching skills*. Belmont, CA: Wadsworth Cengage Learning.

Welman, J. & Kruger, S. 2005. *Research methodology* 2nd ed. Pretoria: University of Pretoria.

Werts, A. & Brewer, C. 2015. Reframing the study of policy implementation: Lived experiences as politics. *Educational Policy*, 29(1): 206–229.

Wilke, R. & Straits, W. 2005. Practical advice for teaching inquiry-based science process skills in the biological sciences. *The American Biology Teacher*, 67(9): 534–540.

World Food Programme (WFP). 2008. *WFP annual report 2008*. *Annual Reports, Corporative Publication, 2009*. Available at http://m,wfp.org [Accessed 21 June 2018].

World Population Prospects (WPP), 2018. *Lesotho Population: Demographics, Map, Graphs*. Online: www.worldpopulationreview.com

Yan, C. 2015. 'We can't change much unless the exams change': Teachers' dilemmas in the curriculum reform in China. *Improving Schools,* 18(1): 5–19.

Yu, A. 2015. A study of University teachers' enactment of curriculum reform in China. *International Education Studies*, 8(11): 113–122.

Zhu, H. 2010. Curriculum reform and professional development: A case study on Chinese teacher educators in China. *Professional Development in Education* 36(1-2): 373-391.

APPENDICES: LETTERS OF APPROVAL

Faculty of Education

30-Jun-2015

Dear Mrs Lerato Ralebese

Ethics Clearance: Integrated Curriculum in Lesotho: Exploring primary school teachers' instructional and assessment practices

Principal Investigator: Mrs Lerato Ralebese

Department: School of Education Studies (Bloemfontein Campus)

With reference to you application for ethical clearance with the Faculty of Education. I am pleased to inform you on behalf of the Ethics Board of the faculty that you have been granted ethical clearance for your research.

Your ethical clearance number, to be used in all correspondence is:

UFS-HSD2015/0284

This ethical clearance number is valid for research conducted for one year from issuance. Should you require more time to complete this research, please apply for an extension.

We request that any changes that may take place during the course of your research project be submitted to the ethics office to ensure we are kept up to date with your progress and any ethical implications that may arise.

Thank you for submitting this proposal for ethical clearance and we wish you every success with your research.

Yours Sincerely

Dr M.M. Nkoane
Chairperson: Ethics Committee
Faculty of Education

THE KINGDOM OF LESOTHO
MINISTRY OF EDUCATION AND TRAINING
MASERU DISTRICT EDUCATION OFFICE
P.O. BOX 47. MASERU 100.
22 313 709 / 22 322 755

12 May 2015

The Principal

_____

Maseru 100

Dear Sir/Madam

RE: RESEARCH

"EXPLORING TEACHERS' INSTRUCTIONAL AND ASSESSMENT PRACTICES OF THE INTEGRATED PART OF THE NEW CURRICULUM IN LESOTHO"

Mrs Lerato Ralebese is a student who is conducting a research on the above stated topic. She therefore wishes to carry out a research at your school.

You are kindly requested to provide her with the information that she may require.

Thanking you in advance for your usual support.

Yours Faithfully

LEPEKOLA RALIBAKHA (MR)
SENIOR EDUCATION OFFICER - MASERU

MASERU DISTRICT
EDUCATION OFFICE
12 MAY 2015
P.O. BOX 47, MASERU - LESOTHO
TEL.: 22322755/22313709

20 May 2015

The Ministry of Education and Training
Masera District Education Office
P.O Box 47
Masera 100

Dear Sir / Madam

"Exploring teachers' Instructional and assessment Practice of the integrated part of the new curriculum in Lesotho"

With the regard to your requesition to conduct a research on the above topic at our school; this serves to inform you that your request has been accepted at this school

We are therefore hoping to provide you with our usual co-operation

Yours Faithfully

19th May 2015

Private Bag A197
Maseru 100

Dear Mrs Ralebese

RE: RESEARCH 'EXLORING TEACHERS INSTRUCTIONAL AND ASSESSMENT PRACTICES OF THE INTEGRATED PART OF THE NEW CURRICULUM IN LESOTHO'

This is to confirm that you are allowed to carry out a research at the above mentioned school. You will be provided with the information that you may require.

We are looking forward to your cooperation.

Yours faithfully

Principal

15th May 2015

Dear Mrs Ralebese

Approval of your request to conduct a research study

This letter serves as an approval of your request to carry out the research on the topic:

Exploring teachers' instructional and assessment practices of the Integrated Part of New Curriculum in Lesotho.

Therefore the school shall cooperate and assist you in carrying out this study.

Looking forward to your cooperation as well.

Yours faithfully

(Principal)

Protocols: Scheme of work

KEY ISSUES	TEACHERS							
	1A	2A	1B	2B	3A	3B	4A	4B
A. Components								
B. Arrangement of learning outcomes within the learning area C. Arrangement of learning outcomes per window/ learning area								
D. Arrangement of learning outcomes across windows/ learning areas								
E. Alignment of content that addresses different domains (cognitive, affective & psychomotor)								
F. How are concepts integrated within the learning area G. How are concepts integrated across the learning areas								

Lesson plan protocol

KEY ISSUES	TEACHERS								
A. The nature of learning outcome(s)	**1A**	**1B**	**2A**	**2B**	**3A**	**3B**	**4A**	**4B**	
B. The nature of instructional objective(s):									
C. How introduction links with the prior learners' knowledge									
D. Success criteria in relation to the objective(s)									
E. Instructional materials									
F. Instructional methods									
G. Assessment methods									
H. How the teacher's and learners' activities cater for differentiation									
I. How teacher intended to use his/ her knowledge, during instruction (instructional and assessment methods) in collaboration with the materials in the plan									
J. Integration of concepts to real life: • (holistic teaching and assessment)									

Observation protocol

KEY ISSUES	TEACHERS								
	1A	**1B**	**2A**	**2B**	**3A**	**3B**	**4A**	**4B**	
A. How teacher links the prior knowledge of learners to introduce the lesson									
B. How teacher presents the success criteria to learners									
C. Identification of instructional and assessment materials used									
D. Identification of instructional methods used E. Identification of assessment methods used									
F. How teacher engage learners to participate G. How teacher' and learners' activities cater for differentiation									
H. How teacher uses his/her knowledge to connect instructional and assessment methods with the materials									
I. How teacher relates the lesson with the real life situation-linking learning to the practical contexts: • (holistic teaching and assessment)									

Interview protocol

KEY ISSUES	TEACHERS								
	1A	**1B**	**2A**	**2B**	**3A**	**3B**	**4A**	**4B**	
A. Teacher's understanding of his/her role									
B. Teacher's understanding of the learner's role									
C. Requirements/steps for planning									
D. Reasons that underpin the selection of the: i. Instructional methods ii. assessment methods iii. materials									
E. Teacher opinions about opportunities to work with others									
F. Teachers opinions about the role of the principal toward their teaching									
G. How teachers approach the challenge of integrating concepts									
H. Teacher perspectives on: i. Integration of concepts ii. What makes learning of integrated curriculum effective									
II. Challenges faced during teaching process									
I. What teachers like about the curriculum									
J. What teachers do not like about the curriculum									

K. Suggestions on improvements for effective learning									