UNIVERSITY OF
KWAZULU-NATAL
INYUVESI
YAKWAZULU-NATALI

An interrogation of Consultant-Driven Curriculum Design in Lesotho: A Primary School Science Curriculum Design

Molise David Nhlapo

PhD

2018

An interrogation of consultant-driven curriculum design in Lesotho: Primary school science curriculum design

by

Molise David Nhlapo

A

THESIS

Submitted in fulfillment of the degree

DOCTOR OF PHILOSOPHY

Faculty of Education and Social Sciences

Edgewood Campus

University of Kwa-Zulu Natal

Supervisor: Dr. L.R. Maharajh

Pietermaritzburg

2018

DECLARATION

I, Molise David Nhlapo, declare that the contents of this thesis represent my own unaided work, and that the dissertation has not previously been submitted for academic examination towards any qualification. Furthermore, it represents my own opinions and not necessarily those of the University of Kwa-Zulu Natal.

…….. …….

Signature Date

ABSTRACT

In 1978 National Dialogue in Lesotho, Basotho requested education that would build a Basotho nation with its own identity and specific destiny in life that would instill values and attitudes consistent with a Basotho way. One of the strategies to address these demands was to train more Basotho to spearhead Lesotho education system especially curriculum design and development. Like any other underdeveloped African country, Lesotho lacked skills to achieve its objective and had to import expertise from other countries in the form of consultancy. But the involvement of foreign consultants in the Lesotho curriculum design and development has been in operation since the beginning of formal education in the country to-date. The expectation was that, with time, the country would produce enough quality curriculum specialists, and the engagement of foreign consultants would end.

This study assesses the issues of foreign consultants' involvement in designing the Lesotho primary school Grade 4 science curriculum. Curriculum specialists mandated to design Lesotho curriculum and two foreign consultants engaged to assist curriculum specialists at time of study provided most of data for this research through one-on-one interviews. Another data was produced through document analysis of old school science Standard 4 syllabus (as it was called) and the new integrated curriculum for Grade 4. In order to interpret data, the researcher utilized the concept quality in which I interrogated the quality of curriculum specialists, foreign consultants and the quality of documents produced by both curriculum specialists and foreign consultants.

The results show that one of the main reasons for engaging foreign consultants is the collapse of training for newly employed curriculum specialists while on the other hand, the Ministry of Education and Training (MOET) employs less qualified and inexperienced curriculum specialists since the Centre (NCDC) is unable to retain or attract highly qualified curriculum specialists. This resulted in the lack of knowledge of curriculum design and curriculum specialists are accused of taking too long to design a low quality curriculum.

ACKNOWLEDGEMENTS

I am grateful to my supervisor, Dr L.M. Maharajh for the guidance and support through the most and final journey of my study. I am also thankful to Prof Reshma Sookrajh for supervision, assistance and encouragements at the start of this journey. Their insightful and encouraging comments gave me a push to go forward to pursuit my goal.

I am also gratified to Prof Nyna Amin and Prof Labby Ramrathan for eye opening explanations and discussions in our contact sessions on research studies. The teachings and discussions really established a deep foundation for my academic journey.

I would like to appreciate contributions made by lecturers and students who participated in the Edgewood PhD Cohort between 2013 and 2015. The teachings and debates we went through also contributed a lot to my eagerness and possibility to finish my studies.

The University of KwaZulu-Natal had made it possible for me to achieve my dream by means of the support they provided through human, structural and financial resources.

Encouragements from colleagues and friends gave me strength to continue and not to slumber. Dr L. Akpan aka Chief, Dr S. Makhasane, the late Sphindiwe Ndlela (May soul rest in peace), Dr Meda, Balugile Gumede and many others, you left a remarkable mark in my life through encouragements and support.

The Ministry of Education and Training through its department of The National Curriculum Development Centre (NCDC) which gave me permission to conduct this research in the Curriculum Centre. I am greatly appreciative to curriculum specialists, foreign consultants, directors, and authorities of the curriculum development Centre.

To my family, thank you so much for understanding and putting up with me when I was going through different emotions. To my daughters, Mamokoena Kwenzy Nhlapo and Mamashinini Nhlapo now known as Mrs ‘Mathabiso Matlapeng; my sons Leshoboro Shuby Nkunyana and Menzy Samuel Nhlapo, you have always known your father as “ngoana oa sekolo”; to my lovely wife, you have been a wonderful mother and acting father to our children.

Special thanks to Mandla Mncwabe, my brother-in-law and his wonderful family in C-section Kwa-Mashu, Durban. His wife, my sister Elizabeth Mncwabe and my niece Slie, Sya, Vumane, Zama, Sane, Zanele and also Mandisa, Andiswa, Nonfundo (Shabalala!!!) and Siyanqoba. Thank you for hosting and taking care of me while attending sessions in KZN.

Thank you all!! May Almighty God bless you richly!!!

Finally, I thank God in Jesus’ name because it is not by my power or might; I could not have made it on my own. Thank you God for Pastor Joseph; Prophet TB Joshua; Prophet Shepherd Bushiri, Bishop ND Nhlapo and my father, the General, Prophet Moorosi!!!!

DEDICATION

This work is dedicated to God Almighty!! Jesus Christ of Nazareth is my Lord and saviour. My strong redeemer.

JESU KE MOLIMO

I love you God

LISTOFACRONYMS

Acronyms	Descriptions
ADB	Asian Development Bank
AIDS	Acquired Immune Deficiency Syndrome
AIMS-NEI	African Institute for Mathematical Science – Next Einstein Initiative
BSTDB	Black Sea Trade & Development Bank
CAPS	Curriculum and Assessment Policy Statement
CEO	Chief Education Officer
CEO-CAS	Chief Education Officer-curriculum and assessment services
COSC	Cambridge Overseas School Certificate
CCFNR	Compassion Capital Fund Natural Resource Centre
CV	Curriculum Vitae
CQS	Consultants' Qualifications
C2005	Curriculum 2005
DANIDA	Danish International Development Aid
DRT	District Resource Teacher
ECOL	Examination Council of Lesotho
EE	Environmental Education
EFA	Education for All
FBS	Fixed Budget
FIDIC	International Federation of Consulting Engineers
FPE	Free Primary Education

Acronyms	Descriptions
GOL	Government of Lesotho
GS	Government Secretary
HIV	Human Immunodeficiency Virus infect
IMF	International Monetary Fund
ITC	Instructions to Consultants
LCE	Lesotho College of Education
LCS	Least-Cost Selection
LHWP	Lesotho Highlands Water Project
LDTC	Lesotho Distance Teaching Centre
LSE	Life Skills Education
LOTE	Languages Other Than English
LOI	Letter of invitation
NCC	National Curriculum Committee

Acronyms	Descriptions
NCDC	National Curriculum Development Centre
NCS	National Curriculum Statements
NGO	Non-Governmental Organisation
NTTC	National Teachers Training College;
NUL	National University of Lesotho;
NMDS	National Manpower Development Secretariat
MOET	Ministry of Education and Training
OBE	Outcomes Based Education
PCK	Pedagogic Content Knowledge
PEMS	Paris Evangelical Missionary Society
PNG	Papua New Guinea
POP/FLE	Population and Family Life Education
PS	Principal Secretary
PS-MOET	Principal Secretary for Ministry of Education and Training
QCBS	Quality and Cost-Based Selection
QBS	Quality-Based Selection
RFP	Request for Proposal
SACU	Southern African Customs Union

Acronyms	Descriptions
SEO	Seniour Education Officer
SSU	Schools Supply Unit
SSS	Single-Source Selection
TOR	Terms of Reference
UN	United Nations
UKZN	University of Kwa-Zulu Natal
UNICEF	The United Nations Children's Fund
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNFPA	United Nations Population Fund
UNDB	United Nations Development Business
UNDP	United Nations Development Programme
USA	United States of America

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION TO THE STUDY

How and why the race began?

1.1 Introduction: Background to Lesotho

Lesotho is a small mountainous country completely surrounded by South Africa, covering about 30,000 sq. km with a population of about 2 million, of which about 75% reside in the rural areas, depending largely on subsistence agriculture (Jopo, Maema & Ramokoena, 2011). The country has a beautiful landscape characterized by high mountains and perennial rivers and it is popularly referred to as the "Mountain Kingdom" and is divided into 10 districts namely; Butha-Buthe, Leribe, Berea, Maseru, Mafeteng, Mohale's Hoek, Quthing, Qacha's Nek, Mokhotlong, and Thaba-Tseka.

Lesotho has a small mineral resource base and exports diamonds, wool and mohair to international markets. The country also receives royalties from the sale of water to South Africa under the Lesotho Highlands Water Project (LHWP). There is also revenue from the Southern African Customs Union (SACU), and sales of textile products. As one of the strategies for supporting the economy, the government of Lesotho aims to have enough skilled, innovative and technically trained manpower and a competitive science and technology infrastructure (Ministry of Natural Resources, 2002).

Lesotho is generally a peaceable country, the peacefulness of the country is reflected in the national motto, *Khotso, Pula, Nala* (peace, rain, and prosperity), and is reinforced by a shared indigenous language, history and culture where Sesotho and English are used as official languages (Government of Lesotho, 2004).

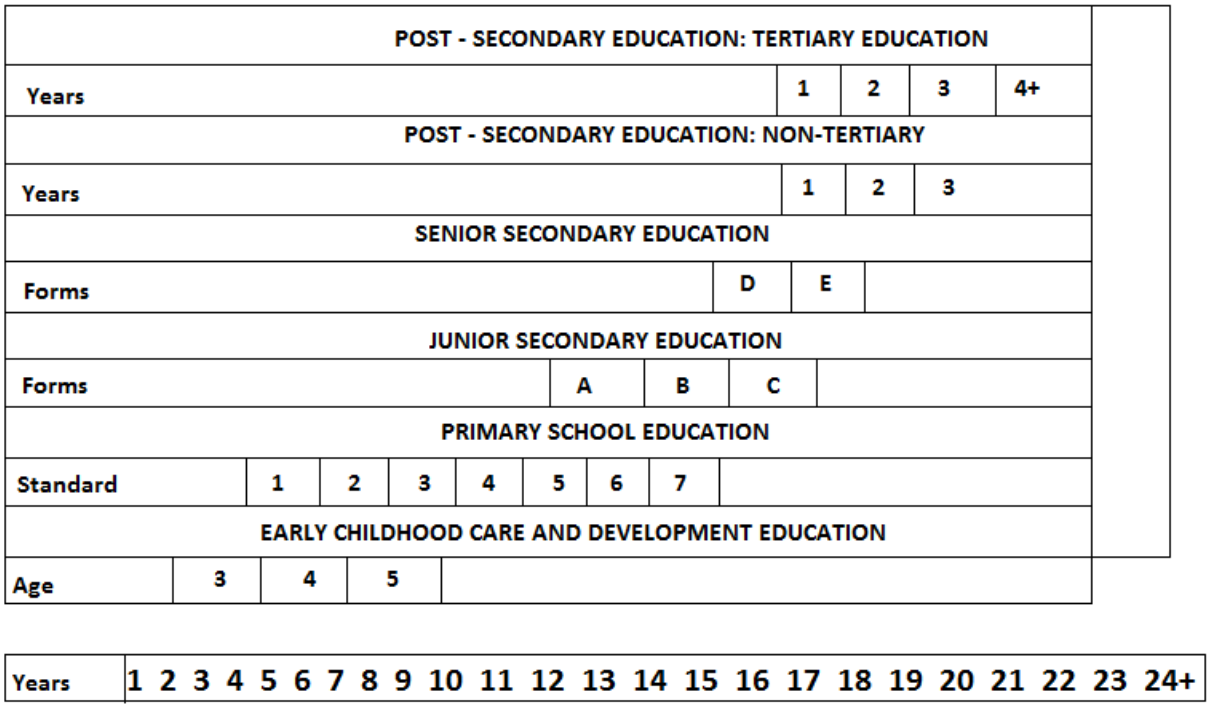
The government of Lesotho envisages the provision of basic education to all Basotho as central to enhancing social and economic development (Ntoi, 2007). The big challenge for this was that the educational system experienced great pressure in expanding education. The curriculum was overloaded with many academic subjects and learners developing minimum practical skills

during their schooling years. Under the old policy a primary school child had to learn 13 subjects and only seven were examinable. Science is among those subjects which are examinable in the primary education of Lesotho. To remedy the challenge of overload, the government of Lesotho has developed a new Curriculum and Assessment Policy in 2009 which significantly reduced the teaching load (Jopo, Maema & Ramokoena, 2011). The new policy is being piloted in 70 primary schools for Grades 1 to 3 and 4 to 5. At the moment, the curriculum has been implemented in standards 1 to 4 and covers the following five learning areas:

Linguistic and Literacy;
Numeracy and Mathematical;
Personal, Spiritual and Social;
Scientific and Technological;
Creativity and Entrepreneurial. (MOET, 2013).

The formal education system takes sixteen years in which the primary cycle takes seven years, at the end of which learners sit the Primary School Leaving Examination (PSLE). This is followed by the secondary education which takes five years. The secondary education is divided into two in which, junior secondary education takes three years and two for senior secondary education. At the completion of junior secondary education learners sit for the Junior Certificate (JC/grade 9) and at the end of senior secondary education there is O-Level/Grade 12 examinations which prepare learners for selection and promotion into tertiary education. Tertiary education ranges from a three-year diploma in technical schools to a four-year degree at the University level. Figure 1 below shows the education structure in Lesotho.

Figure 1.1: Structure of an old Lesotho's education and training system

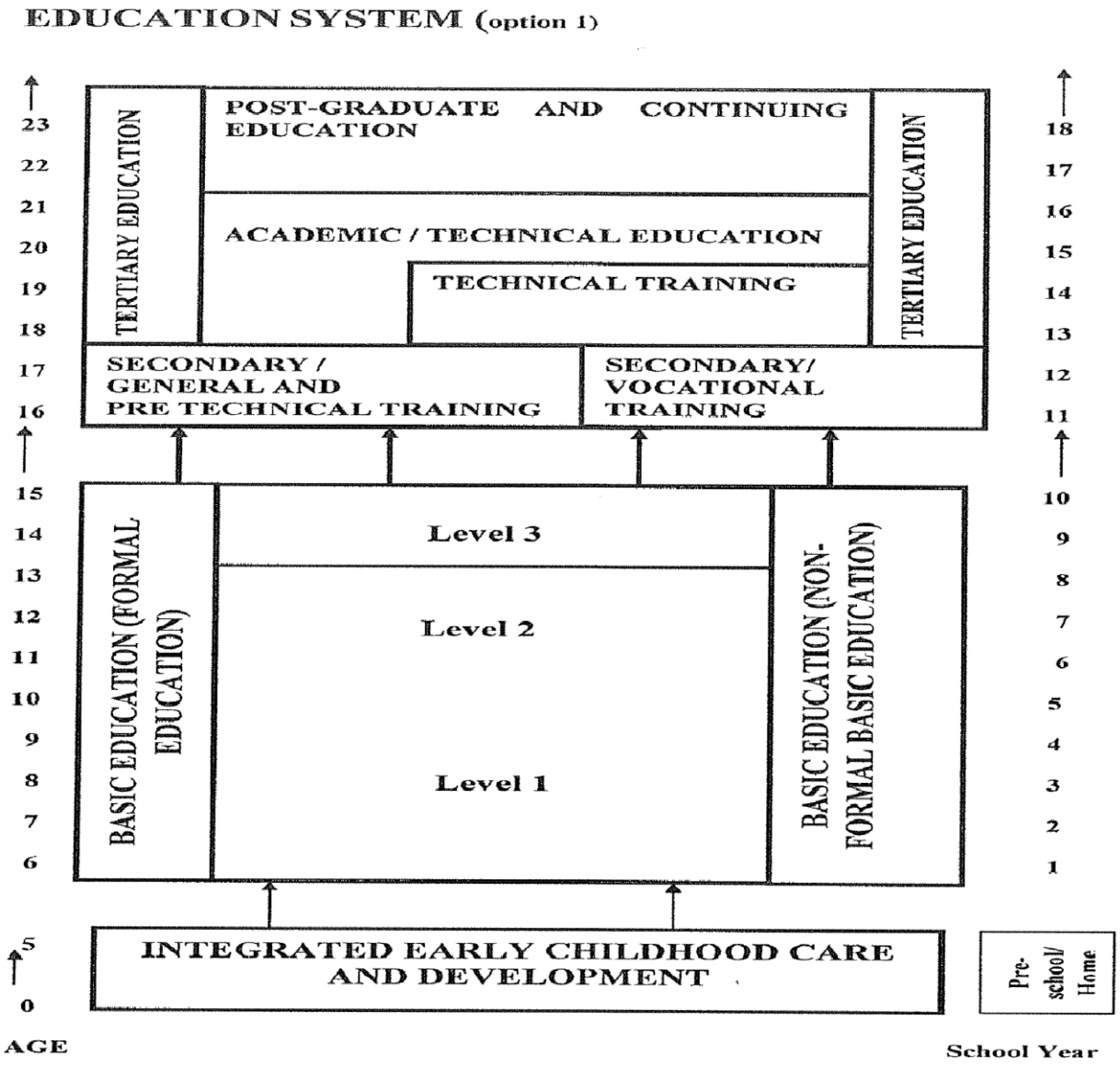


Source: Jopo, Maema & Ramokoena (2011, p.8)

The new curriculum which is being implemented (Grades 1, 2, 3 and 4) and piloted in 70 schools (Grade 5) at the time of this research, introduces a new structure of education in Lesotho. The new structure also suggests sixteen years of formal education system. The major difference is where the primary cycle has been merged with junior secondary. The merge produces ten (10) years of basic education at the end of which learners sit for external examinations. This is followed by secondary/General and Pre-technical training or Secondary/Vocational Training education which takes two years. At the completion of the secondary/General and Pre-technical training or Secondary/Vocational Training education there is AS/Grade 12 examinations which are used to promote learners into tertiary education which consists of academic/technical education and post-graduate/continuing education. Tertiary education ranges from a three-year diploma in technical schools to a four-year degree at an academic institution. This is followed by post-graduate and continuing education which consist of certificates, diplomas, masters and doctorate degrees.

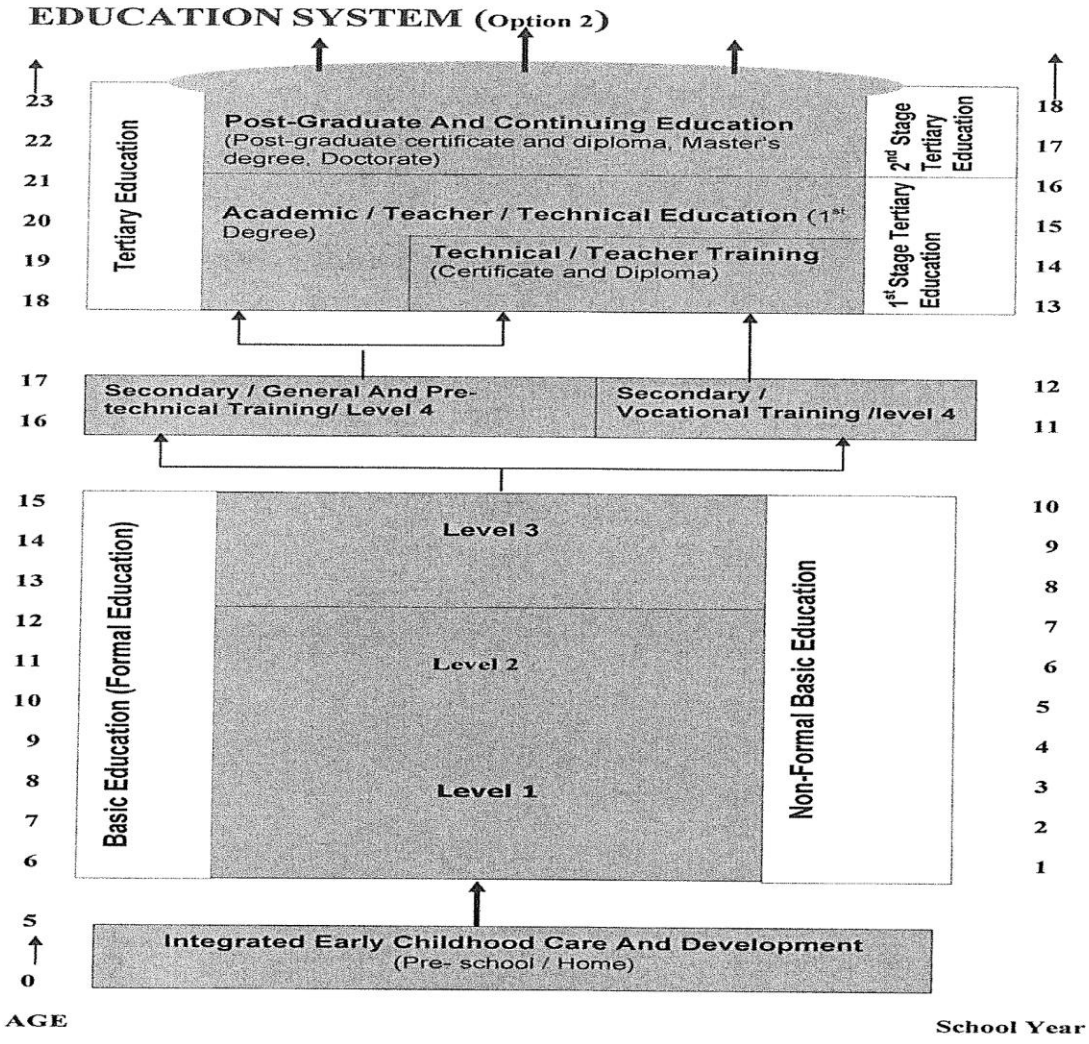
The envisaged structure of education is presented in two diagrams as shown below:

Figure 1.2: Lesotho Education system (option 1)



Source: Curriculum and assessment policy framework (MOET, 2009, p.25)

Figure 1.3: Lesotho Education system (option 2)



Source: Curriculum and assessment policy framework (MOET, 2009, p.26)

In Lesotho, the National Curriculum Committee (NCC) is entrusted with the task of approving curriculum policy and syllabi, checking curriculum materials, and approving the curriculum programme and monitoring progress (Ntoi, 2007). The National Curriculum Committee's main role is to advise the government on all curriculum matters and is composed of the Principal Secretary of Education, the Director of National Curriculum Centre (NCDC), the Directors of the National University of Lesotho (NUL) and Lesotho College of Education (LCE) and other directors of departments of education. The NCC committee members also include the senior education officers for primary and secondary, proprietors of schools and a member of the public and teachers' organization representatives (Ministry of Education, 1980).

Curriculum development is based at the National Curriculum Development Centre (NCDC). The NCDC works through national subject panels comprising representatives of teachers, teacher-training institutions, the inspectorate, and teachers' associations (Jopo, Maema & Ramokoena, 2011 p.19). Each subject in the school curriculum has its own panel. The panels also develop curriculum materials such as textbooks, teachers' guides and other teaching aids. All curriculum materials must be approved by the government on the advice of the National Curriculum Committee. The curriculum specialist is taken to be the curriculum expert who guides the panel through the curriculum development process. The Schools Supplies Unit is closely linked to the NCDC to assist in the procurement and distribution of curriculum materials.

1.2 RATIONALE AND MOTIVATION OF THE STUDY

The 1978-National Dialogue in Lesotho formed doctrine underpinning Lesotho's educational system (Mosisidi, 1981). From this conference Basotho gave their views about the type of education they want. Reports from this conference reveal that Basotho requested education that would build a Basotho nation with its own identity and specific destiny in life (Ansell, 2002 p 106). They demanded education that would instill values and attitudes consistent with a Basotho in a way that it nurtures good citizens who can live and work in a civilized way, who are loyal, patriotic and respectful to elders, law-abiding and responsible, who can take care of their families; a good neighbour and a trustworthy friend; tolerant to different races and religions; clean, neat, punctual, and well mannered (Ansell, 2002; Muzvidziwa & Seotsanyana, 2002; Ministry of Education, 1982).

Past and current studies indicate that education requested and demanded by Basotho as per 1978 National Dialogue has not yet been achieved. Curriculum is regarded as a driving force for an educational system in any country but since 1967, not a great deal has happened in curriculum development in Lesotho; the education system has only expanded in scale but not changed in character from colonial education (Ansell, 2002, p.91; Muzvidziwa and Seotsanyana, 2002; Raselimo, 2010). As a result, education in Lesotho is irrelevant to the needs of the society because it trains and imparts foreign values in youth (Ansell, 2002, p.94; Mosisidi, 1981, p.68; Muzvidziwa & Seotsanyana, 2002). The type of education that Lesotho citizens receive is said to be largely 'bookish' not equipping learners for self-employment, but equips only a minority with

certification as it is geared towards public sector employment or white-collar jobs (Ansell, 2002, pp.95–96; Muzvidziwa & Seotsanyana, 2002). Due to its irrelevance to Basotho, Muzvidziwa and Seotsanyana (2002) recommend that it is essential to empty the European-oriented content of syllabus in schools, colleges and universities, and introduce a content that would instill a sense of pride in their own culture and identity as Basotho. But the question is, if Lesotho wants to eradicate the British-oriented education system and if Lesotho really wants to honour the request of the Basotho made in the 1978 conference, why does the government continue to engage foreign consultants to design the curriculum?

One reason that one can think of as a justification for continued use of foreign consultants, is lack of expertise from Lesotho. But from anecdotal experience as a primary science curriculum developer employed by Lesotho government at the National Curriculum Development Centre (NCDC), the researcher has observed that there are qualified Basotho nationals who can perform the task, both within NCDC and outside in other organisations and institutions. To confirm this idea, in 2009 when the researcher applied and requested to read for a Masters' degree in curriculum design and development studies, the department responsible for bursaries, National Manpower Development Secretariat (NMDS) informed the researcher that he would not be sponsored for the study in that specialisation. The reason given was that the country has got enough curriculum experts. But the irony is that the curriculum design process has been spearheaded by foreign consultants ever since 1967 when the first curriculum was designed and still is. Therefore, the question is why curriculum experts from Lesotho are not used to design the Lesotho curriculum? Instead foreign consultants, mostly from Britain, are engaged.

1.3 ADMINISTRATIVE ISSUES OF CURRICULUM DEVELOPMENT IN LESOTHO

This section discusses the role of managers, CEOs, senior officials in the education system specifically in matters related to curriculum design and development. These are the people who make decisions whether to change or review a curriculum in a country. They sit in groups called committees, task teams or panels. The curriculum panels are structured in such a way that most of the knowledge providers are part of the curriculum design (Marsh, 2009). Contrary to this

argument, Ntoi (2007) observes that in Lesotho, the NCC is made up of members who do not necessarily have technical know-how of subject matter and as such their decisions are superficial. The administrative committees include senior government officials in the ministries of education, school principals, teachers, examination agencies, textbook writers and teacher unions (Marsh, 2009).

Marsh (2009, p.205) categorizes those who are collaboratively involved in curriculum development and design into three classes, thus: decision-makers, stakeholders and influence groups.

1.3.1 Curriculum Decision-makers in Lesotho

According to Marsh and Willis (2007, p.307), curriculum decision-makers in a formal education setting are "Those individuals or groups who, because of their professional status or positions of authority, would influence and have some degree of power to determine courses of action to be followed in schools." Their professional status and position enable them to make specific decisions about what is to be taught, when, how and by whom (Marsh, 2009, p.205). These individuals operate within two systems of curriculum administrations namely; bottom up system and top down system (Chisholm, 2005). In the bottom up system, a community or society decides and shapes the education system of the country and the government act on what the people want the curriculum to be. On the other hand, in the top down system, decisions are imposed on people by rulers. Since curriculum is politically driven, each political party that is taking over the government implements its political ideologies to change the curriculum to suit their manifesto. For instant, in the Republic of South Africa, Cross, Mungadi & Rouhani (2002) argue that the ANC-led Government made changes in education in order to redress the legacy of apartheid education that provided unequal education for the various race groups. This is because the ANC inherited problems of an unequal, segregated education system that administered a politically defined curriculum that provided a racist model (Dean, 2005).

Decision-making is found in all levels but at the national level in the case of a centralised education system, there are discreet hierarchical levels. The top most decision-makers in curriculum reform are the political leaders. Ministers of education at the national level are the most influential decision-makers who have enormous political influence on curriculum change.

Once the political party is in power, its political ideas are implemented by senior government officials in the ministries of education in consultation with ministers of education. The ministers, with their political authority, have initiated major curriculum reforms as a result of their position and strong personalities. The education budget is so large in most countries that it is only politicians who can provide direct levels of accountability to the general public to justify the expenditure (Marsh, 2009, p.207). Following the ministers of education, the next level is the commissioners of education or senior education officers. In a centralised education system, the senior government officials include the Principal Secretary (PS) and chief education officers (CEOs). It is at this level where the commissioners of education or officers of educational agencies make policy decisions about establishing or terminating total programmes. The CEOs responsible for curriculum and assessment services also supervise curriculum development activities, which are undertaken by the National Curriculum Development Centre (Raselimo, 2010).

The next level that follows is the level of superintendents at district level, then principals at school level and lastly teachers at classroom level. Superintendents are mainly concerned with decisions about general programmes concerning their respective districts whereas, at school level, principals are more concerned with coordination within curricula or across grade levels. Even though both teachers and principals are mainly concerned with decisions directly related to day-to-day teaching, teachers focus on the curricula of their own classroom within the school.

In the case of Lesotho in which the education system is highly centralised, curriculum decisions are made at the level of central government through the Ministry of Education and Training (MOET). The government of Lesotho had established an arm that is responsible for curriculum design. Curriculum design and development is the work of the National Curriculum Development Centre (NCDC). This unit has been in existence since 1974 in different names and focus. The primary curriculum panel and subjects' panels were formed in 1974 to initiate the curriculum development process (Mosisidi, 1981, p.20). In 1975 subjects' panels metamorphosed into the curriculum unit which specifically was tasked with the role of curriculum development. The curriculum unit evolved into the primary research and curriculum unit in 1976 to focus more on the research part. In 1980, the National Curriculum Development

Centre (NCDC) was established with the new scope of responsibility embracing all levels for both primary and secondary education and this is still the current situation as of 2016. More specifically, its functions (among others) are to:

- design and develop syllabuses in different subjects areas at both primary education and secondary education levels;
- prepare instructional materials of various types used in primary and secondary levels;
- carry-out pilot testing of curriculum materials in selected schools;
- undertake evaluation research in order to establish the effectiveness of the curriculum in schools (NCDC Handbook, 1993, unpaged).

To perform these functions, NCDC operates within the bureaucratic structure of the Ministry of Education and Training (MOET). Table 1.1 shows key players in the management and implementation of curriculum, from the senior level of the MOET to the level of classroom practice.

Table 1.1: Curriculum decision-making structure in Lesotho

Level of influence	Contextual intents	Programme guided	Locus of control	Manager responsible
1	Policy of education for development	National education system	Ministry of education	Principal secretary for education
2	Employment further studies other goals	Curricula	Ministry of education	Chief education officer curriculum
3	Individual subject syllabus aims	Individual subject syllabus	NCDC	Director of the NCDC
4	Individual subject unit objectives	Individual syllabus unit	School subject department	Head of the school subject department
5	Individual lesson plan objectives	Individual lesson plan	Classroom	Classroom subject teacher

Source: Nkoale (2005, p.24)

As Table 1.1 illustrates, the structure of curriculum decision-making in Lesotho is hierarchical, with the Principal Secretary (PS) for the MOET being the top government official responsible for the education policy for the Ministry of Education and Training. The Principal Secretary (PS) for

MOET is a top government official at the ministry but reports to the Education Minister who is the political authority deployed by the Prime Minister. The PS for MOET reports to the Education Minister but she is directly answerable to the Government Secretary (GS).

Under the PS, there is a Chief Education Officer (CEO) for Curriculum and Assessment services responsible for the three departments, thus School Supply Unit (SSU), Lesotho Distance Teaching Centre (LDTC) and NCDC. With the approval of the PS, the CEO-CA makes decisions on the formulation of new curricula, based on societal needs as expressed at level 2 of contextual intents. The CEO responsible for Curriculum and Assessment services supervises the activities of the three curriculum departments; one of these activities is the development of syllabi for various subjects at both primary and secondary levels. In order to perform the job of curriculum design and development, the curriculum and assessment task team was established in 1999 with the following terms of reference:

- To present the state of the art in basic and secondary education in Lesotho;
- To define basic and secondary education in the context of Lesotho in the formal sector and complementary forms of education;
- To establish aims and objectives of basic and secondary education and an integrated curriculum and assessment framework;
- To propose implementation strategies for basic and secondary education; and
- To provide justification for the development of a comprehensive policy document for education and the establishment of a national commission for this purpose (MOET p. iii, 2009).

The Curriculum and Assessment Task team has membership that covers a range of stakeholders in education including teachers' associations, unions, school principals, university lecturers, churches and other professionals.

The CEO-CAS and the task team are coordinating and facilitating the curriculum design and development, while the technical work in this field is done by NCDC which is staffed with subject specialists (curriculum specialists for different subjects) in different areas, who are usually recruited from classroom teachers with at least five years teaching experience (Appendix E; NCDC, 2010). Within NCDC, there are technical committees for different portfolios such as curriculum and assessment committee, book rental scheme committee, and training and staff

development committee. The curriculum and assessment technical committee is the only committee that comprises members outside NCDC specifically from ECOL. The NCDC curriculum specialists work with subject panels, which comprise representatives of key stakeholders including teachers' associations and unions, teachers, teacher educators in relevant subjects from teacher training institutions and subject examination officers at the ECOL (Ministry of Education, 1980).

The syllabi and instructional materials developed by NCDC were approved by the National Curriculum Committee (NCC) prior to implementation in schools. The NCC had a broad membership of heads of key stakeholder institutions, including educational secretaries of the three major churches in Lesotho (Roman Catholic Church, Lesotho Evangelical Church and Anglican Church of Lesotho), and chairperson of the association of schools' principals (Ministry of Education, 1980). The CEO for curriculum services is the chair of the committee, and the director of NCDC holds the position of secretary. In 2010, the NCC has evolved into a new curriculum development body called the Education Advisory Council (EAC) (Government of Lesotho, 2010). The terms of reference for this new council are different from NCC and the EAC has the PS for education and training and the registrar of ECOL as new members of the council.

1.3.2 Stakeholders of curriculum design in Lesotho

Curriculum development is a nation-wide activity that needs to take into account the aspirations of every citizen. Stakeholders are individuals or groups of persons who have a right to comment on, and have input into, school programmes (Arends as cited in Marsh, 2009, p.205). These are the head office education directors or regional directors. They may not have official powers on what to be taught but can influence the content and approach of curriculum and they usually rely on their modes of persuasion, such as parent groups or newspaper editors. Stakeholders to be considered when designing curriculum are: education authorities, assessment boards (ECOL in the case of Lesotho), teacher unions, parents and school councils/boards, school principals/heads, teachers, students, academics, professional associations and textbook writers (Marsh, 2009, p.207).

In the case of Lesotho, stakeholders form the broad representation in different committees such as the NCC, now known as EAC, curriculum panels, and task teams.

At the level of NCC/EAC, as mentioned earlier, the key stakeholder institutions include the three major churches in Lesotho, namely; the Roman Catholic Church (RCC), Lesotho Evangelical Church (LEC) and the Anglican Church of Lesotho (ACL). The chairperson of schools' principals' association is also a member of NCC/EAC representing the schools in which the curriculum will be implemented. The PS-MOET, CEO-curriculum and assessment services and the director-NCDC also form part of stakeholders in EAC representing as curriculum designers. The main responsibility of NCC/EAC is to facilitate the task of developing curriculum policy, approving syllabi, checking curriculum materials, and approving the curriculum programme and monitoring progress of curriculum development and design. The EAC is composed of the Principal Secretary of Education, the CEO-CA, the Director of National Curriculum Development Centre (NCDC), the Directors of the National University of Lesotho (NUL) and Lesotho College of Education (LCE) and other directors of departments of education (Ntoi, 2007).

Other stakeholders in the EAC include the senior education officers for primary (SEO-Primary) and secondary (SEO-secondary), proprietors of schools, a member of the public and teachers' organisation representatives and the Registrar of the Examinations Council of Lesotho (ECoL) (Ntoi, 2007). Since the EAC is made up of policy makers, the task of checking curriculum materials can be assumed to be superficial since most of the members do not necessarily need to have expertise in either curriculum development or subject content (Ntoi, 2007). As mentioned earlier, the technical task to develop the primary and junior secondary curriculum is mandated to the National Curriculum Development Centre (NCDC) using the system of subject panels. The panels also develop curriculum materials such as textbooks, teachers' guides and other teaching aids.

1.3.3 The influence of stakeholders on curriculum development in Lesotho

Singh (2007) identifies that although culture can be regarded as a unifying force that binds social groups or classes together, it is also a divisive element that "reflects the complexity of societies generally constituted by various subgroups and subcultures in a struggle for legitimacy of their behaviour, values, ideals and life-styles against the dominant culture of the dominant society, that is, the hegemonic culture" (Cross as cited in Singh, 2007, p.62). One would have thought, that a country like Lesotho that has never experienced racial discrimination, would be a homogenous society. Bhabha (1994, p.148) argues that, "we are confronted with a nation split within itself, articulating the heterogeneity of its population…internally marked by the discourses of minorities, the heterogeneous histories of contending peoples, antagonistic authorities and tense locations of cultural differences".

One of the groups that can be found in a society is ruling class. This is a group created by colonial education to do what the colonizers wanted (Raselimo, 2010; Ngubane, 2008; Ansell, 2002). This class does not simply change what they do but change who they are (Ngubane, 2008), which means that they have developed into and changed to a different nature with foreign ideologies. The problem is they are not Europeans or Africans because it is not possible to eliminate the African cultures "no matter how much is subtracted from the individual there is always a remainder that could embrace the task of constituting the self" (Kanu, 2011, p.220). This is an elite class of civil servants and teachers, called the ruling class, brought up in a colonial environment of academic curriculum to serve the colonizers' interests (Ansell, 2002; Iutta, 2011). The class therefore supports an elitist education system driven by individualistic interest and the needs of a small but powerful minority (Muzvidziwa & Seotsanyana, 2002). They support a colonial type of education because it provides white-collar employment for them and their own children, whatever ideology or academia might dictate (Ansell, 2002, p.104). As a result, it is difficult to make innovations acceptable to civil servants or teachers brought up in a colonial environment.

Most of these people are now curriculum decision makers in the form of ministers, CEOs, inspectors, examiners and curriculum designers and developers. Most in this group are concerned with individual betterment and few are concerned with social empowerment (Ansell, 2002,

p.107). These are the people who are in power, who make decisions about the type of educational reform which should be designed and by whom. Consequently, they frequently look up to their former colonial masters for assistance in the form of foreign consultants. Even though, Maharajh (2014, p.499) suggests that values education has the potential to remedy the rampant crime, violence and delinquency prevalent in schools, but the ruling class has the power to protect its particularistic interests, and it is naive to believe that they would bow to the voice of universal reason and agree to yield its power peacefully (Shalin, 1992). Therefore, there are two options (that lead to one outcome) in which the stakeholders can influence the curriculum development in Lesotho. Firstly, if the stakeholders are the ruling class, they might not see anything wrong with the engagement of foreign consultants to design curriculum of Lesotho for Basotho. It has already been mentioned that the curriculum decision makers in Lesotho include ministers, Chief Education Officers, inspectors, examiners and curriculum designers and developers. The same group can fit the definition of the ruling class.

Secondly, the lack of knowledge about curriculum, curriculum development and curriculum studies (Du Preez & Simmonds, 2014) by the stakeholders may not give them enough ammunition to contest the decision by curriculum specialists to engage foreign consultants to design Lesotho curriculum for Basotho (World Bank, 2011). Ntoi (2007) observes that the task of checking curriculum materials can be assumed to be superficial since most of the stakeholders do not have expertise in curriculum development. In essence, the stakeholders may not have any influence in the decision of engaging foreign consultants in Lesotho curriculum design.

1.4 AIMS AND OBJECTIVES OF THE STUDY

1.4.1 Broader issues considered through literature

The following are some of the issues that may have led to the engagement of foreign consultants in the curriculum design of Lesotho. They include values and beliefs of Basotho, capacity of Basotho to design curriculum, donors' terms and conditions in funding educational projects, qualities in terms of qualification, experience, knowledge and ability to do work of people involved in curriculum design and development in Lesotho.

The study is interested in exploring the values of Basotho in order to determine whether "culture, language, traditions and right to self-determination" have or have not been replaced or mixed with the hegemony of the West (Parsons & Harding, 2011, p.2).

This information helps the researcher with knowledge and understanding of the broad issue which is whether Basotho have the ability to design their own curriculum. This is because a circular from National Manpower Development Secretariat (NMDS) claims that there are enough curriculum experts in Lesotho and hence there is no need to train more Basotho in curriculum studies (Ministry of Finance, 2009). Therefore, if the number of curriculum experts in the country is more than enough, then there should be another reason they are not utilized to design the curriculum of their country as they have an advantage of knowing the background and context of the country over the foreign curriculum experts. Therefore, issues including quality of their qualifications were investigated. The researcher also investigated the influence that funding has on people and their reasoning or decision making (Monaheng, 2007). The literature covered the results of poverty, factors and conditions that contribute to foreign aid acquisition or rejection (Raselimo, 2010).

Another broad issue investigated is the impact of initial knowledge to the society (Mosisidi, 1981; Ansell, 2002; Muzvidziwa & Seotsanyana, 2002). This is because most African countries were firstly introduced to colonial education (Khoboli, 2005). The issue is, how has this affected them? How easy or difficult is it to change from colonial knowledge to localization of education? How easy is it to change values and attitudes imparted to them at a young age? The colonial paradigm and funding of educational reforms forms an unhealthy relationship between a dominant group and subordinate group (Iutta, 2011). The relationship between states where one state is more powerful than the other and between a state and the community can influence decision on curriculum reforms.

1.4.2 Specific issues that provoked the investigation

In 1967 when formal education was first introduced in a form of schooling, curriculum in Lesotho was designed, developed and implemented by consultants from the University of Durham in Britain (Mosisidi, 1981). This was understandable considering the situation that there

was no expertise in Lesotho to perform the task. But, the expectation would be that capacity should have been built for Basotho to take over the role of curriculum design and development. However, it is astonishing to realize that in the latest curriculum review, in 2013, a consultant from Britain was engaged to develop syllabi and instructional materials, which should be within the capacity of Basotho curriculum experts and curriculum specialists employed for this specific purpose. Therefore, the study is assessing the issue of foreign consultants' involvement in designing the Lesotho primary school Grade 4 science curriculum.

1.4.3 Critical questions for the study

1. Who are the foreign consultants engaged to design the primary school science curriculum in Lesotho?
2. How is the selection of consultants made to design the primary school science curriculum in Lesotho?
3. Why are foreign consultants used to design the primary school science curriculum in Lesotho?

1.5 FOCUS OF THE STUDY

The structure of Lesotho's education and training system shows that primary school education covers seven years (Jopo, Maema & Ramokoena, 2011). The study focuses on the primary school science curriculum to answer the critical questions. As mentioned earlier, primary schooling in Lesotho takes seven years according to the old education structure which is still in operation as the new curriculum is currently being implemented up to Grade 4. The focus in this study is narrowed down from seven levels to two levels, standards/Grades 4 and 5 of primary schooling/basic education. I had planned to focus on Grades 4 and 5 but since the curriculum for Grade 5 had not been completed at the time of research, the study focused only on Grade 4.

Furthermore, the study focuses on assessment of foreign consultants' involvement in designing the Lesotho primary school Grade 4 science curriculum. The primary education in Lesotho is organized such that learners learn all subjects and all of them are taught by one teacher per class. As a result, the curriculum (old curriculum) is structured such that all subjects are compiled in one document. These subjects are not integrated, but discrete and separate but just put together in

one book. Therefore, it is possible to focus on one subject when analyzing the old school science curriculum, in this case, science subject. The challenge was to focus only on science subject when analyzing the new integrated school syllabus Grade 4 as all subjects have been infused.

There are three reasons for choosing science as a focus of this study. Firstly, science is regarded as one of the core subjects in the Lesotho curriculum. Consequently, most of the projects and innovations consider science as a career subject and as such it is usually used when integrating innovations into the existing curriculum. Secondly, the curriculum design in Lesotho started at primary level in 1967 and was extended to secondary level in 1980 (Mosisidi, 1981; Ansell, 2002, Khoboli, 2005). Therefore, primary science has been in existence since the inception of the Lesotho curriculum. Thirdly, the researcher is currently working as a primary science curriculum specialist in which case the access to relevant documents and resources is maximized as they comprise part of his roles and responsibilities.

1.6 PERSONAL BACKGROUND TO THE STUDY

I am working as a curriculum specialist for the primary science division at the Curriculum Development Centre (NCDC). As mentioned earlier, the work of NCDC, among others, is to develop suitable curricula and instructional materials to meet the needs of Basotho nation and as an employee of NCDC my job is to analyse policy guidelines for development of the curriculum and develop curriculum objectives. To perform my duties, I work with a committee known as a "Primary science panel". This is a committee that consists of curriculum experts in the country and stakeholders in the education system of Lesotho. They include the science subject specialist at the Examinations Council of Lesotho (ECoL), two practicing science teachers, a science curriculum lecturer at the National University of Lesotho and science subject specialists at Lesotho College of Education (LCE). As people mandated to design and develop curriculum of Lesotho, we (both curriculum specialists and panel) always feel insulted by involvement of external consultants to assist us in performing our work because we felt we were doing consultancy work for them.

1.7 ARRANGEMENT OF CHAPTERS OF THE DISSERTATION

1.7.1 Chapter 1: Introduction

This chapter introduces the study and outlines the backwardness of the Lesotho education system and involvement of foreign consultants. It is in this chapter where research questions are outlined with the main critical question being "Why are foreign consultants engaged in Lesotho to design the primary school science curriculum?"

1.7.2 Chapter 2: Literature review

In this chapter, studies done on areas related to the topic have been critically discussed. The focus was on why countries engage consultants especially in educational systems. The gap on investigating involvement of foreign consultants especially in Lesotho has also been discussed.

1.7.3 Chapter 3: Conceptual framework

A number of theories that explain educational relationship of countries, specifically where one country is an impoverished, third world, developing and former colony of the West was evaluated. These include neo-colonialism theory, and cultural theory. The main concept for this study is quality.

1.7.4 Chapter 4: Methodology

The methodology chapter discusses the nature of the study. This includes the paradigm as critical educational research, qualitative approach, methods of data production utilized in this study which are one-on-one interviews and document analysis. The sampling techniques are also explained as to how and why the sample was selected.

1.7.5 Chapter 5: Data analysis, interpretation and discussions

This chapter mainly reports the results from interviews of curriculum specialists, decision makers and foreign consultants. Documents that were analyzed include old primary syllabus standard 4 (science portion) and the new integrated primary curriculum Grade 4 syllabus. Document analysis also included comparison between Terms of reference (TORs) for consultants with roles and responsibilities of curriculum specialists. In this chapter some conclusions were also drawn from the data, then explanation in regard to theories and literature review were incorporated.

1.7.6 Chapter 6: Concluding remarks

This chapter provides a summary of the whole dissertation and using the results obtained, a way forward in terms of solutions and further studies are recommended.

1.8 CONCLUSION

Chapter 1 provided outline of discussions and research about the involvement of foreign consultants in curriculum design and development in Lesotho. The challenges of Lesotho education are briefly discussed in the rationale and motivation of the study section. Administrative issues provided discussions about how decisions are made in the curriculum design and development. Lastly, the layout of the whole dissertation is given.

CHAPTER 2: LITERATURE REVIEW

Going back to the future of curriculum design and development

2.1 INTRODUCTION

This study assesses the issue of foreign consultants' involvement in designing Lesotho primary school science curriculum at Grade 4. The researcher aims to find out who the foreign consultants are, how they are selected and reasons for their engagement to design the primary school science curriculum in Lesotho. Countries like Lesotho have employed curriculum designers mandated to design and develop a curriculum for the country for a number of years, so the issue is why do countries engage consultants? And if consultants have to be engaged why do curriculum centers engage foreign consultants over local curriculum experts? Yet, Lesotho has obtained her independence and the local curriculum designers have undergone training on curriculum studies. Therefore, in this chapter, studies done on areas related to the involvement of consultants and curriculum reforms have been critically discussed.

The preliminary literature related to this study is summarised into the categories of the concept of curriculum, curriculum design and curriculum development; knowledge of curriculum specialists; administration of curriculum change; global influences on curriculum change and curriculum consultants.

2.2 THE CONCEPT: CURRICULUM, CURRICULUM DESIGN AND DEVELOPMENT

2.2.1 Defining curriculum concepts

Curriculum has numerous definitions that makes it difficult to come up with a single definition. This is because "curriculum scholars produced new working definitions of curriculum, creating the field's definitional largesse." (Breault & Marshall, 2010, p.179). The way to understand curriculum is to atomize and explain the units of curriculum, curriculum design and curriculum development. There is a difference between curriculum and curriculum development. Consequently, there is a thin line between curriculum design and curriculum development. Let me start with defining the difference between curriculum design and curriculum development.

Curriculum is a definition of what is to be taught (Ross, 2000, p.8) and curriculum design is a reasoning, debate and dialogue towards curriculum development. Two curriculum theorists who define curriculum design clearly are Freire (1970) and Tyler (1949). Tyler (1949, p.61) refers to curriculum design as technical questions that approach curriculum development as objective, scientific and "driven by rational decision-making". In Lesotho, the decision-making process is deductive, it follows a top-down approach. The authorities such as Education ministers, CEOs, and school managers are making decisions regarding curriculum innovations. Similarly, Freire (1970) argues that curriculum design involves critical reflection, problem posing and dialogue about education matters in the country.

On the other hand, curriculum development is a process of putting ideas and decisions made in the curriculum design stage into a plan. This is ascertain by Tyler (1949), who define curriculum development as a technical production procedure and Elliot (2012) refers to curriculum development as a process and argues that curriculum development should be socially constructed. Mosisidi (1981, p. 66) distinguishes between curriculum design and curriculum development thus:

Design being conceived of here as a higher, wider planning level of curriculum while Development focuses on the actual operational stage, e.g. compiling syllabi for pre-selected subject areas and levels of study, writing up curriculum materials, etc.

Besides the difference between curriculum design and curriculum development, the two terms will be used interchangeably in this study. Even though, the involvement of foreign curriculum consultants were more on the curriculum development since decisions had already being made regarding the curriculum design.

For the definition of curriculum, this study will adopt the view of Du Preez and Simmonds (2014) who simply refer to curriculum as policy documents enacted by authorities such as the Ministry of Education and Training. As Ntoi (2007) highlights, these documents represent the official curriculum and illustrate a nation's educational priorities. Official curriculum entails:

- School subjects and the knowledge included in them;
- Guidelines for how knowledge might be taught in the classroom;
- Providing the minimum knowledge, skills and values that learners must gain;
- Articulating what curriculum designers and policy-makers regard as important knowledge for learners and society. (Reed, Gultig and Adendorff, 2012, p.30).

This definition of curriculum is chosen as a result of the initial stage of curriculum process which the study is focusing on. The curriculum design results in curriculum development, the process, which produces a document, a policy, official curriculum, which is a blueprint to be used by teachers in schools (at meso level). The time teachers make use of official curriculum, it becomes enacted curriculum (Ntoi, 2007). Some of these concepts are explained further in the following sections.

2.2.2 Curriculum development process

There are a number of curriculum development models; however, I am not going to discuss all in this study. Curriculum is divided into three kinds, hidden, enacted and intended curriculum. The hidden curriculum is the learning gained by a learner which is not explicitly planned for in the formal curriculum while Kelly (1989) defines enacted curriculum as the actual experiences of the learner which are the result of teachers' attempts to implement the planners' intentions in the official or intended curriculum. On the other hand, intended curriculum defines the vision, values, specific outcomes and learning objectives in a standard form for the country as a whole (Ntoi, 2007). The intended curriculum is the initial stage of the curriculum and is usually done by government officials, curriculum designers, specialists and experts in curriculum studies. This is the kind of curriculum division this research is focusing on, with the engagement of foreign consultants to design the intended curriculum for primary schools in Lesotho. There are a number of models of curriculum development process from the literature. Kern et al. (2009) suggest six steps to curriculum design and development, while Gustafson & Branch (2004) propose the 5 steps curriculum development process model but the curriculum development process model that is used in Lesotho follows four stages as suggested by Stenhouse (1980). Stenhouse (1980) argues that "in a broad sense, the curriculum development process includes the design, development, implementation and evaluation of curricula.

2.2.2.1 Curriculum design and development

Curriculum design is the phase in which a new curriculum is planned or an existing curriculum is revised. Varbelow (2012) says that curriculum design involves all the initial work that is carried out to ensure that the curriculum is relevant, appropriate and workable. McKernan (2008) writes as follows about curriculum design:

> … curriculum design is political in nature; that is an attempt to facilitate someone's idea of good life. By creating social processes and structuring the environment for learning, curriculum design is thus a form of utopianism, a form of political and social philosophizing and theorizing…. (McKernan, 2008, p.57)

Therefore, curriculum design is not just a technical response to societal problems and needs, but rather it is political in nature and driven by various values. In designing a new curriculum, curriculum designers engage with the broader national context in the form of stakeholders to identify needs and problems that a curriculum needs to address. Elliot (2012) warns that curriculum development should be socially constructed, that is, there should be involvement of community in the form stakeholders including practicing teachers in curriculum development. The problems and challenges facing citizens of the country especially youth are usually brainstormed so that remedies and solutions are solicited through the new curriculum. Seen in this manner, curriculum design presumes national curriculum reform, which typically refers to government decisions to change the content and organisation of what is taught in public schools, within the parameters imposed by social, economic and political contexts (Marsh, 2009). In some national contexts curriculum design is the preserve of senior government officials and curriculum developers in the Ministry of Education (Ntoi, 2007). This is the stage that is directly related to the study since the critical questions ask, "Why are foreign consultants used to design the primary school science curriculum in Lesotho?" It emerges from the process of curriculum design stage that more activities are involved with the interactions with the communities whereby citizens brainstorm problems and challenges with which they are faced. Ntoi (2005) presents the steps in the curriculum design and development in Lesotho as follows:

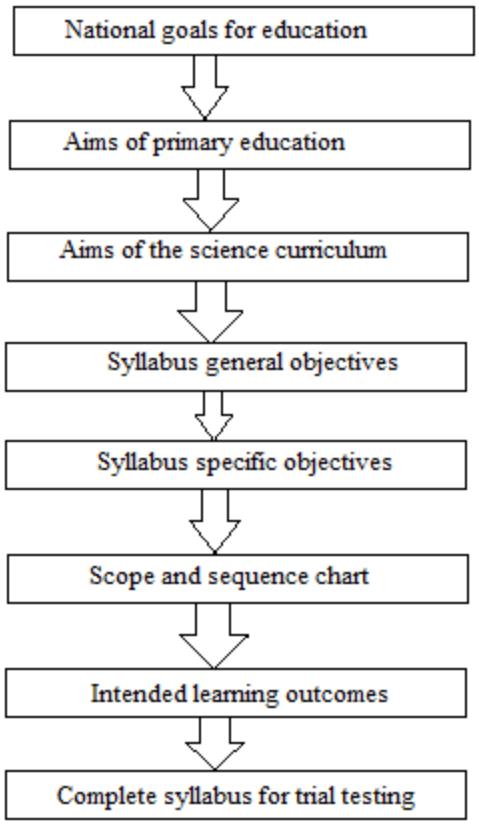


Figure 2.1: Steps in curriculum design and development in Lesotho

Source: Ntoi (2005)

This activity can be done by local experts because of knowledge and familiarity with context and culture, unless there are other strong reasons to choose foreign consultant over local experts.

2.2.2.2 Curriculum dissemination

Curriculum design is followed by dissemination of the developed curriculum**.** Curriculum dissemination is a phase in which information about the new curriculum is distributed intentionally and curriculum consumers are prepared for its use (Carl, 2002). As dubbed by Varbelow (2012), curriculum dissemination refers to intentional and planned efforts to inform individuals or groups of educational practitioners about the newly designed curriculum. This also involves arousing interest and marketing the innovation to the potential users for its adoption. Dissemination strategies that are often used include the production and distribution of guidance materials, and conducting capacity-building workshops to empower curriculum users, at the level of empowerment would probably also determine the level of dissemination (Carl, 2002, p.143).

Carl (2002) further argues that effective dissemination is not only a condition for successful implementation of new curriculum ideas, but also for the institutionalisation of such ideas. The model of dissemination commonly used in Lesotho is called the trial school system (Jobo, Mokuku, & Nketekete, 2005). In this model selected schools representing various regions and religions are selected for trial of the new curriculum. These schools work collaboratively with the National Curriculum Development Centre (NCDC), which is responsible for school curriculum activities in the country. The NCDC plays a supervisory role by providing clarity and addressing teachers' concerns with the new curriculum. They also get feedback that is used to refine the curriculum prior to full implementation.

2.2.2.3 Curriculum implementation

Curriculum dissemination is then followed by the implementation of the curriculum which refers to the actual use of the new curriculum in schools. This is where the designed curriculum which is also referred to as intended curriculum is turned into operation and it becomes the enacted curriculum (Ntoi, 2007). It is the process of translating the planned or written curriculum into classroom practice (Marsh and Willis, 2007). In this phase the key players are classroom teachers who are referred to as key implementers of the curriculum. The implementation process is mediated by a number of contextual factors including teachers 'beliefs and attitudes (Ntoi, 2007; Prawat, 1992)**.** Hence there may be discrepancies between the planned or intended curriculum and the implemented curriculum. As far as this study is concerned, curriculum implementation is not part of the research. This study focuses only on curriculum design and development which is the mandate of NCDC while curriculum implementation is monitored by the Inspectorate department of the Ministry of Education and Training (MOET). At this stage, the curriculum is already designed and packages for teachers are prepared. This is the stage where the foreign consultant hands over the curriculum to local curriculum developers. It would be a different research to investigate whether the consultant would still be involved in the implementation stage and how the curriculum developed with the assistance of a foreign consultant is performing in schools. These are the gaps that other researchers could scrutinize in future.

2.2.2.4 Curriculum evaluation

Curriculum evaluation is the last stage of the curriculum development process. This is the phase where the success and effectiveness of the curriculum are evaluated including the effect on pupils (Carl, 2002, p.55). Information obtained from this phase leads to the decision to institutionalise or revise the curriculum in order to improve it. In the case of the South African curriculum, the information obtained from curriculum evaluation has led to the introduction of CAPS (Department of Basic education, 2011)

This study is situated within the first two phases of curriculum development; namely the curriculum design and curriculum dissemination. These are the stages where the curriculum consultants are largely engaged. I will analyse the criteria used to select the consultants with the aim of revealing the reasons why is it always the foreign consultants who win the tender to design the Lesotho curriculum and not local consultants. I will also examine why the hand over to the curriculum development center is done after dissemination and not after curriculum design, which actually means that curriculum consultants are doing the work of curriculum developers at NCDC. This is because curriculum developers at the NCDC must hand over to the inspectors after curriculum dissemination (Khoboli, 2005). Most countries copy good practices of education systems in other successful countries and adopt them in their countries. This is called curriculum borrowing.

2.2.3 Curriculum borrowing

Different countries use different curricula specific to the context of their countries. In most cases, especially in Africa, countries do not create their own curricula but they study other countries' curricula and either adapt or adopt the already existing ideas. Adoption of curriculum is taking the curriculum of another country and implementing it as is in own country. This is an easy process but creates more challenges related to different contexts because of different cultures that other countries have. When adapting the curriculum to suit the context, the curriculum goes through a number of stages. Spreen (2004) outlines three stages of curriculum policy borrowing and lending. She calls stage 1 the stage of external transactions, stage 2 the political manipulation and stage 3 the stage of ownership, internal initiative, internalisation or appropriations. In stage 1, the country is involved in study tours to other countries to learn about

other countries' educational and training systems. In this case the policymakers (from the borrowing country) collect foreign models and ideas. These are circulated and reviewed for relevance and applicability to the local country. Spreen (2004) coined these stages with reference to what was happening in the Republic of South Africa during educational reform. In the South African experience, the borrowed policies were adopted as they were. According to Spreen (2004), what should have happened in South Africa is that the country should have used ideas from other countries to build their own curriculum making it relevant to the context of their own country. Also, in this stage, curriculum consultants can be engaged to explain these ideas to local expects and policymakers as they develop their own curriculum.

The second stage; the stage of political manipulation is the transitional stage where the government tries to push policies that have not been produced by the local experts. This is done to provide a quick fix solution to curriculum crisis. This is where international consultants are engaged to provide technical assistance. The case of Lesotho is different from that of South Africa since the South African new government had no time to design and develop own curriculum and also it was politically correct for them not to use apartheid ideas in the democratic education system but to originally appear to have brought in curriculum ideas from outside in order to escape apartheid. But Lesotho has never been under apartheid oppression only colonial oppression. Spreen (2004) calls this stage a honeymoon period because this is where money from international aid is flowing into the country for curriculum financing. Unfortunately, in the case of Lesotho the honeymoon is unending because the series of donations and international aid is always solicited, and in some cases Lesotho is borrowing both curriculum ideologies and money (Monaheng, 2005).

Stage three or stage of ownership, internal initiative, internalisation or appropriation is where the international origins vanish. This is the end of the honeymoon period (Spreen, 2004). This is where recontextualisation and reconceptualisation occur to incorporate comments from the stakeholders about the new curriculum innovation to implement the corrections identified in the curriculum (Ntoi, 2007). The policymakers use cross-cultural analysis to see applicability and local usage (Spreen, 2004). This is the end of the honeymoon period in which the country breaks ties with foreign masters to be independent in the education system. As stated above, Lesotho

seems to be staying in the honeymoon stage forever, not breaking ties with her colonial masters in the form of foreign consultants. One of the reasons to break ties with foreign masters as suggested by Spreen (2004) is cross-cultural analysis of the curriculum for applicability in own country. This indicates that if Lesotho is not breaking ties with foreign ideologies, this could affect the quality of the designed Grade 4 school science curriculum.

2.2.4 Curriculum integration

Curriculum integration has different concepts where various aspects can be looked at. Marsh (1997, p.96) describes four concepts of curriculum integration as multidisciplinary or parallel-discipline, subject wheels, broad fields and interdisciplinary concepts. Multidisciplinary design is where a teacher sequences lessons to correspond to lessons in the same area as other disciplines. He says a teacher can use concepts in other subjects to teach English comprehension or compositions. This helps learners to not view subjects or topics as isolated discreet elements and to recognise relationships between subjects. The second concept of curriculum integration is subject wheels where a teacher selects the central theme and identifies contributions from various subjects to the central theme. In this concept the identity of each subject is maintained but according to Marsh (1997), traditional subjects tend to dominate while emerging areas tend to be excluded. In the Lesotho experience in examinations of primary school leaving pupils, science is integrated with agriculture, home economics and guidance and counseling but, as observed by Marsh (1997), science dominates the paper such that primary school teachers focus more on science teaching than other subjects. The 'Broad fields concept tries to remove or minimise traditional discipline boundaries. In this case a number of disciplines are merged into one broad topic as in physical science a broad field for chemistry and physics, social studies a broad field for history, sociology, economics, geography, politics and anthropology. Interdisciplinary concepts work at the level of national or district curriculum development. It is where topics are placed under one theme. A good example is the Australian curriculum where eight learning areas were created in April 1991. The areas of learning were: English, science, mathematics, languages (LOTE – languages other than English), technology, studies of society and environment, the arts, and health and physical education (Marsh, 1997, p.32). Marsh (1997, p.101) describes a case study of 5 Grade 7 teachers who were tasked to develop a Grade 7 integrated curriculum involving mathematics, science, reading, English and social studies. In this

case study, a little progress was observed over one year. Similarly, in the case of Lesotho, prior to the engagement of a foreign consultant in 2010, curriculum designers from the National Curriculum Development Centre (NCDC) attempted to design an integrated curriculum in line with the curriculum and assessment policy framework (MOET, 2009) but there was no progress. Some of the reasons for low progress and infrequent successes in curriculum integration are lack of teacher training and support, difficulties in organising team teaching and insufficient resources (Martin-Kniep et al., 1995).

The curriculum integration in Lesotho follows interdisciplinary concepts as described by Marsh (1997) above. There are five learning areas which are Linguistic and Literacy; Numerical and Mathematical; Personal, Spiritual and Social; Scientific and Technological; and Creativity and Entrepreneurial (Ministry of Education and Training, 2009). In this model traditional subjects and other emerging issues are grouped together under one learning area.

With all the challenges facing implementation of curriculum integration in some countries, advantages of curriculum integration over single subjects are indisputable. Integrated curriculum enables teachers to focus on many skills from different subjects combined which are often neglected or taken for granted in single subject teaching. This enables teachers to develop learners holistically not giving children fragmented knowledge (Le Roux, 2012). In the integrated curriculum teachers draw more effectively on students' interests as it is more effective in reinforcing concepts, skills and values in children's learning using school time and resources more efficiently (Marsh, 1997, p.95). The integrated curriculum also emphasises cooperative learning where students share their learning responsibility with others in the class through a multisensory and experience-oriented curriculum (Marsh, 1997, p.100).

On the other hand, the single subject curriculum does not support curriculum research as it reflects a euro-centric view of knowledge organisation. It is said to be artifice of real-life using content and skill (Beane, 1997, p.46). As has already been said earlier that in an integrated curriculum, the 'whole child' is taught, single subject curriculum encourages atomisation and alienation as the curriculum is divided into subjects and subjects into units which are not related to each other (Miller, 1988 in Marsh, 1997, p.95). As a result, it contributes to a fragmented

approach to problems that are better resolved by an integrated vision (Eisner, 1991 in Marsh, 1997, p.95) since in a single subject curriculum each subject comes in its own box, its own wrapper, is evaluated by its own test, and has nothing to do with anything else the student is studying (Bernstein as cited in Marsh, 1997, p.95).

2.2.5 The Value and Quality of curriculum

Most countries select a modern, high-quality curriculum, in order to maximise the potential of a curriculum for enhancing the overall quality of education and its relevance for students and societal needs (UNESCO, 2014). I have discussed the quality of education in Nhlapo (2014) focusing on the quality of lecturers and the quality of students in one of the universities in South Africa. One of the conclusions in that study is that quality of education is determined by the quality of matric graduates entering universities in the form of distinctions they have obtained and the quality of lecturers teaching these students. The consideration is on their qualification and time dedicated to students inside and outside the classroom.

In this current study the focus is on the quality of the primary school science curriculum in Lesotho. The quality of this curriculum, I argue, is also determined by the quality of curriculum designers and developers. Hence the first critical question looks at "who" is designing the primary school science curriculum in Lesotho? The boundary should be clear that I am not researching education as a whole but curriculum design specifically at the science curriculum at primary level. Hence, the quality of learners and teachers will not be considered.

I have identified and discussed four categories that explain the concept of quality as a humanist approach, a behaviourist approach, a critical approach and an indigenous approach (Nhlapo & Sookrajh, 2014). I have also evaluated some quality education models in higher institutions (Nhlapo, 2012). I would like to adapt two of these models to explain quality of curriculum. The first one is Barnett's (1992) model (Nhlapo, 2012, p.16). The second model is the Levine (2006) nine-point template for judging quality (Nhlapo, 2012, p.14). These two models for measuring quality of education programmes are discussed in detail in the conceptual framework chapter. In that chapter I also introduced some quality aspects in curriculum design. One of the aspects and

attributes of quality curriculum is certification and the knowledge, of people involved in curriculum design. All these models and aspects are not only restricted to higher institutions of education and whole curriculum innovations but can also be used in assessing the foreign consultants' involvement in designing the Lesotho primary school Grade 4 science curriculum.

2.2.6 Curriculum history

2.2.6.1 Curriculum design history

Curriculum history is an important aspect in curriculum studies that provides information about past patterns and priorities in the field (Marsh, 1997 p.253). In order for the curriculum designer to undertake disciplined inquiry, there is a need to understand the past and broader perspective and some insights not only about how a curriculum was taught in a particular historical period but also why and for whom (Marsh, 1997, p.254). This will enable the curriculum designer to use curriculum history knowledge to make decisions about the present and to inform future goals. As dubbed by Tanner (as cited in Marsh, 1997), curriculum designers will tend to appreciate current models of curriculum if they have curriculum history knowledge. Later in this chapter I will discuss that one of the reasons curriculum is changing is agreements and declarations to which countries pledge. One of them is child-centred approach to education. Curriculum history shows that this idea is being recycled every decade as revealed by peaks in the 1890s, 1920s, 1930s, 1960s, not counting earlier appearances due to the efforts of Rousseau, Pestalozzi and others (Marsh, 1997, p.254). The most talked about curriculum history is the change of curriculum in England and Wales.

Curriculum history shows how and why curriculum reform has been initiated in different countries. One of the reasons, as mentioned, for curriculum reform is the introduction of concepts such as a child-centred approach. The main interest in this study is how the involvement of foreign consultants has been especially in underdeveloped African countries like Lesotho. The link between foreign consultants and the reasons for recent curriculum reform in Lesotho is worth exploring. This will assist the researcher to use the information to interpret data from participants as to what led to the engagement of foreign consultants in the design of the primary school science curriculum in Lesotho.

2.2.6.2 The design of consultant-driven curriculum in Lesotho

Formal education of Lesotho came into being around 1833 and the then colonial government in Lesotho established a few government-controlled primary schools and initiated a grant-in-aid scheme to meet churches part of the way in running their educational institutions (Mosisidi, 1981, p. 7). Because people of Lesotho knew little or nothing about Western formal education, they could not play an active role in the planning and implementation of education. In this case the church ministers from Europe, specifically from France who were called the Paris Evangelical Missionary Society (PEMS) acted as educational proprietors (Mosisidi, 1981). In line with this study, this would be referred to as the first foreign curriculum consultants to Lesotho. The foreign consultants (in the form of church ministers) continued educating Basotho children using Western principles, context and values (Ansell, 2002). This was due to the curriculum they brought to Lesotho from Britain with almost no re-contextualisation and re-coceptualisation. Therefore, this curriculum was not designed for Basotho but for children in Britain with a totally different culture and background. The PEMS were joined by other 'foreign consultants' from Roman Catholic and Anglican churches also in the form of church ministers. This situation continued until independence in 1966 when Basotho realized that education given to their children was irrelevant and there is need to change it (Ministry of Education, 1982). Table 2.1 below summarizes the involvement of foreign consultants in Lesotho education:

Table 2.1: Former foreign consultants assisted in Lesotho education

Date	Reform	Foreign Consultants
1967	Implementation of UNICEF primary school syllabus (Khoboli, 2005; Mosisidi, 1981, p.19).	Tutors from University of Durham Institute of Education (UK).
1974	Supervision of review of curriculum materials (Mosisidi, 1981, p.20).	British Overseas Development Administration (ODA) Adviser (UK).
1974	Advise on a systematic design of curriculum for Lesotho (Raselimo, 2010).	Hugh Hawes from London University (UK).
1978 National dialogue	To share experiences in curriculum design (Mosisidi, 1981, p.33).	Dr. Babs Fafunwa- Nigeria; Dr. Gilbert P. Olouch- Kenya; Dr. Barnabas Otaala – Kenya
1998	To integrate Population and Family Life Education into school syllabus (UNFPA, 1999).	A consultant from Uganda
2001	Integration of Environmental Education into school curriculum (Monaheng, 2007)	Chief Technical Adviser - Karl J. Stark. Teacher trainers - Niels Kerstein Knudsen and Else-Marie Thuesen
2008	Introduction of Life Skills Education subject (NCDC, 2008)	Two consultants from Malawi
14/11/2011 – 11/04/2012,	Development of curriculum packages for grades 1 -3 (Consultant's contract, 2012).	Dr. Simone Doctors - 15 Webton Court, Allerton Park, Leeds LS7 4SP, UK.
2012	Review and Revision of Life skills and Sexuality Education Curriculum (consultant's report, 2012).	Dr. Sheila Wamahiu – A consultant based in Nairobi, Kenya
2013/2014	Development of curriculum packages for grades 4 - 5 (Consultant terms of reference).	Dr. Simone Doctors - 15 Webton Court, Allerton Park, Leeds LS7 4SP, UK.

This continued engagement of foreign consultants in Lesotho curriculum design and development could be explained by what Giroux (1992, p.151) calls a critical theory that "attempts to unravel certain political and economic injustices within education."

According to Giroux (1992) this attempt focuses on labour functions in which schools "reproduce the social relations necessary for maintaining a market economy. Rather than creating managers they produced passive workers who would adjust to the imperatives of the capitalist order." Passive workers are creative and cannot design a curriculum for the country.

The conceptual framework discusses quality of curriculum from the point of view of human resources. One of the characteristics of quality human resources is epistemological access. The type of epistemological access in the form of training and education of Lesotho curriculum specialists have had could have contributed to repeated engagement of foreign consultants. If curriculum specialists had quality training they would be in a position to take-over from foreign

curriculum experts. I believe with proper training they could design the curriculum because we Basotho, “are not mindless puppets of a given social order; we are not ‘ideological dopes of stunning mediocrity” (Giddens as cited in Morrison, 2004, p.488).

The domination of consultant-driven science curriculum in Lesotho should have brought rethinking and radical reconstruction of the meaning of human emancipation and to engage in self-conscious critique. (Giroux, 1988, p. 8). Utopian and egalitarian visions of Lesotho curriculum future should emerge from their own self-conscious critique and discomfort about the dependence of foreign curriculum consultants.

Consistent with conceptual framework of quality, Morrison (2004, p.488) equates a quality curriculum with a good curriculum theory which must “demonstrate fertility, richness, comprehensiveness, fecundity, simplicity, parsimony, the ability to spawn a research enterprise, testability, internal consistency, logical consistency, precision, and explanatory potential”. Morrison (2004) further argues that curriculum theory field must grow up or be condemned to the perpetual. Similarly, Lesotho science curriculum design and development should grow and stop singing the same song composed by our ancestors during colonialism, of “let us engage foreign consultant”. Instead of composing a new song, they have changed a tune of the old song from “let us engage a foreign consultant *to develop* our curriculum” to “Let us engage a foreign consultant *to assist curriculum specialists* to design and develop our curriculum”. Curriculum specialists can stop the circle of foreign consultants in Lesotho through acquisition of curriculum knowledge. Curriculum content knowledge is one of the four key features of quality curriculum identified in chapter 3.

2.3 TYPES OF KNOWLEDGE FOR CURRICULUM SPECIALISTS

There is vast literature on knowledge, forms, types and other elements. Jensen, Johnson, Lorenz, & Lundvall (2007) identify two forms of knowledge as Science, Technology and Innovation (STI) knowledge and doing, using and interacting (DUI) knowledge. Both these forms of knowledge are required in curriculum design and development. The focus in this section is mainly on the STI knowledge (Jensen, et al., 2007) which Muller (2009) refers to as vocational and curriculum knowledge.

2.3.1 Indigenous knowledge.

Indigenous education also known as traditional education or pre-colonial African education is the type of education that was given to African children before Western type of education was introduced. Shizha (2013, p.3) describes indigenous education as the knowledge including local knowledge, traditional knowledge, indigenous technical knowledge, peasants' knowledge, traditional environmental knowledge and folk knowledge. He further claims that it is knowledge that is unique to a given culture or society and it contrasts with the international knowledge system generated by universities, research institutions and private firms.

In Lesotho this type of education existed before the country became a colony of Britain in 1868. This means that there was already some ongoing system of indigenous education among the Basotho, in the form of both non-formal (informal) and formal education (Ministry of Education, 2009). Both formal and informal traditional education has the following features of indigenous African education:

- close links with social life, both in a material and spiritual sense,
- collective nature,
- multi-faceted,
- progressive development of the child (Nwanosike and Onyije, 2011).

2.3.1.1 Informal traditional knowledge

Informal traditional education is the type of education given to boys and girls, teaching them how they should behave and do their chores. According to African tradition, fathers are responsible for boys and mothers are responsible for teaching a girl child how to do household chores (Solomon-Fears, 2015). Informal education for children occurred through spontaneous observation in the family and neighbourhood, and through interaction with the physical environment (Munyaradzi, 2015). Some of the key aspects of this education were knowledge of clan members and communication, promoted through riddles and folktales usually told by grandmothers in the evenings. Nwanosike and Onyije (2011) observe that pre-colonial African education matched the realities of pre-colonial African society and produced well rounded personalities to fit into that society.

2.3.1.2 Formal traditional education

Formal education is conducted in initiation schools for both boys and girls to serve as a rite of passage for youth into adulthood (Ministry of Education and Training, 2009). This indicates that this form of education was available at later stages in the life of an African child, such as on the occasion of passing from one age grade to another or of joining a new brotherhood (Nwanosike and Onyije, 2011). The purpose of this form of education is to prepare boys and girls to manage their families and fit into society in their adult life. Schiro (2008) identifies core values of traditional education as discipline, respect and loyalty. In this sense, education was underpinned by the ideology of social efficiency, wherein the goal is socialisation and maintaining social order (Schiro, 2008). These programmes of teaching had goals and objectives of being able to perform specialised functions such as hunting, organising religious rituals, and the practice of medicine definitely involved formal education within the family or clan. Nwanosike and Onyije (2011) claim that traditional education was important because it was passing down skills of iron-making, leather making, cloth manufacture, pottery and professional trade. Formal traditional education was compulsory and free. Also, there is no shortage of teachers, for every competent adult served as a model and a teacher, and every elder was potentially a reference library (Ministry of Education, 1982, p.1). Matšela (1979) elaborates that:

> The process through indigenous education did not permit failures, but emphasized personal and group effectiveness, socio-culturally responsible and accountable behaviour, as well as cooperative and collaborative efforts in all community undertakings. Cultural values and socio-economic and political issues (often in integrated problem situations) were generally given priority in inter-personal and communal affairs, striving always towards community and national peace, economic self-sufficiency and political freedom (Matšela,1979).

There had to be evidence of change for all the graduates of indigenous education. This is seen in respect of cognitive, affective, practical as well as social-consciousness, problem-solving abilities and relationships (Ministry of Education and Training, 2009).

The quality concept-web model I designed in chapter 3 appreciates process quality as one of the key measures of quality curriculum. Under this feature, there is social emotions, cultural awareness and immediate context. These characteristics can only be obtained from a local consultant. Shizha (2013, p.3) observes that this type of knowledge is unique to a given culture or society and it contrasts with the international knowledge, which means foreign consultants will run short in this regard. Besides, this type of knowledge may not be found in official curriculum as it forms part of hidden curriculum. Since this study falls under critical paradigm,

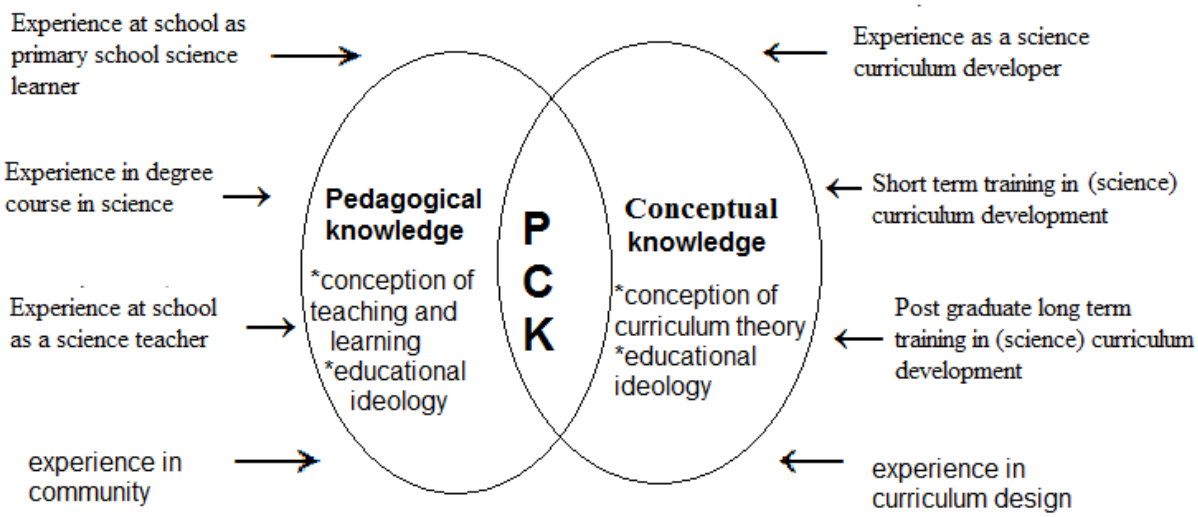
critical theorists contend that the hidden curriculum and null curriculum have a much more profound impact on students than the overt curriculum. (Slattery, 2006, p.234). Therefore, it is not beneficial for Lesotho to engage a foreign consultant who does not have an indigenous impact on the official curriculum.

2.3.2 Curriculum developers' knowledge

Curriculum developers are both foreign consultants and NCDC specialists and are supposed to be teachers by profession with at least five (5) years' teaching experience (NCDC, 2010). This means these are professionals who have undergone the teaching and learning training as teachers and in addition, they have been trained for curriculum design and development specialisation. Since there is a need to build capacity of teachers as they are the most crucial players in the implementation of new curricula (Lee & Chue, 2013), it is even more crucial to build capacity of curriculum developers as they are designers of curriculum implemented by teachers. Darling-Hammond (1997) warns that trying to mandate what matters most without building capacity, leads to certain failure of curriculum innovation. In other words, failing to train curriculum developers, leads to certain failure of curriculum innovation or leads to involvement of foreign consultants to assist NCDC curriculum developers to do their work. Successful curriculum reform requires systematic human development initiatives to improve content knowledge, skills and attitudes and also to change epistemological beliefs of curriculum developers (Roehrig as cited in Raselimo, 2010, p.90,). Many scholars in the field of curriculum design and development have advocated for the adoption of more empowering models of teacher professional development to encourage teachers to develop both content and professional knowledge (Shulman, 1987; Mokuku, 1999; Carl, 2002; McKernan, 2008; Wilmot, 2009). Among the many models available in the literature, I am attracted to the model of pedagogic content knowledge (Shulman, 1987; Nhlapo, 2012), as it applies directly to teachers and curriculum developers. In this model, Shulman contends that teachers need two types of knowledge if they are to implement a curriculum policy effectively. These are, firstly, content knowledge, which emphasises knowledge of the subject matter in terms of its nature, the key principles and concepts. Secondly is pedagogical knowledge, which is concerned with knowledge about teaching and learning. As described by Shulman (1987), pedagogic content knowledge (PCK) entails knowledge about structuring and presenting content to the learners, and knowledge about

common conceptions and misconceptions among learners, and difficulties they often encounter. This knowledge lies at the intersection between content knowledge and pedagogical knowledge, thus suggesting that initial teacher training programmes should strike a balance between the two. Since my focus is on curriculum developers and curriculum developers are teachers first, I have established that curriculum developers need this knowledge. But in addition to PCK, curriculum developers need to know much more, such as different curriculum ideologies and policies used in various countries. I have adopted the following PCK model by Shulman (Shulman, 1987; Martin, 2008; Raselimo, 2010) to accommodate the knowledge required by curriculum developers.

Figure 2.2: Model of Primary School Science Curriculum Specialists' Professional Development



Source: Martin (2008, p.22)

As can be seen from the diagram, a curriculum developers' knowledge base is influenced by prior experience and formal education. This suggests that capacity building for curriculum

developers should take into account what they bring with them from teaching experiences and life experiences as a basis for the acquisition of new knowledge. As Maharajh (2014, p.499) correctly puts it, teachers must also gain knowledge about values which may be gained through social-cultural activities, enjoyment of real life stories, assignments and projects.

Consistent with Shulman's (1987) theory of pedagogical content knowledge, the model recognises the importance of striking a balance between subject content and pedagogical knowledge. In view of the overlapping nature of content and pedagogical knowledge, Martin (2008) argues that in order for student teachers to shift from the perspective of the learner to that of the teacher, they need to develop a clear awareness of the two types of knowledge. In the same manner, the awareness of the two types of knowledge is required for teachers to shift from the perspective of the school teacher to that of the curriculum developer.

Handel and Herrington (2003) present research findings suggesting that mathematics teachers' lack of clear pedagogical knowledge inhibits their efforts to implement new teaching approaches. They report that the teachers who participated in their study relied on their own beliefs, situated in behaviourist approaches, because they were not aware of current trends in teaching and learning. Similarly, Alexandre (2009), on the basis of the research findings of a study carried out in Portugal, contends that the lack of epistemological awareness, results in constraints in curriculum innovations seeking to introduce changes in classroom practice. The implication of Shulman's (1987) model of teacher professional development in the context of this study is that if curriculum developers do not have sound knowledge of the content of the curriculum theory they may not realise the opportunities offered by the content for designing and reviewing the curriculum. Secondly, a lack of grounding in knowledge of curriculum development may interfere with their ability to apply innovative ideas in their designing of and reviewing of the curriculum. Application of this model in curriculum developers' professional development programmes can enhance their capacity to operate as curriculum designers (Bernstein, 2000) rather than relying on foreign consultants.

In support of more empowering participatory models of professional development of curriculum developers, Wilmot (2009) argues for a more reflexive practice that is epistemologically empowering and sensitive to the specific contexts of schools and the nature of the change

envisaged. She proposes a model of teacher professional development built on the following four pillars:

- A spiral curriculum for the acquisition of foundational knowledge, that is understanding of the theory and practice of the change process;
- Modeling of constructivist and learner-centred interactional pedagogy;
- Apprenticeship, which is concerned with the preliminary application of knowledge in the classroom; and
- Metacognition, which enables reflection on the process of change and taking action to refine and improve innovations (Wilmot, 2009).

This model can be applied in the context of curriculum developers' professional training programmes in Lesotho to support curriculum design in the country. Combined with Shulman's (1987) ideas of content and pedagogic knowledge, the model has the potential to enhance epistemological awareness of the role of curriculum developers in promoting independence from foreign consultants in the curriculum design of Lesotho. Curriculum developers may be aware of the nature of a curriculum relevant to Lesotho, but lack reflexive competences to document it as it is the case when curriculum developers were able to develop a curriculum and assessment policy framework but failed to design the school syllabi and were forced to engage external consultants (but the critical question is why did they choose foreign consultants?). This suggests that curriculum research should seek to understand whether or not curriculum developers when designing curriculum innovations recognise the theory and realise the practice of the change process as it relates to their contexts.

I have described four different types of learners in Nhlapo (2012) as the theorists (those who are independent, well organized and gather facts and learn from their own experiences); the pragmatists (these ones are active, take risks and involved with others); the activists (are independent, try new ideas, evaluate options and find information); and lastly, the reflectors (seek alternatives to create options, they are prepared to wait and watch others while they retain a sense of perspective). This implies that teachers and curriculum developers are also not homogenous. Practicing teachers and curriculum developers have different backgrounds and knowledge and a variety of needs and interests (Day, Hall and Whitaker, 1998; Khoboli, 2005). According to Day, Hall and Whitaker (1998), there are three types of teachers, namely; the rational adopters, stone-age obstructionist and the pragmatic sceptic. The rational adopters are

those who take up innovations through a logical process, based on evidence, argument and theory. They normally have the motivation to implement new ideas and later determine their impact. The stone-age obstructionists are those who do not accept the proposed professional change, and work deliberately to prevent it. The pragmatic sceptics are those who can take up innovations only if they are able to apply them in their immediate working environment. The most important concern of this type of person is the validity of the suggested innovations. The three types are all present in the curriculum development centres, and all these types need to agree on one common curriculum for the country. In the case of Lesotho, the situation is exacerbated by the fact that the country does not have any university or institution to capacitate the curriculum developers, specifically primary school science Grade 4 curriculum. They study all over the world and are of different age groups.

The primary school science curriculum developers in the case of Lesotho are also affected by different backgrounds and experiences in terms of religion and type of primary school education they acquired. They are the products of the missionaries' skills promotion as noted in the Education Sector Survey Report of 1982. The report reveals that the promotion of skills, especially around the turn of the twentieth century, was not the primary emphasis in missionary schools but the central purpose of schools was to develop Christian character, not to offer vocational training (Ministry of Education, 1982, p.2) and to create critical and creative thinkers. Aspects of modernity featured strongly in this type of colonial education, and these are still current in the education system (Mokuku et al., 2005, Raselimo, 2010).

Globalisation has also played a vital role in the type of knowledge primary school science curriculum developers have. Sugrue (1997) claims that:

> For a period of approximately three hundred years, from the European Enlightenment until the middle of the present century [20th century], knowledge was primarily influenced by Rationalist thinking. Knowledge was thought to exist independently of individuals, it was out there, waiting to be discovered, it was objective and God-given. Therefore, there was one reality and with it came an arrogant certainty (Sugrue, 1997, pp.20-21).

This type of knowledge which is objective and not challengeable together with the Basotho culture has influenced the education system in Lesotho. The teacher is the authority in the classroom and an adult is considered a source of knowledge. Maruatona (1994) observes that

control of lives of the ruled goes beyond ideological control, it is hegemonic. This hegemonic process permeates beyond ideological domination and includes every facet of social, cultural and economic life of the people. This may spill over to the primary school science Grade 4 curriculum panel discussions in board rooms where curriculum developers need to agree on one new curriculum for the country.

2.4 GLOBAL INFLUENCES ON CURRICULUM CHANGE

There are a number of reasons for curriculum reforms to take place. In most cases it is the change of government in which the incumbent government wants to implement its education policy. This was also the case in South Africa in 1994 changing from Bantu education to democratic education to eliminate apartheid (Dean, 2005). Other reasons could be an out-dated curriculum with the view of incorporating technology (Ntoi, 2007) and emerging issues and international agreements and conventions (Raselimo, 2010). The change of curriculum in this context refers to both primary school science Grade 4 curriculum over-haul and integration of issues into already existing primary school science Grade 4 curriculum.

2.4.1 International conferences

The international agreements and conventions include Agenda 21, The 1990 Conference on Education for All (EFA) held in Jomtein, the Convention on Rights of the Child (1989) and the United Nations (UN) summit on Millennium Development Goals (MDGs), which have also shaped national visions in member states. In these agreements there are innovative educational ideas aimed at transforming education systems worldwide. These ideas appeared attractive to most southern African countries that wanted to overcome the inherited limitations associated with colonial education systems and achieve their development goals (Chisholm & Leyendecker, 2008). Some of the agreements are about the approaches to teaching and learning; Education For All (EFA), and Millennium Development Goals (MDGs).

2.4.1.1 Different Curriculum Approaches

Curriculum approaches express a viewpoint about the design or development of a curriculum. This also includes the roles played by the learner, the teacher and the curriculum specialist in the

planning and development of the curriculum. Marsh (1997, p.2) dubbed three curriculum approaches, namely behavioural, managerial, and system approaches while on the other hand Schiro (2013, p.4) identifies four approaches as scholar academic, the social efficiency, learner centred and social reconstruction approaches. There are detailed explanations of these approaches but I will not dwell much on them as they are not directly related to the approaches that influenced curriculum design in Lesotho primary school Grade 4 education on which this study is focusing. The common approaches advocated for in most of the international conferences and that have had a major impact on curriculum change in most countries are learner centeredness, Outcomes Based Education (OBE) and competencies.

2.4.1.1.1 Outcomes Based Education Approach

OBE is referred to as Outcomes Based Education or Outcomes Based Learning and can be defined as "a process of curriculum design, teaching, learning and assessment that focuses on what students can actually do (i.e., learning outcomes) after they are taught (Lam, 2009). The main focus in this approach is the achievement of an outcome or objective by the learner at the end of an instruction. According to Olivier as cited in Holtzhausen (2010, p.7), these outcomes are achieved "through the mastering of processes, knowledge and skills.

There are three (3) types and four (4) principles of OBE according Spady. Lam (2009) identifies the three types of OBE as traditional OBE which measures the learning outcomes in terms of learners' mastery of curriculum. This is suitable for the primary school science Grade 4 learners as it caters for lower level achievement. At the primary school level learners are not usually given challenging tasks as they are also dealing with transition language of teaching and learning from mother tongue (Sesotho) to English as medium of instruction (Thuzini, 2011). The researcher would expect this type of OBE to present in both old primary school science Grade 4 curriculum and the new integrated curriculum Grade 4. The second type of OBE is transitional OBE which measures the learning outcomes of learners in terms of generic or higher order competencies such as critical thinking, problem solving, communication skills and teamwork (Lam, 2009, p.7). The learning outcomes which learners are expected to achieve in this type are relevant to science. Since learners are expected to engage in experiments and scientific

practicals, these would help them develop critical thinking and problem solving skills. Furthermore, as they cooperate with other learners as a team, their communication skills are also developed. The third type is the transformational OBE which measures the learning outcomes of learners in terms of broad category of disciplinary knowledge and skills, generic competencies, attitudes and values required by the industry or society (Lam, 2009). This type is most relevant to business education and religious education. The new integrated curriculum Grade 4 would have some elements of this type of OBE in science sections.

The four principles of OBE are designing down, clarity of focus, high expectations and expanded opportunities. Since OBE is linked to Outcomes Based Assessment or assessment standards, these principles are a guide to teachers and lecturers on how to assist learners to reach their full potential (Holtzhausen, 2010). During the designing down principle, teachers should identify skills and knowledge that need to assessed and select an appropriate assessment strategy. Under clarity of focus, teachers should ensure students understand the assessment criteria while in high expectations teachers should not measure the progress of learners against other learners but against their previous performance. The fourth principle is expanded opportunities where learners are given various opportunities to show their abilities to reach their full potential. In the case of primary school science curriculum in Lesotho, the curriculum design and development is the mandate of the National Curriculum Development Centre (NCDC) while the assessment strategies are design and developed by a different institution, Examinations Council of Lesotho (ECOL) (Ntoi, 2007). Therefore, the Outcomes Based Assessment (OBA) is not really relevant to the focus of the study, which is, the involvement of foreign consultants in curriculum design of primary school science Grade 4.

2.4.1.1.2 Competencies as Curriculum Approach

Competencies in the Lesotho primary school context is the concept credited to the environmental education (EE) than primary school science. EE as it is commonly known by Lesotho educationists, is one of the projects that was integrated into the old Lesotho curriculum. This is briefly discussed below in section 2.4.2.3.1 Curriculum projects and emerging issues, part (b). This is the project that introduced the concept ‘action competence. Raselimo (2010) traces the

origin of the concept from the German tradition of Bildung. Action competence is the approach that appeals to the volunteerism and initiative taking by learners. In essence, one would say it is when learners show independence, not necessarily that they are theorists, activists or the pragmatists (Nhlapo, 2012), but because they have acquired the basic knowledge that lays the foundation for a willingness to take action (Jensen, 2000).

According to Mogensen & Schnack (2010), action competence appeals to the critical morals of learners and works with democratic and participatory ideas in relation to teaching–learning. They further argue that action competence empowers individuals to act on their own convictions rather than just comply with norms or imitate others.

Raselimo (2010, p.47) cites a primary school science example of action competence that "when students voluntarily decide to switch off lights whenever they leave the classroom they are taking direct action towards energy conservation." This is applicable even to the learners at Grade 4 primary school science.

2.4.1.1.3 Learner-centred approach

Schiro (2013) defines learner- centred curricula as contexts, environment, or units of work in which students can make meaning for themselves by interacting with other students, environments, or units of work which will stimulate growth in learners as they construct meaning for themselves. Therefore, as learners construct meaning, this leads to the effective learning and comprehension of knowledge.

The Human Rights Convention encouraged the spread of learner-centred education on the African continent. Chisholm & Leyendecker (2008) observe that a learner-centred approach promoted a number of curriculum reforms due to the democratisation of most African countries in the early 1990s. The rationale given by Schiro (2013, p.5) is always what is put forward by politicians when advocating for curriculum innovation. Schiro (2013, p.5) argues that a learner-centred approach focuses on the needs and concerns of individual learners where they learn in enjoyable places (schools) being developed naturally according to their own innate natures. He goes further by saying that each learner should be in harmony with his or her own unique intellectual, social, emotional, and physical attributes because they contain their own capabilities for growth and they are the agents who must actualise their own capabilities. In this approach

learners are viewed as a source of content for the curriculum; their ends are considered to be the appropriate ends for the curriculum. The potential for growth lies within the learner. The following are examples of countries that adopted learner-centred education in different forms.

Post-apartheid South Africa adopted a form of learner-centred approach known as Outcomes Based Education (OBE) after 1994, signaling a departure from apartheid education (Cross, Mungadi & Rouhani, 2002). In Namibia, the introduction of learner-centred education after independence in 1990 was regarded as a means of consolidating democratic ideals (O'Sullivan, 2004). In Lesotho in the year 2000, though not officially documented, the concept was introduced together with the new science curriculum. The new science curriculum was introduced to infuse issues of technology, environment, population growth and family life education (Khoboli, 2005). The old Lesotho primary school curriculum for Grade 4 in the science section describes the learner-centred approach for teaching and learning science as the "inquiry approach". The curriculum document states that:

> "Science education is about helping children to develop important useful skills and attitudes, thinking in a clear and logical way, and solving practical problems. All these are acquired through the medium of "inquiry approach" whereby learners are exposed to situations that stimulate their curiosity and interest to identify problems in their own environment and attempt to solve them" (MOET, 1998, p. 61).

Also, the introduction of environmental education was greatly influenced by the new approach of competencies. Chisholm & Leyendecker (2008) argue that developing countries adopted the philosophical ideal of learner-centred education as a result of international pressure to transform their societies and economies from agricultural based policies to modern and knowledge-based policies. Whether or not this is in the best interests of developing countries is a matter for debate.

The changed view in which science is taught has influenced the design of the curriculum. For a long time, it was believed that 'pure' science was neutral and should be pursued because it was believed to be the building blocks of the 'cathedral of knowledge' (UNESCO, 2000). This therefore led to making science compulsory for all school attenders. Funders were keen to finance a curriculum policy that includes pure science as content. Pure science lost its value in the long term and 'applied' science took over as being oriented toward problem-solving and interacting with industry and the business community. As such the interaction between universities and industry has become commonplace in industrialised countries and is encouraged everywhere, *ipso facto*, funding agencies allocate financial resources preferentially to applied

research projects (UNESCO, 2000, p.6). This section on approaches to curriculum innovation will be used in the analysis and interpretation of documents specifically looking at the changes or lack of in the new integrated primary school syllabus Grade 4 approaches compared to the old primary school science Grade 4 curriculum.

2.4.1.2 “Education for all” influence on curriculum design

The 1990 Conference on Education for All (EFA), held in Jomtein, Thailand, pledged to achieve universal primary education by 2000. In this conference, commitment was made by member countries to provide basic education to their citizens as a fundamental human right. Universal basic education is largely understood as universal primary schooling. Only after the Jomtien conference on Education for All (EFA) in 1990 was it understood that by making primary education free would include children from poor families and thereby become universal (Avenstrup, Liang and Nellemann, 2004). It is therefore politically correct for stakeholders and decision-makers to change the curriculum in order to implement EFA recommendations. This is because schooling costs for families are a major constraint. This is a major weapon used by politicians to seem to be caring for the poor in order attract votes so that they stay in power longer.

Avenstrup, Liang and Nellemann (2004) claim that in Malawi, Kenya, and Lesotho, free primary education was the key election issue on which the new government came to power. In these countries, immediate support from at least one major donor/lending agency was needed to ensure confidence in the process. Avenstrup, Liang and Nellemann (2004) report that the good thing that came out of the FPE is that by reducing the direct costs to households, all four countries increased enrolments by sizable margins. The challenge countries such as Malawi, Kenya, Lesotho and Uganda now face is to reform their educational systems to accommodate the increase in enrolments so that schools can provide good-quality primary education to all; not just access to education. Avenstrup, Liang and Nellemann (2004, p.5) argue that the Education for All conference held in Jomtien, Thailand, in 1990 was the impetus for spurring policy development and implementation on a wider scale. Policymakers attending the conference reached the conclusion that the goal of universal basic education could be reached only by making primary education free (that is, eliminating compulsory school fees).

As a signatory to the EFA convention, Lesotho launched the Free Primary Education (FPE) Programme in 2000. Some of the objectives of FPE in Lesotho are to "make basic education accessible to all learners, and to make education equitable in order to eliminate disparities and inequalities" (Ministry of Education, 2000, p.9). The programme began in Grade One in 2000, with Grade 7, the last grade in the primary schooling sector, covered in 2007 (Morojele, 2009). One would assume that the increased enrolments in primary schools due to the launch of Free Primary Education in Lesotho also increased the load to teachers. This was the rationale for current curriculum innovation to integrate different subjects into fewer learning areas that can be managed by teachers. This is the curriculum innovation for which the country solicited the assistance of foreign consultants. The analysis especially of the documents such as the science syllabi might reveal whether primary school Grade 4 curriculum integration compromised the quality or increased the curriculum.

2.4.1.3 Millennium Development Goals (MDGs) Influence on Curriculum Design

The launch of the Millennium Development Goals (MDGs) in a United Nations (UN) summit in 2000 encouraged a number of curriculum innovations in many countries. The MDGs acknowledge the need for the reduction of the teacher/pupil ratio by 20% and the pupil/classroom ratio by 33% to achieve the goal of free universal primary education by 2005 (UNDP, 2005). Currently, the question that remains is: Have the MDGs' target for free universal primary education by 2005 been met? In 2005 member states were asked to review how they had progressed towards the attainment of the MDGs. The government of Lesotho's reports stated that the country was making good progress in achieving MDGs for education.

There are several critical challenges that the Ministry of Education in Lesotho has identified in order to implement FPE. The EFA implementation manual in Lesotho (2013) reports the challenges as, first, mobilising the required financial and human resources to provide free and compulsory basic education at a time when global aid flows to developing countries are on the decline. Financial resources were needed to build new schools in rural areas and also the addition of classrooms to the existing schools with the aim of getting all children to school as the dispersion of schools in rural areas has a direct effect on the attendance of children (UNDP,

2005). To address the challenge of overcrowding and to accommodate the increased number of pupils, it was estimated that half of the existing schools should be extended and that half of the school requirement would be new schools to be constructed. The increased number of pupils due to the implementation of FPE did not only have an impact on the infrastructure but on the increase of teachers also which in turn had a direct impact on teacher training institutions to ensure the constant supply of qualified teachers. UNDP (2005) observes that the costing of the universal primary goal has emerged as being extremely high as a result of building new schools. In view of this, it does not make any economic sense to engage foreign consultants to do the job of curriculum developers who are employed and paid to design and develop a curriculum for the country. This is because NCDC curriculum developers are still paid full amount of their salaries while the foreign consultant charges fees for the work done which would have been done by curriculum specialists, transport (including air ticket), accommodation, airtime, internet and others fees charged in US-dollars.

2.4.2 **Financing curriculum innovations**

Curriculum reform is one of the most expensive activities in government expenditure that involves study tours, training, meetings, workshops, and purchase of new instructional materials and involvement of curriculum experts. Therefore, any government should have more than enough funds to engage in curriculum reform. Funding may come from a number of different sources as discussed below.

2.4.2.1 Financing Curriculum through Government levy

The government levy is the money that the government collects through activities such as taxes to be used in recurrent activities such as payment of teachers, renovations of educational buildings, roads, schools and hospitals. Therefore, to carry out big projects such as curriculum reform, developing countries like Lesotho which is classified as a Least Developed Country (LDC) and is also a World Bank classified low-income country resort to donations and financial aid. This financial aid mostly comes through programmes called projects.

2.4.2.2 The role of the bank/donor in curriculum design

Engaging consultants involves money for payment of consulting services, workshops and purchasing materials for training of employees. One source of funding for curriculum reform is the World Bank. Besides financing the projects, the Bank plays other roles in the engagement of consultants. One of these roles is to monitor the quality of the consultants' work as necessary to satisfy themselves that it is being carried out according to appropriate standards and is based on reliable data (World Bank, 2011, p.7). Sometimes the Bank may take part in discussions between the client and consultants and help the client in addressing issues related to the assignment. If a significant portion of the assignment is being carried out in the consultants' home offices, the bank may visit these offices to review the consultants' work (World Bank, 2011, p.7).

2.4.2.3 Donations and foreign aid in curriculum design

Countries that seek and receive foreign aid are mostly African countries (Ansell, 2002). Foreign aid has become 'a way of life' in educational reforms in Africa as Africans wish to overcome the limitations of colonial education (Ansell, 2002; Lotz-Sisitka, 2004, p.37; Raselimo, 2010, p.85). Some countries even receive funding for recurrent education expenditures (Ansell, 2002; Monaheng, 20007, p.29; Raselimo, 2010). Unfortunately, foreign donors do not only finance education, but also provide ideas and initiatives for change coming from overseas (Ansell, 2002 p. 101; Mosisidi, 1981, p.24). For example, Laracy (2006, p.20) observes that the Australian Aid to Papua New Guinea (PNG) may not have been made with the specific conditions of PNG in mind. This was done to benefit the donor country, Australia. Also, Samoff (1992) shows that the International Monetary Fund (IMF) and World Bank do not really consider conditions in poor countries when funding their curriculum reform projects. Their funding is mostly motivated by demands of the world economy than national priorities of the recipient countries (Ansell, 2002; Samoff, 1992; Tabulawa, 2003). Their primary concern is to reduce the public spending on education (Carnoy, 1999).

Muzvidziwa & Seotsanyana (2002) argue that the significance of funding responsibility and activities of the colonial government in the country requires staff of an appropriate standard. As a result, consultants are invited to provide expert services and by so doing build capacity of

citizens through training. The disadvantage of this is that the consultants leave confusion if their involvement is continuous and are allowed to plan and implement curriculum development (Mosisidi, 1981). Therefore, African countries should view with caution any offers to involve non-nationals in curriculum planning, development and implementation (Lancaster, 2004, p.14; Monaheng, 2007; Mosisidi, 1981, p.64). Patriotic citizens should be capacitated to plan, develop and implement curriculum since curriculum is the anchor of education.

But in the case of Lesotho, where there has been unending involvement of foreign consultants in curriculum design in the country, there has been unending foreign aid for decades. In the last two decades, Lesotho had 321 projects from 61 donors (Berg, 1993, p.132). Similarly, Nieuwehuis (1996, p.111) indicates that 90% of Lesotho's education budget for capital costs (buildings, vehicles, and furniture) was financed through donor funding. The Ministry of Development Planning Mission Report (1997) also observed that donor support averaged 75% of the country's Public Sector Investment Programme. Again, Ferguson (1999) argues that in the past two decades the country has received assistance from twenty-six different countries and seventy-two international agencies and non-governmental agencies. Recently, the Government of Lesotho's (2006) 9th donor conference report claims that there are 30 donors in Lesotho.

2.4.2.3.1 Curriculum projects and emerging issues

Curriculum funding sometimes comes through emerging issues that need to be integrated into the already existing curriculum. Foreign countries have found a strategy to introduce curriculum projects in order to impose their ideas into the country's curriculum and the citizens have accepted this strategy to incorporate new approaches in order to improve the curriculum. The curriculum projects are sponsored by the donor countries. In the case of Lesotho, examples of such curriculum projects include Population and Family Education (POP/FLE), Environmental Education (EE), Life skills education (LSE), Education for Democracy, finance education curriculum and disaster management curriculum. To ensure proper implementation of the ideas of donors, consultants usually come as a package with projects' funding into a country (Monaheng, 2007). Monaheng (2007) and Raselimo (2010) have implicated the poor running of projects like POP/FLE and EE as contributing factors to problems of the education system in

Lesotho. There is actually confusion between consultants who come for projects and local curriculum designers. Consultants do not understand the local context and the local curriculum designers do not understand the rationale for consultants' involvement. They usually refer to them as *insultants* instead of consultants. But for the sake of soliciting the funding, they implement their ideas and taint the primary school science Grade 4 current curriculum. That is why the Lesotho primary school science curriculum is set to be irrelevant and is mimicking the old British education system (Ansell, 2002; Mokuku, 2004; Monaheng, 2007; Raselimo, 2010).

a) Population and Family Life Education (POP/FLE)

Population and Family Life Education (POP/FLE) funded by the United Nations Population Fund (UNFPA) is one such project. In Africa these projects are functional in countries such as Lesotho, Zambia, Malawi, Botswana and Mozambique (Monaheng, 2007). The primary aim of the project is to support the government's plans to strengthen and institutionalise the teaching of family life education in the formal school system (UNFPA, 1999). The project provides both advice in the form of consultants and finance to fund all activities and materials. In Lesotho, the project was not well implemented. There was a conflict between the cultures as the project encouraged sex education in schools and stakeholders, especially churches and parents were against the idea. Again the ideas of POP/FLE were in a separate document (POP/FLE framework) from the syllabus. Teachers were to consult both documents before preparing for lessons.

b) Environmental education (EE)

Another project that is in operation in most African countries is Environmental Education (EE) which arrived as a result of International conferences such as Stockholm 1972 and Tbilisi 1977 for environmental education and management. These conferences provided much needed help on ideas towards improving life and protecting the environment. As a result, countries on the continent of Africa are signatories to international agreements and conventions (Monaheng, 2007; Raselimo, 2010). As mentioned earlier, the spread of educational ideas conceptualised in international conventions is facilitated by foreign donor funding (Iutta, 2011; Raselimo, 2010).

Environmental Education funded by the Danish International Development Aid (DANIDA) is operational in countries such as Namibia, Zambia, Zimbabwe, South Africa and Lesotho. The aim of this project is to achieve sustainable utilisation of natural resources and effective protection of the environment (Monaheng, 2005; Raselimo, 2010, p.49; Van Ongevalle, 2004). Raselimo (2010) further claims that the intervention of DANIDA has contributed to an understanding of the notion of action competence in the region by placing long-term consultants through Carl Bros management for technical assistance and funding (Monaheng, 2007).

c) Life Skills Education (LSE)

Lesotho is one of the countries in the world where the impact of HIV and AIDS has been felt very strongly. Its adult prevalence rate, at 23% in 2011, is the third highest in the world. Available data indicate that the child HIV prevalence rate reached its peak in 2007, attributable in part at least to early sexual debut characterised by forced and unprotected sex (Kingdom of Lesotho, 2009). The introduction of Life Skills Education (LSE) in 2005 by the Ministry of Education and Training (MoET) was one of the responses within the education sector designed to address challenges in this area. LSE was conceptualised as a stand-alone compulsory subject in all schools in Lesotho. This was also confirmed by the Education Sector HIV and AIDS Policy (MOET, 2012).

There have been a number of funding agencies for LSE. Initially, the curriculum was funded by UNFPA with the view of strengthening the implementation of POP/FLE as lifeskills is one of the components of POP/FLE and the LSE framework was derived from the POP/FLE framework. The second funder to appear was Irish Aid who took over from UNFPA for the development of instructional materials in the form of learners' textbooks, LSE syllabus and LSE teachers' guide with the assistance of two consultants from Malawi. Then the Global fund followed, specifically during the implementation stage of LSE as a subject. This process was facilitated by the NCDC-LSE team led by the LSE coordinator with assistance from the NCDC director.

2.5 CONSULTANTS IN CURRICULUM DESIGN

One of the critical questions in this project is to answer the question, 'Why are consultants (specifically foreign consultants) engaged to design the Lesotho curriculum?' Harley & Wedekind (2004) looking at South African curriculum design during the transition period from apartheid education to democratic education, observed that consultants and non-governmental organisations (NGOs) were sub-contracted for curriculum design and implementation due to lack of capacity in teachers. But in the case of Lesotho, statistics show that there have been more than enough curriculum specialists produced in the last decade (Ministry of Finance, 2009). It is a puzzle therefore that the country continues to engage foreign consultants who need to be explored further.

2.5.1 Who are Curriculum Consultants?

Compassion Capital Fund Natural Resource Centre (CCFNRC) (2010, p.24) defines a consultant as "a person in a position to have some influence over an individual, a group, or an organization but who has no direct power to make changes or implement programs." Therefore, consultants are not employees but are independent private experts. Similarly, the World Bank (2007, p.2) regards consultants as specialists contracted for a period of time to complete a particular project or perform a certain type of work. As experts, consultants bring specialised skills, experience, knowledge, or access to information to provide services of an intellectual and advisory nature "using their professional skills to study, design, and organize specific projects, advise clients, conduct training, and transfer knowledge" (CCFNRC, 2010, p.24; World Bank, 2002, p.3). Ideally, a consultant brings an independent perspective to an organisation (CCFNRC, 2010).

The work of consultants also defines them because they provide consulting services. Lawler (1951) defines consulting services as those services that encompass multiple activities and disciplines such as the drafting of sector policies; institutional reform, management, financial advisory services; provision of engineering and architectural design services. In addition, he extends the list of activities done by consultants to providing project supervision, social and environmental studies, technical assistance, and training. It is a well understood fact that consulting services vary from routine tasks to highly specialised and complex assignments. However, Lawler (1951) claims that Bank-funded projects consultants should:

- Meet the highest standards of quality and efficiency;
- Be unbiased, that is, they should be acting independently from any affiliation, economic or otherwise, which may cause conflict between the consultant's interests and those of the client; and
- Be proposed, awarded, and executed according to the ethical principles of the consulting professions.

In the case of Lesotho, almost all consultants who have been engaged to design the curriculum were Bank-funded. This study aims to assess the issue of quality and efficiency of foreign consultants which might justify their engagement.

Another characteristic of a consultant observed by CCFNRC (2010, p.24) is that since they are not permanently employed and usually work for more than one client at a time, they work on their own and they are not expected to be present in the office during set hours. As a result, there might be split devotion to a project unless these can be arranged in the contract. Often consultants will work long or irregular hours during busy times, but CCFNRC (2010, p.24) warns that they should not be expected to do so unless the project specifically demands it.

In the case of Lesotho, consultants are not employees of the Ministry of Education and Training (MOET) and are usually engaged to assist curriculum specialists to design a relevant and effective curriculum for Lesotho. As the study is questioning the norm in the education system of Lesotho, these consultants are not only from outside the department (NCDC) or the ministry (MOET), but from outside the country and sometimes even from outside the continent, Africa.

CCFNRC (2010) observes that consultants bring specialised skills, experience, knowledge, and access to information that will make a consultant provide a consulting service which is the role of a special subject matter resource person and supervision (Lawler, 1951; World Bank, 2002). When one compares these attributes of a consultant, they are actually what a primary school science curriculum specialist employed by NCDC should has. Such attributes like experience and access to information should be found together with specialised skills as curriculum specialists and some knowledge of their field of work and study. The question about, "Who are the consultants?" does not necessarily refer to their names, gender, race or geographical location

in which they come from, but what their backgrounds and ideologies are, and what influence they bring to the local curriculum.

The term consultant can also be used to refer to staff members (Lawler, 1951) especially if they have special skills and knowledge for the job they are doing as is usually expected. Similarly, this context is recognised in the study as the Lesotho (NCDC) curriculum employees are referred to as consultants and curriculum specialists (NCDC, Hand book, undated). One of NCDC curriculum specialists' roles and responsibilities is to advice the Ministry of Education and training on curriculum matters. The curriculum knowledge they possess and experience on curriculum development and design over years qualifies them to be called consultants and advisors of the government in matters relating to curriculum design. The question this study will attempt to answer is why do NCDC curriculum consultants need consultants from outside to assist them in curriculum design? CCFNRC (2010, p.24) argue that it is wasteful to engage foreign consultants because it "wouldn't be cost-effective to bring in a consultant to complete a job that could be done by someone your organization is already employing."

2.5.2 Roles and responsibilities in consultancy

2.5.2.1 Consulting Services

The services that are provided by consultants are grouped into preparation services, implementation services and advisory services (World Bank, 2002). The group under which the curriculum design and development falls, is advisory services. In this group there are services that are provided by consultants such as advice on policy and strategy, institution building, training and knowledge transfer, management advice and technical and operating advice (World Bank, 2002, p.2).

In order to manage the services of consultants, the World Bank (2002, p.3) identifies five (5) legal arrangements of consultants involved in World Bank projects. These are partnerships (two or more individuals), limited liability companies, public stock companies (large consulting firms with shares held by the public and traded on stock exchanges), government-owned enterprises

(special consulting arm within the ministry provided remunerated consulting services) and foundations and non-profit organisations. Among these groups, there is none that describes the consultants who took part in this study. The second consultant, Dr Simone Doctors, is working as an individual and is referred to as "the consultant" not company in her contract. The advert that led to her appointment, published on the 23 March 2011, reveals that she was appointed under the World Bank's *Guidelines: Selection and Employment of Consultants by World Bank Borrowers, October 2006 Revised* May 2010. There are a few irregularities concerning consultant 2's appointment but these are discussed in detail in the data analysis chapter.

The first consultant is employed by UNICEF which is the donor agency that provided the curriculum development centre in Lesotho with funding escorted by a consultant. Agencies of the United Nations have personnel who are acquainted with the procedures of the United Nations and the World Bank (World Bank, 2002). This is the staff who offers technical assistance and advice to clients in preparing and implementing Bank-financed projects by providing professional services under projects financed by the Bank to assist borrowers. Her appointment into this consultancy did not follow normal selection procedures as she came as a package together with the funding. This exceptional or special case is acceptable under the rules and guidelines of the World Bank and is categorised under types of consultants as UN agencies together with consulting marketing groups, universities and research institutions, financial consultants, and procurement agents and inspection agents (World Bank, 2002). Both the legal arrangements of consultants and consulting services will be used in the analysis of data. These will help the researcher to answer some of the research questions for this study.

2.5.2.2 Consultants' roles

The above section reveals that consultants are characterised by specialised skills, experience, knowledge or access to information. Consultants' roles can be deduced from their attributes and qualifications. Lawler (1951, pp.223 & 225) argues that a curriculum consultant's roles require that he works with the school administration on areas usually thought of as administrative which affect designers and teachers in their work for curriculum improvement and with any problem that impinges upon the curriculum. When the client is drafting the terms of reference for

consultants, in essence, they are outlining the roles of the consultants. So the specific roles for individual companies are stated in the bid invitation documents of consultants.

Sometimes consultants can be engaged not necessarily because the company does not have expertise to perform the task but to free up time for the manager and directors (CCFNRC, 2010 p.11). In such cases consultants merely function as a "pair of hands," doing something the organisation does not have the time or requisite expertise to accomplish itself. This is also essential because it helps companies to complete projects on time and save money.

Lawler (1951, p.220) identifies the role of a consultant as to act as a resource person in helping a teacher and administrative group to deepen understanding and become proficient in the use of new techniques necessary to develop the most desirable kind of school programme. This implies that when a consultant leaves, the curriculum developers will be able to implement the new techniques for the programme independently. Also, the consultant is not supposed to impose his/her own programmes on the client as he/she develops the most desirable programme required by the client. Besides being a resource person, a consultant is expected to offer clients a more efficient allocation of resources by providing specialised services for limited amounts of time without any obligation of permanent employment on the part of the client (Lawler, 1951, p.220). Sometimes curriculum developers are hindered by the lack of proper resources to design and develop a desirable programme. It is the responsibility of a consultant to provide relevant resources from all over the world.

Another role identified by CCFNRC (2010, p.6) is that a good consultant is a unifier, not a segmenter, who helps teachers become acquainted with frontier thinking and practice in the field. Consultants have the ability to impart superior knowledge, transfer skills and upgrade the knowledge base of clients by collaborating with staff to build their expertise in ways that a "pair of hands" cannot (Lawler, 1951, p.220). Accordingly, CCFNRC (2010 p.11), warns that working with this type of consultant requires the commitment and involvement of the relevant managers, front-line staff, board members, and other stakeholders.

2.5.2.3 Responsibilities of consultants

In performing their job, consultants should be professional and follow ethical issues related to their work. There are specific behaviours that consultants are expected to show during the selection process and during the execution of the assignment. During the selection process, Lawler (1951) argues that consultants should abstain from offering bribes to the selectors. This may lead to less qualified consultants being awarded the tender. This can also be done by a consultant colluding with other consultants or clients to win the contract unfairly. Lawler (1951) further warn consultants to submit proposals that reflect their true qualifications and capabilities. This can affect the quality of consultancy because unqualified candidates may be offered a job that is beyond their capacity. It is the responsibility of consultants to aim for fair contracts and to report any acts of observed corruption and extortion (Lawler, 1951).

The same responsibilities are still applicable during the execution of the assignment. In addition, Lawler (1951) observes that consultants must exercise independent professional judgment and maintain proper and adequate administrative records. Anecdotal experience shows that some consultants collude with other people especially those who possess the required skills for the consultancy and the one who is less qualified becomes a silent partner while the gains are shared equally. Only the qualifying consultant submits documents and qualifications. This is done to win the tender. Improved selection methods and procedures cannot prevent fraud and corruption, but only make it more difficult. Increased integrity levels on the part of both borrowers and consultants are also necessary. Both sides must raise their awareness of the risks to which institutions, consulting firms, public officers, and consultant staffs expose themselves when acting corruptly.

At the level of an individual consulting firm, steps in the right direction include improving corporate culture and introducing internal controls, codes of conduct, and structured systems to manage integrity.

2.5.2.4 The roles and responsibilities of the client

The client or borrower here refers to an individual, group, company, or organisation that is soliciting consulting services. In the current research this is either the government of Lesotho

(GOL), the Ministry of Education and Training (MOET), or the National Curriculum Development Centre (NCDC). Depending on the method of selection of consultant, the client is the employer of the consultant (not on a permanent basis but on contract). Anecdotal experience has shown that the client is involved in drawing terms of reference, drafting the contract, shortlisting, adverting and monitoring the consultant. World Bank (2011, p.7) sees the client as being responsible for supervising the consultants' performance and ensuring that they carry out the assignment in accordance with the contract. Hence, there are principles that should guide the client. According to the World Bank (2002, p.30), the roles and responsibilities of the client start before the selection of consultants and continues through the execution of the consulting assignment. Before and during the selection of consultants, the client should describe the selection criteria to applicants and ensure that all documents forming the request for proposals (RFP) are clear and unambiguous and then shortlists applicants who are qualified for the consultancy (World Bank, 2002). In order to administer the roles, the client should appoint an evaluation committee with competent officials, a negotiation committee with technical and legal experience relevant to the assignment or also a lead in-house contact or a manager depending on the size of the project (World Bank, 2002; CCFNRC, 2010, p.11). It is the responsibility of the client to deal with cases of corruption during selection. The World Bank (2002) claims that the client should report, investigate and sanction cases of corruption and also make known the results of the selection process to all those interested. The main responsibility of the client during the execution of the consulting assignment is to safeguard against corruption. To do this, the World Bank (2002 p.30) recommends an enforcement of a code of conduct with proper sanctions; prompt payment of consultant's invoices; always adhering to the provisions of the contract; keeping records orderly; auditing and establishing a reporting channel.

2.5.3 Selection of consultants for curriculum design

2.5.3.1 Invitation of consultants

Before a consultant is engaged in any company, a decision needs to be taken about what kind of consultant to appoint. There are some pointers that can assist whoever is responsible for appointing the consultant. CCFNRC (2010, p.6) lists things to consider before inviting or engaging a consultant. These are:

- Could in-house staff do the job if they had additional training and/or supervision?
- Does a board member have the expertise or experience to help? Would it be appropriate for a board member to help?
- Could someone from a sister, trade, or government organisation help instead? What about someone from a university or college?
- Are there volunteer advisors or organisations that provide free advice?
- Will hiring a consultant have profoundly negative financial consequences for our organisation? In other words, can we afford to hire a consultant?
- Are we hiring the consultant to delay a decision or action that we know is necessary but don't want to make?
- Are we looking for someone to give credibility to a decision which has already been made and which there is no intention of changing?
- Do we want a consultant to come in so they can take the blame for the mistakes of staff or board members?
- Are we asking the consultant to solve problems that managers, for example, should solve themselves? (If so, consider reframing the project to teach the line managers how to solve these problems so that you are building internal capacity for the long term.).
- Does the consulting project matter? Does it link to larger goals or priorities we are aiming to achieve or compliance requirements of some kind (e.g., accounting standards)?

Once the decision has been to engage the consultant, the main requirement will be financing the project. The most widely used way of financing curriculum projects is to solicit funding from the bank. The Bank, especially the World Bank, has some rules governing loans. The World Bank (2011, p.2) argues that the Bank, for its part, is required to "ensure that the proceeds of any loan are used only for the purposes for which the loan was granted, with due attention to considerations of economy and efficiency and without regard to political or other non-economic influences or considerations," and it has established detailed procedures for this purpose. The World Bank (2011) further highlights five main considerations that guide the Bank's policy on the selection process. These are:

(a) the need for high-quality services,

(b) the need for economy and efficiency,

(c) the need to give all eligible consultants an opportunity to compete in providing the services financed by the Bank,

(d) the Bank's interest in encouraging the development and use of national consultants in its developing member countries, and

(e) The need for transparency in the selection process.

The best way to address these considerations can be through competition among qualified short-listed firms in which the selection is based on the quality of the proposal and, where appropriate, on the cost of the services to be provided (World Bank, 2011). The competitive selection of consultants is done to consider Conflict of Interest, Unfair Competitive Advantage and

Eligibility in bank financed projects (World Bank, 2011). The Bank will then review the borrower's hiring of consultants to satisfy itself that the selection process is carried out in accordance with the provisions of these guidelines.

The criteria provided by CCFNRC (2010, p.6) and the considerations that guide the World Bank policy on the selection process will become very useful when I attempt to answer the second research question which is "How is the selection of consultants made to design the primary school science curriculum in Lesotho"? Although of the two consultants interviewed in this study one is an employee of UNICEF and was deployed, the main character consultant went through the selection process and was selected under the rules of the World Bank as her consultancy was funded by the World Bank. Again, she is the main consultant because her assignment was to overhaul the curriculum in all the subjects and also assist in assessment packages with ECOL whereas; the UNICEF consultant was to assist in the integration of Life Skills Education (LSE) only.

2.5.3.2 Who selects curriculum consultants?

The consultant should be brought into the picture only upon invitation by the staff. The employees should therefore see the need for a consultant and they should be interested, willing and ready for the consultant (Lawler, 1951, p.220). It is then that the lead in-house contact or a manager in the case of smaller projects can be chosen to oversee the selection process but in the case of larger projects or in bigger organisations, it is sensible to form a committee (CCFNRC, 2010, p.11). The lead in-house contact person or manager or selection committee will be responsible for preparing and implementing the project, and therefore for selecting the consultant, and awarding and subsequently administering the contract on behalf of the company (client or borrower) (World Bank, 2011).

In the case of this study, there was a lead in-house contact person who was responsible for appointments and execution of both consultants. This person also provided data for this study as "curriculum specialist 4".

2.5.3.3 Methods of selecting curriculum consultants

Basically, there are two main areas that are considered in selecting consultants. The first is the knowledge or expertise that a consultant has and the second is the experience of the consultant in the field. Consultants are selected on the basis of their expertise. As has already been said in this chapter in the topic "Who are consultants?" they should be experts with special knowledge, skills, competency and experience in their area of specialisation. Lawler (1951, p.220) argues that the competency in the area of specialisation should be with a workable knowledge of what constitutes a desirable educational programme. Consultants should have a background of training and experience that will provide them with special competency in that area of professional discipline or degree that is appropriate and evidence of training, skills, and knowledge they need for the project (CCFNRC, 2010, p.11).

To confirm the evidence of training of consultants, selectors need to evaluate their qualifications and competence. Therefore, evaluation is based on qualifications and experience shown in their curriculum vitae (CV). The World Bank (2002, p.75) gives criteria for the evaluation of consultants' qualifications, competence and experience as follows:

- General Qualifications. This sub-criterion covers the general experience of the candidate (total duration of professional activity), level of education and training, positions held by the candidate, time spent with the consultant as staff, experience in the region where the assignment is to be carried out.
- Adequacy for the Assignment. This relates to the education, training, and experience of the candidate in the specific sector, field, subject, and so on directly relevant to the assignment and the proposed position. This factor is critical and should be given the highest weight among the three sub-criteria.
- Experience in the Region and Language. This illustrates the candidate's knowledge of national or local conditions, including culture, administrative systems, and government organisations, and his or her ability to communicate in the national language.

In answering the first research question, "Who are the foreign consultants engaged to design the primary school science curriculum in Lesotho?" I will utilise the criteria for evaluation of consultants. This will help me in the assessment of the type of consultants who were involved in designing the primary school science Grade 4 curriculum in Lesotho in terms of their qualifications, adequacy and experience.

In order to evaluate competence, skills, knowledge and experience of consultants, there are different methods of selection accepted by the World Bank. The lead in-house contact or

manager selects a consulting firm also known as the consultant from those listed in the letter of invitation (LOI). This is done in accordance with the method of selection decided by the selectors approved by the bank in the case of bank funded projects. The methods of selection of consultants include Quality and Cost-Based Selection, Quality-Based Selection (QBS), Fixed Budget (FBS), Least-Cost Selection (LCS), Consultants' Qualifications (CQS), and Single-Source Selection (SSS). The most commonly used and recommended method is the Quality and Cost-Based Selection (QCBS) (World Bank, 2011). These methods are briefly described below:

2.5.3.3.1 Quality and Cost-Based Selection (QCBS)

QCBS uses a competitive process among short-listed consultants that takes into account the quality of the proposal and the cost of the services in the selection of the successful consultant (World Bank, 2011, p.13). Cost as a factor of selection shall be used judiciously. The relative weight to be given to the quality and cost shall be determined for each case depending on the nature of the assignment. According to the World Bank (2011, p.13), the selection process under quality and cost based selection shall include the following steps:

(a) preparation of the terms of reference (TOR);

(b) preparation of cost estimate and the budget, and short-listing criteria;

(c) advertising;

(d) preparation of the short list of consultants;

(e) preparation and issuance of the Request For Proposal (RFP) (which should include: the Letter of Invitation (LOI), Instructions to Consultants (ITC), the TOR, and the proposed draft contract);

(f) receipt of proposals;

(g) evaluation of technical proposals: consideration of quality;

(h) public opening of financial proposals;

(i) evaluation of financial proposal;

(j) final evaluation of quality and cost; and

(k) negotiations and award of the contract to the selected firm.

In the case of curriculum design, one would presume that quality should be considered the most important factor. This is because curriculum takes time to be reviewed and children's lives are directly affected by the type and quality of curriculum implemented. Motala (2001) and Robertson (2007) define "fitness for purpose" as provision of value for money and the measure of excellence. This simply means that one is unlikely to get a high quality consultant who comes

cheap. But the selectors should be vigilant because some companies tend to inflate the prices when giving services to the government.

2.5.3.3.2 Quality-Based Selection (QBS)

As the name suggests, this type of selection is mainly based on the quality of the consultant in terms of expertise. The method is appropriate for special assignments as described by the World Bank (2011, p.25) below:

(a) Complex or highly specialised assignments for which it is difficult to define precise Terms of Reference (TOR) and the required input from the consultants, and for which the client expects the consultants to demonstrate innovation in their proposals.

(b) Assignments that have a high downstream impact and in which the objective is to have the best experts.

(c) Assignments that can be carried out in substantially different ways, such that proposals will not be comparable.

One would think that this should be the type of selection employed for Lesotho primary school science curriculum design consultants considering the guidelines mentioned above. Contrarily, the favoured selection method is the quality and cost based selection method for the obvious reasons of cost implications. Once the cost is in the picture, there is a possibility of compromising quality of consultant hence low quality of consulting services. Below are some other minor selection methods which are less relevant to curriculum design specifically for Lesotho.

2.5.3.3.3 Other minor selection methods

a) Fixed Budget (FBS) - when the assignment is simple and can be precisely defined and the budget is fixed

b) Least-Cost Selection (LCS) - appropriate for selecting consultants for assignments of a standard or routine nature such as audits, and engineering design of non-complex works where well-established practices and standards exist.

c) The Consultants' Qualifications (CQS) - for small assignments or emergency situations declared by the client and recognised by the Bank for which the need for issuing an RFP, and preparing and evaluating competitive proposals is not necessary.

d) Single-Source Selection (SSS) - does not provide the benefits of competition in regard to quality and cost, lacks transparency in selection, and could encourage unacceptable practices.

2.6 CONCLUSION

Literature reveals that one of the reasons curriculum reform is undertaken is the introduction of educational concepts such as a child-centred approach. But curriculum reform is an expensive exercise that requires much money and engaging consultants is even more expensive as it requires money for payment of consulting services, workshops and purchasing materials for training of employees. The history of Lesotho education shows that the involvement of foreign consultants has been an unending activity since formal education came into being in 1833.

The prolonged engagement of foreign consultants usually creates a ruling class. This is an elite class of civil servants and teachers brought up in a colonial environment of academic curriculum to serve the colonisers' interests. The class therefore supports an elitist education system driven by individualistic interest and the needs of a small but powerful minority.

One of the influences of foreign involvement in curriculum design is curricula specificity to the context of the country. This requires recontextualisation and reconceptualisation which adds to the value or loss of and more expenses.

Knowledge is crucial in curriculum design and development for curriculum developers. Those involved in curriculum design and development should bring specialised skills, experience, knowledge, and access to information that will provide the role of a special subject matter resource person and supervision. There are clear guidelines that can be used to measure the quality of consultants.

The subsequent chapter outlines the theoretical framework of the study. The concept of quality is outlined throughout the chapter.

CHAPTER 3: CONCEPTUAL FRAMEWORK

Conceptualising foreign curriculum consultancy

What counts as quality is contested. The different views of quality generate different methods of assessing quality and in particular alternative sets of performance indicators (PI). However, PIs are highly limited in their informational content, and have nothing to tell us about the quality of the educational process (Barnett, 1994, p.68).

3.1 INTRODUCTION

The curriculum development process consists of four stages, namely curriculum design, curriculum dissemination, curriculum implementation and curriculum evaluation (Carl, 2002). The focus of this study is on the curriculum design stage in the Lesotho curriculum development centre. The main focus of the study is the department of science in the Lesotho curriculum development center. The effectiveness of an educational system of any country depends on the quality of education policies especially the curriculum policy. The quality of any curriculum policy is as a result of proper planning and the effective design of that curriculum policy. This chapter looks at the quality of educational programmes, specifically the curriculum policy. Literature agrees that for any education programme to be of quality, it should consider the following four aspects: design, content, resources and assessment (Ritchhart, 2007; Barnett, 1994; UNESCO, 2014; Darling-Hammond, 1999; Wilks, et al., 2004; Motala, 2001; Levine, 2006; Pike & Kuh, 2005; Jansen, 1999). Among the four aspects, curriculum design is the one that informs the other aspects. If the planning and assumptions about actual practice and implementation of curriculum in schools are not of a high quality, this will lead to enormous wastage (Macdonald, 2003). In the following paragraphs I wish to explore the concept of quality in curriculum design. The chapter will explore the concept of quality focusing on definitions and models of quality measurement. The definition of quality will comprise the quality of people and that of education programmes.

3.2 THE CONCEPT QUALITY

3.2.1 Conceptualizing quality

The very notion of quality itself is problematic as it can be looked at from a variety of angles as the concepts quality, quality assurance or total quality management and this makes it totally subjective (Robertson, 2007). According to Buchberger, et al (2000, p.14) the concepts quality,

quality assurance or total quality management were developed within the industrial sector, where quality is indicated by a product. Quality in the education context has in the last century also been influenced by the industrial sector and has focused on external efficiencies in education systems which relate to the labour market. Giroux (1992) contends that labour functions in which schools rather than creating managers they produced passive workers who would adjust to the imperatives of the capitalist order. In this case managers are a good quality compared to passive workers. Within the relativist framework, quality is conceived within a process-product-impact dimension. This looks at how education costs and attainment correlated with future employment and earnings (Pillay, 1991; Meyer, 1995, p.13). In this dimension, quality in education programmes is embedded in the process of curriculum design and development with the major focus being on a revised/reviewed curriculum (product) whose impact is realised through curriculum implementation (outputs) and effective teaching and learning (impact). Doherty-Derkowski (as cited in Wilks et al, 2008) presents two aspects of quality as structural quality and process quality.

3.2.2 Structural and process quality

Structural quality deals with such things as the regulated environment of space, teacher training, and group size while process quality is concerned with such things as relationships, stimulation within the learning environment and social emotional security. Process quality also includes a global aspect for such characteristics as cultural awareness, an appreciation of diversity, a comprehension of environmental, historical and technological influences on experience as well as acknowledging the importance of the immediate context and its influence on wellbeing and development (Wilks et al., 2008).

3.2.3 Fitness for purpose

Within these two broad aspects of quality, structural and process quality, there are other specific concepts of quality worth mentioning. The first concept is quality as effectiveness or fitness for purpose where there is provision of value for money (Motala, 2001). This goes together with the definition of quality mentioned by Robertson (2007) that quality is a measure of excellence. Fitness for purpose and value added are described as entailing “assessing fitness for a defined purpose as well as assessing through performance indicators and participants’ perceptions, how

much value has been added" (Webbstock, 1994, p.7). Fitness for purpose requires that the foreign curriculum consultants engaged should add value that would otherwise not be engaged by national curriculum centre.

3.2.4 Empowering quality

The second concept is quality as transformative or empowering. Quality as empowering or transforming is also known as empowering agency which has two dimensions, namely; creating epistemological access, and developing the capability of all education role players to exercise judgment (UNESCO, 2004). Epistemological access occurs if the curriculum gives opportunities to all learners to have access to a wide range of different forms of knowledge, skills and competencies which will enhance the social value of their qualifications. In the case of South Africa, during segregation, the quality of language was used for the purpose of exclusion, domination and political advantage (Motala, 2001). A quality curriculum policy should be multicultural and advocate teaching for social justice and development of character (Maharajh, 2014). Epistemological access relates to both quantity and the notion of quality. This is the access of learning new forms of knowledge that must lead to cognitive equity (Crouch, 1996). The new curriculum should afford learners to learn new relevant knowledge to prepare them for future challenges. The curriculum should cater for both content knowledge and values. Together, values and knowledge provide a means for deciding "what matters" in the school (Crouch, 1996). In the context of this study, if the curriculum specialists, employed to design Lesotho curriculum, have had the empowering quality-epistemological access they would not depend on the assistance of foreign consultants in designing Lesotho curriculum.

Besides epistemological access, empowering quality also deals with inclusion of all education role players to exercise judgment (UNESCO, 2004). Education role players are also known as stakeholders. I have also discussed the concept of curriculum stakeholders in the literature review (chapter 2). Education role players are individuals or groups of persons who have a right to comment on, and have input into, school programmes (Arends as cited in Marsh, 2009, p.205). They comprise head office education directors, academics, non-governmental organisations, political parties, youth organisations, parents, religious groups, traditional groups and assessment boards, teacher unions, school councils/boards, school principals/heads, teachers, students,

professional associations and book authors (Marsh, 2009, p.207). In most countries, stakeholders are organised into committees and work on specific tasks related to curriculum policy. The main responsibility of stakeholders is to facilitate the task of developing curriculum policy, approving syllabi, checking curriculum materials, and approving the curriculum programme and monitoring progress of curriculum development and design. However, as observed by Ntoi (2007), epistemological access afforded to stakeholders may not have any influence in the quality of curriculum since their task of checking curriculum materials can be assumed to be superficial since most of the stakeholders do not have expertise in curriculum development.

3.2.5 Quality in schooling

When the process of curriculum design and development is done, the product of the process is the reviewed or revised curriculum. The usefulness of a revised curriculum is when it is in operation in schools. Hence, implementation of a newly revised curriculum is vital to impact teaching and learning in schools. Fuller (1986) recognises four definitions of quality related to schooling. These are:

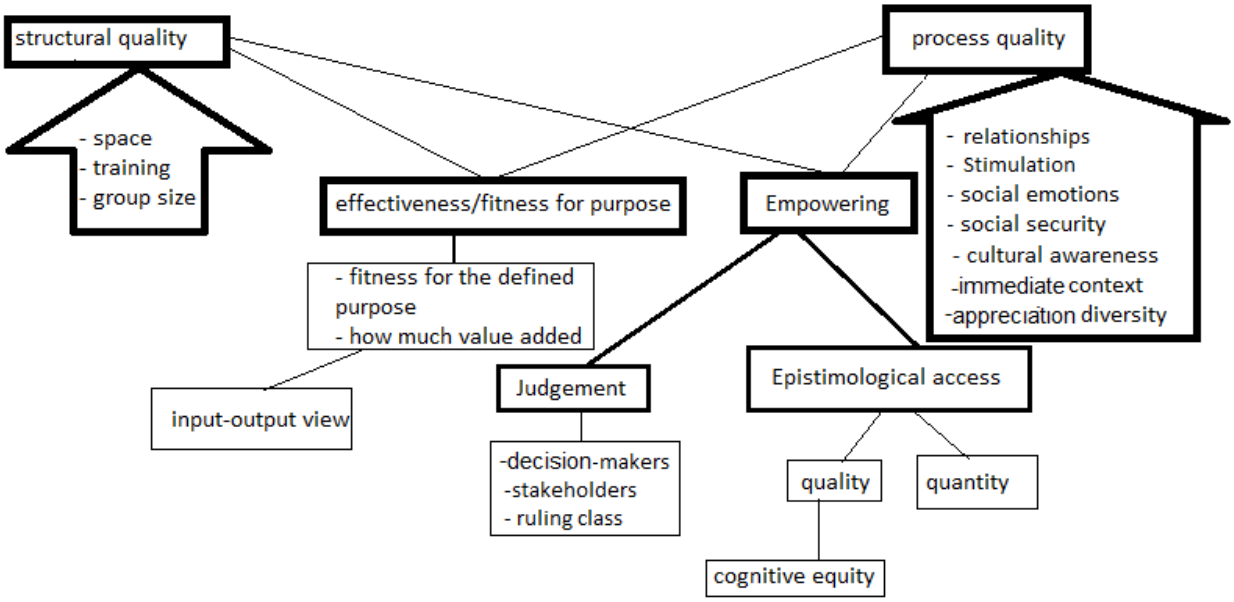
- A production function model with an input-output view;
- School quality as existing in the relationships between teacher and student, supported by a positive school climate;
- School quality as a function of classroom and school organisation (time on task and a well-managed school structure); and
- Quality as symbolic.

Even though the intended curriculum may not be exactly the same as the enacted curriculum (schooling curriculum), curriculum design (intended curriculum) gives guidelines on what and how it should be taught in schools. Therefore, there is a direct influence by the intended curriculum on quality in schooling. Since this study is not focusing on schooling curriculum but on the intended curriculum, I will not dwell much on the quality of the schooling curriculum. I wish to look at the overview of the concepts that explain quality.

3.2.6 Summary of quality concepts

The following concept-web in figure 3.1 shows a link between concepts of quality discussed so far in this chapter:

Figure 3.1: Quality Concept-Web



Source: Fuller (1986), Shulman (1987), Crouch (1996), Motala (2001), UNESCO (2004) and Marsh (2009)

Putting the concept web into the context of this study, structural quality involves training which leads to empowering the trainee (the teacher or curriculum specialist) so that he/she will be able to afford learners with epistemological access (to design a curriculum that is based on equity for all). This enables learners to possess a quality that will give them cognitive equity amongst their peers all over the world. The trained and retrained curriculum specialists will again be able to involve stakeholders in the curriculum design. The types of teachers and curriculum specialists likely to possess such qualities are described by Wilks, et al. (2008). Teachers (curriculum designers and specialists are teachers) with structural quality are highly qualified, experienced, positive and competent individuals who are effective in their work. Individuals with structural quality will definitely show process quality. Wilks, et al. (2008) assert that the presence of highly qualified and experienced staff has been consistently linked to high quality interactions between learners and teachers, and this is an important factor in the social, language and cognitive

development of children in group settings (these are attributes of process quality). The links between higher levels of qualified staff and positive outcomes for children is established and the qualifications and competency of staff to implement curricula are critical to success (Wilks, et al., 2008). It has been established that effective implementation of curriculum requires qualified staff who understand the curriculum; and, on-going assessment of children. Well qualified staff are essential to quality teaching and professional practice. Successful teachers tend to be those who are able to use a range of teaching strategies and who use a range of interaction styles, rather than a single, rigid approach (Hamachek, 1977). Effective teachers adjust their teaching to fit the needs of different students and the demands of different instructional goals, topics, and methods (Darling-Hammond, 1999).

The opposite is also true; the lack of structural and process quality yields negative results. Inexperienced curriculum specialists are typically less effective than more senior ones (Darling-Hammond, 1999). Inexperienced teachers are those with less than three years of experience but the benefits of experience appear to level off after about five years. This indicates that after five years of teaching experience, a teacher is considered to be experienced. This is why in curriculum development centres in many countries (including Lesotho), the candidates for the position of curriculum designer should have a minimum of five years' experience (MOET, 2009).

Another variable that assesses teacher quality is subject specialisation. Darling-Hammond (1999) argues that possession of full certification and a major in the field is a more powerful predictor of student achievement than teachers' education levels (e.g., master's degrees). She defines certification status as a measure of teacher qualifications that combines aspects of knowledge about subject matter and about teaching and learning, also known as pedagogic content knowledge (PCK) (Shulman, 1987). It is not surprising that masters' degrees would be relatively weaker measures of structural quality, given the wide range of content they include, ranging from specialist degrees in reading or special education that are directly related to teaching to fields like administration and others that have little to do with teaching (Darling-Hammond, 1999). In this instance, teachers are not specialising in a single unit which prevents deep understanding of a single specialised unit.

Again, Darling-Hammond's (1999) research reveals that teachers' measured intelligence and subject matter knowledge do not increase teacher performance. In other words, intelligence is not a measure of quality, neither is subject matter knowledge alone but certification, which is a combination of teacher qualifications, knowledge about subject matter and about teaching and learning (simply put; teacher qualification, content knowledge and methodology) is.

In short, the quality of the teacher in schooling is full certification. Therefore, if countries are interested in improving the quality of education and students' achievement they may be well-advised to attend to the preparation and qualifications of teachers they hire and retain in the profession (Darling-Hammond, 1999). The same is true with the curriculum development centres. Teachers who are promoted into curriculum specialists should undertake training for preparation and qualification in the office. The fully certificated teachers will not only implement a curriculum effectively but can also assist in producing quality curriculum programmes at national, school, and classroom levels.

3.3 QUALITY OF CURRICULUM PROGRAMMES

Most countries want to maximise the potential of a curriculum to enhance the overall quality of education. They do this by designing a curriculum that is modern and relevant to children and societal needs (UNESCO, 2005). In other words, countries advocate for the design of a high-quality curriculum for a better future for their citizens. Barnett (1994, p.68) expresses the concept of quality in educational programmes as follows:

> What counts as quality is contested. The different views of quality generate different methods of assessing quality and in particular alternative sets of performance indicators (PI). However, PIs are highly limited in their informational content, and have nothing to tell us about the quality of the educational process.

This shows that, as with the human resource quality, there are variables and performance indicators to inform us of the quality of educational process.

3.3.1 Framework for improving quality of education

In order to improve quality in educational programmes, there are certain areas on which to focus. UNESCO (2005) outlines key areas to be considered when improving quality of education as shown by figure 3.2 below:

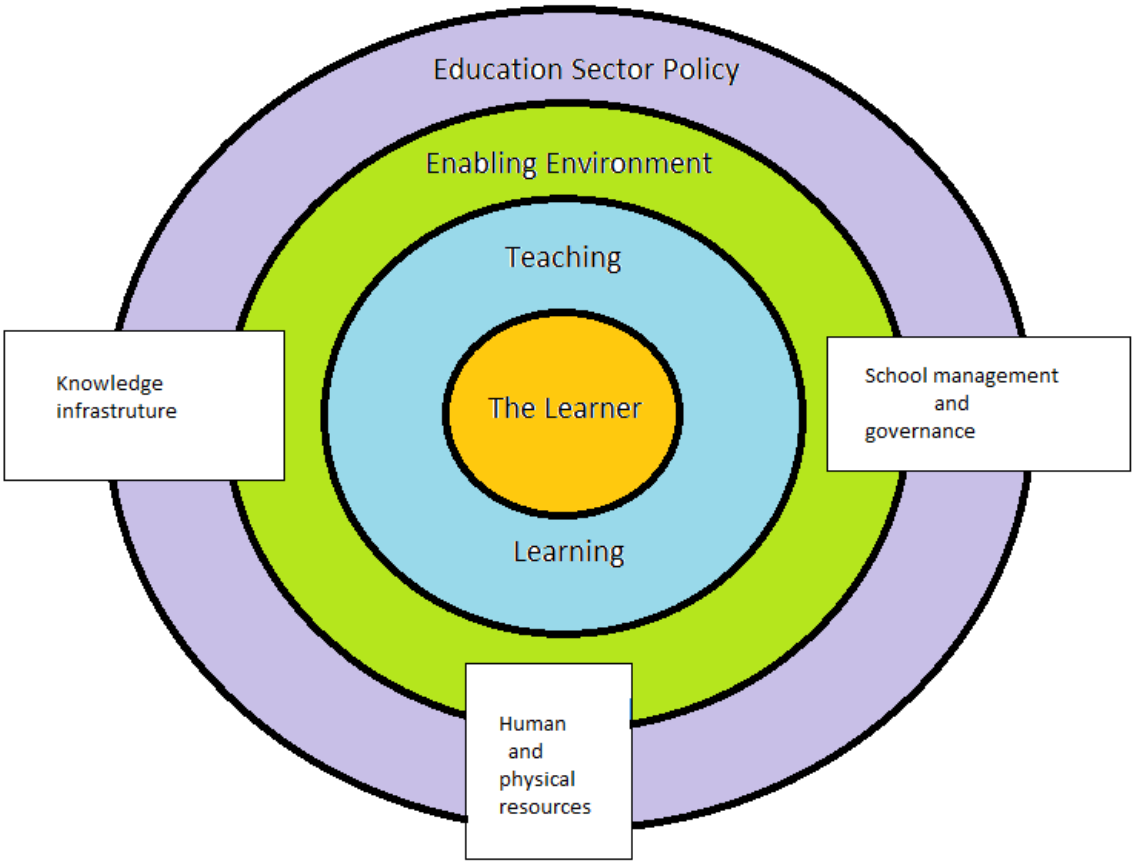


Figure 3.2: Policy framework for improving the quality of education
Source: UNESCO (2005 p. 143)

The centre of the whole process of curriculum development policy is the learner who is the core and main focus of quality improvement. Education policy including curriculum policy should have the interest of the learner at heart when designing education programmes. Educational programmes should treat learners as individuals with unique aptitudes, personal attitudes and learning styles (UNESCO, 2005). Teaching and learning processes are ways in which learners acquire knowledge, skills, values and attitudes. Therefore, policy decisions on teaching and

learning should be clear as these are the most important areas. The quality of educational programmes is assessed looking at these areas.

Therefore, this policy framework informs curriculum improvement in that it guides curriculum developers about the hierarchy of stakeholders and resources to consider in order to when designing effective curriculum;

1. Learners – curriculum is designed for learners. Curriculum designers should consider the level and type of learners when designing the curriculum. A colourful curriculum is no use if learners will not be able to achieve the outcomes.
2. Teaching and learning – teaching and learning strategies and content to be covered should be considered second.
3. Enabling environment – this refers to support materials which will assist learners to achieve their full potential. These include quality of teachers, teaching and learning resources, quality and skills of school managers such as the principal, deputy, Head of departments and School governing bodies.
4. Education sector policy – laws, policies and legislation to assist in the running of school matters. These are meant to guide teachers and managers on dealing with school matters and also protection of learners and teachers from unfair and unjust practices.

3.3.2 Models for Measurement of Quality in Curriculum

There are different methods used to assess quality of educational programmes. I have discussed some quality education models used in higher institutions in Nhlapo (2012) and I would like to adapt two of these models to explain quality of curriculum programmes. The first one is Barnett's (1992) model adapted by Nhlapo (2012, p.16).

3.3.2.1 Barnett's (1992) Model for Judging curriculum quality of an institution

In this model, Barnett (1992 p. 112) argues that judgment of quality in institutions should be made on the basis of the institution's care for teaching, assessment, staff development, and for its courses. In the context of this study, the model has been adapted to focus on the institution's care for design and development of curriculum, assessment, staff development and content (subjects /learning areas). These activities Barnett (1992) contends should form core elements in reviewing the performance of any institution. Figure 3.3 below shows the activities in the model:

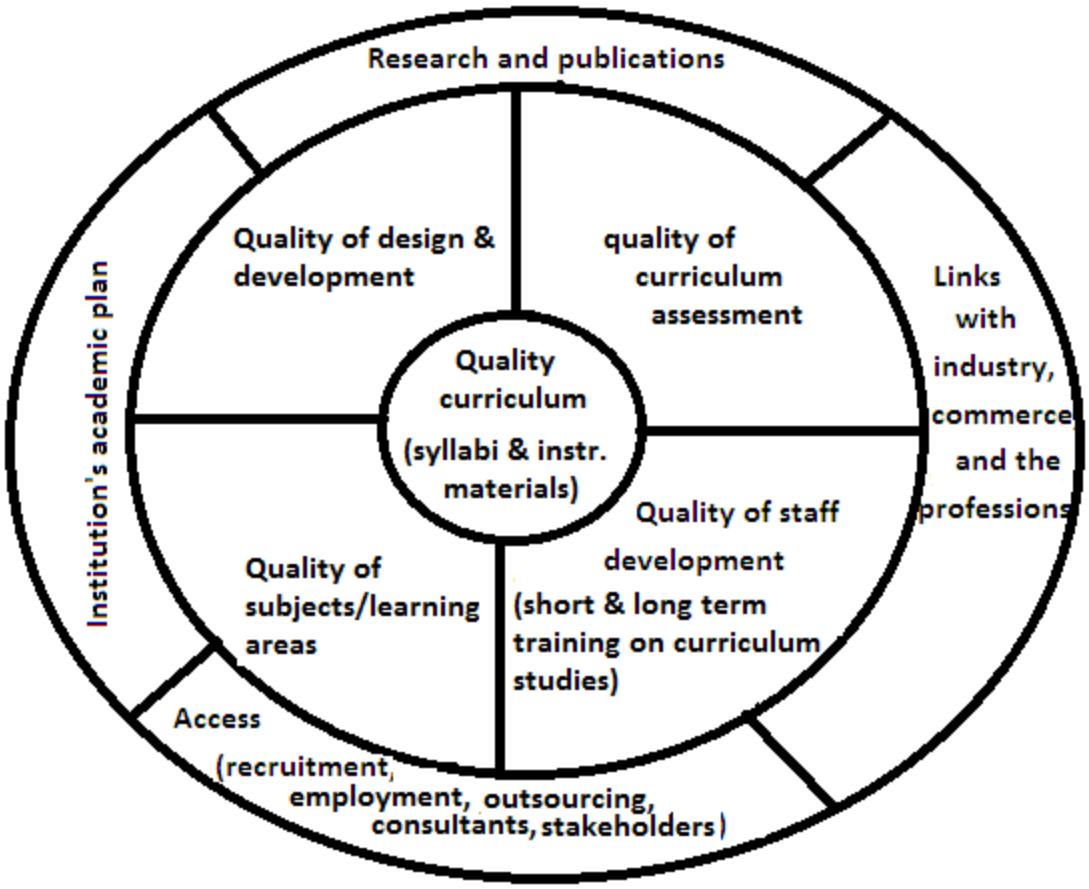


Figure 3.3: Quality Measurement Model

Source: Barnett (1992).

This model suggests four main areas in any curriculum development institution in which quality should be maintained. These are: assessment, design and development, staff development and content (subjects). The component of assessment in curriculum design is critical. There should be indicators to show the achievement of goals and objectives stated in the curriculum and this component clarifies the achievement of the goals, aims and objectives of the curriculum (Barnett, 1992).

Curriculum design and development is the main task of the curriculum development institution. This is where the education policies are simplified and clarified for implementation. The component should address the crisis or challenges that face the education system of the country. Curriculum design and development outline the content, approaches, goals, aims and objectives

of the new curriculum. The quality of this component depends on the quality of the curriculum developers involved.

Curriculum developers and teachers form a third component known as staff development which includes staff recruitment, employment, outsourcing and engagement of curriculum consultants. The quality of curriculum developers is measured by full certification and experience (Darling-Hammond, 1999; Wilks, et al., 2008; Motala, 2001). In order to have a quality curriculum programme, countries need to engage quality curriculum developers to design and develop curriculum programmes. Darling-Hammond (1999) maintains that decision makers should attend to preparation and qualifications of teachers they hire and retain in the profession to improve quality of education and learners' achievement.

The content component outlines the type of knowledge learners should acquire. Jansen (2004) contends that content should be grounded in a progressive constitution, based on values of non-racism, non-sexism; should include human rights education, citizenship education and inclusive education. This makes the quality content in a curriculum programme relevant and up to date to the needs of citizens of the country (Levine, 2006). The lack of content in the South African National Curriculum Statements (NCS) raised a number of concerns to some academics and it was an indication that "curriculum content matters and is a critical vehicle for giving meaning to particular set of outcomes…" (Jansen, 1999, p.150).

Besides the four main areas of quality curriculum development, the model recognises other activities that constitute a quality curriculum programme. These are links, research, plan and access. A quality curriculum should be linked to today's world to prepare citizens for future and global challenges (Levine, 2006). The developers should be engaged in research to be up to date with current information. Curriculum institutions should have access to the most qualified individuals in the field. The experts could be obtained through employment in short or long term contracts or engagement of consultants (Barnett, 1992). The quality of consultants is discussed in detail in the literature review chapter.

3.3.2.2 Eight-point template for judging curriculum quality

The second model is an eight-point template for judging quality adapted from Levine as cited in Nhlapo (2012, p.14). During adaptation, the nine steps are reduced to eight as the sixth was collapsed due to its irrelevance to curriculum design and development in institutions. Table 3.1 below illustrates the revised template:

Table 3.1: Eight-point Template Model

Source: Levine (2006)

Standard	Description
1. Purpose	Explicit purpose reflecting today's needs.
2. Coherence	Curriculum that is rigorous, coherent and organised.
3. Balance	Curriculum that integrates theory and practice.
4. Faculty	Experts in curriculum design, up to date in their field, intellectually productive academics and practitioners.
5. Recruitment	Criteria in place to recruit curriculum specialist with the capacity and motivation to become successful curriculum designers.
6. Research	High quality research driven by practice carried out in curriculum.
7. Finances	Adequate resources to support curriculum activities
8. Assessment	On-going curriculum assessment and improvement of its performance

Assessment, research, recruitment and faculty have already been discussed in the Quality Measurement Model by Barnett (1992) above. Over and above the expertise of the faculty (human resources; curriculum developers), Pike & Kuh (2005) add that the quality of curriculum development is also affected by relationships between employees and the institution (employers), and among employees themselves. They claim that if the relationship in the faculty is sour, the quality of the programme is negatively affected. According to anecdotal experience, the relationship between curriculum developers and director-NCDC and amongst curriculum developers themselves resulted in a stagnant curriculum design process in 2009 which led to the engagement of a curriculum consultant (Dr Simone Doctors) in 2010.

3.3.3 Other curriculum quality measurement tools

3.3.3.1 Categories of evaluating curriculum

Besides the two indicators or models of curriculum programme quality assessment, Ritchhart (2007) suggests seven categories of evaluating a curriculum for quality as rigorous, real,

independent, and rich in thinking, revealing, rewarding and reflective. These categories are outlined below:

- A rigorous curriculum affords students opportunities to develop a deeper understanding and it is open enough to extend students' understanding beyond a minimal outcome.
- A real curriculum engages students in authentic disciplinary activities such that classroom activities mirror the real work of adults in the field. Students become mathematicians, scientists, authors, and historians to build true disciplinary understanding.
- A curriculum that requires independence gives learners opportunities to use their skills and knowledge, make appropriate choices, and apply their skills to direct their learning.
- A curriculum that is rich in thinking asks more of students than mere memorisation and replication. Students make connections, observe closely, ask questions, form conjectures, identify points of view, consider alternatives, evaluate outcomes, and make evidence-based judgments.
- A revealing curriculum (curriculum of understanding) reveals *how students* understand on top of what they understand. Students should acquire facts, then apply them in another context and be able to explain them.
- Rewarding curriculum addresses the intrinsic rewards of students through a sense of efficacy, accomplishment, and relevance by directing their efforts towards a well-defined learning goal.
- The reflective curriculum gives learners opportunities to make visible, the revealing thought processes and lines of reasoning. In this case they recall their state of thinking and knowledge before learning occurred and after they have learnt something.

3.3.3.2 Guidelines to determine quality curriculum

In addition to the seven categories, UNESCO (2014) also gives guidelines to follow in determining a quality curriculum: A quality curriculum should:

- Have clear aims for the curriculum and be up-to-date.

- Be relevant to students' current and future lives, experiences, environments and aspirations.
- Create a socially and economically prosperous future and respect the country's past – its cultural history and traditions.
- Be equitable and inclusive (take into account the diversity of learners and the different learner needs; cater for marginalised groups; avoid biases).
- Be learner-centred and learner-friendly (take learner needs into account; avoid biases and discrimination; well sequenced with regard to the learners' age; contribute to personal development and life skills; make sense –meaningful for learners; avoid overloading learners).
- Be open and flexible, to address new challenges & opportunities by integrating new/emerging issues.
- Be coherent and consistent across different education stages/grades/streams/learning areas/subjects.

3.3.3.3 Quality of OBE in South Africa as seen by Jansen (1999)

Curriculum 2005 (C2005) was implemented in Grade 1 in 1999 in the Republic of South Africa. The National Education Policy Act (No 27 of 1996) provided for the "development of the curriculum design tools to support an outcomes-based approach, critical cross-field outcomes, specific outcomes, range statements, assessment criteria, performance indicators, notional time and flexi-time." Hence, curriculum 2005 is outcomes-based.

The relationship between OBE in South Africa and this study is that, the current study investigates the involvement of foreign consultants in the curriculum of Lesotho and also OBE in South Africa was foreign, imported from Australia and the USA. Alderson & Martin (2007 p.163) argue that "OBE in Australia was modelled on the American response to particular social and political pressures of the 1960s and 70s." therefore, the failure of OBE in South Africa can inform the influence of foreign consultants in the Lesotho curriculum.

There are a number of issues that academics claim to have led to the failure of OBE in South Africa. Some of them are derived from claims by Jansen (1999):

Firstly, he claims that “the language of innovation associated with OBE is too complex, confusing and at times contradictory” (Jansen 1999 p.147). Inversely, a quality curriculum should be written in a simple and clear language understandable to teachers as implementers of curriculum. The number of new concepts and labels introduced by new curriculum should be few and unambiguous (Jansen, 1999).

Secondly, Jansen (1999, p.145) argues that “OBE as curriculum policy is implicated in problematical claims and assumptions about the relationship between curriculum and society”. It is stated as a solution to economic growth. This implies that, advocacy of a new curriculum should not overemphasise good qualities such that unrealistic expectations are projected. There should be balanced mentioning of strengths and weaknesses of the new innovation.

The third argument of Jansen (1999, p.145) is that “OBE is based on flawed assumptions about what happens inside schools, how classrooms are organized and what kinds of teachers exist within the system”. In this case, a quality curriculum should be based on correct information about the environment and current context in schools. Both human and physical resources should be available to effectively implement a curriculum in schools. In this regard, Jansen (1999) counsels that highly qualified teachers who understand theoretical underpinnings of a new curriculum should be engaged to make sense of its challenges and apply skills to transfer application across different contexts.

Another claim of Jansen (1999, p.146) is that “the management of OBE will multiply the administrative burdens placed on teachers”. The work of the teacher is to teach. Therefore, teachers should be offloaded from management and clerical duties that would otherwise engage them in non-academic work. In this argument Jansen (1999) was specifically referring to the type of assessment that goes with the new curriculum that it should not be a burden to teachers so that they put more focus on teaching and learning.

The other aspect of quality curriculum is content knowledge. Jansen (1999, p.147) argues that “OBE trivialises curriculum content”. A quality curriculum is specific about knowledge in the form of content that learners will acquire from the curriculum. “Curriculum content is a critical vehicle for giving meaning to a particular set of outcomes... “Content matters” (Jansen, 1999, p.150).

Closely related to curriculum content is the issue of attitudes and values in a curriculum. Jansen (1999) argues that OBE focuses on instrumentalism and therefore sidesteps the important issue of values in the curriculum. A quality curriculum should develop a learner holistically. It should aim at developing knowledge, skills, values and attitudes of the learner.

All in all, a quality curriculum is not only a well written document but it requires:

- trained and retrained teachers,
- radically new forms of assessment (such as performance assessment or competency-based assessment),
- classroom organisation which facilitates monitoring and assessment, additional time for managing this complex process,
- constant monitoring and evaluation of the implementation process,
- retrained education managers or principals to secure implementation as required,
- parental support and involvement,
- new forms of learning resources (textbooks and other aids) which are consonant with an outcomes-based orientation and opportunities for teacher dialogue and exchange as teachers co-learn in the process of implementation (Jansen, 1999).

3.3.3.4 Consolidation of curriculum quality measuring models

In light of the above discussion on quality models of educational programmes, I have summarised the concepts in a table that combines all ideas from a number of educational quality models. The ideas are presented in table 3.2 below and a flow chart after the table:

Table 3.2: Characteristics of a quality curriculum

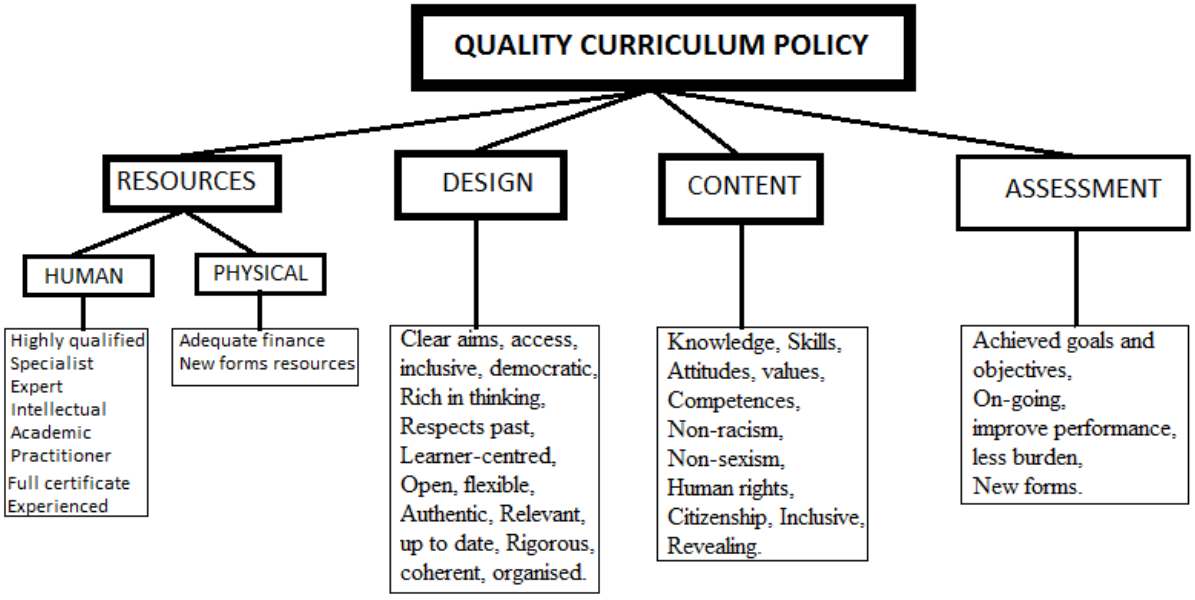
Source: Barnett (1992), Jansen (1999), Levine (2006), Ritchard (2007) and UNESCO

RESOURCES	DESIGN	CONTENT	ASSESSMENT
Physical resources: Adequate finance, New forms resources. Human resources: Full certification, experience, Highly qualified, specialist, Experts, intellectuals, academics, practitioners.	Clear aims, access, inclusive, democratic, Rich in thinking, Respects country's past, Learner-centred, Open, flexible, Authentic, Relevant, up to date, Rigorous, coherent, Organised.	Knowledge, Skills, Attitudes, values, Competences, Non-racism, Non-sexism, Human rights, Citizenship, Inclusive, Revealing.	Achieved goals and objectives, On-going, improve performance, less burden, New forms.

The information in the table is used to develop a flow chart of quality curriculum policy that is presented below:

Figure 3.4: Quality curriculum policy flow chart

Source: Webbstock (1994), Crouch (1996), Motala (2001), Robertson (2007) and Maharajh (2014)



From the consultation of some literature, it is observed that in order to design a quality curriculum for institutions and countries or states, the curriculum designers need to consider the four key measures. As illustrated in the flow diagram above, these include resources, both human and physical resources can affect the quality of curriculum positively or negatively. The design itself is important in the quality of curriculum of institutions. Is it focused, understandable, does it demonstrate fertility, richness and comprehensiveness? (Morrison, 2004, p.488). Is there clear vision for the future? Content is also important in the quality of curriculum. This is evidenced by some of the reasons for curriculum change from Curriculum 2005 (C2005) to Curriculum and Assessment Policy Statement (CAPS) in South Africa. Lastly is the component of assessment in the curriculum. In some countries such as Lesotho and RSA, assessment is administered by different and independent departments, ECoL in the case of Lesotho and UMALUSI in South Africa. Therefore, in order to achieve a quality curriculum, the four key measures should be considered.

3.4 THE ACHIEVEMENT OF QUALITY IN LESOTHO

The government of Lesotho has committed itself to the provision of quality education to Basotho. The Lesotho Education Policy states:

"… The quality of education shall be improved by equipping schools and educational centres with the requisite skills through investing in teacher training and professional development and providing improved teacher supervision and support.

Provision of and facilities such as teaching and learning materials as well as adequate school infrastructure, including classrooms, administrative facilities, libraries and laboratories.

Reforms of the curriculum at all levels of schooling and training shall be part of quality improvement and the strengthening of developmental relevance of the education system." (MOET 2005, p.26).

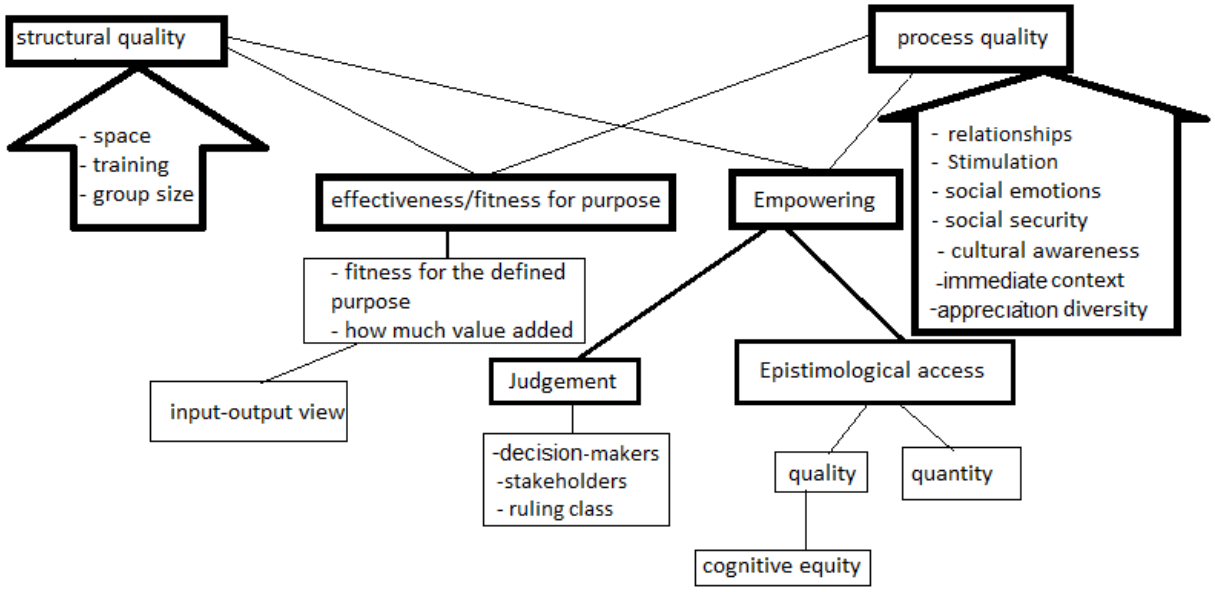
Assessment of this commitment of the Lesotho government is required. This study can contribute to some extend to the last paragraph pertaining to reforms of the curriculum. The study investigates the Lesotho primary school science curriculum design questioning involvement of foreign consultants in the design and development. The concept of quality is used to collect data and also in analysis of collected data. I have developed two models for the purpose of explaining quality in the Lesotho primary school science curriculum. One is the quality concept web informed by definitions of quality from scholars such as Fuller (1986), Marsh (2009), UNESCO

(2004), Crouch (1996), Motala (2001), Shulman (1987). The second model is characteristics of a quality curriculum programme.

3.4.1 The quality concept-web

The quality concept web focuses on the quality of human resources involved in the design and development of the Lesotho curriculum. This includes curriculum specialists and foreign consultants. It is with the notion that quality besets quality and the opposite is also true. This model was used to inform interview schedules for participants in the data collection phase.

Figure 3.5: The quality concept-web



Source: Fuller (1986), Shulman (1987), Crouch (1996), Motala (2001), UNESCO (2004) and Marsh (2009)

For both curriculum specialists and consultants, the following pointers derived from the quality concept-web were used to collect and analyse data:

Relationships, social emotions, social security:

- The relationships between consultant and curriculum specialist, acceptance of consultant by specialists, cooperation between consultant and curriculum specialists.

- Relationships among curriculum specialists (same level, no authority, not listen to each other).
- Relationships between curriculum specialists and curriculum authorities including administration.

Cultural awareness, immediate context, appreciation of diversity: cultural theory:

- Foreign consultant vs local culture,
- Context and diversity of society

Training/ staff development

- Long term and short term training
- Experience for the job
- Qualification/certification

Group size

- Management of curriculum specialists

Judgment

- Decision to involve consultants
- Decision to train or not to train

Epistemological access:

- Involvement of other stakeholders in education of Lesotho
- (Curriculum policy, 1980 p. 8 – NCC structure and panel membership).

Fitness for purpose:

- Is there value added by foreign consultants (only managerial/leadership, ability to complete projects – are leadership skills not available in the country? The work of director NCDC and CEO-CS)

3.4.2 The characteristics of a quality curriculum programme

The second model is drawn from a number of curriculum measuring models. These are the Levine (2006) model for quality measurement, Barnett's (1992) quality measurement model, Ritchard's (2007) categories for evaluating quality of curriculum, UNESCO's (2014) guidelines in determining quality curriculum and Jansen's (1999) views on the failure of OBE in South Africa. The model is called characteristics of a quality curriculum programme and it was mainly

used in the analysis of data from documents even though some activities cut across both quality concept-web and characteristics of a quality curriculum models.

Table 3.3: Characteristics of a quality curriculum

Source: Barnett (1992), Jansen (1999), Levine (2006), Ritchard (2007) and UNESCO

RESOURCES	DESIGN	CONTENT	ASSESSMENT
Physical resources:	Clear aims,	Knowledge,	Achieved goals and objectives,
Adequate finance,	access, inclusive,	Skills,	On-going,
New forms resources.	democratic,	Attitudes,	improve performance, less
Human resources:	Rich in thinking, Respects	values,	burden,
Full certification,	country's past,	Competences,	New forms.
experience,	Learner-centred, Open,	Non-racism,	
Highly qualified, specialist,	flexible, Authentic,	Non-sexism,	
Experts, intellectuals,	Relevant,	Human rights, Citizenship,	
academics, practitioners.	up to date, Rigorous,	Inclusive,	
	coherent,	Revealing.	
	Organised.		

The core activities in this model to be used to judge the quality of curriculum institutions are resources which include staff development and infrastructure; design and development of the curriculum, assessment; content in subjects or learning areas covered by the curriculum and assessment both formative and summative.

The human resource or staff development cuts across both models. Besides the two quality models, the analysis also drew inspiration from theoretical constructs such as Neo-colonialism theories (Charlie, 2006; Laracy, 2006; Parsons & Harding, 2011; lutta, 2011) and cultural theories (Bhattacharyya et al, 2002; Singh, 2007; Bhabha, 1994; Aikenhead, 2001; Kanu, 2008; Giroux, 1988; Dolby, 2006).

3.5 CONCLUSION

This chapter provided some concepts of quality that can be utilised to make sense of the data. Besides the quality concept web and characteristics of quality curriculum discussed above, the study also drew from theoretical constructs of neo-colonialism featuring modernisation, post-colonialism and capitalism. The cultural theories which also inform the study include the nation, popular and imagination theories.

The next chapter discusses the methodology adopted in the study. These include the discussion of methods of data collection used and how data were analysed.

CHAPTER 4: METHODOLOGY

Strategies to gather evidence

4.1 INTRODUCTION

This is the methodology chapter which discusses the paradigm; research approach; methods of data production and how and why the sample was selected for this study. This study follows critical educational research as the paradigm and employs a qualitative approach. The methods of data production are one-on-one interviews with participants and document analysis. The sample was selected purposefully from the population of curriculum specialists, decision makers in the Lesotho education system and consultants. Two of the many consultants who had been involved in Lesotho curriculum development were interviewed as they were engaged for curriculum consultation during the period of the study. The chapter discusses the approaches adopted in this research which follows inductive logic as alluded to in the above text. The type of data analysis for both data from interviews and document analysis is discussed and then ethical considerations are also looked into.

4.2 THE PARADIGM - CRITICAL PARADIGM

The critical paradigm also known as the emancipatory interest paradigm is concerned with autonomy and responsibility made possible by action and self-reflection (McLaren, 2007). The emancipatory potential is central to critical theory, which is concerned with ideological critique intended to liberate individuals from the constraints of ignorance, authority and tradition upon human reason (Huckle, 1993, p.19). The continued engagement of international consultants (also known as foreign consultants) in Lesotho curriculum design and development was either because of the effective work they are doing or some form of ignorance from which the country needs to be liberated. This is the critical research study that intends to realise a society that is based on equality and democracy for all its members (Cohen, Manion & Morrison, 2011). Critical theory identifies the false consciousness that has brought a social group to powerlessness as is the situation in Lesotho because of a weak education system that favours certain individuals in society (Henning, 2004). Critical theory's substantive agenda is explained below:

> Examining and interrogating the social construction of knowledge and curricula, who defines worthwhile knowledge, what ideological interests this serves, and how this reproduces inequality in society; how power is produced and reproduced through education; whose interests are served by education and how legitimate these are (Cohen et al., 2007, p.27)

As a social construction, knowledge is deeply rooted in a nexus of power relations and is heavily dependent on culture, context, customs and historical specificity (Schiro, 2013; McLaren, 2007, pp. 196-197). However, the critical perspective on curriculum and the overall aim of formal school education is to promote democratic values with a view to transforming society. Critical curriculum theory is interested in answering the following questions:

- How and why does knowledge get constructed the way it does?
- How and why are some forms of knowledge legitimated and celebrated by the dominant culture while others are not?
- Whose interests does this knowledge serve?
- What is the relationship between social class and knowledge taught in schools? (Apple, 2004; McLaren, 2007).

These questions are specifically relevant to this study, which seeks to understand the processes of curriculum reform and transformation in Lesotho, a less developed country and a former colony of Britain.

Curriculum is a contextualised and contestable dynamic social process driven by various agendas involving power and ideology (Apple, 2004; McLaren, 2007). In any area where power is involved, one would expect the oppressor and the oppressed, the dominant and the subordinate to be in battle contesting over power and ideologies. The difference in power warrants the intervention in order to support the weak. Also, different ideologies give room to difference in opinions in which some of the ideas are utilised and others discarded. In most cases, the ideas that are used are those of people in power and in dominant groups such as males, whites, educated, and the rich. The same is true with Europeans versus Africans and colonisers over colonised. Critical theory is interested in whose ideas are being used for whom and why. The strength of critical curriculum theory is provision of a *language of critique* to question appearances and taken-for-granted practices (Raselimo, 2010). It again focuses on questioning assumptions and implications of practices (Cornbleth, 1990, p.3) that may be overlooked.

Thompson (2003) shares her experiences with the use of critical theory in curriculum research as follows:

> I have found a critical theory perspective to be useful in studying processes of curriculum construction and implementation. In these processes, curriculum documents and programs are co-constructed not just because of what is considered to be the best for the learner but because curriculum is a social and political process. It emerges from struggles, contestations and alliances, and from things that are said and also left out. Thus, the critical lens is not about finding solutions to problems or even about critiquing solutions that are posed. It also helps to probe what is not immediately seen as problematic (Thompson, 2003, p.189).

Critical theory may also be seen as a critical perspective for understanding and reasoning about processes of curriculum reform (Jansen, 2001; Tabulawa, 2003; Thompson, 2003; Smyth, 2004; Huynh, 2005). The same lens of understanding the processes is utilised in this study, not necessarily to find a solution to educational problems in Lesotho but in order to analyse, interpret and explain the social process of constructing, disseminating and implementing educational curriculum policy guidelines. In this case, critical curriculum theory will help the researcher to examine the contextual and structural factors that facilitate or constrain curriculum design in Lesotho. The intentions of the researcher to undertake this research, of the engagement of foreign consultants in Lesotho curriculum design and development, is an attempt to answer questions such as, "How and why does knowledge get constructed the way it does? How and why are some forms of knowledge legitimated and celebrated by the dominant culture while others are not? Whose interests does this knowledge serve? What is the relationship between social class and the knowledge taught in schools (Apple, 2004; McLaren, 2007)? The literature reveals that since 1967, not a great deal has happened in curriculum development in Lesotho; the education system has only expanded in scale but not changed in character from colonial education (Ansell, 2002, p.91; Muzvidziwa and Seotsanyana, 2002; Raselimo, 2010). As a result, education in Lesotho is irrelevant to the needs of the society because it trains and imparts foreign values in the youth (Ansell, 2002, p.94; Mosisidi, 1981, p.68; Muzvidziwa & Seotsanyana, 2002). It is said to be largely 'bookish' not equipping learners for self-employment, but equips only a minority with certification as it is geared towards public sector employment or white-collar jobs (Ansell, 2002, pp.95–96; Muzvidziwa & Seotsanyana, 2002). The fact that foreign consultants are engaged is not conclusive that they are particularly the ones designing the curriculum and hence imposing their knowledge and culture to Basotho such that education creates inequality in the society. The question is whether the foreign curriculum consultants'

engagement is one of the efforts to improve Lesotho education making it more relevant to Basotho children.

4.3 QUALITATIVE APPROACH

The research adopts a qualitative approach using document analysis and interviews for data generation. Qualitative research is based on the epistemological assumption that knowledge is socially constructed by people in interaction with their world to gain insights through discovering meanings by improving comprehension (Neill, 2007; Nieuwenhuis, 2007). Since knowledge is socially constructed, this research approach falls under subjective reality rather than objective reality, enabling the researcher to examine how people make sense of their lives and interpret their situations, and how their sense of self develops in interaction with others (Berg, 2007). Thus the primary interest of researchers operating within this tradition is to understand and interpret the subjective world of human experience (Cohen, Manion & Morrison, 2011). Detailed discussions on methods of data production later in this chapter, elaborates on the point raised by Cohen et al. (2011).

4.4 CASE STUDY

The case study is an in-depth study that focuses on one particular case (Neuman, 2006 p. 40). The context for the case studied was, science curriculum, a small division within the National Curriculum Development Centre (NCDC) of the Ministry of Education and Training (MOET) in Lesotho government. It involves a group of science curriculum panel, made up of science curriculum specialists also known as science curriculum developers. Science curriculum panel of NCDC caters for two science curriculum sections. One is the primary school science curriculum section (in which the focus of the study was) and the other one is the secondary school science curriculum section. The panel is made up of one science specialist from each stakeholder institution such as Inspectorate, Examination Council of Lesotho (ECoL), Lesotho College of Education (LCE), the National University of Lesotho (NUL), department of Energy, District Resource Teachers (DRTs), District Education Officers (Eos) and three practicing science teachers from the three different context of Lesotho (Mountainous, valley and urban area schools). The science curriculum panel is not free to work democratically but it is relatively

constrained by the bureaucratic structures of NCDC and MOET, and with direct accountability to the director-NCDC who reports to CEO-CS (Hesketh, 2004).

This study focuses on the science curriculum design in Lesotho at primary school level, specifically in Grade 4. Yin (2009) defines a case study as follows:

> An empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between the phenomenon and its context are not clearly evident (Yin, 2009, p.18)

In this case study, the researcher is investigating the issue of foreign consultants' involvement in designing the Lesotho primary school science curriculum. The investigation targets the very people who are involved in the development of the curriculum in Lesotho. These include curriculum developers employed by the Lesotho government to develop the curriculum and the decision-makers on curriculum development matters. Also, the foreign consultants who have been recently engaged in the development of the curriculum are targeted.

This study presents a complex scenario which may confuse the ready in identifying the case in the study. The situation at NCDC is such that, when the science curriculum panel has designed the curriculum for primary school science, they need to present and get mandate from all the curriculum specialists at NCDC first. Upon approval by NCDC curriculum specialists, they then present the curriculum to higher curriculum committee. Therefore, the activities in the science curriculum department are known by all stakeholders and they get their mandate from the authorities and the NCDC body as a whole. That is why in some instances, reference is made to NCDC or primary school science instead of science curriculum.

Most case studies use varied data collection methods such as observations, interviews, and documents on a single case (Neuman, 2006, p. 41). The researcher in this case is aiming to capture the reality of the participants' lived experiences, perceptions and thoughts (Cohen et al., 2011, p.255) about engagement of foreign consultants in curriculum design through interviews and documents analysis. As noted by Cohen et al., (2011), the purpose of a case study is to present and represent reality in order to contribute to action and intervention. Therefore, in this study, the aim is to present the opinions of Lesotho curriculum developers and foreign consultants about curriculum design in Lesotho.

The strength of the case-study is that it allows the researcher to focus on a specific area or situation to identify the various interactive processes at work. These processes may remain hidden in a large-scale survey but may be crucial to the success or failure of systems or organisations.

In this regard, the case study method enabled an in-depth investigation of educational practice at a particular site (McMillan & Schumacher, 2001), so as to gain an understanding of the contextual factors that hinder or enable curriculum change in primary school science.

Literature reveals a number of research case studies such as intrinsic, instrumental, collective and comparative case studies (Stake, 2005; Johansson, 2003; Mann, 2006). Stake (2005, p.443) makes a distinction between intrinsic case study and instrumental case study. He contends that the purpose of intrinsic case study is to establish an understanding of a particular case for its own sake, especially when a researcher has a special interest in the case. On the other hand, the instrumental case study has the purpose of understanding an issue through an examination of the case. In this event, as Stake (2003) observes, the case is of secondary interest for it plays a facilitator's role in understanding something else. Instrumental case study may also serve the purpose of making comparisons between individual cases.

This study could be described as both an intrinsic case study and an instrumental case study, for two reasons. Firstly, I used the case study method for studying curriculum change in primary school science. I studied this case because of my special interest in the subject as a primary school science curriculum specialist, employed by the Lesotho government to design and develop the primary school science curriculum for the country. Therefore, this qualifies me to be concerned about the status of the subject of science in the country. There are also emerging projects and subjects such as Population and Family Life Education (POP/FLE), Environmental Education (EE) and Life Skills Education (LSE), which sought to bring about curriculum innovations in content and pedagogy of school subjects.

Secondly, the design and development of the primary school science curriculum, though intrinsic in purpose, also helped to foster a deeper understanding of the general process of curriculum

reform in the Lesotho national context. This makes the study fit the description as an instrumental case study.

4.5 METHODS OF DATA PRODUCTION

4.5.1 Introduction

There were two data generation methods employed in this study. The researcher utilized one-on-one interviews of curriculum specialists and foreign consultants. The second data generation method used is document analysis and both of these strategies are discussed below. Table 4.1 summarizes the two methods specified.

Table 4.1: Research design

Methods of data generation	Quantity	Purposes	Instrument used for data generation
Stage 1: Semi-structured Interviews			
1.Curriculum specialists	3	To understand the rational for foreign consultants' engagement. Shortcomings primary science curriculum specialist have to solicit consultants assistance	Semi-structured interview schedule.
2.NCDC director	2	To understand experiences of specialists, state and other stakeholders about foreign consultants	Semi-structured interview schedule.
3.CEO-curriculum and assessment services	1	To solicit understanding of engagement of foreign consultant and challenges of specialists.	Not done
4.Consultants	2	To determine quality and performance of consultants' expertise in curriculum design.	Semi-structured interview schedule.
Stage 2: Document analysis			
Consultants' terms of reference	2	To compare roles and responsibilities of specialists. Determine existence of overlap between consultants' TORs with specialists' roles.	
Consultants' reports	2	Determine views and recommendations of consultants on Lesotho curriculum.	
Primary science syllabus standard 4	1	Compare old science Std 4 syllabus with science components in the new integrated curriculum Grade 4.	
Integrate primary curriculum Grade 4	1	Ditto	
Primary school science textbooks.	6	To determine coverage of Grade 4 school science concepts	Not done
Primary school science teachers' guides	6	Ditto	Not done

4.5.2 Data production: Interviews

The methods of data collection in qualitative design favour mostly interviews whereby there is much text collected in the form of words (Festinger, 2005; Marczyk, DeMatteo & Neill, 2007). Curriculum developers and curriculum consultants are encouraged to participate and interact fully where the interviewer probes for clarity of specific aspects relating to Lesotho curriculum design and stimulates participants to give full answers (Cohen et al., 2011, p.378; Wheeldon, 2010). Interviews favour in-depth information in a narrative form as the interviewer communicates with both consultants and curriculum developers (Fraenkel and Wallen, 2008). In other words, this produces very detailed and descriptive information collected in the form of words (Slavin, 2007). The detailed transcripts of interviews produced permit the researcher to identify themes (Chang, 2006; Lowe, 2007). Interviews allow the researcher to enter into curriculum developers' and consultants' perspectives and as a result, the researcher is in a position to understand and portray their perceptions and understanding of curriculum design in Lesotho (Burton & Bartlett, 2005). Interviews may be structured, unstructured or semi-structured (Holstein and Gubrium, 2008). In the case of structured interviews, specific questions and the order in which they are asked are determined prior to the interview process, whereas unstructured interviews explore the topic areas without specific questions or a pre-determined order (Merriam, 2002). The participants in this interrogation are listed in table 4.1.

Table 4.2: Method of data production - interviews

Participant	Frequency	Tool	Reasons
Curriculum specialist	3	One-one Interviews	Rationale for foreign consultants' engagement. Shortcomings of curriculum specialists in curriculum design that need foreign consultants' assistance.
NCDC director	2	One-one Interviews	Rationale for foreign consultants' engagement. Experiences of curriculum specialists, the state and other stakeholders about foreign consultants.
CEO-curriculum and assessment services	1	One-one Interviews	To solicit understanding of engagement of foreign consultants over local and challenges of curriculum specialists. Not done. Declined.
Consultants	2	One-one Interviews	To determine quality and performance of consultants' expertise in curriculum design.

For this study, I conducted face-to-face semi-structured interviews with all the participants. Semi-structured interviews enabled me to ask open-ended questions and to probe participants' responses (Lankshear & Knobel, 2004). I held interviews with the Director of NCDC in order to obtain information on the rationale for the involvement of international consultants in the curriculum design of Lesotho. Due to the bureaucratic nature of the Lesotho curriculum department, the Director of NCDC is responsible for the acquisition of services of foreign consultants. After establishing the need for a consultant in the curriculum design, he forwards the requisition to the CEO-curriculum and assessment services (CEO-CAS). I had also planned to interview the Chief Education Officer (CEO-CAS), who is responsible for curriculum and assessment services prior to and during the engagement of the two interviewed consultants. However, the office of the CEO, after having agreed to the interview and had seen and stamped the interview schedule, declined at the last minute claiming that the study does not fall under her ordinance. I also interviewed four members of the panels who are responsible for the technical/ground work in the development of primary curriculum. The members consist of a primary school science curriculum specialist, Life Skills education (LSE) curriculum specialist, one member of the panel who is not an employee of the Lesotho government but works as a lecturer in the National University of Lesotho; and the lead in-house contact person (CCFNRC, 2010, p.11) who was responsible for the selection of consultants and the drafting of terms of reference for more than three consultants recently engaged at the NCDC. This was done in order

to get their views on the general operations of the centre (NCDC), and also to understand possible contestations and controversies experienced during the development of the term of tenure of the consultants. In total I interviewed four members of the NCDC professional staff who were directly involved in science curriculum development activities. Moreover, I held interviews with two international consultants who had been recently engaged to help in the design and development of the primary school science curriculum. Of the two consultants, one was focusing on the Life Skills Education syllabus and the other one was assisting in the development of the integrated primary curriculum of which science is a component.

Cognisant of the fact that qualitative research interviews are collaboratively produced between the interviewer and the interviewee (Silverman, 2006, p.112), I held all the interviews in a place where the respondents would be free to talk without feeling intimidated. For the curriculum specialist, the interviews were held in their offices at the curriculum development centre (NCDC). As most of them occupy offices individually, these were quiet rooms with no disturbances from other offices. All the interview meetings were planned in advance for the convenience of the officers and where there were two officers in one office, the interviews were held in a vacant separate room to avoid interruptions from the observer. Two of the interviews were held at workshop venues (Lake-Side Hotel) as the officers held residential dissemination workshops for the curriculum developed with the assistance of foreign consultants. The workshops were for the education officers and District Resource Teachers (DRTs) who, in turn, were supposed to cascade the information to schools' representatives and the schools' representatives to pass knowledge to teachers in schools. I attended workshops as per invitation of the participants (curriculum specialists and Director-NCDC) assuring me that they would have spare time within their workshop schedule for interviews. These were also held in separate quiet rooms with no disturbances from the workshop attendees.

In some cases, however, I had to conduct interviews in an open space in the workshop venues during the lunch period as there were no spare rooms in the hotel. To further relax the interview environment, I encouraged the respondents to talk in the language they were comfortable with, even though the key questions were asked in English. Where the respondents used more Sesotho than English, I would also code switch accordingly, in order to facilitate the conversation.

In all the cases, I gave the participants an interview schedule before commencing with the conversation and explained the purpose and estimated time of the interview at the beginning and on average each interview took about 40 minutes. I also inquired from the participants whether I could use a tape recorder to capture the conversation. With the consent of the respondents, I audio recorded all the interviews as there was no one who objected to the use of an audio tape and I then later transcribed the conversations. The audio recording enabled me to maintain close eye contact with the respondents, to listen carefully to what they said and to probe the responses when appropriate. This would have been difficult to achieve had I been forced to take notes. All the tapes were labelled and kept for data transcription and analysis.

Initial data transcription occurred mostly in the evening after interviews, while I could still remember the key issues raised and the non-verbal responses. Both the transcripts and audio tape were labelled with the code representing the respondent and the date of interview and kept as a hard copy and soft copy respectively in an appropriate envelope/folder for further transcription and analysis. This initial transcription gave me an opportunity to reflect on my interviewing style and identify areas of possible improvement while I was still in the field. For instance, in initial interviews, I was talking too loudly with the respondent on the tapes and hence in some cases the words from the respondents were not clear. This problem was addressed in the subsequent interviews as I used non-verbal communication in order to avoid my voice being heard in the audio.

4.5.3 Data production: Document analysis

Document analysis enables a researcher to obtain the language and words of participants and present them as participants have given attention to compiling the data (Creswell, 2003, p. 187). It also enabled me to access the ideas of consultants even when they are not available at the time of the research (Cohen et al., 2007) since the written words remain for a long time. This is because documents are “a valuable source of information in qualitative research” because they are a good source of text that provides the researcher with understanding of central phenomena (Creswell, 2012, p.223). Although documents might not be readily available, they present balanced information as the consultants and curriculum developers did not write the reports for

the purpose of this research and those resources are written in the "language and words" of the participant (Creswell, 2012, p.223; Henning, 2004). Again, the advantage is that "documents are plentiful and part of the everyday world of the participant" (Cohen et al., 2007, p.201).

Table 4.3: Method of data production - document analysis

Documents analysed	Method used	Reasons
Functions of NCDC	Document analysis	NCDC as a Centre has functions to perform either through curriculum specialists or foreign consultants.
Roles and responsibilities of a curriculum specialist at NCDC	Document analysis	A curriculum specialist has general roles to help NCDC achieve her goals. These were compared to TORs of consultants.
Job description for a science curriculum specialist.	Document analysis	Each curriculum specialist has specific office duties pertaining to subject in which he is responsible for. These were compared to TORs of consultants.
Consultants' terms of reference (TORs).	Document analysis	TORs for consultants clearly and adequately define the objective, functions, duties and scope of proposed work (ADB, 2013). These were compared to functions of NCDC, job description, and roles and responsibilities of curriculum specialists.
Primary Syllabus Standard 4	Document analysis	Old primary school syllabus for standard 4 (science part) compared to integrated primary curriculum developed with assistance of foreign consultant.
Integrated Primary Curriculum Grade 4 syllabus (2013)	Document analysis	Integrated primary curriculum Grade 4 developed with the help of foreign consultant. Science elements in it compared to old primary syllabus to check input of consultant.

Table 4.3 shows all documents that were analysed in this study. Hox and Boeije (2005) classify documents into two (2) groups, as primary and secondary data. Primary data, "are collected for the specific research problem at hand, using procedures that fit the research problem best." (Hox and Boeije, 2005, p.593). The other group is the secondary data that are collected earlier by other researchers or for other purposes than research, such as official statistics, administrative records, or other accounts kept routinely by organizations (Hox and Boeije, 2005, p.596).

The terms of reference for both consultants are an example of secondary documents which were compared with the roles and responsibilities of primary school science curriculum specialists employed by the Lesotho government to design and develop the Lesotho primary school Grade 4 science curriculum of the country. This helped the researcher to establish whether consultants were doing primary school science curriculum specialists' job or whether they had a different mandate. This information was triangulated with data from interviews of both consultants and that of primary school science curriculum specialists about the job consultants really performed.

Another primary document I analysed was the old primary school science syllabus for Grade 4. This was compared to the newly introduced integrated primary school science curriculum for Grade 4. The main focus is to identify whether there are any main science concepts compromised by the integration and also to determine whether there are any improvements brought about by the new integrated primary school curriculum Grade 4 over the old science curriculum. Also, the new integrated curriculum is aimed at clarifying the curriculum and assessment policy framework (2009). Therefore, the analysis of the Grade 4 syllabus would determine whether the curriculum is in line with the policy.

The secondary documents I had planned to analyse were the old science textbooks published and prescribed for teaching under the Textbook Rental Scheme introduced by the Lesotho government in 2004 with financial aid from the World Bank. During the time of data collection, the textbooks for the new integrated primary curriculum Grade 4 had not been produced, published nor prescribed. It is most unfortunate that all three textbooks for both new and old curricula were not analysed to identify the changes in school science consequent to the declared government intention to introduce the integrated curriculum (MOET, 2009).

4.6 SAMPLING AND SAMPLING PROCEDURES

4.6.1 Sampling of participants for Interviews

The table 5.2 outlines the sample, the tool for measurement and rationale for the selection of participants. Curriculum specialists were selected with the idea of having different specialisations and projects undertaken at the NCDC. For this study, there were two projects in focus, a curriculum specialist for Life Skills Education (LSE) project and another was the specialist for the Environmental Education (EE) project. These were the only projects which were in force at the National Curriculum Development Centre (NCDC) during the period of study even though the respective consultants had left the country. These specialists have had a direct encounter with consultants as they were the projects coordinators and were involved in the selection and engagement of consultants. Another curriculum specialist selected is the one who was responsible for the development and design of the primary school science curriculum. Since the study deals with science curriculum design at primary level, it is logical to include the

primary science curriculum specialist to share his views on foreign consultants' engagement to the curriculum design and development in the country.

Other participants selected for interviews were the supervisors in the curriculum design and development in the country. These are the directors of the NCDC and the Chief Education Officer (CEO) – curriculum and assessment services. Two directors were selected, one former director and the director who was in charge during the period of research. The CEO-curriculum heads three departments responsible for curriculum development and schools' materials distributions. These are the National Curriculum Development Centre (NCDC), Lesotho Distance Teaching Centre (LDTC) and Schools Supply Unit (SSU). NCDC is mandated to develop and design the curriculum of the country at primary and secondary levels. This is the focus institution for this research. The LDTC designs and develops curriculum and instructional materials for distance learners in the country. Distance learners are those who are not covered by the NCDC curriculum and include the shepherds, domestic workers and adult learners. The SSU collects the instructional materials developed by NCDC and publishers and distributes them to primary and secondary schools throughout the country.

The participants who were actually interviewed are the primary school science curriculum specialist, the Life Skills Education programme coordinator, one curriculum specialist who was involved in the Environmental Education, one novice curriculum specialist and the director of NCDC.

It was not easy to trace any of the former directors of NCDC as they had already retired from work and did not stay in the city. The efforts to conduct them telephonically and otherwise were futile. The CEO-curriculum had initially agreed to the interview and was given the scope of the research. She had arranged numerous meetings which were postponed at the last minute due to her unexpected sudden engagements. She finally cancelled the interview with the rationale that the study is not relevant to the new curriculum which she is facilitating. She advised the researcher to solicit whatever information required from the curriculum specialists at the NCDC as she acts on the mandate of curriculum specialists.

To address the critical questions, seven interviews were conducted and instructional documents namely primary school syllabi were analysed. Textbooks for science in Grade 4 were not

analysed due to unavailability. The researcher focused on learning outcomes and content of the documents to establish whether they address issues raised in the curriculum and assessment policy framework (2009).

4.6.2 Sampling of documents

The primary school curriculum is divided into three parts in Lesotho: Grades 1-3, Grades 4 and 5, and Grades 6 and 7. Documents for these phases are also developed in three parts and therefore the analysis only focused on documents for Grades 4 and 5. Unfortunately, only documents for Grade 4 were available during the research for this study. Hence, only documents for Grade 4 were used, which specifically integrated the primary school science curriculum. But in the case of the consultants' terms of reference and reports, the focus was on the tasks of consultants to identify any overlap or extra roles over those of curriculum developers.

4.7 DATA ANALYSIS

Qualitative data are in the form of text, written words, phrases, or symbols describing people, actions, and events in social life (Neuman, 2006 p. 457). Qualitative data analysis is described in the literature as an iterative process involving description, analysis and interpretation (Wolcott, 2001; Merriam, 2002; Cohen et al., 2007). Unlike quantitative researchers, qualitative researchers form new concepts or refine concepts that are grounded in the data (Neuman, 2006 p.460). Descriptive analysis generates an account of the data using direct quotes from documents, interviews or observations. At a second level of analysis, data is systematically arranged according to defined categories to develop a pattern. Wolcott (2001) asserts that the analytic presentation of data must follow scientific procedures, emphasising factual accounts with little interruption by the researcher. In contrast, interpretative analysis is not derived from rigorous, agreed-upon, carefully specified procedures, but from efforts at sense-making (Wolcott, 2001 p. 33). In this respect, interpretation goes beyond getting factual accounts and identifying patterns, to a deeper level of developing an understanding by explaining and reflecting on the data in order to generate findings.

4.7.1 Data Analysis of Interviews

For this research, I operated according to these three layers of data processing. In the first cycle I analysed the data generated through content analysis of the documents specified in table 2 and the interviews of curriculum specialists and foreign consultants in order to describe and document how the science curriculum is being developed by NCDC curriculum developers with the assistance of curriculum consultants. In some cases, the descriptive data was organised according to theoretical categories in order to generate data patterns for interpretation. This descriptive and analytic data enabled me to identify patterns that could be used critically to interpret the rationale for engagement of foreign consultants in science curriculum documents development.

Preliminary analysis of the data occurred simultaneously with data generation, through continual reflection on the data (Creswell, 2014) as it emerged from interviews. This also is consistent with Neuman (2006 p.460) who claims that "concept formation is an integral part of data analysis and begins during data collection". However, as Patton (2002) suggests, I employed an open-minded approach to allow naturalistic inquiry to occur, rather than initially focusing too narrowly on data analysis. I was also careful that the preliminary analysis did not lead me into premature conclusions because this could interfere with the openness of the naturalistic inquiry, which is its strength (Patton, 2002, p.436).

As implied in the three levels of data analysis described earlier in this section, I employed both inductive and deductive approaches. Inductive analysis involved an open-ended approach that allowed data dimensions to emerge from individual responses, and reading documents, rather than presupposing what the important dimensions would be (Patton, 2002). On the other hand, deductive analysis occurred in terms of the analytical categories drawn from Critical Theory to uncover issues that surrounded the process of conceptualising and implementing integrated curriculum at the macro-level of curriculum development in Lesotho. I also drew insights from Habermas's theory of knowledge interests and Bernstein's theoretical concepts of classification and framing to understand how curriculum developers with the help of curriculum consultants integrate the science subject into other learning areas, and to illuminate issues of power and control within the content of science and the structure of pedagogy.

4.7.2 Data Analysis of documentary data

All the documents specified in table 3 were subjected to content analysis. Content analysis is a technique for gathering and analysing the content of text which is anything written, visual or spoken such as words, meanings, pictures, symbols, ideas, themes or any message that can be communicated (Neuman, 2006 p.322). Content analysis also involves the examination of artefacts of social communication, such as written documents and transcriptions of interviews (Berg, 2007). Content analysis is usually applied in quantitative research (quantitative content analysis where the researcher uses objective and systematic counting and recording procedures to produce a numerical description of the symbolic content in a text (Wolcott, 2001; Neuman, 2006; Cohen et al., 2007). However, on the contrary, Berg (2007) argues that it can be equally effective in qualitative analysis. He explains that:

> Textual elements merely provide a means of identifying, organising, indexing, and retrieving data. Analysis of the data, once organised according to certain content elements, should involve consideration of literal words in the text being analysed, including the manner in which these words are offered. (Berg, 2007 p.307)

In the following sections I describe how I used content analysis to examine consultants' documents and Grade 4 science curriculum documents.

4.7.3 Data Analysis of Primary School Science syllabus documents

In this study, I analysed the primary school science curriculum documents to explore the additions made to the old standard 4 science syllabus by the new integrated curriculum developed by the foreign consultant and the relevance of the new curriculum to the curriculum and assessment policy framework.

Pingel (2010) identifies two methods that can be used to analyse textbooks, namely, content analysis and didactic analysis. But I made use of only content analysis to analyse the primary school science documents and consultants' terms of reference. Content analysis focuses on the content of the document to determine whether or not it sufficiently covers the topic in question.

In this study I used both methods to analyse the primary school science documents, consultants' terms of reference and consultants' reports as I was interested in understanding change in both the content and pedagogy of science. The content analysis employed was qualitative in nature. This qualitative approach involved developing analytical categories, identifying sections in curriculum documents that contained scientific information, and making a value judgement about relevant aspects of the content, including illustrations. This enabled me to develop a rich description of the science content in relation to the new integrated curriculum. I then coded all the relevant sections using the analytical tool.

Using that criterion, I focused on the objectives for each topic/section, relevant texts, diagrams/visual illustrations, learning activities and glossary, to illuminate content, skills, values and dominant theory of instruction as they relate to the primary school science curriculum. The suggested activities were also analysed to unearth the type of assessment supported in the syllabus. In each case, I made a comparison of the old science syllabus and the new integrated syllabus and also in relation to the curriculum and assessment policy framework.

4.7.4 Using Bernstein's principles of classification and framing scales

4.7.4.1 Introduction

Bernstein (1996) recommends a theoretical framework to be used to analyse curriculum documents in curriculum change. This framework consists of the concepts of framing and classification, which between them constitute a language for describing issues of power and control among discourses (primary school science standard 4 syllabus and integrated curriculum Grade 4) and agents (foreign consultants and primary school science curriculum specialists). These concepts enabled the study to reveal the extent to which science is integrated into primary school curriculum. Of the Bernstein's principles of classification and framing scales, the researcher has used classification for both document analysis and interviews.

4.7.4.2 Bernstein's Principles of Classification

Bernstein (1996, p.56) describes classification as the strength of the boundary between knowledge contents. In the case of this study, this is the relations within the science concepts knowledge between old standard 4 syllabus and new integrated curriculum Grade 4. The

relations between the two curriculum documents is what Bernstein would refer to as external classification and the relations within scientific knowledge of the subject would be internal classification. The strong classification is represented by C+ and this implies that the content is well separated while, the weak classification (C-) shows that the items have been brought together (Bernstein, 1996). He refers to the strong classification as 'collection code' and the weak classification as the 'integration code'. This is how the researcher used classification to compare the old school science standard 4 syllabus with the new integrated curriculum Grade 4.

Another type of classification Berstein (1996) describes is classification of agents. In the case of this study, this implies to the boundaries between primary school science Grade 4 curriculum specialists and foreign consultants. This type of classification would enable an analysis of issues of power relation between foreign consultants and primary school science Grade 4 curriculum specialists during curriculum design and development. The dominant discourses were mainly derived from both foreign consultants and primary science curriculum specialists' responses in the interviews (Naidoo, 2010, p.21). Of particular significance was the language used to describe each other. Similar or repeated descriptions of foreign consultants /curriculum specialists during the interviews were seen as representative of the views of the majority. The boundaries maintained were coded into whether the relationships were showing strong classification (D+) or weak classification (D-).

4.8 VALIDITY AND TRUSTWORTHINESS

Data generated by qualitative research must be verified as credible. The validity of the research depends on how accurately participants' realities have been captured and represented by the researcher in the inferences that have been drawn from the data. Creswell & Miller (2000) say it is important to engage the participants in assessing the accuracy of the researcher's interpretation. Validity will rely on curriculum developers and foreign consultants checking their responses to ensure the credibility of the data. Meetings with participants must be reconvened to review the researcher's findings to ensure that the researcher's interpretations correctly represent their realities (Creswell & Miller, 2000).

Creswell & Miller (2000) also define researcher reflexivity as the process to ensure that the representation of participants' realities is free of any bias of the researcher's beliefs and assumptions. They therefore suggest that it is essential for the researcher to report "personal beliefs, values and biasness that may shape their inquiry", at the beginning of the research process so that readers of the research will be able to understand the position of the researcher in the study (Creswell & Miller, 2000, p.127).

4.9 ETHICAL CONSIDERATIONS

Cohen et al. (2011) say ethical issues include informed consent, confidentiality, and consequences of the interviews. Henning (2004, p.73) states that participants must be fully informed about the research in which the interview is going to be used. Therefore, in this study, all participants were informed about the purpose of the research and their freedom to participate or not. They were again informed that they are free to withdraw from participation at any time without giving reasons for withdrawal. This was communicated to them both verbally and in a written form in the letter of consent. The information sheet was given to each participant to read before they could undertake any activity. Permission was also requested for the use of the audio tape recorder during the interviews.

According to Neuman (2006, p.131), participants need to know whether their privacy and sensitivity will be protected and what will happen with their information after recording. Thus, before each interview, participants were assured of anonymity and confidentiality. In this study, participants were promised that their identities will be protected in that their identities or the identity of the office will not be linked to the information they will give. This was done to maintain the confidentiality to protect the participants.

Permission to conduct the research was obtained from the Ministry of Education and Training (MOET) and the PS Education office in written form. The same permission was also requested from the participants. As already mentioned, all the stakeholders (PS Education, NCDC management, and participants) were assured that confidentiality will be highly guarded and pseudonyms will be used. Follow-up interviews with some participants were also done so that we could discuss the topic and issues arising from their responses.

All materials that have been part of the study will be kept safely and will not be used for any other purpose without prior permission from participants. If at any time participants feel that they wish to withdraw from the study, they were informed that they were free to do so without being prejudiced in any way; and they will not be obliged to answer any questions with which they feel uncomfortable. Participants were also notified that once the transcriptions are done, I will discuss their authenticity with them and if they feel uncomfortable with any part, it will not be used. As far as this study is concerned, there are no known risks and/or discomforts associated with it. The researcher has solicited ethical clearance certificate from the UKZN Ethics committee after the approval of the proposal before embarking on the research and the ethical clearance certificate is attached.

4.10 LIMITATIONS OF THE RESEARCH

The plan was to interview the curriculum developers and decision makers in Lesotho, but some of the top management in Lesotho curriculum design could not be accessed, specifically the Chief Education Officer – curriculum and assessment services and one of the former NCDC directors. It is a fact that curriculum developers are well informed about the processes at the NCDC and the ones who requested the engagement of consultants, but the people who give a go ahead decision are the directors and CEO-curriculum and assessment services. The absence of CEO-CAS's comments is a limitation because she would have confirmed the rationale for involving foreign consultants instead of local consultants. Also, she would have specified the boundaries for consultants and curriculum developers.

The researcher wished to interview more foreign consultants than the two who were interviewed. Even though the two consultants represented all the types of consultants involved in curriculum design in Lesotho, it would have been beneficial for the research to interview diverse foreign consultants. The types of foreign consultants who have been involved with curriculum design in Lesotho are: the projects coordinators who facilitated the integration of emerging issues; those who were involved with the whole curriculum change; those not selected but brought in by donors; those who were selected through World Bank procedures; those who were paid by the government of Lesotho; those who were paid by donors. All these categories were represented by the two consultants who participated in this study.

4.11 Biasness in data production

At the start of this study and during the data generation process, the researcher was working as a curriculum specialist for primary school science division at the Curriculum Development Centre (NCDC). As a primary school curriculum specialist, one of my job descriptions is to develop suitable primary school science curricula and instructional materials to meet the needs of Basotho nation. To perform my duties, I work with a committee of about 15 members known as a "Primary school science panel". This is a committee that consists of primary school science curriculum experts in the country and stakeholders in the education system of Lesotho and as a primary science curriculum specialist, I am a chairperson of this committee by virtue of my office.

Since this is the area of focus for the study, this implies that the researcher was investigating his office and position. Also, all the participants are colleagues and well known to the researcher. This could have both positive and negative implications to the data collected in that some participants may give information that they assume is what the research is looking for. On the contrary, some would wish to sabotage the success of investigation depending on working and social relations between them and the researcher. This type of involvement may also affect researcher's judgment and fairness as the issues being assessed directly affect him. This may result in a defensive mode on issues favourable to him and attacking tone to those issues he feels unjust.

4.12 CONCLUSION

The chapter described the orientation in which the study is conducted. The theoretical lens is that of the critical paradigm as it is aiming to inform in order to change the current culture. The study mainly employed inductive logic other than deductive logic utilising a qualitative approach, one-on-one interviews and document analysis as methods of data production. For both data from interviews and documents, content data analysis was used.

The following chapter, chapter 6, discusses the results of the study. In the next chapter the focus is mainly on analysis of data from curriculum developers from the National Curriculum Development Center (NCDC) and NCDC director.

CHAPTER 5: DATA ANALYSIS, INTERPRETATION AND DISCUSSIONS

Gathering evidence

5.1 INTRODUCTION

The context for the case studied was, science curriculum, a small division within the National Curriculum Development Centre (NCDC) of the Ministry of Education and Training (MOET) in Lesotho government. It involves a group of science curriculum panel, made up of science curriculum specialists from NCDC and other stakeholders in the country. The stakeholder institution from which one science specialist is a science curriculum member include Inspectorate, Examination Council of Lesotho (ECoL), Lesotho College of Education (LCE) and the National University of Lesotho (NUL),

Data used in this study emanates from interviews with curriculum specialists and foreign consultants. There was also analysis of data from the following documents: terms of reference for consultants, roles and responsibilities of curriculum specialists, the old primary school science syllabus for standard 4 and the newly developed integrated primary curriculum of Lesotho for Grade 4. The textbooks, integrated primary curriculum for Grade 5 and teachers' guides for the new curriculum were not available during the period of research as they were in the process of development. Therefore, they were not analysed even though the initial plan was to analyse them. In order to establish improvement on the new curriculum or lack of quality, I compared the primary science curriculum for standard 4 with the integrated primary curriculum Grade 4. This is because the primary science curriculum for standard 4 was developed without the assistance of consultants while the new Grade 4 curriculum was developed with the help of foreign consultants. This chapter interprets the views of curriculum specialists and foreign consultants with reference to the curriculum documents and literature. The discussions covered participants' profile; consultants' selection procedure; quality of consultants, curriculum specialists and documents; and performance of consultants and curriculum specialists.

5.2 PARTICIPANTS' PROFILES

5.2.1 Consultants' profile

5.2.1.1 Foreign consultant 1 profile

This is a foreign consultant engaged to assist curriculum specialists to integrate Life Skills Education (LSE) into the Lesotho curriculum. She is the UN personnel delegated from UNICEF where she is the Education Programme Officer for UNICEF, occupying the office of Quality Education, Gender and Pedagogy Advisor based in New York, USA.

The first assignment of consultant 1 was in the Ministry of Gender, Youth and Recreation Development to assist in development of Gender policy. She is now engaged to do consultancy in life skills education (LSE) with the National Curriculum Development Centre (NCDC).

Foreign consultant 1's qualifications are as follows: PhD in education, MSc in Social Anthropology and B.A. in English Literature and Sociology

5.2.1.2 Foreign consultant 2 profile

This is the foreign consultant selected to assist curriculum specialists to design a curriculum for Grades 1, 2 and 3 in 2011 and for Grades 4 and 5 from 2013. This is the second assignment for foreign consultant 2 at NCDC, as she was firstly engaged to do consultancy at NCDC for Grades 1, 2 and 3 and she is currently assisting curriculum specialists with development of Grades 4 and 5 curriculum packages.

Foreign consultant 2 has the following qualifications: PhD in Education/Linguistics; MA in Human Resource Management and Applied Linguistics, and BA in European Studies and German.

5.2.2 Curriculum specialists' profiles

Table 5.1: Curriculum specialists' profile

Participant	Occupation	Place	Curriculum experience
Curriculum specialist 1	University lecturer	N/A	Subject specialist, NCDC panel member
Curriculum specialist 2	Curriculum specialist	NCDC	Major subject specialist at NCDC, national panel chair
Curriculum specialist 3	Education officer	undisclosed	Subject specialist, panel member
Curriculum specialist 4	Lead-in-house	NCDC	Subject specialist, panel chair
Director-NCDC	Curriculum manager	NCDC	NCDC director, subject specialist, panel chair

The National Curriculum Development Centre (NCDC) designs and develops curricula in Lesotho using subject panels. A subject panel is a technical task team that develops curricula to assist the National Curriculum Development Centre (NCDC) on its mandate of curriculum design and development (Ntoi, 2007). Subject panels also develop curriculum materials such as textbooks, teachers' guides and other teaching aids.

5.2.3 Profile of Documents analyzed

There are four (4) documents analysed in this study. They are two primary curriculum documents for Grade 4 and two documents describing duties of curriculum specialists and foreign consultants. The two primary school science curriculum documents are an old school science syllabus for standard 4 and an integrated primary curriculum for Grade 4 (MOET, 2008; MOET, 2013). The new integrated primary curriculum for Grade 4 was developed with the assistance of foreign consultants while the old primary school science curriculum for standard 4 was developed by the science subject panel without the assistance of any consultant. The development of both curricula is through a centralized process controlled by the Ministry of Education and Training (MOET), through its department of the National Curriculum Development Centre (NCDC). Normally, subject panels consisting of the following members do the design and development of a curriculum in Lesotho:

- A subject specialist who is a Seniour Education Officer (SEO);
- A subject tutor from National Teachers Training College (NTTC);
- A subject representative from the National University of Lesotho (NUL) (Curriculum policy, 1980)

The subject panels "establish methods and schedules of operation based on policy guidelines set by the National Curriculum Committee (NCC) and develop required new syllabi inclusive of specific objectives, content elements, suggested instructional strategies, materials and books, as well as evaluation" (Curriculum policy, 1980, p.9).

5.3 SELECTION PROCEDURE FOR CURRICULUM CONSULTANTS

5.3.1 Who selects consultants?

The World Bank (2011) specifies the responsibilities of the lead in-house contact person or manager or selection committee as preparing and implementing the project, and therefore for selecting the consultant, and awarding and subsequently administering the contract on behalf of the company.

There is a lead in-house contact person who is responsible for appointments and recruitment of consultants to NCDC. This person also provided data for this study as "curriculum specialist 4". There are also selection committees chosen to facilitate the selection process as confirmed by curriculum specialist 4: "*When we select consultants we follow the procurement procedure…. We sit down as a panel…. then the selection team sits down and selects the suitable candidate from the applicants. We organize a selection team to deal with selection procedure."*

According to data, a few curriculum specialists do not know the procedure followed in the selection of consultants. However, all those who seem to know about it agreed that curriculum specialists select consultants for curriculum design and development. The following comments indicate views of participants about who selects consultants:

"*What I have noticed is that curriculum specialists, who have been in this place longer, are called to draft terms of reference for the consultants (*Curriculum specialist 2)*. "In most cases curriculum specialists are selectors of consultants"* (Curriculum specialist 4). *"It is us as the center (NCDC) that identifies the need and selects consultants. The curriculum specialists are involved in the selection of curriculum consultants"* (Director-NCDC).

Literature supports the involvement of employees in the selection of consultants by choosing a lead in-house contact to oversee the selection process that forms a committee (CCFNRC, 2010, p.11; Lawler, 1951, p.220). In order for the selection to be beneficial, employees should see a need of a consultant, be interested, willing and ready for a consultant. Therefore, the company through its employees selects consultants. This is only applicable to procurement selection since non-procurement selection does not involve competitive and transparent selection.

5.3.2 Consultants' selection process

The selection process of consultants follows two procedures. There is non-procurement procedure and procurement procedure as per the discussion following.

5.3.2.1 Non-Procurement procedure

In non-procurement procedure, a donor agency assigns a consultant to a country, company or project. This is not a "no objection" because in "no objection" a selection is done but not properly followed (Asian Development Bank, ADB, 2013). The non-procurement procedure also does not qualify as what the World Bank (2011 p.26) refers to as a Single-Source Selection (SSS) or single tendering (Black Sea Trade & Development Bank, BSTDB, 2011). It is simply allocating a consultant to a company without competitive and transparent selection. A good example of non-procurement procedure is consultant 1. The UN agency allotted her to assist in LSE curriculum design in Lesotho. She confirms not going through procurement procedures: *"All these times when I came into the country I came through the UN agency. There were no selections made. I was asked to come and assist to implement the initiatives of UN. At the moment (for this consultancy) my contract is with UNESCO not NCDC or government (of Lesotho)."*

It is unfortunate that consultants always accompany funding to help in the drawing up of detailed plans for donor agencies (Mosisidi, 1981 p.25). This is because poor countries need funding and may not need the consultant. Subsequently, the problem with the encouragement of imports of donors to countries is that they enhance their own economic interests through shaping economic policies of recipient countries (Kingsbury et al., 2004). Foreign donors do not only finance

education, but also provide ideas and initiatives for change coming from overseas (Ansell, 2002 p. 101; Mosisidi, 1981, p.24).

5.3.2.2 Procurement procedure

Curriculum specialist 4 claims, "*When we select consultants we follow the procurement procedure to select consultants".* Procurement is the process of acquiring goods and services (Black Sea Trade & Development Bank, BSTDB, 2011). There are a number of procurement principles and rules to follow when selecting consultants. Most principles and rules discussed in this study are drawn from the World Bank as it was the major funder for curriculum design in Lesotho. World Bank (2011) recommends a number of selection procedures (discussed in chapter 2) and the NCDC utilized 'Quality Cost-Based Selection (QCBS) procedure and Single-Source Selection (SSS) (World Bank, 2011) also known as closed tender. World Bank (2011, p.13) suggest three main steps for selection of international consultants under QCBS procedure. These are drawing terms of reference, development of adverts and evaluation of tenders.

a) Drawing terms of reference for consultants

After taking a decision to engage a consultant, the next stage is to establish "value of service, establish markets, develop specification, run competition, evaluate and choose the supplier." (International Federation of Consulting Engineers (FIDIC), 2011). Drawing terms of reference for consultants that encompasses to establish value of service and markets refers to developing specifications for consultants. World Bank (2011, p13) recognizes the terms of reference step as the first in the selection process under QCBS procedure. Terms of reference summarizes the requirements in the specification by client (FIDIC, 2011). In other words, it is the step where a client defines scope and objectives of an assignment (BSTDB, 2011).

As discussed in 5.3.1 above, curriculum specialists are responsible for developing terms of reference for consultants at the National Curriculum Development Centre (NCDC) in Lesotho. Curriculum specialists are appropriate people for drafting terms of reference for consultants, as they know where they need assistance most. This is in agreement with literature that before the process of recruitment of a consultant starts, the objectives and scope of the proposed work, and

the functions and duties of consultants should be clearly and adequately defined in the terms of reference (CCFNRC (2010; World Bank, 2011; ADB, 2013).

b) Development of advertisements for consultants

The next step after drafting terms of reference, the client invites application from suitable consultant firms. The client follows a procedure called Request for Proposal (RFP), which includes Letter of Invitation (LOI), Instructions to Consultants (ITC), Terms of Reference (TOR) and proposed draft contract (ADB, 2013; World Bank, 2011). To request consultants to submit their proposals, the client advertises on the website of the Bank, appropriate national journal, or newspapers (ADB, 2013) the invitation for consultants to bid for the tender. The World Bank advocates for a transparent and competitive process and hence favours Quality and Cost-Based Selection method of consultants (World Bank, 2011, p.13).

Curriculum specialists also perform this activity of developing an advertisement: "*When we select consultants… We sit down as a panel and develop an advert for so many weeks both in the country and internationally…"* (Curriculum specialist 4); "…*The drafted terms of reference is used as an advert since we are using World Bank moneys here. This is the requirement of the World Bank"* (Curriculum specialist 2); "*So what usually happens is that there would be adverts for the consultancy and they are always international adverts. The adverts would be posted on website for everybody and all contacts and mode of application would be shared. Then people would apply to be considered for consultancy"* (Director-NCDC).

c) Evaluation of tender documents

The next step that follows submission of proposals is evaluation of tender documents. There are two stages of evaluation of proposals under QCBS procedure. These are technical evaluation (quality of consultants) and financial evaluation (cost of consultancy) (World Bank, 2011).

The technical evaluation of proposals uses qualifications and experiences of consultants. The criteria for evaluation of consultants outlined by the World Bank shows three (3) qualities that applicants need to meet. These are general qualifications, adequacy for assignment and experience in the region and language (World Bank, 2002, p.75). These qualities are discussed in detail later in this chapter under quality of foreign consultants.

Besides the QCBS procedure, NCDC also used a Single-Source Selection (SSS) (World Bank, 2011 p.25). Unlike QCBS, SSS procedure does not provide the benefits of competition on quality and cost and lacks transparency in selection (Bank, 2011 p.25). BSTDB (2011) refers to SSS as single tendering and outlines some of the exceptional cases in which SSS is used:

- the extension of an existing contract awarded in accordance with procedures acceptable to the Bank for additional goods, works or services of a similar nature would clearly be economic and efficient and no advantage would be obtained by further competition;
- a product can only be provided by a single supplier because of exclusive capabilities or rights;
- it is a case of extreme urgency.

The above-mentioned exceptional cases form the justification for NCDC to engage the foreign consultant 2 for the second consultancy in 2014. Curriculum specialists refer to SSS as Closed Tender as follows:

"*…. now she has come for the second time to do Grades 4 and 5. The advert was made such that it suits her appointment since selectors wanted to continue with her... In this case, the justification that was made was that she is continuing the work she has started"* (Curriculum specialist 2).

"…this is the second time I work here in the curriculum development center. I have worked here in 2011 and 2012 for five months, when we were doing the curriculum for Grades 1, 2 and 3. So maybe the selectors recognized that we did a good job and this time they asked me to come back for the curriculum for Grades 4 and 5 without any application and I think this time it is on basis of the previous work" (Consultant 2).

5.4 QUALITY IN CURRICULUM DESIGN

Chapter 3 discusses the conceptual framework of this study in which the concept quality is identified. I developed two models of quality measurement; the quality concept-web and characteristics of a quality curriculum programme. I intend to utilize some aspects of these models in discussions of quality in this section. This section looks at the quality of consultants engaged at NCDC, the quality of curriculum specialists and the quality of documents analysed in this study. In the context of consultants, World Bank (2002) shows three aspects that describe the

quality of consultants. For the engagement in World Bank projects, the candidate should have general qualifications, adequacy for assignment and experience in the region and language (World Bank, 2002, p.75). In the case of curriculum specialists, the advertisement for the position of curriculum specialist and their roles and responsibilities stipulate the required quality of curriculum specialists. I discuss qualities of both consultants and curriculum specialists separately.

5.4.1 Qualifications of curriculum designers

5.4.1.1 Qualifications of foreign consultants

(a) General qualification

World Bank (2011) defines general qualification as the level of education and training. Foreign consultants engaged by NCDC have a high level of education and training compared to all curriculum specialists. Both of them hold PhD degrees while none of the curriculum specialists has a PhD.

(b) Adequacy for the assignment

Nevertheless, for the consultants to qualify for the assignment, they also need to meet the requirements of adequacy for the assignment. According to World Bank (2011), adequacy for the assignment is the education and training in the specific sector, field, subject directly relevant to assignment and proposed position. This is critical and given highest weight among all criteria for consultants' selection by World Bank. Unfortunately, both consultants do not conform to this criterion, as both do not have any qualification in curriculum studies.

"I am not a curriculum person myself, I have specialized in Topology." (Consultant 1);

"I would say that my qualification for this job is less about my knowledge in curriculum… I am not a curriculum specialist; my background is in general education and teacher education not in curriculum development" (Consultant 2).

The above quotes from consultants indicate, even though they have high qualifications, they both do not have adequacy for the assignment because their qualifications are not relevant and specific to the assignment. According to Levine's (2006) nine-point Template Model for measuring quality of curriculum programmes, consultants should be experts in curriculum design, up to date in their field, intellectually productive academics and practitioners. Since foreign consultants do not have adequacy for the assignment, there is high possibility that they do not have attributes and qualities required to design a quality curriculum.

Furthermore, literature shows that consultants are supposed to be independent, private, experts, specialists who bring specialised skills, experience, knowledge, and access to information to provide services of an intellectual and advisory nature (CCFNRC, 2010 p.24; World Bank, 2002 p.3; World Bank, 2007, p.2; Lawler, 1951). Consultants display all these qualities if they have adequacy for the assignment.

Darling-Hammond (1999) refers to qualifications of teachers as full certification. She describes full certification as qualifications that combine aspects of knowledge about subject matter and about teaching and learning, also known as pedagogic content knowledge (PCK) (Shulman, 1987). Darling-Hammond (1999) argues that possession of full certification and a major in the field is a more powerful predictor of achievement than education levels. She argues that intelligence is not a measure of quality, nor is subject matter knowledge alone but full certification, which is a combination of qualifications, knowledge about subject matter and about teaching and learning. Consequently, despite the fact that consultants have PhDs, we may not expect good performance due to their lack of specific qualifications to the field of curriculum. Consequently, consultants may not assist curriculum specialists to design a quality curriculum, which is modern and relevant to children and societal needs (UNESCO, 2005), because well qualified staff is essential to quality curriculum design and professional practice. Wilks, et al., (2008) claim that effective design and implementation of curriculum requires qualified staff who understand the curriculum; and, on-going assessment of children.

5.4.1.2 **Qualifications of curriculum specialists**

(a) General qualification

Unlike foreign consultants who have high levels of qualifications (PhD), none of the curriculum specialists has PhD degrees at the time of research. The highest level of education and training for curriculum specialists are Masters' degrees (NCDC, 2010; anecdotal experience). "*The local consultants are at a low level; they only do masters in curriculum*" (Curriculum specialist 1).

Curriculum institutions, such as NCDC, should have access to the most qualified individuals in the field (Barnett, 1992). This is because general educational levels of staff and their specific preparation in education predict the richness of the curriculum (Harrison, Golfeld and Moore, 2012). In addition, curriculum specialists should be experts and intellectually productive academics (Levine, 2006). To employ unqualified curriculum specialists and expect them to do quality work leads to certain failure (Darling-Hammond, 1997).

(b) Adequacy for the assignment

NCDC (2010) outlines the specifications required for the curriculum specialists as follows:

1. Master's Degree in Education **plus** a minimum of three (3) years' work experience as a Curriculum/Subject Specialist. Specialization in Curriculum Design and Development as well as assessment will be an added advantage.

   OR

2. Bachelor's Degree in Education **plus** five (5) years as a Curriculum/Subject Specialist in Science.

As discussed earlier, adequacy for the assignment is the education and training in the specific field and subject directly relevant to the assignment (World Bank, 2011), curriculum specialists need to meet requirements specified above in the job advertisement to have adequacy for the assignment.

Data shows that some curriculum specialists do not have adequacy for the assignment of curriculum design and development. Curriculum specialist 4 admits NCDC employs curriculum specialists with no proper qualifications: "*Some of them are still from teaching without any training in curriculum development. So the new curriculum specialists join the center (NCDC) straight from teaching, they are not even given the basics of curriculum development.* Director-NCDC explains why some curriculum specialists do not have relevant qualifications: "*…sometimes the candidate with experience but without qualifications is selected* (employed) *over the one with qualifications but lacks experience... These are people who have been involved*

with developing the curriculum for some years but their qualifications lack curriculum development modules.

Curriculum specialists do not meet the specifications since they have low levels of education and some do not have qualifications relevant to curriculum. It is not surprising that NCDC engages consultants to assist curriculum specialists to design curricula whenever there is curriculum innovation. This is because "educators who are qualified, well-resourced and supported are critical to program success" (Harrison, Golfeld & Moore, 2012, p.2), and the opposite is true.

5.4.1.3 NCDC staff development

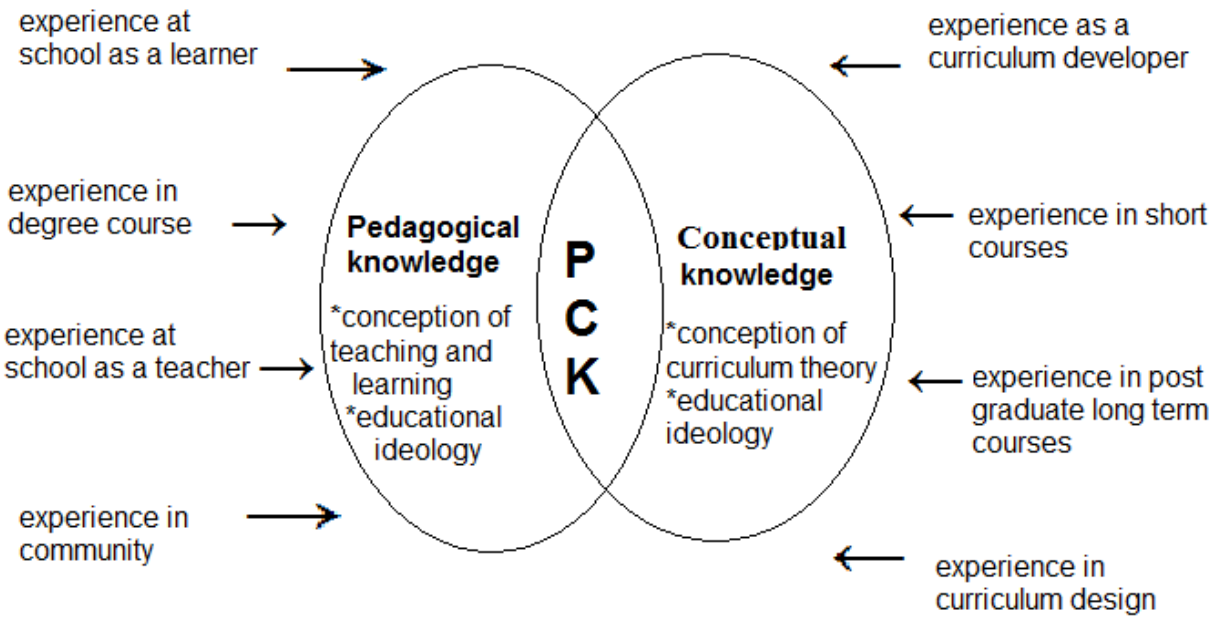
Staff development ensures structural quality, which leads to empowering newly employed curriculum specialists with epistemological access (Wilks et al., 2008). According to Barnett (1992), curriculum institutions should have access to the most qualified individuals in the field, which is not the case with NCDC. Similarly, Levine (2006) refers to staff development as "faculty" and maintains that there should be experts in curriculum design. This shows that institutions and companies should attend to preparation and qualifications of employees they hire and retain in the profession in order to improve quality and achievement (Darling-Hammond, 1999). Unfortunately, NDCD does not embark on staff development of curriculum specialists anymore. "*…curriculum developers need to be given exposure in short term training and long-term training. This used to be the common practice of the Centre (NCDC)… but this has stopped for many years now" (*Director-NCDC*).*

The newly employed curriculum specialists come without knowledge and experience of curriculum design and do not go through curriculum training to do their jobs. "*There are people here who had hardly any training, they come directly from teaching and they have very little experience in curriculum development"* (Consultant 2).

Curriculum is the source of education, it is what matters most in any education system and trying to mandate what matters most without building capacity, leads to certain failure of curriculum innovation (Darling-Hammond, 1997). Successful curriculum reform requires systematic human development initiatives to improve content knowledge, skills and attitudes and to change epistemological beliefs of curriculum developers (Raselimo, 2010, p.90,). Below I present a

Model of curriculum developers' professional development modified from Martin (2008) in literature to show the importance of staff development in curriculum design.

Figure 5.1 - Model of curriculum developers' professional development



Source: Martin (2008, p.22)

According to the model, the newly employed curriculum specialists possess the conception of teaching and learning (pedagogical knowledge) but lack conception of curriculum theory. The awareness of two types of knowledge is required for teachers to shift from the perspective of schoolteacher to that of curriculum developer (Martin, 2008). The lack of awareness of these types of knowledge will make untrained new curriculum specialists rely on their own beliefs, situated in behaviourist approaches, because they are not aware of current trends in curriculum design and development (Handel and Herrington, 2003).

Furthermore, studies from United Kingdom, United States, Sweden, Norway, Germany, Canada, Northern Ireland, New Zealand and Australia, show that greater staff training and higher levels of staff qualifications have a beneficial effect on children's developmental outcomes (Harrison, Golfeld & Moore, 2012).

5.4.2 Experience in curriculum design and development

5.4.2.1 Experience of foreign consultants

A professional educator needs to have three attributes; qualification, subject matter knowledge and education (Darling-Hammond, 1999). She describes education as knowledge of teaching and learning. On the other hand, World Bank (2002, p.75) refers to education as general experience and gives one of the criteria for evaluation of consultants during selection as General Qualifications which includes "total duration of professional activity" and "experience in the region where the assignment is to be carried out". I will therefore, discus experience of consultants as duration of professional activity and knowledge of region of assignment.

(a) Professional activity

Consultants have worked in different countries and for a number of consultancies. *"I have worked in a lot of different African countries; I have worked in French speaking countries, Portuguese speaking countries, also in English speaking countries… I did a lot of training in research skills and research methodology and they benefited"* (Consultant 2). Similarly, consultant 1, profess, *"I have been to different countries…. I am the one who started the programme of gender policy in this country."*

Curriculum specialists also concur with consultants as Director-NCDC and curriculum specialist 4 comment respectively: "*they have wide experience of different education systems in different countries and how different countries have modeled their curriculum.***"**

"*They have been involved with curriculum development in numerous countries; so they come here with a lot of experience".*

Both consultants conform to specifications of professional activities. They bring much experience to the curriculum design and development in Lesotho as both have developed educational programmes in a number of countries including African countries. African Institute for Mathematical Science – Next Einstein Initiative (AIMS-NEI) (2011) argues that it is critical for a consultant to have professional experience working in Africa if such a consultant is to be engaged in an African country.

(b) Experience in the region and Language

This is an important criterion in the selection of consultants for World Bank projects. It illustrates a consultant's knowledge of national or local conditions, including culture, administrative systems, and government organisations, and ability to communicate in the national language (World Bank, 2002). It is important for a consultant to have cultural awareness and sensitivity of the area in which the assignment is taking place (AIMS-NEI, 2011) but unfortunately, data shows that both foreign consultants fail to comply with this criterion. All participants in this study, including consultants, agree that the major challenge facing engaged consultants is lack of context knowledge of Lesotho. Curriculum specialist 1, 2, 4, and Director-NCDC comment: "*Foreign consultants do not know the context of our country … their knowledge would be theoretical…"* (Curriculum specialists 1, 2, and 4; Director-NCDC). Curriculum specialist 3 goes further to elaborate on an incident concerning consultant 1: *"she doesn't know anything about our country … Right now, she has come up with a long list of drugs we do not know, and she said they are supposed to be taught to learners in schools. When we said we don't know them she gave us a task to change them to the local drugs in the country, a person from Lesotho would know which drugs and their Sesotho names without much struggle."*

Consultant 1 admitted not having a context knowledge of the country: *"…before I started working on the curriculum I went around to some of the schools to find out and learn about the context of the country and about the beliefs and ways of the people in this country."*

The quality concept web introduced in the conceptual framework chapter as a measure of quality of curriculum developers, has a pointer on cultural awareness, immediate context and appreciation of diversity. The limitation on this pointer by anyone who develops curriculum, can negatively affect the quality of the curriculum. The other problem with consultants from another country is that they bring foreign culture into the country (Mosisidi, 1981). Aikenhead (2001) claims that there is also power and control, which are exercised through a formal corpus of knowledge which a consultant distributes through the training, rules and regulations. The position of a consultant in the whole exercise is authoritative and curriculum specialists are persuaded to listen and abide by her ideology as Dolby (2006 p.33) observes "being part of popular culture is a key component of modernity and feeling that one is somehow connected to

the global flow". Therefore, with the lack of context of the country, foreign consultants are likely to impose their culture through curriculum design and development.

5.4.2.2 Experience of Curriculum specialists

Curriculum designers and specialists with structural quality are supposed to be highly experienced individuals (Wilks, et al., 2008). According to Wilks, et al. (2008), the presence of highly experienced staff consistently produces high quality educational programmes. Therefore, experience in curriculum is necessary for quality curriculum design. As discussed in the conceptual framework chapter, experience is one of the attributes of process quality, which is concerned with relationships, stimulation within the learning environment and social and emotional security (Wilks, et al, 2008).

Unfortunately, most of the recruits at NCDC are directly from schools coming into the Centre with no experience and knowledge of curriculum design and development. Very few curriculum specialists have worked for a long time at NCDC but still do not have experience of curriculum design and development due to non-involvement of curriculum specialists in curriculum-related activities both at the Centre and in the world of education. Curriculum specialists 1 and 2 reveal respectively: *"They … come back to be office bearers and are not involved in educational research. They do not implement what they have learnt. Their writing frolics are low. The international world and the consumers need credible people to produce the curriculum. They look at the caliber of people who have designed the curriculum and belief in such a curriculum."*

"Even those curriculum specialists trained in curriculum studies, when they come back from training there is not much they are doing".

The lack of experience of curriculum specialists and local consultants made selectors of consultants to consider foreign consultants. Curriculum specialists 1, 2 and 4 and Director-NCDC commented on this issue: *"As far as I am concerned, the experience and level of consultancy in the country is low."*

"… as a country we are far behind in terms of curriculum development. We do not attend conferences and there is nothing we do to interact with the outside world. Our curriculum is sort

of office based. It is like we are working in the office while we are supposed to be interacting with the world, in schools doing research, presenting in conferences, and writing papers."

"*The local applicants are usually beaten by the international consultants during selection. The international consultants have written more books; they have experience that can never be comparable to the local people even those who teach at the University do not have what the international consultants have".*

"When we looked at the local applicants we noticed that these people do not have the experience of doing this job..." "Local applicants were beaten by their counterparts on the level of expertise, because to us as a country, this model of integrated curriculum was a new thing altogether".

Curriculum specialists should be engaged in research to be up to-date with current information (Levine, 2006). Similarly, one of the roles and responsibilities of curriculum specialists is to "Conduct situational / contextual analysis to guide decision-making in planning" (NCDC, 2009). The most important experience of a curriculum specialist is to be involved in curriculum academic matters. The number of years working as an office clerk does not help curriculum specialists to be competent in their job. Being involved in curriculum academic activities such as curriculum conference attendance, writing curriculum articles, engaging in curriculum consultancy are the required experiences. This is because quality curriculum links today's world to prepare citizens for future and global challenges (Levine, 2006). Therefore, non-involvement of specialists in curriculum matters makes them ignorant of current issues of the curriculum. Levine's (2006)'s model for measuring quality of a programme states that a quality curriculum should involve "high quality research driven by practice carried out in curriculum". Therefore, NCDC curriculum specialists should carry out curriculum research both in Lesotho and in other countries to have the required experience for quality curriculum design and development.

5.4.3 Performance in curriculum design and development

5.4.3.1 Performance of foreign consultants

World Bank (2011, p.2) gives five (5) reasons for engagement of consultants in providing services financed by the Bank. These are "the need for high-quality services; the need for economy and efficiency; opportunity to compete; use of national consultants and the need for transparency in the selection process." Omission of any of these requirements during selection of consultants can negatively affect performance of consultants in their assignment. The discussion on selection procedures has concluded that selection of consultants was partly competitive and not fully transparent, as some consultants do not go through the procurement process. Again, it was established that Lesotho prefers foreign consultants to local consultants. This section looks at the performance of consultants under these conditions.

(a) Consultants assist curriculum specialists to develop curriculum

Martin & Williams (2001, p.63) describe the role of consultants as to assist practitioners to "identify, select, deliver, and evaluate appropriate instructional adaptations, modifications, and accommodations, linking them to the student's learning and behavioral characteristics." This is synonymous to terms of reference (TOR) for consultants engaged at NCDC (NCDC, 2011; NCDC, 2013). According to terms of reference, consultants are engaged to assist, help, support, guide, and advice curriculum specialists on how to perform their work (NCDC, 2013). The task of foreign consultants is to "Support curriculum developers in the development of the curriculum packages" (NCDC, 2013, p.2). This agrees with World Bank (2002, p.2) about roles of consultants as to "advice on policy and strategy, institution building, training and knowledge transfer, management advice and technical and operating advice". The function of NCDC is to "Develop suitable curricula and instructional materials to meet the needs of Basotho nation" (NCDC, 2009), and one of the roles and responsibilities of curriculum specialists is to "Analyse policy guidelines for developing curriculum and curriculum objectives" (NCDC, 2009).

Unfortunately, data shows that consultants did not only assist curriculum specialists to develop curriculum but were actually developing the curriculum for NCDC.

Curriculum specialist 1 and consultant 2 commented on this issue: *"at the moment we are working on a document produced by the consultant, as we do it we are telling her what to change to fit our context and she changes everything. This document could have been produced by the curriculum specialist at NCDC and a workshop meeting called for the panel to come and do the same thing we are doing with life skills education syllabus."*
"In Grades 1, 2 and 3, I used to go through and practically re-write everything…"

Consultant 2 provides justification for developing curriculum instead of assisting curriculum specialists: *"... people want everything to be so perfect but as a result it takes a very long time because they look at all the details and forget about the bigger picture that we have a deadline to meet. So, one of my roles is to help them produce the product by the definite date…. Therefore, the coordination and reminding people about the deadlines was not what was the strength here."*

Consultants are engaged to offer the company a more efficient allocation of resources by providing specialised services for limited amounts of time without any obligation of permanent employment on the part of the company (Lawler, 1951, p.220). This is important because in the world of curriculum design, there are non-negotiable deadlines that would affect the education system of the whole country. Therefore, one of the reasons for engaging consultants to develop curriculum is that it was taking too long for curriculum specialists to develop curriculum at NCDC since curriculum specialists were unable to meet deadlines.

(b) **Consultants enhance communication between stakeholders**

Martin and Williams (2001) identify one of the roles of consultants as to enhance educators' communication skills when working with parents and with each other. Consultants perform this role by holding meetings and writing reports on the assignment. In the case of Lesotho, curriculum specialists communicate all curriculum-related activities to National Curriculum Council (NCC) which is the body that approves them (curriculum policy, 1980). However, data reveals that for this consultancy, the consultant carried out this activity:
"*During the presentation before the council (NCC), she was able to argue for some of the decisions and activities we have done in the curriculum also gave examples from other countries because we did not know the experiences of other countries as far as curriculum is concerned. Again, she was*

able to clarify the differences our curriculum has over other curricula of other countries that follow the same curriculum model" (Curriculum specialist 4).

Although, literature agrees that assistance of curriculum specialists by consultants enhances communication with NCC, it is not clear to what extent should consultants assist curriculum specialists. The presentation of a completed curriculum to NCC is the work of curriculum specialists not consultants. It is not clear whether presentation to NCC by a consultant is regarded as assisting curriculum specialists. It sounds like the consultant is not assisting curriculum specialists but doing their work.

Terms of reference of consultant for Grades 4 and 5 (NCDC, 2013) states that consultants should "Present periodical feedback reports and consultancy exit report that covers all activities undertaken to the NCDC professional staff and Chief Education Officer (CEO) – Curriculum and Assessment." This means that the consultant presents periodical feedback reports to NCDC professional staff (curriculum specialists) and thereafter the curriculum specialists present to the NCC. It seems curriculum specialists took advantage of consultant's ignorance on this issue and asked her to present the feedback reports directly to NCC.

(c) Consultants provide resources materials

"Consultants can also play a key role in securing federal, state, and local resources…assist both school district personnel and parents in securing resources provided by entities in the state" (Martin and Williams, 2001, p.62). Terms of reference for consultants for Grades 1, 2 and 3 (NCDC, 2011) concurs that consultants should "Bring curriculum materials from other countries to share with curriculum developers at NCDC."

Both consultants and curriculum specialists agree that consultants provided reading materials to specialists to look for information.

Consultant 2: "…. *We looked at five different countries and one of those we looked was Jamaica and they really liked the Jamaican experience and we looked at their curriculum in details and one of the things they have done in Jamaica is windows in literacy and numeracy for literacy and numeracy. They have these periods everyday where learners just study intensively literacy and*

numeracy skills, and we talked about that and we decided to adopt that here. So for grades 1, 2, 3 and 4 we have the same principle and that was connected to mine."

Director NCDC: *"…They source reading materials from different countries about different models of curriculum and they give us to read, work in groups to discuss and then decide which ideas we can adopt and shape our own thing."*

Curriculum specialist 2: "… *able to source materials of other countries which we do not have and are not able to do. Because we do not have a library so, we do not have access to books so she came with some books that we used.*

Curriculum specialist 4: "*… they have lot of literature. Unlike us who normally would surf the net and get information, for them, they talk about what they have done and experienced during their consultancy elsewhere.*

Lawler (1951, p.220) claims that one of the reasons to engage consultants is because "a consultant can act as a resource person in helping a teacher and administrative group". Nevertheless, the issue is whether it was necessary for NCDC to engage a consultant to provide materials. Curriculum specialist 4 and Director-NCDC commend the consultant for providing valuable information from the internet about curricula of other countries. This is the main commendable work of consultant 2 according to most curriculum specialists. It is true that the consultant acted within her jurisdiction and literature supports her (Lawler, 1951; Terms of reference, 2011; terms of reference, 2013), but the paradox is whether curriculum specialists really needed consultants to surf the internet for them for curricula of other countries. This is because as curriculum specialists, they are experts and have information of countries' curricula. Therefore, they should be qualified to perform their jobs that include:

- Carry out needs/situational analysis.
- Carry out comparative analysis of curriculum from different countries for benchmarking (NCDC, 2013).

In addition, as they design a curriculum of the country day in day out, curriculum specialists should know what is happening in the world as far as curriculum is concerned. Two main activities expected of curriculum specialists about information seeking during curriculum reform are:

1. Surfing the internet for curriculum information about different models of other countries;

2. Undertaking study tours to different countries that seem to use effective and efficient curricula.

It is unlikely that curriculum specialists could not perform such trivial activities. One reason could be lack of resources or support as revealed by director-NCDC:
"…*we had requested study tours to different countries to learn about curricula of other countries so that we can choose the best model for our country but we were denied the opportunity. We then opted for consultant to be engaged."*

It is common practice to learn about curricula of countries before curriculum innovation. Spreen (2004) calls it curriculum borrowing. In stage 1 of curriculum borrowing and lending, the country is involved in study tours to other countries to learn about countries' educational and training systems. This is where curriculum specialists collect foreign models and ideas to circulate and review for relevance and applicability to the local country. Therefore, the refusal of Lesotho authorities to grant curriculum specialists opportunity to undertake study tours to study and compare curriculum models hindered their competency in designing the Lesotho curriculum.

(d) Consultants train curriculum specialists

Terms of reference for consultants (NCDC, 2011; NCDC, 2013) state consultants should "conduct training on integrated curriculum with special emphasis on different approaches or methods of curriculum organization and delivery." Similarly, the literature concurs that consultants bring specialised skills, experience, knowledge, and access to information to the company (CCFNRC, 2010; Lawler, 1951; World Bank, 2002). One of the consultants' roles, according to Lawler (1951, p.220), is to deepen understanding of curriculum specialists to become proficient in the use of new techniques necessary to develop the most desirable kind of curriculum. Again, consultants' engagement is "for their superior knowledge, transfer skills and upgrade knowledge base of their client while executing assignment" and this forms an important part of the assignment (Lawler, 1951, p.220). This is what consultant 2 claims to have done: "*The other thing I have done is training them on integrated curriculum… I have worked on how to formulate learning outcomes… how to formulate assessment criteria…there is lot of training I did on integrated curriculum, what it is, how it works, and why it is a good idea and… a lot about challenges and limitations of using integrated curriculum."*

Terms of reference and literature suggest that it is the responsibility of consultants to provide training. However, it is not clear why curriculum specialists needed training on integrated curriculum, while curriculum specialists developed the Curriculum and Assessment Policy Framework (MOET, 2009) which informs curriculum integration.

In addition, it is surprising that the consultant also teaches curriculum specialists on learning outcomes and computer operations such as processing results on "excel". Curriculum specialists are curriculum and assessment specialists with more than five years teaching experience (NCDC, 2010). They have supposedly studied curriculum in higher institutions, have also used learning outcomes in schools, and have developed assessment criteria for teachers during curriculum development process at NCDC (NCDC, 2009).

As a result, curriculum specialists do not need training on curriculum design because they are curriculum experts (NCDC, 2010) and perform curriculum activities on daily bases (NCDC, 2009). The statement of curriculum specialist 4 during interviews shows that there is no need for training: *"At one stage I asked myself a question… that do we really need these things this child is telling us? The problem is that we are clear that we don't need them but we don't have the confidence to stand on our own."*

Therefore, curriculum specialists do not need training from consultants on curriculum matters because they are experts in curriculum design (Levine, 2006); they are knowledgeable about curriculum issues (NCDC, 2010).

5.4.3.2 Performance of curriculum specialists

Recruitment documents (NCDC, 2010) outline the work of curriculum specialists. We also find curriculum specialists' work in roles and responsibilities of curriculum specialists (NCDC, 2009; Mosisidi, 1981, p 23; Khoboli, 2005). However, the fact that consultants are frequently engaged to assist curriculum specialists is an indication that there is something wrong with the performance of curriculum specialists. Data reveals two contrasting views concerning performance of curriculum specialists. Consultants commend curriculum specialists for their good work ethics but curriculum specialists claim they do not know how to do their work. *They*

are very committed, they believe in what they are doing; quite hard working; good vision of what to be achieved and how to achieve it; they are quite flexible, they do quite different things; they work with panels; they work at different situations; They are very cooperative; they are good at team work" (Consultant 2).

On the contrary, curriculum specialist 4 contrasts: *"... we don't have the capacity to do work entrusted to do which is to develop the curriculum of this country…. The situation at the curriculum development center is like a vicious cycle, because we are not capacitated, but expected to do the work, and when the work is not good they come back and declare the vote of no confidence in you, blaming the curriculum specialists saying that these people don't know anything."*

Both participants do not necessarily contradict each other because comments of consultant 2 do not indicate that curriculum specialists have competency in curriculum design. The fact that they are hardworking, committed, and cooperative does not mean they know how to do their work and are doing correct work because these qualities cannot make them produce a quality curriculum. As discussed earlier, a quality curriculum is produced by experts in curriculum design, up to date in their field, intellectually productive academics and practitioners who have grounding knowledge in curriculum (Barnett, 1992; Levine, 2006; Wilks, et al., 2008; Shulman, 1982).

In addition, Martin & Williams (2001, p.63) argue that performance requires that all practitioners be fully knowledgeable regarding the components of the general education curriculum. Therefore, there is a link between qualification and performance. Curriculum specialists with relevant qualifications will produce effective programmes. Harrison, Golfeld & Moore, 2012) concur that effective programmes are staffed by individuals trained and supported through effective organisational and management structures to offer responsive and high-quality services. They continue that curriculum values rely on educators' professional knowledge and competence in interpreting principles and learning goals for the local context. This also explains one reason for engaging foreign consultants, as stated in data and terms of reference (curriculum specialist 2; NCDC, 2011, p.1; NCDC, 2013). This is curriculum specialists are not able to interpret the Curriculum and Assessment Policy Framework (2009); do not have a "technical know-how on

integrated curriculum". Hence, they need assistance from consultants. Therefore, the quality of curriculum specialists' links to their performance and affects the quality of curriculum development (Harrison, Golfeld & Moore, 2012).

5.5 CURRICULUM DOCUMENTS ANALYSED

This study analyses; terms of reference for consultants; roles and responsibilities of curriculum specialists and Grade 4 curriculum documents related to the science subject. The textbooks, Grade 5 integrated syllabus and teachers' guides for new curriculum were not available during the period of research and hence not analysed.

5.5.1 Job descriptions of foreign consultants and curriculum specialists

The section discusses similarities and differences between the two documents, curriculum specialists' roles and responsibilities and consultants' terms of reference (TORs). Table 5.2 summarises the comparison between the two documents. The first column shows curriculum specialists' roles and responsibilities while the second column contains consultants' terms of reference (TORs). The last column shows the comments of the researcher on the duties of specialists and consultants.

Table: 5. 2: Curriculum specialists' roles and consultants' terms of reference.
Source: Curriculum developers' roles and responsibilities and terms and conditions for consultants

Specialists' roles	Consultants' terms of reference	Comments
Conduct situational / contextual analysis to guide decision-making in planning.	Conduct training on integrated curriculum with special emphasis on different approaches or methods of curriculum organization and delivery.	To conduct training implies that specialists do not have competence and knowledge of the job employed to do.
Undertake educational research in support of curriculum activities.	Provide technical knowledge on integrated curriculum.	Specialists should be knowledgeable about integrated curriculum, approaches and methods of curriculum organisation and delivery.
Analyse policy guidelines for developing curriculum and curriculum objectives.	Support curriculum developers in the refinement of the curriculum packages for Grade 4 and prepare them for wholesale implementation.	Consultants "support" curriculum developers. The word "support" is subjective. It does not explicitly state what exactly the consultant will do in the
Develop suitable curricula and instructional materials to meet the needs of Basotho nation.	Support curriculum developers in the development of the curriculum packages for Grade 5 and prepare them for pilot testing.	act of supporting. For instance, if consultants prepare curriculum packages for Grade 4 for wholesale implementation, this is not support but actually doing curriculum specialists' job.
Prepare for curriculum trial testing, undertake trial-testing follow-ups, revise trial-tested materials and disseminate trial-tested materials to all schools.	Advise on how to produce appropriate monitoring and evaluation tools/systems. Assist in designing a training plan for wholesale implementation of Grade 4 and pilot of Grade 5 schoolteachers.	When consultants give advice on how to produce monitoring and evaluation tools is beyond design and implementation stages. This is at the stage of curriculum monitoring and evaluation.
Conduct in-service training workshops on subject content.	Conduct training on integrated curriculum with special emphasis on different approaches or methods of curriculum organization and delivery.	Specialists do not need training if employed on merit for this job; they are expected to be trainers.

Table 5.2 shows the overlap on the terms of reference of consultants over roles and responsibilities of curriculum specialists. The current curriculum reform in Lesotho interprets curriculum and assessment policy framework (MOET, 2009) which advocates for curriculum integration. MOET (2009, p.15) states that "the first seven years of Basic Education shall follow an integrated approach managed through five learning areas, with the gradual emergence of subjects in the last three years." This is one of the main policy issues curriculum specialists were

not able to interpret in order to design curriculum which led to engagement of consultants to assist curriculum specialists. Data concur that:

"*...we needed a consultant for both assignments for Grades 1, 2 and 3 and also for Grades 4 and 5 for one main reason that the policy says subjects should emerge as we go higher in the level of study. Therefore, the consultant would help us to realize the curriculum policy, as we are unable to do so. We did not know how the subjects would emerge and when at what stage they should emerge. As a result, we were afraid not to make them emerge at the wrong stage*" (Curriculum specialist 2).

This reason for engaging consultants to assist curriculum specialists is not convincing. This is because the curriculum and assessment policy framework, which informs the new integrated primary curriculum, clearly explains how this curriculum should be integrated. The following paragraph elaborates:

Unlike in the past where traditional school subjects were used as organizing elements to achieve curriculum integration, the framework uses curriculum aspects and learning areas, which are juxtaposed to identify competencies to be promoted in different contexts. Curriculum aspects highlight the life challenges and contexts in which the learner is expected to function as an individual and a member of the society. Learning areas indicate a body of knowledge necessary to equip the learners with competencies necessary to address these life challenges (MOET, 2009, p.4).

Furthermore, action verbs used to describe tasks of consultants in terms of reference are not clear except for training specialists and presenting reports. Performances such as assist, help, support and advice are not comprehensive. They do not specify what consultants are supposed to do, and how far they should go. These uncertainties create room for exploitation of consultants and overlap between curriculum specialist's duties and those of consultants.

5.5.2 Quality of Grade 4 curriculum

This section analyses science curriculum documents for Grade 4. These are old standard four-school science syllabus and new integrated curriculum for Grade 4. The aim is to compare the two documents to establish improvement on the new curriculum or lack of quality. This justifies whether to engage foreign consultants is productive or not. Curriculum specialists developed the old primary school science curriculum without the assistance of foreign consultants while with the new one foreign consultants were involved. This also might assist the researcher to establish

the value on the new curriculum brought by the involvement of consultants. Table 5.3 summarises the comparison between two documents.

Table 5.3: Comparison of old standard 4 school science syllabus with integrated primary curriculum for Grade 4
Source: Primary Syllabus Standard 4 - Science section and Integrated Curriculum Grade 4

Item	Standard 4 old syllabus	Integrated primary curriculum Grade 4
Schooling	Primary schooling for 7 years	Basic education schooling for 10 years
Curriculum aims	Science education aims focus on science. Applies to all 7 Grades	16 curriculum aims, 3 related to science and technology. Focus only on Grade 4.
Specific objectives	Objectives specific to science and cover all concepts and skills for 7 years.	Basic education focus on integrated learning outcomes covering five learning areas; curriculum arranged into 4 units.
Learning outcomes	36 in Standard 4 cover 7 science topics. Spiraling of concepts design (Ornstein & Hunkins, 2009).	Integrated learning outcomes, see table 5.4
Windows	Science taught as a subject (all subjects taught individually)	Literacy window (Sesotho and English) and Numeracy window. No science window.
Assessment	Testing is through examinations and tests.	Continuous assessment. Assessment packages and ECol (2012) to guide teachers.

In table 5:3, column 2 shows the old school curriculum represented by the primary school science syllabus. As revealed in the table, this is a single subject curriculum. According to Marsh (1997), in a single subject curriculum, the curriculum divides subjects, subjects divide units, which are not related and the curriculum encourages atomisation. As a result, it contributes to a fragmented approach to problems that are better resolved by an integrated vision.

Column 3 in table 5.3 shows an integrated curriculum which came as a result of the new curriculum and assessment policy framework whose goal is to re-arrange the education system for schools (Raselimo and Mahao, 2015; MOET, 2009). As shown in table 5.3, the integrated curriculum focuses on many skills from different subjects combined. Even though, Le Roux (2012) views the integrated curriculum to develop learners holistically not giving them fragmented knowledge, there is lack of depth in the integrated curriculum. The deep coverage of scientific concepts would enable learners to pursue ‘pure’ science in order to do applied research projects (UNESCO, 2000, p.6). Table 5.4 illustrates the idea of lack of scientific depth in the integrated curriculum of Grade 4.

Table 5.4: Learning outcomes related to science in integrated curriculum Grade 4

Source: Integrated Curriculum Grade 4

Unit	Science (LOs)	Total (LOs)	Percentage (%)
1.About myself	0	40	0
2.My Health and Safety	17	36	47.2
3.Understanding and Sustaining the Environment	21	39	53.8
4.Survival and Self Reliance	10	45	22.2
Total	48	160	30

The coverage of science learning outcomes in the standard 4 syllabus is 100% while in the integrated primary curriculum Grade 4 is only 30%. The integrated primary curriculum Grade R compromises scientific concepts by encompassing concepts, skills, values and attitudes in children's learning (Marsh, 1997, p.95).

5.6 THEORISING CURRICULUM CONSULTANCY IN LESOTHO

This critical paradigm study conveys ideological critique to liberate individuals from ignorance, authority and tradition (Huckle, 1993, p.19); realizes a society that is based on equality and democracy for all its members (Cohen, Manion & Morrison, 2011) and identifies false consciousness that has brought a social group to powerlessness (Henning, 2004). The critical paradigm allows the theorist to look at the relationship between the social class and knowledge taught in schools (Apple, 2004; McLaren, 2007). I refer to questions usually asked by critical theorists to examine and interrogate the social construction of knowledge and curriculum in Lesotho. Critical theorists would ask: How and why does knowledge get constructed the way it does? Who defines worthwhile knowledge? What ideological interests this knowledge serves? How knowledge reproduces inequality in society? How is power produced and reproduced through education? How and why are some forms of knowledge legitimated and celebrated by the dominant culture while others are not? (Cohen et al., 2007, p.27).

Apple (1993, P.22) identifies the role of education as representing cultural, political, and economic conflicts, tensions, and compromises that organize and disorganize people. The conflicts are usually between the dominant group and the subordinate group. The dominant group are the ones who control the economic and political power in the society. Maruatona

(1994) argues that the decision to select certain forms of knowledge lies with them. In the case of Lesotho, for instance, the NCDC usually suggests the curriculum design model to be adopted in developing the curriculum for different subjects. This model is communicated to the panel by the curriculum experts. This suggests that curriculum design model used in developing the science curriculum is decided by NCDC and communicated to the panel by the curriculum expert. The NCDC decides on the model in order to achieve uniformity across the different subjects (Ntoi, 2007, p.76).

The Ministry of Education and Training, through NCDC, has a monopoly over curriculum design and they give people a limited opportunity to participate in educational decision making. For instance, the primary school science curriculum panel left out learners and parents in its membership. The 1978 national dialogue attempted to involve parents in the decision making process and indeed massive contribution was made. But unfortunately, as Boaduo (2005) observes, the Ministry of education (MOE) did not implement most of the recommendations proposed by the various commissions including the suggestions of Basotho in the 1978 National dialogue because the education system is finally determined by politicians and bureaucrats (Mosisidi, 1980; Maruatona, 1994). This is what Stenhouse (1980) calls top-down model of curriculum where the political and economic elite provide the type of knowledge for the poor (not for their children). But whose knowledge is it anyway?

Maruatona (1994) observes that the political and economic elite are the same group as the ruling class and they are answerable to the western governments and large financial institutions who still control the economy. In essence, the dominant group, ruling class, the economic elite, whatever they are called, seem to be in power, controlling Lesotho with a remote control. This is better articulated by Nwanosike and Onyije (2011) as follows:

Just as the European controlled African participation in the new economic order, they carefully structured African education, so as to perpetuate their underdevelopment and dependency. The system of education was designed to impose upon Africans, the white man's mythical, racial superiority and African inferiority. Whatever Africans were taught about themselves was designed to enable them to internalize their inferiority and to recognize the white man as their savior. Colonial schooling was education for subordination, exploitation, the creation of mental confusion and the development of underdevelopment. (Nwanosike and Onyije, 2011).

This suggests that the political and economic elite construct the knowledge for schools but it is not for their benefit. Another form of control Europe has over Africans is the Foreign Aid to education. Unfortunately, foreign donors do not only finance education, but also provide ideas

and initiatives for change coming from overseas (Ansell, 2002 p. 101; Mosisidi, 1981, p.24). Also, Samoff (1992) shows that the International Monitory Fund (IMF) and World Bank do not really care about conditions in poor countries when funding their curriculum reform projects. Their funding is mostly based on demands of world economy than national priorities of the recipient countries (Ansell, 2002; Samoff, 1992; Tabulawa, 2003). Their main concern is to reduce the public spending on education (Carnoy, 1999).

In interrogating the results of this study, I refer to the last critical question which I have decided to trace back from; who are the consultants? What did they do? Why were they engaged to assist in curriculum design of the primary school science in Lesotho? Apple (1993) argues that knowledge is biased to serve the interests of certain sections of society with "official knowledge". This was perpetuated by colonial domination which instilled a 'culture of silence' among people leading to a resignation to accept authority without resistance (Freire, 1990). Giroux (1992, p.151) calls them passive workers who would adjust to the imperatives of the capitalist order. The foreign consultants were accepted without resistance while they did not meet some of the crucial specifications of their selection. For instance, consultants were supposed to be experts with special knowledge, skills, competency and experience in their area of specialization (Lawler (1951, p.220). But both of them had no school knowledge of curriculum, curriculum design and curriculum development. This is the result of colonial system that reinforced the dependency of people on authority by collaborating with the ruling class. Maruatona (1994) observes that control of lives of the ruled goes beyond ideological control, it is hegemonic. This hegemonic process permeates beyond ideological domination and includes every facet of social, cultural and economic life of the people. “Culture, language, traditions and right to self-determination” have been replaced or mixed with the hegemony of the west (Parsons & Harding, 2011, p.2). This is why the selectors would not consider local language, context and background when these conditions were guidelines in the selection process. Could it be, is because the knowledge of the dominant class (the west) is made 'legitimate knowledge' and every other form of knowledge and reality is relegated to the periphery (Parsons & Harding, 2011, p.2).

Looking at data from this study, I would summarize the performance of consultants with one sentence. “The foreign consultants did nothing but they have done a very good job.” Mosisidi (1981, p.64) under section 6.6: Curriculum Development and Foreign Aid, reports about the 1979 memorandum from the Central Planning and Development Office. One of the “very” important points emphasized is that “Curriculum is a very sensitive area in which nationals must predominate.” This is exactly what the foreign consultants did. They made curriculum specialists develop the curriculum. The nothingness of consultants’ activities is when they were doing unnecessary things such as “training curriculum specialists” when there was no need, “surfing the internet for curriculum materials” which is really not technical but clerical task. They did a very good job by managing curriculum specialists to finish the curriculum design. They demonstrated their authority and control as it has been discussed earlier. And if that is why they were selected, it worked. They were engaged to provide leadership, control, management, coaching, mentoring and authority. The coach in a football match does not play, but manages the team to play.

“Leha ho le joalo”, patriotic citizens should be capacitated to plan, develop and implement curriculum since curriculum is the anchor of education (Mosisidi, 1981, p.64). The question that remains for further research is, how does this curriculum measure up to the quality models, namely quality concept-web and characteristics of a quality programme developed in chapter 3? It is evident that a change is needed in the curriculum development center of Lesotho, and it needs people who are not silent worker (Morrison, 2004) but those who are committed to empowerment and liberation. These are the people, according to Slattery (2006, p.232), who must reject banking concept in its entirety and adopt instead a problem-posing concept.

5.7 CONCLUSION

This chapter discusses data from foreign consultants, and curriculum specialists collected through one-on-one interviews. There was also discussion of curriculum documents in which roles and responsibilities of curriculum specialists, terms of reference and Grade 4 curriculum were analysed.

The next chapter is the concluding chapter, which summarises the answers to the research questions. It also highlights questions not answered by the study and suggests the recommendations based on the research.

CHAPTER SIX: CONCLUDING REMARKS

At the mountain top – Summary, conclusions and recommendations

6.1 INTRODUCTION

The study is a case study of the National Curriculum Development Centre (NCDC) in Lesotho on involvement of foreign consultants in curriculum design and development. In this study the process of curriculum design and development in Lesotho is interrogated. The logic and expected procedure was that the process of curriculum design and development in Lesotho was supposed to be done by the curriculum developer/specialists employed by the government of Lesotho to design a curriculum for the country. But history shows that almost all major curriculum innovations in the country are done with the assistance of foreign consultants. Therefore, the study aims to find out why are foreign consultants used to design curriculum in Lesotho? This is because the continued involvement of foreign consultants in local curriculum design might have a negative impact on the knowledge, values and attitudes imparted to Basotho children. Since curriculum design and development of the country is a broad topic, this study only focused on the curriculum of primary school science in Grade 4. Data for the research was collected through interviews of curriculum developers and foreign consultants and also from documentary analysis of old and new Grade 4 science curricula.

This chapter reiterates what I have researched and how it was done as presented in chapter 4. It also discusses the main findings in the research. Possible areas for future research are outlined together with the significance of the research in the field of education.

6.2 **WHAT WAS THE RESEARCH ALL ABOUT?**

The focus of the study was on the reasons for the involvement of foreign consultants in Lesotho curriculum design and development focusing on the primary school science curriculum. The major question that guided the study was why are foreign consultants used to design the primary school science curriculum in Lesotho?

6.2.1 How was the research done?

The research was a case study of Lesotho curriculum design and development, an in-depth study that focuses on the science curriculum design in Lesotho at primary level in Grade 4. According to Yin (2009, p.18), a case study is an empirical inquiry that investigates a phenomenon in depth and within its real-life context. The research was conducted at the National Curriculum Development Centre (NCDC).

In this case study, the researcher has interrogated the issue of foreign consultants' involvement in designing the Lesotho primary school science curriculum. The interrogation targeted curriculum developers and the curriculum innovation decision makers, and in addition, the foreign consultants who have been recently engaged in the development of curriculum.

In this study, the aim was to present the opinions of Lesotho curriculum developers and foreign consultants about curriculum design in Lesotho.

The researcher conducted face-to-face semi-structured interviews with all the participants. I interviewed a primary science curriculum specialist, Life Skills education (LSE) curriculum specialist, one member of the panel who is a lecturer in one campus of the University of Lesotho; and the lead in-house contact person (CCFNRC, 2010, p.11) who was responsible for the selection of consultants and the drafting of terms of references for more than three consultants recently engaged at the NCDC. All in all, I interviewed four members of the NCDC professional staff who were directly involved in science curriculum development activities. Moreover, I held interviews with two international consultants who had been recently engaged to help in the design and development of the primary curriculum. Of the two consultants, one was focusing on Life Skills Education (LSE) curriculum and the other one was assisting in the development of the integrated primary curriculum of which science was one of the subjects.

Data was also collected by analysing documents which are reports of consultants, consultants' terms of reference, roles and responsibilities of curriculum specialists, the old primary syllabus for Standard 4 and the newly introduced integrated primary curriculum for Grade 4. This was done to establish the improvements of the new integrated primary curriculum Grade 4 over the

old science curriculum and to check whether the new integrated curriculum is in-line with the curriculum and assessment policy framework (MOET, 2009).

6.3 MAIN FINDINGS

As mentioned in chapter 2, this study is situated within the first two phases of the curriculum development process which are curriculum design and curriculum dissemination. Since these are the first stages of design, it is where consultants are largely engaged. Through an exploration of what transpired in this phase, the study has established that there was no need to engage foreign consultants. The ideal solution would have been professional staff development but as a matter of urgency, local consultants especially those individuals who were involved in the design and development of Curriculum and Assessment Policy Framework would have been engaged. This section summarises the main findings under the headings which are linked to the three (3) research questions of this study as described in chapter 1.

- Reasons for engaging foreign consultants
- Qualifications of foreign consultants engaged;
- Performance of foreign consultants.

6.3.1 Reasons for engaging foreign consultants

6.3.1.1 Specialists lack experience

The discussions in the previous chapter show that the main reasons for engaging consultants to assist in design and development of integrated curriculum in Lesotho are:

a) Curriculum specialists did a bad job on developing curriculum.

b) It was taking too long to develop the curriculum because curriculum specialists were not meeting deadlines.

Data reveals that the local curriculum experts lack experience in curriculum design and development. These include college and university lecturers and NCDC curriculum specialists. All curriculum specialists, including the few that have gone for relevant training, do office clerk work not related to curriculum innovations. They do not research, nor monitor curriculum implementation and assessment in schools, the job which is done by inspectors and examination council of Lesotho (ECoL)'s subject officers respectively (Ntoi, 2007). They have many years of working at NCDC not doing the work related to curriculum design and development and hence do not gain knowledge of curriculum development.

Curriculum specialists were not familiar with the curriculum and assessment policy framework which informs the reform of the integrated primary curriculum because they were not involved with the design and development of the policy because of the way NCDC operates. Curriculum specialist 4 illustrates that: *The whole academic staff of NCDC was divided into working groups, so if you were not a member of that curriculum & assessment working group, you wouldn't know clearly what the thinking was behind or their school of thought in regard to this model.* Therefore, curriculum specialists have no idea about the vision of the curriculum and assessment policy framework (2009). The policy framework was developed at NCDC by curriculum specialists without the assistance of consultants. All the members of the group who were involved in the policy development are no longer working at NCDC. Some have retired, some resigned and others left for different reasons but most of them are still in the country. I think these could have been the correct people to be involved as consultants rather than foreign consultants.

6.3.1.2 Lack of training for curriculum specialists

Truly speaking, we don't have the capacity to do work we are entrusted to do which is to develop the curriculum of this country (curriculum specialist 4).

The National Curriculum Development Centre (NCDC) has suspended training of curriculum specialists on the job. This means that newly employed curriculum specialists are not trained on the job anymore. Therefore, if newly employed curriculum specialists are not adequately qualified, and they are not provided with training on the job anymore, they fall short of competencies of curriculum design and development. The Lesotho curriculum is therefore

designed and developed by unqualified, inexperienced curriculum specialists who joined the Centre with the hope that NCDC would train them on the job. This means there are many curriculum specialists at NCDC who do not have a sound knowledge of the content of the curriculum theory (Shulman, 1987). This is against the Lesotho education policy which states "… The quality of education shall be improved by equipping schools and educational centres with the requisite skills through investing in teacher training and professional development and providing improved teacher supervision and support" (MOET 2005, p.26). But *"This used to be the common practice of the Centre (NCDC) to give people short term training and long- term training, but this has stopped for many years now"* (Director-NCDC). With unqualified and incompetent curriculum specialists mandated to design and develop the curriculum of Lesotho, there is only one result, certain failure of curriculum reform and unsuccessful curriculum reform (Hammond, 1997; Raselimo, 2010, p.90; Wilks, et al., 2008).

Therefore, there are only two options for NCDC to save money and produce a quality curriculum for the country. These are either to train curriculum specialists or deploy them in other departments and use consultants for the development of Lesotho's curriculum, to always engage experts with grounding in knowledge of curriculum design and development. But if the department is to be kept with the same operating systems, the curriculum specialists should be capacitated in order to produce a quality curriculum for the country. The diagram below illustrates minimum areas of development that should be targeted as discussed in chapter 3 and chapter 5:

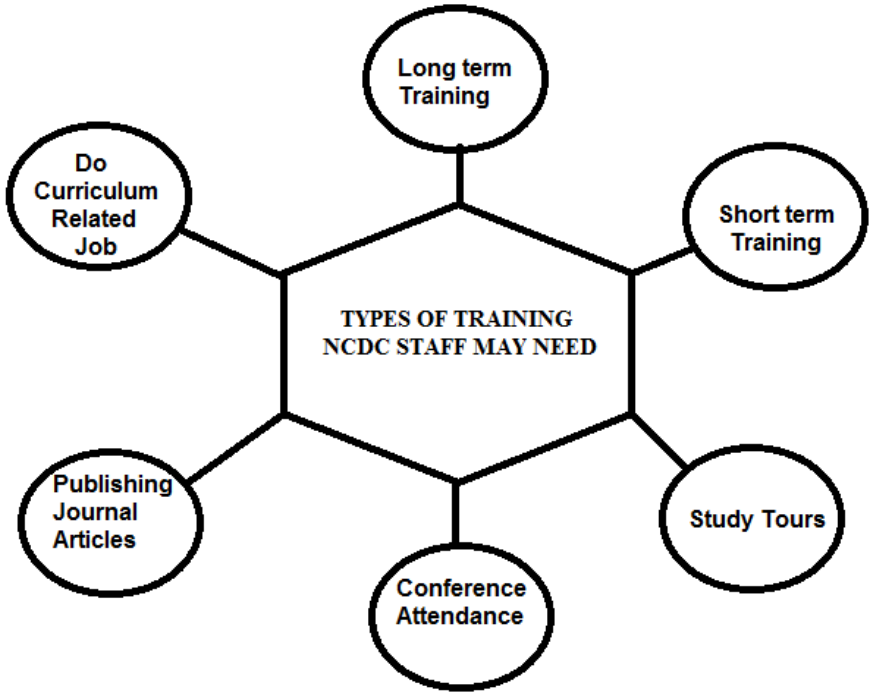


Figure 6.1: Types of training curriculum specialists may need

In chapter 3, figure 3.3, I presented a Barnett's (1992) quality measurement model that I modified in Nhlapo (2014). In this model, it is evident that quality curriculum depends on the quality of staff development. According to Barnett (1992), the recruitment of consultants or outsourcing is the last resort a company does as it is in the outer ring of the model. I also presented a quality Concept-web (figure 3.1) inspired by the ideas of Wilks, et al. (2008). The model shows that in order to empower curriculum specialists to design an effective curriculum, institutions must provide process quality and structural quality (space, training and group size). All these are in agreement with data as it has been revealed that curriculum specialists were not provided with adequate training whereas the company employed less qualified candidates.

According to Darling-Hammond (1999), if states are interested in improving the quality of education they are advised to attend to the preparation and qualifications of teachers they hire and retain in the profession. Similarly, if NCDC is interested in improving the quality of curriculum design and development, they should employ highly qualified curriculum specialists and train them to assist them to produce quality curriculum programmes at national, school, and classroom levels.

6.3.1.3 Lack of resources for specialists (see sub-section 6.3.3.3)

I have discussed the issue of resources, that both consultants and curriculum specialists considered a barrier towards curriculum design and development, in section 7.3.3. Data from interviews show that there was lack of resources at NCDC especially reading materials and internet connectivity. Similarly, the analysis of documents also concurs with the fact that there is lack of materials at NCDC (or in Lesotho) because the terms of reference for the consultants (see Appendix H, 2.1) states that the consultant should "Bring Curriculum Materials from other countries to share with curriculum developers at the National Curriculum Development Centre (NCDC)". Figure 6.2 below illustrates the minimum physical resources required by curriculum specialists in order to perform their work:

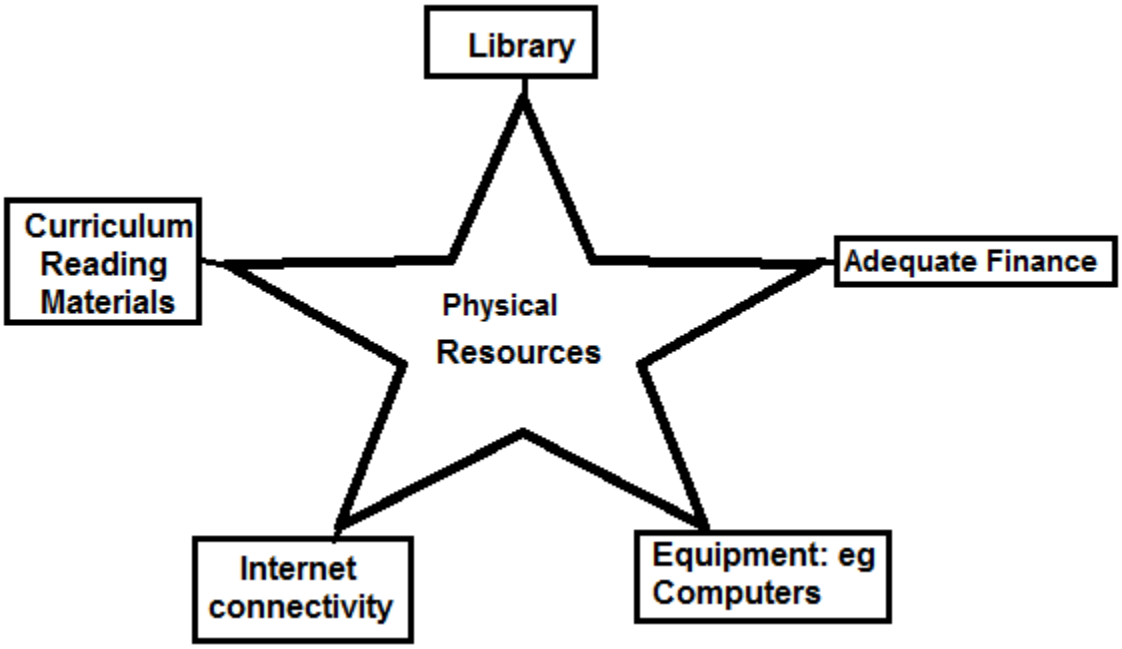


Figure 6.2: Minimum requirements of physical resources for NCDC.

In chapter 3 (figure 3.1), I discussed the Eight-point Template model for evaluating the quality of programmes in higher educational institutions. Eight-point Template Model is adapted from Levine's (2006) Nine-point Template Model I used in Nhlapo (2012). In this model, one of the templates is finances. Levine (2006) claims that in order for a high educational institution to have

quality programmes, there should be adequate resources to support educational activities. Using this information and the one on table 3.2 in chapter 3 together with data from interviews and document analysis as mentioned above, I have designed a diagram indicating the minimum resources required by NCDC to assist curriculum specialists to design and develop a quality curriculum. No matter how highly qualified curriculum specialists are in the curriculum field, if they do not have resources and tools to work with, the quality of their work will be negatively affected. It is not surprising that they were "not meeting deadlines and were doing a bad job", which was the justification used to engage foreign consultants. The proof is that the very consultants who were engaged, had to bring reading materials to curriculum specialists to read about other countries' curriculum models. This is where they were able to recognize and appreciate the Jamaican curriculum model that used "windows of opportunities".

6.3.2 Qualifications of foreign consultants

In Chapter 5, I discussed the evaluation of tenders under 'quality and cost-based method' to determine the calibre of foreign consultants engaged. There were two consultants available to participate in this study who were doing curriculum design consultancy at the time of this research. The method of selection used is Quality and Cost-Based (World Bank, 2011) which is based on the quality of consultants and cost of consultancy. The technical evaluation of quality is based on the qualifications and experience of consultants. This is the evaluation that gives the quality of consultants engaged to assist curriculum specialists on their job of designing and developing a curriculum for Lesotho. As discussed in the previous chapter, both consultants were evaluated using the criteria for evaluation of consultants outlined by the World Bank (World Bank, 2011, p. 75). The two consultants were checked whether they meet three (3) qualities of general qualifications, adequacy for assignment and experience in the region and language (World Bank, 2011, p.75). Table 7.1 below summarises the results as discussed in chapter 5:

Table 6.1: Qualities of foreign consultants

Criteria	Conformation to the criterion	Explanation
General qualifications: -The total duration of professional activity, -level of education and training, positions held by the candidate, -experience in the region where the assignment is to be carried out.	Both consultants conform to the specifications in this criterion	They both have vast experience in working in African countries and have developed educational programmes before. They also both hold PhD degrees
Adequacy for the Assignment -Education, training, and experience in the specific sector, field, subject directly relevant to the assignment and the proposed position. -This is a critical factor and should be given the highest weight among the three sub-criteria.	Both consultants fail when judged against this criterion.	Both consultants are not qualified for the assignment as they are not curriculum specialists. Consultant 1 has PhD in Education and MSc in Social Anthropology and consultant 2 has PhD in Education Linguistics and MA in Human Resource Management and Applied Linguistics.
Experience in the Region and Language. -Knowledge of national or local conditions, culture, administrative systems, and government organizations, -Ability to communicate in the national language.	Both foreign consultants fail to conform to this criterion.	Data shows that the major challenge facing these foreign consultants was lack of context knowledge of the country.

Table 6.1 shows that both consultants were not qualified for the assignment as they obtained one third of the requirements. That is, they only have high education and training but their training is not on curriculum. The other limitation is on the context of the country. In the previous chapter, under procurement procedures on evaluation of tender documents, an interrogation of consultants' compliance of experience in the region and language shows that both consultants lack experience on the context of Lesotho, background knowledge, culture and beliefs of Basotho people. According to data, this was the main limitation observed by curriculum specialists on consultants.

Context is one of the most important factors that affect quality of curriculum design negatively. Amin & Ramrathan (2009) argue that context is a dominant influence on the acquisition of professional performances, beliefs, and practices. Hence, they suggest that conceptual notions of contextual diversity should envelop a re-articulated programme.

Even though Bhabha (1994) claims that hybridity or luminal space in which cultural differences articulate and produce imagined constructions of cultural and national identity, the purpose of engagement of consultants in Lesotho curriculum design was not to integrate them into the Lesotho curriculum design system. CCFNRC (2010, p.24) declares that consultants are not employees but are independent private experts. These people are not interested in becoming part of Basotho and are not interested in the knowledge of the context or culture of Basotho but to do the job, get money and move out. Unfortunately, they bring with them, behaviours, values, ideals and life-styles which can influence various subgroups and subcultures reflected in the complex society of NCDC (Sighn (2007, p.62). This is possible because, by the virtue of their authority, consultants are people in positions to have some influence over an individual, a group, or an organisation (CCFNRC, 2010, p.24).

Mosisidi (1981 p 64) recommends that Lesotho should not take any offers to involve teams of non-nationals in curriculum planning, development and implementation**.** If this continues, the Lesotho curriculum will continually be irrelevant because no one can effectively develop a relevant curriculum without first understanding the child, how he/she learns and interacts with a given environment (Muzvidziwa & Seotsanyana, 2002; Mosisidi, 1981, p.53). The foreign consultants do not know the culture of the Basotho and they come with different ideologies from those of Lesotho. Mosisidi (1981, p.64) observes that "the importation of large numbers of expatriate 'experts' to plan and implement curriculum development" has left a trail of bewilderment and confusion in its wake. This would not have been the case if the implementation of the education policy were adhered to. The Lesotho education policy (2005 p.26) declares, "Reforms of the curriculum at all levels of schooling and training shall be part of quality improvement and the strengthening of developmental relevance of the education system." Obviously, the engagement of foreign consultants is not in support of this policy.

The puzzle is why then were they selected? Were they selected only because of their high level of education and training as both have got PhD degrees? Anecdotal knowledge shows that there are curriculum experts in the country who hold PhDs from the university and teacher colleges in the country who could have been selected for the assignment. Besides, World Bank (2011) maintains that one of the main reasons for engaging consultants is "the Bank's interest in encouraging the development and use of national consultants in its developing member countries." But in this case, this condition is not observed; instead foreign consultants who do not even meet the specifications are engaged by NCDC.

What explanation can then be given to the engagement of unqualified consultants while there are better qualified local candidates? The answer from data for this question particularly from Director-NCDC and curriculum specialist 4 is that local experts lack experience. I have already discussed this issue in sub-section 6.3.1.1.

But the other possibility is what I discussed in chapter 1 about the "ruling class". I highlighted that this is an elite class of civil servants and teachers brought up in a colonial environment of academic curriculum to serve the colonizers' interests (Ansell, 2002; Iutta, 2011). They support a colonial type of education, an elitist education system driven by individualistic interest and the needs of a small but powerful minority, whatever ideology or academia might dictate (Ansell, 2002, p.104; Muzvidziwa & Seotsanyana, 2002). These are the people who are now in power in most African countries. They make decisions about the type of educational reform to be designed and by whom. Consequently, they always look to their colonial masters for assistance in the form of foreign consultants. Shalin (1992) argues that the ruling class has power to protect its particularistic interests, and it is naive to believe that they would bow to the voice of universal reason and agree to yield its power peacefully. According to Ngugi Wa Thiongo, colonial education makes them see their past as one wasteland of non-achievement and makes them want to distance themselves from that wasteland (Ngugi, 1994). This might explain the choice of foreign consultants over the local consultants.

6.3.3 Performance of foreign consultants

Consultants were given specifications from terms of reference in what to do. The responses from the interviews with consultants and analysis of their terms of reference were triangulated. The following results were established:

6.3.3.1 Training curriculum specialist

There was no need for foreign consultants to training specialists

"At one stage I asked myself a question when this child (consultant) was teaching (training) us, that do we really need these things this child is telling us? The problem is that we are clear that we don't need them but we don't have the confidence to stand on our own" (Curriculum specialist 4).

Consultants claim to have trained curriculum specialists on the formulation of learning outcomes and assessment criteria; and the integrated curriculum. They also claim to have helped curriculum specialists with presenting, organising and structuring the integrated curriculum; provided reading materials; helping with materials from the internet; and providing vision for the country.

a) Formulation of learning outcomes and assessment criteria and the relationship between them.

The work of a curriculum specialist is to design and develop the curriculum. They are employed because they know "how to formulate learning outcomes" and "how to formulate assessment criteria". One of the main duties stated in an advert recruiting curriculum specialists is to "develop Learning Outcomes, Learning Experiences, Assessment criteria and Teacher's Guides" (Appendix E; NCDC, 2010). Therefore, if the job advertisement and job description for curriculum specialists says they should be able to formulate learning outcomes and assessment criteria and they are able to do them, which means NCDC may have employed the wrong people. The training on formulation of learning outcomes and assessment criteria should be done in the universities not by the consultant.

b) Training on integrated curriculum.

According to the terms of reference (TORs) for consultants, consultants are tasked to train curriculum specialists on the integrated curriculum. But curriculum specialists have developed the curriculum and assessment policy framework (2009) which is informing the very integrated basic education curriculum. The idea of an integrated curriculum emanates from the curriculum and assessment policy framework which they developed without the assistance of consultants.

Besides, the training item was included in both assignments of consultant 2. The logic says, if training was done in the first assignment (development of Grades 1-3 integrated curriculum), then training on the same issue would not be needed for the second (development of Grades 4 & 5 integrated curriculum).

c) Presenting, organising and structuring the integrated curriculum

The analysis of the integrated primary curriculum Grade 4 shows that there is not much different structural organisation from standard 4 primary school science syllabus. As discussed in chapter 5, they both have two parts which are preliminary information and syllabus matrix. The preliminary pages provide information to the teacher about how to use the syllabus. The difference in the matrix is that the number of periods in the old standard 4 primary science syllabus is replaced by assessment. If curriculum specialists were using the old syllabus as a template to develop the integrated curriculum, this change did not require the assistance of a consultant.

6.3.3.2 Providing resources for the country

a) Providing reading materials

A country does not need a consultant to provide her with reading materials. Any curriculum institution should have a library with current curriculum texts of all kind. The procurement of reading materials would be easier than that of engaging consultants to come and provide reading materials.

b) Surfing internet for curriculum information

Curriculum specialists would not have any challenge of using computers and to surf the internet as they have used them in the universities during undergraduate and post-graduate studies. The only problem is the availability of the equipment including software and internet connectivity.

In chapter 2, I discussed some pointers that can assist the client to consider before engaging a consultant. One of them was "Could someone from a sister, trade, or government organisation help instead? What about someone from a university or college" (CCFNRC, 2010, p.6)? This is one of the areas in which the NCDC should have solicited help from sister departments such as ECoL, Inspectorate to show them how to surf the internet rather than engaging the consultant.

c) Providing vision for the country

Consultant 2 made the following claim to have helped the country with the vision:

"... just recently in Grade 5, I helped people to reflect on where they are going in a long run because it is very strategic, when designing a curriculum, it has to have a vision of a long term, what the long term plan is, where we want to get to and how to get there. So I helped them to think how the whole institution will reflect on that and it is a reflection that is going sector wise, and they really had to engage in that section."

Already mentioned a number of times, curriculum specialists designed and developed the curriculum and assessment policy framework (MOET, 2009) informing this integrated basic education curriculum, of which the integrated primary curriculum Grade 4 is a subset and the implementation of the policy framework. Curriculum and assessment policy framework provides a vision for Lesotho education. Therefore, there was no need for a consultant to provide the vision for the integrated primary curriculum Grade 5 syllabus.

6.3.3.3 Value added by consultants to Lesotho curriculum design

a) Consultants' terms of reference against specialists' job description

Consultants were engaged to assist curriculum specialists to design the curriculum. The analysis of roles and responsibilities of curriculum specialists against the terms of reference for consultants in chapter 5, table 5.2, reveals that all the work consultants were doing, was exactly the same as that of curriculum specialists except the consultancy exit report. To explain this further, I present the expected deliverables of consultants as specified in the TORs for both assignments (NCDC, 2011; NCDC, 2013) below. The last column shows how the task is related to the duties of curriculum specialists:

Table 6.2: Expected deliverables of consultants

Source: Terms and reference for consultants and Job descriptions for science curriculum specialists

Expected deliverables (TOR Grade 1-3)	Expected deliverables (TOR Grade 4-5)	Expected deliverables of curriculum specialists (Job description)
Refined curriculum packages for Grade 1 – 3	Refined curriculum packages for Grade 4-5	Design and develop curricular … at all levels of basic and secondary education.
Monitoring and Evaluation tools and systems	Refined instructional materials, specification and evaluation tool.	Prepare instructional materials
Training Plan for Pilot School Teachers Trained NCDC professional staff	Trained NCDC professional staff	Train textbook evaluators. Train Senior Education Officers, Education Officers, District Resource Teachers, pilot school teachers and principals on curriculum reform.
Trained Pilot School Teachers	Progress and exit reports of the consultancy	Train national trainers on curriculum reform. Train personnel from all stakeholder institutions on curriculum reform.

The expected deliverables for foreign consultants and curriculum specialists are almost the same. This means foreign consultants were doing curriculum specialists' work. This is not a surprising outcome because, as per description, foreign consultants were engaged to assist curriculum specialists. The only unfortunate outcome is that the exercise does not seem to be economically

sensible since two groups of people are paid to do one job. To remedy the situation, there are two options, either:

- The curriculum of Lesotho is designed and developed by foreign consultants and the idea of curriculum specialists be phased out. After the consultants have finished curriculum design, the inspectors can do the work of curriculum monitoring;
- The government should employ well qualified curriculum specialists and curriculum specialists should be capacitated in such a way that they will be able to perform tasks of curriculum design and development without the assistance of foreign consultants.

b) Value added by consultants to the curriculum

(i) Structural organisation of curriculum

One of the challenges of curriculum specialists in designing and developing the curriculum of Lesotho was to organise the integrated primary curriculum. The curriculum specialists admitted that they were unable to interpret the curriculum and assessment policy framework in terms of organising the integrated primary curriculum and this is one of the problems that led to the engagement of foreign consultants.

Consultant 2 claims to have assisted curriculum specialists to organise and structure the new integrated primary curriculum Grade 4. The comparison of the two curricula (Old standard 4 science syllabus and new Grade 4 integrated curriculum) shows that the structuring of the new integrated primary curriculum Grade 4 did not really require the assistance of a consultant. As I have discussed these in chapter 5, section 5.7.3, Table 7.3 below illustrates similarities and differences between the primary science syllabus standard 4 and the integrated primary curriculum Grade 4.

Table 6.3: Structural Organisation of primary syllabus Standard 4 and integrated primary curriculum Grade 4

Source: Primary syllabus - standard 4 and Integrated Curriculum Grade 4

Characteristics	Primary syllabus (science) Standard 4	Integrated primary curriculum Grade 4
Organisation	Subjects	Learning areas, curriculum aspects, core competencies and units.
Learning outcomes	Learning outcomes address the subject eg identify objects using sense of touch	Some learning outcomes address life experience eg *Demonstrate ways of taking care of sense organs.* Other learning outcomes address subject eg *Identify three food groups and their functions.*
Matrix (similar)	Learning outcomes are objective Learning outcome, concepts/skills/attitudes, suggested activities, resources.	Learning outcomes are both objective and subjective Learning outcomes, concepts/skills/values/attitudes, suggested learning experiences, suggested resources.
Matrix (difference)	Have suggested number of "Periods", but no column on "what to assess"	Have "What to assess", but no column on suggested number of "periods"

There is not much difference in structural organisation of the standard 4 primary science syllabus and the integrated primary curriculum Grade 4. The differences and similarities are shown in table 6.3. There are not any special additions and value that would require the services of a foreign consultant. The differences can be viewed as improvements on the structure of the old primary syllabus. These could have been done by the curriculum specialists especially since the changes are given in the curriculum and assessment policy framework (MOET, 2009).

(ii) Organisation of learning outcomes in both curricula

As mentioned earlier, consultants claim to have trained curriculum specialists on formulating learning outcomes and assessment criteria. A more detailed comparison on learning outcomes of both curricula follows. This is inspired by the fact that the curriculum and assessment policy framework describes the new integrated primary curriculum as more contextually relevant and linking it with real life problems (MOET, 2009). The researcher decided to use learning outcomes in both documents as learning outcomes show the type of product that will be produced by the curriculum. This is because when teachers teach, they use learning outcomes to

develop instructional packages. Similarly, when assessors set examinations, they use learning outcomes. I selected learning outcomes in the standard 4 primary science syllabus from the science topic called "senses". Those in the second column of table 6.4 are for the integrated primary curriculum Grade 4 and are science related learning outcomes selected from "unit 2: Health and Safety" since there were very few learning outcomes that are related to science in unit1.

Table 6.4: Comparison of learning outcomes of primary syllabus Standard 4 with integrated primary curriculum Grade 4 (My health and safety)

Primary syllabus (science) Standard 4	**Integrated primary curriculum Grade 4 –** (Unit 2: My Health and Safety)
Identify objects using sense of sight Identify objects using sense of hearing Identify objects using sense of touch Identify substances that have repulsive and those that have pleasant smells Identify different areas of a tongue for different tastes Identify some objects with the use of more than one sense	-Demonstrate ways of taking care of sense organs. -Explain the importance of keeping their sexual parts clean. -Protect oneself from sexual abuse. -Design warning signs that prevent injuries at school and in the village. TG -Identify causes of accidents at school and how they can be prevented. TG -Demonstrate the hygienic methods of handling food.TG -State the effects of natural hazards on people's lives. TG

As stated in the curriculum and assessment policy framework (2009), the standard 4 primary science syllabus is "compartmentalised subject-based" employing teacher-dominated teaching methods. This can be observed in the learning outcomes. Similarly, the analysis of learning outcomes shows that the integrated primary curriculum Grade 4 learning outcomes are also organised into discrete subjects rather than dissolving subject boundaries (Raselimo and Mahao, 2015). They portray an observable combination of discrete elements from different subjects and some of them requesting learners to acquire knowledge rather than to produce knowledge. For example, "state the effects of natural hazards on people's lives, identify causes of accidents at school".

In the integrated curriculum of Grade 4, curriculum specialists, with the assistance from foreign consultants, have used action verbs that look for knowledge acquisition rather than the learner-centred epistemologies advocated by the policy framework. This is one of the threats prophesied by Raselimo and Mahao (2015 p.7) that the contradiction in the use of language may confuse curriculum developers "in designing teaching and learning programmes such that it poses a threat for successful implementation of the policy at the level of classroom practice". This could be viewed as a weakness of the policy framework rather than the consultant's weakness since the consultant was assisting the specialists to interpret and implement the policy.

6.4 POSSIBLE AREAS FOR FUTURE RESEARCH

There are many possibilities for further research especially on the implementation of the new integrated curriculum in Lesotho. But I will only discuss five aspects closely related to this study.

Firstly, is that the methods of this study can be extended to include subjects other than science. The one with the most interest would be the investigation of differences and similarities between the old primary school curriculum and integrated primary curriculum focusing on the subjects that are treated as "windows of opportunities" in the new integrated curriculum. These are Mathematics, Sesotho and English subjects. This is because their curricula were designed differently from other subjects as they were not integrated but designed as individual subjects.

Secondly, the same methods can be extended to other levels or Grades as this study focused only in Grade 4. According to the Curriculum and Assessment Policy Framework (MOET, 2009), the feature of the new integrated curriculum is such that, the subjects should emerge moving up the Grades. Therefore, the expectation in the curriculum is that in lower Grades (1-4), the curriculum should be more integrated. This is where the curriculum is presented in units: unit 1 is "About myself"; unit 2 is "My Health and Safety"; unit 3 is "Understanding and Sustaining the Environment" and Unit 4 is "Survival and Self Reliance". This is where all subjects (except windows of opportunities) are supposed to be merged into one. On the other hand, the Grade 5 integrated curriculum is expected to take a different format where instead of units, the curriculum presentation would be

in ‘learning areas’. In this case related subjects are grouped together to form one learning area. Therefore, it would be beneficial if all these different levels of the integrated curriculum could be explored to inform further innovations.

Thirdly, the fact that this is a new curriculum with new features in which the curriculum specialists had difficulty in developing so much that they even requested the assistance of foreign consultants, it is given that teachers’ readiness and preparedness are not certain. This is because teacher training colleges and universities use the curriculum of the country to develop educational modules to prepare teachers. Therefore, other possibilities of further studies could be investigating implementation of the integrated primary curriculum in different levels. This includes, exploring the experiences of teachers on the implementation of the integrated curriculum and also, to investigate teachers’ attitudes and perceptions on the new integrated curriculum since they have been using the old subject-based curriculum that advocates for teacher-directed activities for so long (MOET, 2009; Raselimo & Mahao, 2015). Again, the new integrated curriculum demands a collegial environment in schools, where teachers can freely consult across subjects but teachers are not trained to handle this type of approach (Raselimo, 2010).

Fourthly, as quality teaching and learning in schools is dependent on the quality of the curriculum designed and developed, there is need to research and document how the link between schools and the Ministry of Education and Training (MOET) could be effectively forged. It is important that schools feel part of the curriculum and assessment process.

Lastly, it would be a worthwhile research to investigate whether the consultant would still be involved in the implementation stage and how the curriculum developed with the assistance of a foreign consultant is performing in schools. These are the gaps that other researchers could scrutinize in future.

6.5 SIGNIFICANCE OF MY RESEARCH

This study provides new insights into the processes of curriculum innovation. Lessons learned from the findings of this study can inform curriculum integration in the context of Lesotho where there is scarcity of research on the involvement of foreign consultants in design and development of the curriculum in Lesotho education. The failure to consider the sociocultural and educational contexts in Lesotho can result in lack of quality in the curriculum because, there are factors deeply rooted in the culture of society and history of both informal and formal education which can externally influence curriculum reform. Therefore, in order for the new ideas to work, these factors need to be co-constructed over time between local educational practitioners and foreign consultants.

This study makes a contribution to an understanding of the complex nature of curriculum reform particularly in the context of Africa, especially Lesotho. It also shed light on how the power and control of dominant groups like the colonizers can influence the education system through the use of the "ruling class" and the donor agencies (Raselimo, 2010; Singh, 2007) and as a result, undermining the global curriculum discourses.

6.6 RECOMMENDATIONS

6.6.1 Professional staff development at NCDC

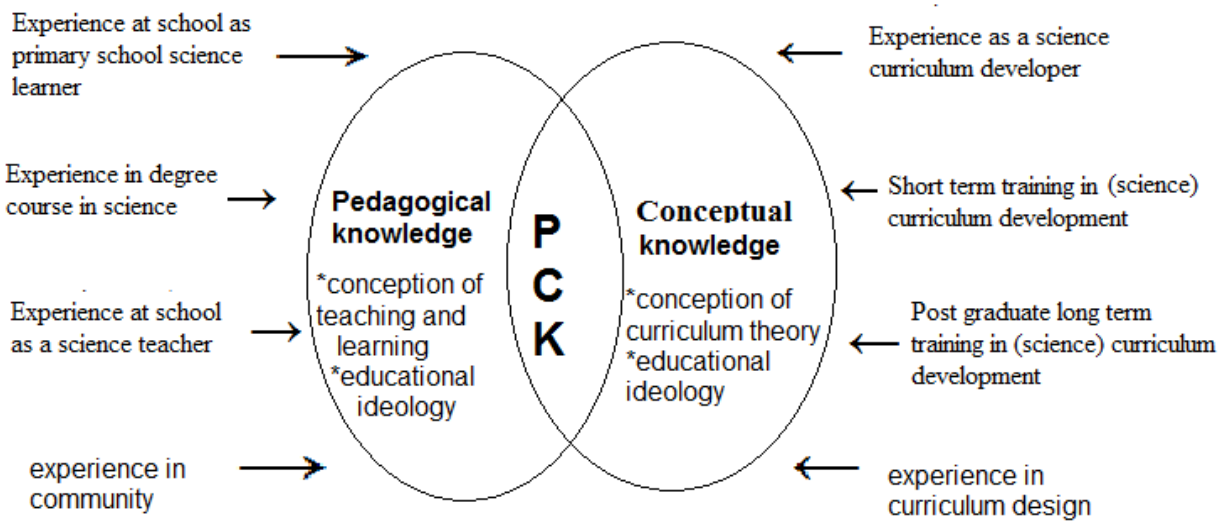
6.6.1.1 On the job training

Data reveals that curriculum specialists were not provided with adequate training and the company employed less qualified candidates. As this was confessed by Director-NCDC that *"This used to be the common practice of the Centre (NCDC) to give people short term training and long training, but this has stopped for many years now."* Therefore**,** if the government of Lesotho is interested in improving the quality of education in the country, it needs to invest in quality curriculum design and development. To do this, the country needs to improve conditions in the National Curriculum Development Centre to attract and employ highly qualified curriculum specialists and train them on the job to assist them to produce quality curriculum programmes at national, school, and classroom levels.

6.6.1.2 Employing qualified candidates

The NCDC should employ eligible candidates according to the specifications outlined in the advertisement of curriculum specialists (Appendix E; NCDC, 2010). According to NCDC (2010), it seems the company is aware of the caliber of employees required at NCDC. I have already discussed the quality of curriculum specialists required in chapter 2, but to remind the reader, I have copied figure 2.2 below and renamed it figure 6.3:

Figure 6.3: Model of Primary School Science Curriculum Specialists' Professional Development



Source: Martin (2008, p.22)

As shown in figure 6.3, the Curriculum Development Centre should employ curriculum specialists with experience:

- At school as a learner – who has gone through Lesotho education system as a pupil;
- In degree course – who has studied educational courses at degree level;
- At school as a teacher – who has taught primary school science in schools;
- In community – who knows the language and background of Basotho;
- As a curriculum developer – who has developed curriculum at some level either university or college modules, school level or national level;

- In short courses – who has attended courses on curriculum design and development;
- In post graduate long term courses – who has a post-graduate degree, either Masters' or PhD degrees;
- In curriculum design – who has been involved in designing educational programmes.

6.6.2 Experience of specialists in curriculum

6.6.2.1 Involvement in curriculum activities

Curriculum specialists should be involved in curriculum activities such as curriculum conferences and writing and publishing articles to share curriculum experiences of Lesotho with the whole world.

6.6.2.2 Handling all phases of curriculum development

Curriculum specialists should be involved in the whole process of curriculum development, that is, design and development, dissemination, implementation and evaluation. At the moment, curriculum specialists are only involved in the first two phases, which are design and development, and dissemination. The monitoring of implementation is done by another department (Inspectorate) and evaluation by the Examinations Council of Lesotho (ECol). These means curriculum specialists lack first-hand information about what is happening in schools regarding the curriculum and do not have immediate access to results of evaluation.

6.6.2.3 Study tours

Curriculum specialists should not only read about curriculum systems of other countries, but should be granted the opportunity to visit other curriculum development centres through study tours. This will enable them to experience the curriculum systems and discuss in detail with all spheres of people involved.

6.6.2.4 Provision of adequate physical resources

There should be provision, maintenance, monitoring/inspection and regular inventory of physical resources. Resources include space (offices and furniture), equipment (computers with up-to-date hardware and software), fast internet connections, libraries (with curriculum and assessment literature) and adequate finance to replace and buy new resources.

6.6.3 Framework of epistemological requirements for primary science curriculum specialists

The lessons learned from this study point to the need for primary science curriculum specialists' professional development programmes in Lesotho in order to deal with curriculum design barriers. This may result in improvement of both knowledge of curriculum and science. The comprehensive knowledge of these areas will develop confidence in science curriculum specialists in doing their jobs. As a summary of the abovementioned recommendations and also, basing myself on the work of Shulman (1987), Barnett (1992), Pinar (2004) and Martin (2008), as reviewed in the literature chapter, I propose a curriculum specialist epistemological improvement framework. Boaduo (2005) observes that Ministry of education (MOE) has not implemented most of the recommendations proposed by the various commissions, assuming that this will be one of the very few that will be implemented, there is high possibility that most of the curriculum design will be done by local curriculum specialists. Foreign consultants will be engaged only on areas that really need their expertise. I suppose that the framework will help primary science curriculum specialists with epistemological confidence to belief in their abilities and hence appreciate assistance from donor consultants. Figure 6.4 is a diagrammatic representation of this framework.

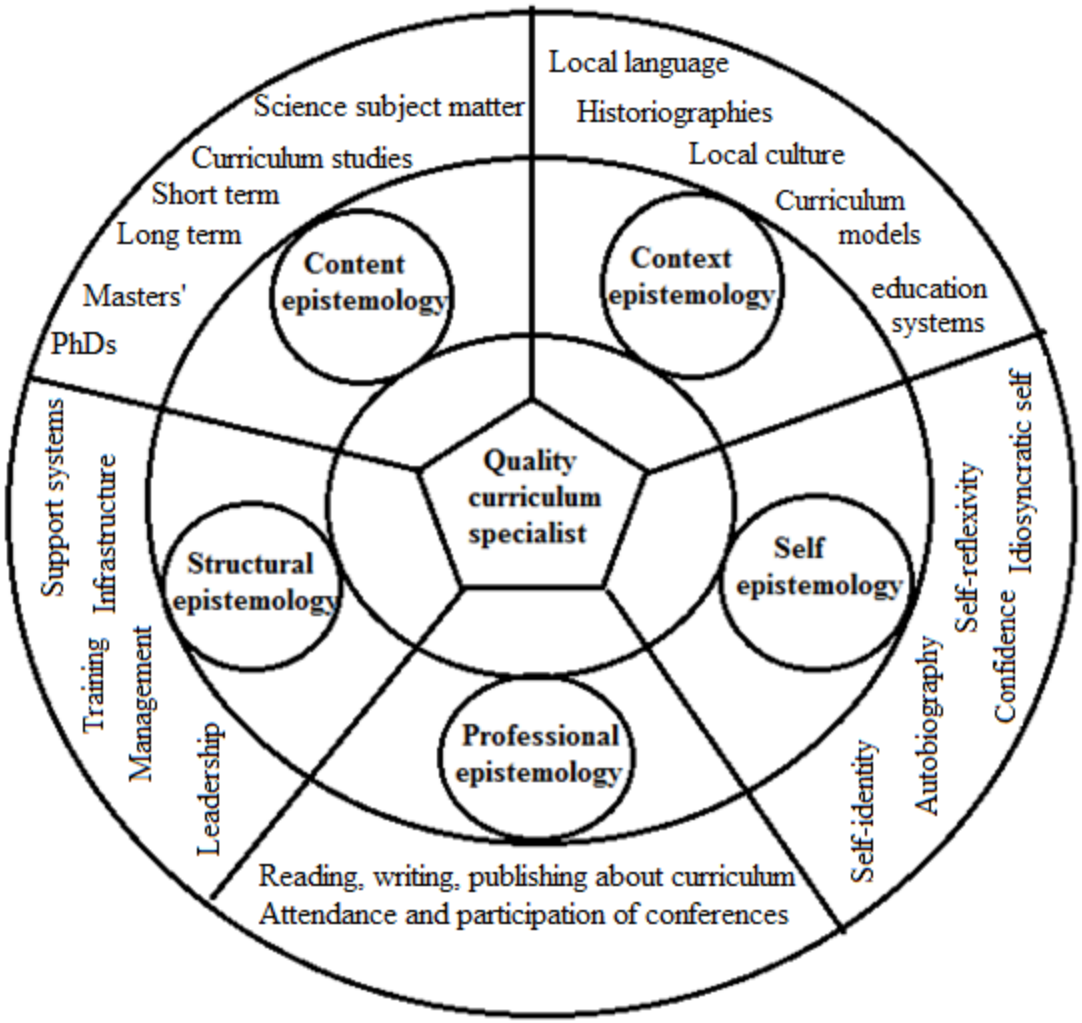


Figure 6.4: Framework of Epistemological requirements for Curriculum specialists

Source: Barnett (1992)

As shown in Figure 6.4, the curriculum specialist is at the intersection of the five (5) areas of epistemology. **Content epistemology** entails knowledge of primary science subject matter and the knowledge of curriculum design and development. This is the type of knowledge I referred to, in this study, as adequacy for assignment. This knowledge is crucial for employment and performance of the primary school science curriculum specialist. It is mostly obtained prior employment through long term courses in different levels of Bed degrees, Masters' and PhDs. The knowledge can also be acquired through short term courses once the science curriculum specialist is on the job to supplement some of the skills and competencies.

The second is **context epistemology** which involves knowledge of local language and language of instruction in teaching and learning. Curriculum specialists need to be acquainted with the culture of the country to enable them to design primary school curriculum relevant to the children of Lesotho. As curriculum specialists need to compare different educational systems of various countries, they also should acquire the historiographies of a number of countries. This type of knowledge is basically acquired through experience not reading or studying. A curriculum specialist who has gone through Lesotho education system as a pupil; who has taught in Lesotho schools and lived in the community with the Basotho nation for at least five years, has a more context knowledge of Lesotho compared to anyone who has not.

Professional epistemology constitutes attitudes and competencies. Curriculum specialists need certain attitudes to acquire this knowledge. These include intrinsic motivation, love for curriculum and science, and love for the job. These attitudes will drive them into competencies of reading more about curriculum, writing and publishing journal articles on curriculum innovations and participation and attendance of conferences related to curriculum.

Structural epistemology is about support systems to help curriculum specialists to perform their work better. These include resources and infrastructure, leadership and management, and welfare of employees.

Lastly, **self-epistemology** focuses on the knowledge of self. This is what Pinar (1975, p.14) refers to as the knowledge of individual apparently idiosyncratic self. This consists of self-reflection, self-reflexivity, self-actualization, currere, autobiography and self-identity.

6.7 LIMITATIONS OF THE STUDY

The data that was collected in the document analysis focused only on Grade 4. The documents I had planned to analyse include textbooks for Grades 4 and 5, integrated curriculum Grade 5 and teachers' guides to both integrated curriculum and textbooks for Grades 4 and 5. All these materials had not been developed at the time of this study.

This has influenced the data collection process because the textbooks document analysis had to be abandoned completely. Focus was therefore only placed on syllabuses but also, the analysis that was already made on the old primary school science syllabus standard 5 had to be abandoned also since there was no integrated curriculum Grade 5 to compare it with.

The unavailability of these documents had also influenced data analysis in this study. The researcher had planned to evaluate the content of the textbooks against the science statements in the Integrated Curriculum Grade 4 and Grade 5. This was going to be done to identify if there are instances of error or oversimplification or complexity or misconceptions". Although this exercise would have been essential in this study, its effect on the study outcome should not be overemphasized since, as Khine (2013) argues, the content analysis of textbooks is focusing on quality of textbook not the curriculum since textbooks are written for the curriculum not the other way round.

The impact of this limitation to the study is that the researcher had to draw conclusion about the quality (or lack) of curriculum developed with the assistance of foreign consultants based only on the information from the comparison of old primary school science syllabus standard 4 with the integrated curriculum Grade 4 in terms of document analysis.

Also, the data from interviews from the Chief Education Office for Curriculum and Assessment Services (CEO-CAS) was not collected. This is because the CEO-CAS declined to attend the interviews and I had no one to replace her with as she is the only one in the office (see Appendix C for stamped interview schedule). She is the only one directly responsible for the National Curriculum Development Centre (NCDC), the overseer and the decision maker over activities and processes taking place at NCDC. She is the liaison between NCDC and the government (political positions).

Furthermore, the data from interviews with foreign consultants focused on only two consultants. One of them was selected through a quality and cost-based selection procedure and the other one was not selected but assigned by the donor agency. These were the only consultants that were available and were in the country busy with curriculum consultancy at the time of the data

collection period. Although the participants on the part of consultants were few, I think the data collected was comprehensive enough to draw valuable conclusions.

The fact that the researcher is investigating the issues that affect him directly might have impact on the outcomes of the study. The focus of this study is an assessment of the issue of foreign consultants' involvement in designing the Lesotho primary school Grade 4 science curriculum and the researcher is currently (at the time of this study) a primary school science curriculum specialist. This biasness might have favoured the outcomes or exposed the study to disservice.

Lastly, it might be difficult for the reader to identify the focus and the case study of this research due to the complex way NCDC operates. The case study is science curriculum unit within the NCDC of MOET, focusing on the primary school science curriculum Grade 4. The challenge is that each subject does not design its curriculum independently but the old primary school curriculum is partly integrated since it is developed in levels. Level 1 is standard 1, 2 and 3; level 2 is standard 4 & 5 and the third level is standard 6 & 7. In all these levels, the subjects are discretely combined in a single curriculum. For example, the design of standard 4 curriculum is done at the same time for all primary school subjects. This is also done by the whole curriculum development centre. That is, there is no other activity besides the development of primary school curriculum. Again, each unit is expected to report and defend their design which may compromise the scientific concepts for uniformity.

6.8 CONCLUSION

This chapter has reflected on the models of quality measurement and theories used in the study. I have summarized how the study was conducted and outlined the key findings in the research, providing answers to the three research questions described in chapter 1. The study reveals that lack of knowledge of curriculum design and development by curriculum specialists forced the government of Lesotho, through the Ministry of education and training, to engage consultants to assist them in doing their job. The lack of knowledge of curriculum design and development came about as a result of lack of training and experience in curriculum matters by curriculum specialists. This came as a result of the National Curriculum Development Centre (NCDC) abandoning the training of newly employed curriculum specialists while employing less

qualified applicants as they were not able to recruit experts in the curriculum field. Also, curriculum specialists do not involve themselves in curriculum matters both locally and globally, as they resort to being office-bearers instead of being researchers due to lack of certification.

REFERENCES

Aikenhead, G. (2001). Integrating Western and Aboriginal Sciences: Cross-Cultural Science Teaching. *Research in Science Education,* 31(3), 337-355.

African institute for Mathematical Science – Next Einstein initiative (AIMS-NEI) (2011). *Curriculum Consultant: Integrated Career Learning at the Masters Level*. Accessed 29th May 2016 from: http://www.sagea.org.za/ktml2/files/AIMSToRCurriculumConsultant.pdf.

Alderson, A. and Martin, M. (2007). Outcomes based education: Where has it come from and where is it going? *Issues in Educational Research,* 17(2), 161-181.

Alexandre, F. (2009). Epistemological awareness and geographical education in Portugal: The practice of newly qualified teachers. *International Research in Geographical and Environmental Education*, *18*(4), 253-259.

Amin, N., & Ramrathan, P. (2009). Preparing students to teach in and for diverse contexts: A learning to teach approach. *Perspectives in Education*, *27*(1), 69-77

Ansell, N. (2002). Secondary education reform in Lesotho and Zimbabwe and the needs of rural girls: Pronouncements, policy and practice. *Comparative Education*, *38*(1), 91-112.

Apple, M. W. (2004). Cultural politics and the text. In J. Ball (Ed.), *Sociology of education* (pp. 77-195). London: Routledge.

Apple, M. W. (1993). *Official knowledge: Democratic education in a conservative age.* New York: Routledge.

Asian Development Bank (ADB). (2013). *Guidelines on the use of consultants by Asian Development Bank and its borrowers.* Mandaluyong City**:** Cataloging-In-Publication Data.

Avenstrup, R. Liang, X. & Nellemann, S. (2004). Kenya, Lesotho, Malawi and Uganda: Universal Primary Education and Poverty Reduction: In *Scaling up poverty reduction: A global learning process and conference* (pp1-29), Shanghai, East Africa: Universal Primary Education and Poverty Reduction.

Babikwa, D. J. (2004). Tensions, contradictions and inconsistencies in community-based environmental education programmes: The role of defective educational theories. *Southern African Journal of Environmental Education*, *21*, 61-80.

Barnett, R. (1992). *Improving higher education: Total quality care.* Buckingham: Open University Press.

Bhabha, H. K. (1994). *The Location of Culture*. London and New York: Routledge

Bhattacharyya, G., Gabriel, J. & Small S. (2002). *Race and Power Global Racism in the twenty-first century.* London & New York: Routledge.

Beane, J. A. (1997). *Curriculum integration: Designing the core for democratic education.* New York: Teachers College Press.

Berg, B. L. (1993). *Case study methods*. Newbury Park, CA: Sage

Berg, B. L. (2007). *Qualitative research methods for social sciences*. Boston: Pearson.

Bernstein, B. (1996). *Pedagogy, symbolic control and identity: Theory, research,*

critique. London: Taylor & Francis.

Bernstein, B. (2000). *Pedagogy, symbolic control and identity: Theory, research, critique* (Revised Ed.). New York: Rowman & Littlefield Publishers.

Black Sea Trade & Development Bank (BSTDB). (2015). *Procurement principles and rules*. Accessed 3rd April, 2016, from: http://www.bstdb.org/about-us/key-documents/Procurement_Principles.pdf.

Boaduo, N. A. (2005). An investigative study of innovation and reform in the education system of the kingdom of Lesotho, *The Journal of African Educational Research*, 5(1), 1-19.

Breault, D.A. & Marshall, J.D. (2010). Definitions of curriculum. In C. Kridel (Ed.), *Encyclopedia of curriculum studies*. London: Sage.

Buchberger, F., Campos, B. P., Kallos, D. & Stephenson, J. (Eds.) (2000). *Green Paper on Teacher Education in Europe: High quality teacher education for high quality education and training.* Umea: TNTEE.

Burton, D., & Bartlett, S. (2005). *Practitioner research for teachers*. London: Paul Chapman Publishing.

Carl, A. E. (2002). *Teacher empowerment through curriculum development: Theory into practice* (2nd ed.). Cape Town: Juta.

Charlie, J. L. (2006). *How children develop social understanding?* Accessed 5 April 2015, from: http://psycnet.apa.org/psycinfo/2006-07153-000.

Carrim, N. (2001). Democratic participation, decentralization and educational reform. In Sayed, Y. & Jansen, J. (Eds) *Implementing education policy: The South African experience. Lansdowne:* University of Cape Town.

Carnoy, M. (1999). *Globalization and education reform: What planners need to know*? Paris: UNESCO.

Chang, E. C. (2006). *An investigation into the thesis/dissertation writing experiences of Mandarin- speaking Masters students in New Zealand*. Unpublished Master's thesis. Christchurch: Lincoln University.

Chisholm, L. (2005). The politics of curriculum review and revision in South Africa in regional context, *Compare, 35(1), 79-100.*

Chisholm, L., & Leyendecker, R. (2008). Curriculum reforms in post-1990s sub-Saharan Africa. *International Journal of Educational Development, 28*(2), 195-205.

Compassion Capital Fund Natural Resource Centre (CCFNRC). (2010). *The working with consultants Guidebook: Strengthening nonprofits.* Washington, D.C: Natural Resources.

Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks: Sage.

Creswell, J. W. (2012). *Educational research: Planning, conducting and evaluating quantitative and qualitative research.* (4th Ed.). Boston, MA: Pearson.

Creswell, J.W. (2014). *Research design: Qualitative and mixed methods approaches. International Student Edition* (4th Ed). London: SAGE Publications.

Creswell, J. W. & Miller, D. L. (2000). Determining Validity in Qualitative Inquiry. *Theory and Practice, 39(3), 124-130.*

Cross, Mungadi & Rouhani (2002) From Policy to Practice: Curriculum reform in South African education. Comparative Education, 38(2), 172-137.

Crouch, H. (1996). *Government and Society in Malaysia*. Ithaca, London: Cornell University

Press.
Cohen, L., Manion, L, & Morrison, K. (2011). *Research methods in education.* (6th Ed.). London: Routledge.
Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6th ed.). London: Routledge.
Cornbleth, C. (1990). *Curriculum in context.* London: Falmer.

Cornbleth, C. (2008). Climates of opinion and curriculum practices. *Journal of Curriculum Studies*, *40*(2), 143-108.
Cullen, J., Joyce, J., Hassall, T., Broadbent, M. (2003), Quality in higher education: From monitoring to management, *Quality Assurance in Education*, 11(1) pp. 5 – 14.
Darling-Hammond, L. (1997). *The right to learn.* San Francisco: Jossey-Bass.

Darling-Hammond, L. (1999). *Teacher quality and student achievement: A review of state policy evidence.* Washington: Stanford University.
Day, C., Hall, C and Whitaker, P. (1998). Developing Leadership in Primary Schools. London: Paul Chapman Publishing Ltd.
Dean, J. (2005). *Communicative capitalism: circulation and the foreclosure of politics.* Accessed 4th April 2013, from: https://commonconf.files.wordpress.com/2010/09/proofs-of-tech-fetish.pdf.
Department of Basic education, (2011). *Curriculum and assessment policy statement Grades 7-9.* Pretoria: Department of Basic Education.
Dolby, N. (2006). Popular Culture and Public Space in Africa: The Possibilities of Cultural Citizenship. *African Studies Review.* 49(3) 31-47.
Examinations Council of Lesotho (ECoL). (2012). *A guide to Continuous Assessment: Implementing the curriculum and assessment policy and improving learning and achievement in Lesotho.* Maseru: Epic Printers
Eisner, E. W. (1992). Curriculum ideologies. In P. W. Jackson (Ed.), *Handbook of research on curriculum* (pp.302-326). New York: Macmillan.
Elliott, J. (2012). Curriculum, pedagogy and educational research: The work of Lawrence Stenhouse. New York: Routledge.
Ferguson, J. (1999). *Decomposing modernity: History and hierarchy after development.* Accessed 23 May 2013, from: http://pweb.sophia.ac.jp/shimokawa/text/ferguson.pdf.
Festinger, D. (2005). *Essentials of research design and methodology*. London: John Wiley & Sons.
Flinders, D. J. and Thornton, S. J. (ed). (2009). *The curriculum studies reader*. (3rd Ed.). New York: RoutledgeFalmer.
Fraenkel, J. R. & Wallen, N. E. (2008). *How to design and evaluate research in education.* New York: McGraw-Hill.
Freire, P. (1970). *Cultural action for freedom.* Cambridge: Harvard educational review

Freire, P. (1990). *Pedagogy of the oppressed.* New York: Continuum.

Fuller, R. G. (1986). *Numerical computations in US undergraduate Physics courses*. Lincoln, Nebraska: IEEE CS and the AIP.
Giroux, H. (1988). *Teachers as intellectuals: Toward a new sociology of curriculum*. South Hadley, MA: Bergin Garvey.

Giroux, H. (1992). *Border crossing: Cultural workers and the politics of education*. London: Routledge.

Government of Lesotho. (2004). *Lesotho Vision 2020*. Morija: Ministry of Finance and Development Planning.
Government of Lesotho (2006). *Poverty Reduction Strategy.* Maseru: Ministry of Planning.

Gustafson & Branch (2004). *The use of traditional instructional systems design models for eLearning. Accessed 20th April 2015, from:* http://www.ub.edu/ntae/dcaamtd/gustafson-branch.
Hamachek, D. E. (1977). Humanistic Psychology: Theoretical philosophical framework and implication for teaching. In D.J. Treffinger, J.K, Davis & R.E. Ripple, *Hand book on Teaching Educational Psychology* (pp. 139-160).
Handel, B., Herrington, A. (2003). Mathematics teachers' beliefs and curriculum reform. *Mathematics Educational Journal*, *15*(1), 59-69.
Harley, K. & Wedekind, V. (2004). Political change, curriculum change and social formation 1990 to 2002. In: L. Chisholm (Ed.). *Changing class, education and event change in post-apartheid South Africa*. Cape Town: HSRC.
Harrison, L.J., Golfeld, E.M. and Moore, T. (2012). *Closing the gap: Early learning programs that promote children's developmental and educational outcomes.* Australian Institute of Health and Welfare.
Henning, E. (2004). *Finding your way in qualitative research*. Pretoria: Van Schaik Publishers.
Hesketh, J. (2004). What can we know from case study research? *Journal of Education*, 33, 103-124.
Holstein, J. A. & Gubrium, J. F. (Eds.) (2008). *Handbook of Constructionist Research,* Journal of Multidisciplinary Evaluation, 5(10), 93-94.
Hox, J.J., & Boeije, H.R. (2005). Data collection, primary vs. secondary. *Encyclopedia of Social Measurement*, 1, pp 593-599.

Huckle, J. (1993). Environmental education and sustainability: A form of critical theory. In J. Fien (Ed.), *Environmental education: A pathway to sustainability* (pp. 43-68). Geelong: Deakin University Press.
Huckle, J. (2002). Towards a critical school geography. In M. Smith (Ed.), *Teaching geography in secondary schools* (pp. 255-265). London: Routledge.
Huynh, M. Q. (2005). Viewing E-learning productivity from the perspective of Habermas cognitive interest's theory. *Journal of Electronic Commerce in Organisations*, *3*(2), 33-45.
International Federation of Consulting Engineers (FIDIC). (2011). *quality based consultant selection guide.* Geneva: International Federation of Consulting Engineers.
Iutta, J. (2011). *Neocolonialism rebranded: How foreign powers keep Africa on its knees.* Retrieved 20 June, 2012, from: http://wardheernews.com/Articles_2011/August/21_africa_joseph.pdf.
Jansen, J. D. (1998). Curriculum reform in South Africa: A critical analysis of outcomes based education. *Cambridge Journal of Education*, *28*(3), 321-33.
Jansen, D. J, (1999). Why Outcomes-based education will fail: An elaboration. In: D. J. Jansen &

P. Christie (Eds.). *Changing curriculum: Studies on outcomes-based education in South Africa* (pp. 145 – 156). Cape Town: Juta.

Jansen, J. D. (2001). Explaining non-change in education reform after apartheid: Political symbolism and the problem of policy implementation. In Y. Sayed & J. Jansen (Eds.), *Implementing education policies: The South African experience* (pp. 271-292). Cape Town: UCT.

Jansen, J. D. (2004). Race and education after 10 years. *Perspectives in Education*, 22(4). 117-128.

Jensen, M. B., Johnson, B., Lorenz, E. and Lundvall, A. L. (2007). Forms of knowledge and modes of innovation. *Research Policy,* 36, 680-693.

Jobo, M., Mokuku, T., & Nketekete, M. (2005). *Curriculum dissemination models in Lesotho: Past, present and future.* Unpublished research report, LEESP-NCDC, Maseru.

Jopo H., Maema M., Ramokoena, M. (2011). *The SACMEQ project in Lesotho: A study of the conditions of schooling and the quality of education.* Maseru: Government Printing.

Kanu, Y. (2011). Re-appropriating traditions in the postcolonial curricular imagination: Postcolonial imaginations. In Y. Kanu (Ed.), *Integrating aboriginal perspectives into the school curriculum: Purposes, possibilities, and challenges* (pp. 204-222). London: University of Toronto Press.

Kanu, K. (2008). Educational needs and barriers for African refugee students in Manitoba, *Canadian Journal of Education,* 31(4), 915-940.

Kassam, L. (2013). *Assessing the contribution of aquaculture to poverty reduction in Ghana*. Unpublished Doctoral dissertation. School of Oriental and African Studies, London.

Kelly, A. V. (1989). *The curriculum theory and practice 3rd ed*. London: Paul Chapman Publishing.

Kelly, A. V. (2009). The curriculum: Theory and practice (6th Ed.). London: SAGE Publications Limited.

Kingsbury, B., Davis, K. E., Fisher, A. and Merry, S. E. (2012). *Governance by Indicators: Global power through quantification and rankings*. London: Oxford University Press.

Kingdom of Lesotho. (1978). *Report on the views and recommendations of the Basotho Nation regarding the future of Education in Lesotho.* Maseru: Ministry of Education.

Kern, D. E., Thomas, P. A. Howard, D. M. and Bass, E. B. (2009). *Curriculum development for medical education: A six-step approach.* Accessed 3rd April, 2016, from: http://www.uc.pt/fmuc/gabineteeducacaomedica/recursoseducare/livro12.

Khine, M.S. (2013), *Critical Analysis of Science Textbooks: Evaluating instructional effectiveness*. Perth: Springer Science and Business Media.

Khoboli, B. C. (2005). *Changes in science teachers' practice of learner-centred education as a result of action research in Lesotho.* Unpublished thesis submitted for the degree of doctor of education. Pietermaritzburg: The University of KwaZulu-Natal.

Kotter, J.P. (2014). *Accelerate: Building strategic agility for a faster-moving world.* California: Harvard Business Review.

Lancaster, C. (2004). *Aid to Africa, so much to do, so little done*. Chicago: University of Chicago Press.

Lankshear, C., & Knobel, M. (2004). *A handbook for teacher research: From design to implementation*. London: Open University.

Laracy, J. (2006). A Systems Theoretic Accident Model Applied to Biodefense: Defense and Security Analysis, 22, 301-310.

Lawler, M. R. (1951). *Role of the consultant in curriculum improvement.* Retrieved on 3rd July 2016 from: http://www.ascd.org/ASCD/pdf/journals/ed_lead/el_195101_lawler.pdf.
Lee, Y. & Chue, S. (2013). The value of fidelity of implementation criteria to evaluate school-based curriculum innovations, *International Journal of Science Education,* 35(15), 2508-2537.
Lesotho Country Report (2000). The EFA assessment: Country Report. Retrieved on 1st June 2016 from http://www2.unesco.org/wef/countryreports/lesotho/rapport 2.html.
Lesotho education policy. (2005). *Kingdom of Lesotho: Education sector strategic plan 2005-2015.* Maseru: Government Printing Unit.
Lesotho Government. (2010). *Lesotho Government Gazette: Education Act, 2010*. Maseru: Government Printing Unit.
Levine, A. (2006). *Educating school teachers. The education schools project.* Retrieved 7 April 2016 from http://www.edschools.org/pdf/.

Le Roux, A. (2014). 'We were not part of apartheid': Rationalisations used by four white pre-service teachers to make sense of race and their own racial identities, *South African Journal of Education,* 34(2), 1-8.
Lotz-Sisitka, H. (2004). *Positioning Southern African environmental education in a changing context*. Howick: Share-Net & Southern African Development Community-Regional Environmental Education Programme.
Lowe, M. (2007). *Beginning research: A guide for foundation degree students*. London: Routledge.
Macdonald, D. (2003). Curriculum change and postmodernism: Is the school-reform movement an anachronism? *Journal of Curriculum Studies*, *35*(2), 139-149.
Maharajh, L. M. (2014). Values! A hot topic. *Anthropologist,* 17(2), 491-500.

Mann, M. E., 2007: Climate over the past two millennia. *Journal of climate*, 35, 111 – 136.

Marczyk, G., DeMatteo, D., & Festinger, D. (2005). *Essentials of research design and methodology*. New Jersey: John Wiley & Sons, Inc.
Marsh, C. J. (1997). *Planning, management & ideology: Key concepts for understanding curriculum.* London: RoutledgeFalmer.

Marsh, C. J., & Willis, G. (2007). *Curriculum: Alternative approaches, ongoing issues* (4th ed). New Jersey: Pearson.
Marsh, C. J. (2009). *Key concepts for understanding curriculum.* (4th ed.). New York: Routledge.

Martin, F. (2008). Knowledge bases for effective: Beginning teachers' development as teachers primary geography. *International Research in Geographical and Environmental Education*, *17*(1), 13-39.
Martin, S.M., and Williams, J.M. (2001). Implementing the Individuals with Disabilities Education Act of 1997: The Consultant's Role. *Journal of Educational and Psychological consultation, 12(1), 59-81*.
Maruatona, T. (1994). Hegemony and the curriculum process: A critique of curriculum development and Implementation in Botswana, *Mosenodi,* 2(2), 15-32.
Matšela, Z. A. (1979). The indigenous education of the Basotho and its implications for

educational development in Lesotho. Unpublished PhD Thesis, Boston, MA: University of Massachusetts.
McKernan, J. (2008). *Curriculum and imagination: Process theory, pedagogy and action research*. London: Routledge.
McLaren, P. (2007). *Life in schools: An introduction to critical pedagogy in the foundations of education*. Boston: Pearson.
McMillan, J. H., & Schumacher, S. (2001). *Research in education*. New York: Longman.

Merriam, S. B. (2002) *Qualitative research in practice*. San Francisco: Jossey-Bass.

Ministry of Education, (1980). *Curriculum Development Policy. Lesotho.* Maseru*:* Kingdom of Lesotho.
Ministry of Education. (1982). The *education sector survey report of the Task Force*. Maseru: Ministry of Education.
Ministry of Education and Training, Lesotho. (2003). *Report of the first national consultative workshop on the formulation of the national policy on teacher education and training.* Maseru: Government Printers.
Ministry of education and training (MOET). (2005). *Lesotho Education Sector Strategic Plan 2005-2015*. Maseru: Government Printers.
Ministry of education and training (MOET), (2008). *Primary syllabus standard 4: Middle primary*. Maseru: Government printers.
Ministry of Education and Training (MOET). (2009). *Curriculum and Assessment Policy*. Maseru: Government Printers.
Ministry of Education and Training (MOET). (2013). *Integrated primary curriculum Grade 4 syllabus.* Maseru: Government Printers.
Ministry of Natural Resources, (2002). *The Lesotho Science and Technology Policy.* Maseru: The Government of Lesotho.
Mogensen, F., & Schnack, K. (2010). The action competence approach and the new discourses of education for sustainable development, competence and quality criteria. *Environmental Education Research, 16*(1), 59-74.
Mokuku, T. (1999). *Education for environmental literacy: Towards participation participatory action research in the secondary school science curriculum in Lesotho*. Unpublished PhD thesis, Rhodes University, Grahamstown.
Mokuku, T, Jobo, M., Raselimo, M., Mathafeng, T., & Stark, K. (2005). Encountering paradigmatic tensions and shifts in environmental education. *Canadian Journal of Environmental Education*, *10,* 157-172.
Mokuku, T., & Mokuku, C. (2004). The role of indigenous knowledge in biodiversity conservation in the Lesotho Highlands: Exploring indigenous epistemology. *Southern African Journal of Environmental Education, 21*, 37-49.
Monaheng, N.K. (2007). *Implementation tensions and challenges in donor funded curriculum projects: A case analysis of environmental education and population education in Lesotho*. Unpublished MED thesis, Rhodes University, Grahamstown.
Morrison, K. (2004). The poverty of curriculum theory: A critique of Wraga and Hlebowitsh, *Journal of Curriculum Studies,* 36 (4), 487-494.
Morojele, P. J. (2009). *Constructions of gender in the context of free primary education: a multi-*

site case study of three schools in Lesotho. Unpublished thesis submitted for the degree of doctor of Philosophy. Pietermaritzburg: the University of KwaZulu-Natal.
Mosisili, P. B. (1981). *A curriculum development process: The Lesotho experience*. Unpublished thesis submitted for the degree of Master's in Education. Bernaby: Simon University.

Motala, S. (2001). Quality and indicators of quality in South African education: A critical appraisal. *International Journal of Educational Development,* 21, 61–78.
Mueller, J. (2009). *What is authentic assessment?* Retrieved, 26 March 2009 from, http://www.eduplace.com.

Munyaradzi, M. (2015), Indigenous knowledge and public education in Sub-Saharan Africa, *Africa Spectrum*, 50(2), 57–71
Muzvidziwa, V. N., & Seotsanyana, M. (2002). *Continuity, change and growth: Lesotho's education system*. Retrieved 15 June, 2012, from: http://radicalpedagogy.icaap.org.
Naidoo, D. (2010). A discursive formation that undermined integration at a historically advantaged school in South Africa. *Perspectives in Education*, 28(2), 19-30.
National Curriculum Development Centre (NCDC). (1993). *NCDC Handbook.* Maseru: NCDC-MOET.
National Curriculum Development Centre (NCDC). (2009). *Roles & Responsibilities of curriculum developers.* Maseru: NCDC-MOET.
National Curriculum Development Centre (NCDC). (2010). *An advert for the senior curriculum specialist-Grade H for Linguistic and Literacy Learning Area*. Maseru: NCDC-MOET.
National Curriculum Development Centre (NCDC). (2011). *Individual consultant to assist Lesotho National Curriculum Development Centre in the development of the curriculum materials for Basic education # Grades 1, 2 and 3.* Accessed, 24th April, 2013 from: http://www.worldbank.org/projects/procurement/noticeoverview?id=OP00007916&lang=en.
National Curriculum Development Centre (NCDC). (2013). *Terms of reference for a consultant to assist NCDC in the development of integrated curriculum materials for basic education – Grades 4 and 5.* Maseru: NCDC-MOET.
Neill, J. (2007). *Qualitative versus quantitative research: Key points in a classic debate.* Retrieved, 20 August 2015, from: http://wilderdom.com/research/QualitativeVersusQuantitativeResearch.html.

Neuman, W. L. (2006). *Social research methods: Qualitative and quantitative approaches* (6th ed.). New York: Pearson International, Inc.
Ngugi, J. (1994). *Decolonising the mind: The politics of language in African literature.* East Nairobi: African Educational Publishers.
Nkoale, L. (2005). Management of subject panels responsible for the formulation of syllabus innovation packages for secondary and high schools in Lesotho. Unpublished PhD thesis, National University of Lesotho, Roma.
Nieuwenhuis, J. (1996). *The development of educational systems in post-colonial Africa: A study of a selected number of African countries*. Pretoria: HSRC.
Nieuwenhuis, J. (2007). Introducing qualitative research. In K. Maree (Ed.). *First steps in research* (4th ed., pp. 46-68). Pretoria: Van Schaik Publishers.
Ngubane, T. C. (2008). *How does globalization affect the professional lives and work of*

office-based educators? A case study of Pinetown district office in KwaZulu-Natal. Unpublished thesis submitted for the degree of Doctor of Education. Pietermaritzburg: The University of KwaZulu-Natal.

Nhlapo, M.D. (2012). *Exploring experiences of the 4th year student teachers on the quality of education received during the four years of initial training at the University of KwaZulu-Natal (UKZN).* Unpublished thesis submitted for the Master's degree of education in curriculum studies. Pietermaritzburg: The University of KwaZulu-Natal.

Nhlapo, M. D. and Sookrajh, R. (2014). Exploring student teachers' experiences of the concept quality education and quality instruction at a South African University. *Anthropologist*, 17(2), 551-568.

Ntoi, L. (2007). *Incorporating technology into Lesotho science curriculum: Investigating the gap between the intended and the implemented curriculum*. Unpublished doctoral thesis, University of Western Cape, Cape Town.

Nwanosike, O. F. and Onyile, L. E. (2011). *Colonialism and education.* 10th January, 2016, from: http://www.hrmars.com/admin/pics/170.pdf.

Northouse, P. G. (2010). *Leadership: Theory and practice* (5th ed.). Thousand Oaks, CA: Sage.

Ornstein, A. C. and Hunkins, F.P. (2004). *Curriculum: Foundations, principles, and issues*. (4th.Ed.). New York: Pearsons.

Ornstein, A. C. and Hunkins, F. P. (2009). *Curriculum foundations, principles and issues.* Boston: Pearson Education, Inc.

O 'Sullivan, M. (2004). The reconceptualisation of learner-centred approaches: A Namibian case study. *International Journal of Educational Development, 24*, 585-602.

Parsons, J. B. & Harding, K. J. (2011). Post-Colonial theory and action research, *Turkish Journal of Qualitative Inquiry,* 2(2), 1-6.

Patton M. Q. (2002). *Qualitative research and evaluation methods* (3rd Ed.). London: Sage.

Petrina, S. (2004). The politics of curriculum and instructional design: Critical problems, projects, units, and modules. *Interchange*, 35(1), 81-126.

Pike, G. R. & Kuh, G. D. (2005). A topology of student engagement for American colleges and Universities. *Research in Higher Education*, 46(2), 185-210.

Pinar, W.F. (1975). *The method of currere*. Washington, D.C.: American Research Association.

Pinar, W. F. (2004). *What is curriculum theory?* London: Lawrence Erlbaum Associates.

Pinar, W.F. (2012). *What is curriculum theory*? (2ndEd.). New York: Routledge.

Pingel, F. (2010). *UNESCO guidebook on textbook research and textbook revision* (2nd ed.). Paris: UNESCO.

Prawat, R. (1992). Teachers' beliefs about teaching and learning: A constructivist perspective. *American Journal of Education, 100*(3), 354-395.

Raselimo, M. G. (2010). *Curriculum reform in Lesotho: exploring the interface between environmental education and geography in selected schools.* Unpublished thesis submitted for the degree of doctor of philosophy (education). Grahamstown: Rhodes University.

Raselimo, M. G. and Mahao, M. (2015). The Lesotho curriculum and assessment policy: Opportunities and threats. *South African Journal of Education, 35(1), 1-12.*

Raven, G. (2006). Methodological reflexivity: Towards evolving methodological frameworks through critical and reflexive deliberations. *Environmental Education Research, 12*(3), 559-569.

Ritchhart, R. (2007). *The seven R's of a quality curriculum.* 18th January 2015, from: *http://www.ronritchhart.com/Papers_files/The%20Seven%20Rs%20reprint%20V3.pdf*.

Richards, L. & Morse, J. M. (2007). *Read me first for a user's guide to qualitative methods.* (2nd ed). Thousand Oaks: SAGE Publications.

Robertson, S. (2007). *Globalisation, education and development: Ideas, actors and dynamics*. Bristol: Department for international development.

Ross, A. (2000). *Curriculum: Construction and critique.* London: Falmer Press.

Samoff, J. (1992). The intellectual/financial complex of foreign aid. *Review of African Political Economy, 53*, 60-87.

Sayed & J. Jansen (Eds.) (2001), *Implementing education policies: The South African experience* (pp.98-109). Cape Town: University of Cape Town.

Sartre, J.P. (2005). *Colonialism and Neocolonialism*. New York, NY: The Taylor & Francis e-Library.

Schiro, M. S. (2008). *Curriculum theory: Conflicting visions and enduring concerns*. California: Sage.

Schiro, M.S. (2013). *Curriculum theory: conflicting visions and enduring concerns.* California: SAGE Publications, Inc.

Silverman, D. (2006*). Interpreting qualitative data: Methods for analysing talk, text and interaction (3rd Ed).* London: Sage.

Singh, L. P. (2007). *Birth and regeneration: The arts and culture curriculum in South Africa (1997-2006).* Unpublished thesis submitted for the degree of doctor of education. Pietermaritzburg: the University of KwaZulu-Natal.

Shizha, E. (2013). Reclaiming our indigenous voices: The problem with postcolonial sub-Saharan African school curriculum, *Journal of Indigenous Social Development*, 2(1), 1-18**.**

Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Education Review, 57*(1), 1-22.

Slattery, P. (2006). *Curriculum development in the postmodern era.* New York: Routledge.

Slavin, P. E. (2007). *Educational research in an age of accountability.* New York: Pearson Education, Inc.

Spreen, C. A. (2004). Appropriating borrowed policies: Outcomes–Based Education in South Africa. In: G. Steiner-Khamsi (Ed.). *The global politics of educational borrowing and lending* (pp 101-113). New York: Teachers College Press.

Smyth, R. (2004). Exploring the usefulness of a conceptual framework as a research tool: A researcher's reflections. *Issues in Educational Research, 14*(2), 167-180.

Smyth, J. (2010). *Critical theory curriculum ideology.* London: Sage Publications, Inc.

Stake, R, E. (2004). *Standards-based and responsive evaluation*. California: Sage Publications, Inc.

Stake, R. E. (2005). Qualitative case study. In N.K. Denzin & Y. S. Lincoln (Eds.), *Strategies of qualitative inquiry* (3rd ed.) (pp. 443-466). London: Sage.

Stenhouse, L. (1980). *Curriculum research and development in action.* London: Heinemann Educational.

Stjetja, M. (2013). *The Case Study Approach: Some Theoretical, Methodological and Applied Considerations.* Edinburgh: DSTO Defense Science and Technology Organisation.

Solomon-Fears, C. (2015). *Fatherhood initiatives: Connecting fathers to their children.* Cambridge, MA: Congressional Research Service.

Surgrue, C. (1997). Change in context: Back to the future. *Lesotho Journal of Teacher Education*, 1(1), 18-36.

Tabulawa, R. (2003). International aid agencies, learner-centred pedagogy and political democratization: A critique. *Comparative Education, 39*(1), 7-26.

Thompson, M. E. (2003). Big question: Does critical theory have any practical value for educational change? *Journal of Educational Change, 4*(2), 189-193.

The United Nations Organisation for Education, Science and Culture (UNESCO). (1990). *World declaration on education for all*. Retrieved 9 May, 2012, from: http://www.unesco.org/education/efa/ed_for_all/background/jomtien_declarations.html

The United Nations Organisation for Education, Science and Culture (UNESCO). (2000). *Science for the twenty-first century: A new commitment*. Paris: UNESCO.

The United Nations Organisation for Education, Science and Culture (UNESCO). (2004). *EFA Global Monitoring Report 2005: Education for all – The quality imperative.* Paris: UNESCO.

The United Nations Organisation for Education, Science and Culture (UNESCO). (2005). *Report by the Director General on the United Nations Decade of Education on Sustainable Development: International implementation scheme and UNESCO's contribution to the implementation of the Decade.* Report no. UNGA 59/237. Paris: UNESCO.

The United Nations Organisation for Education, Science and Culture (UNESCO). (2014). *What makes a quality curriculum*? Retrieved 19 January, 2015, from: http://www.unesco.org/new/en/education/themes/strengthening-education-systems/quality-framework/technical-notes/what-makes-a-quality-curriculum.

Tyler, R. W. (1949). *Basic principles of curriculum and instruction: Chicago:* University of Chicago Press.

UNFPA**.** (1999). *Population and family life education in schools' component. Project document between the government of Lesotho and United Nations Population Fund.* Maseru: UNFPA.

United Nations Development Programme (UNDP). (2005). *Needs assessment for achieving the millennium development goals of Lesotho: Consultants' report.* Pretoria: CSIR.

Varbelow, S. (2012). Instruction, curriculum and society: Iterations based on the ideas of William Doll, *International Journal of Instruction,* 5(1), 87-98.

Wallhead, T. and O'sullivan, M. (2007). A didactic analysis of content development during the peer teaching tasks of a sport education season, *Physical Education and Sport Pedagogy,* 12(3), 225-243.

Wheeldon, J. (2010). Mapping mixed methods research: methods, measures and meaning. *Journal of Mixed Methods Research,* 4(2), 87 – 102.

Wiles, J. (2009). *Leading curriculum development*. California: Corwin Press

Wilks, A; Nyland, B; *Chancellor, B; Elliot, S. (2008). Analysis of Curriculum/Learning Frameworks for the Early Years (Birth to Age 8).* Victoria: The Victorian Curriculum and Assessment Authority.

Wilmot, D. (2009). A critical review of a school-based intervention in Grade 9 human and social sciences at two South African schools. *Journal of Educational Studies, 8*(3), 94-111.

World Bank. (2002). *Consulting services manual: A comprehensive guide to selection of consultants*. Washington, D.C.: The World Bank.

World Bank (2007). *The World Bank Annual Report 2007*. Washington, D.C.: The World Bank

World Bank. (2011). *Guidelines selection and employment of consultants under IBRD loans and IDA credits & grants by World Bank borrowers.* Accessed 24 April, 2015, from: www.worldbank.org/procure.

Yin, R. K. (2009). *Case study research design and methods*. London: Sage.

APPENDICES:

APPENDIX A: Informed consent of Principal Secretary of Ministry of Education and Training (MOET)

P.O Box 2308
Maseru 100
Lesotho
16th March 2013

The Principal Secretary
Ministry of Education and Training
P.O Box 47
Maseru, 100
Lesotho

Dear Sir/Madam

Re: Permission to conduct research at the National Curriculum Development Centre (NCDC)

I am a Doctoral student at the University of KwaZulu-Natal in the Republic of South Africa. My research topic is **"An interrogation of consultant-driven curriculum design in Lesotho: Primary school science curriculum design."** The study focuses on how and why foreign consultants are selected to assist in the design of primary school science curriculum. I will be conducting my research using interviews and documentary analysis. Participants in this study comprise NCDC staff and management and some of the consultants who have been engaged by NCDC to assist in curriculum design.

Confidentiality will be highly guarded and depending on the choice of each participant, pseudonyms will be used. The participants' permission to audiotape all conversations will be requested and I will personally transcribe each session and give them a copy of the transcript. All materials that have been part of the study will be kept safely and I will not use them for any other purpose without their prior permission. The participants will be free to withdraw from this study at any time if they do not feel comfortable without any form of disadvantage to them. There are no known risks and/or discomforts associated with this study. I am hoping that their participation in this study will help them reflect on benefits and limitations of foreign consultants in Lesotho curriculum design.

I would like, therefore, to request your permission to undertake my research at NCDC in the Maseru district. My contact details as well as those of my supervisor on this research are provided.

Your expected consideration is appreciated in advance.

Yours faithfully,
Molise David Nhlapo (Mr)
Contacts:
078442010/+266 631648
sekekete@yahoo.co.uk

Supervisor: Lokesh Ramnath Maharajh (PhD)

Telephone: 031-260 3422/072-435 6968

Email address: maharajhlr@ukzn.ac.za

APPENDIX B: INFORMED CONSENT FOR CHIEF EDUCATION OFFICER CURRICULUM AND ASSESSEMENT SERVICES (CEO-CAS)

P.O Box 2308
Maseru 100
Lesotho
29th November 2013

Dear Sir/Madam

I am a Doctoral student at the University of KwaZulu-Natal in South Africa. My research topic is **"An interrogation of consultant-driven curriculum design in Lesotho: Primary school science curriculum design."** The study focuses on how and why foreign consultants are selected to design primary school science curriculum. I will use interviews and documentary analysis. You will get a copy of the questions and prompts a day prior to the data production activity so that you have an idea of what to expect. You will be interviewed at your own convenient time and place. You will also be asked to share some documents related to the research.

Confidentiality will be highly guarded and depending on your preference, pseudonyms will be used. The participants' permission to audiotape all conversations will be requested and I will personally transcribe each session and give you a copy of the transcript. I might need follow-up interviews with you so that we could discuss further about the topic and issues arising from your responses.

All materials that have been part of the study will be kept safely and I will not use them for any other purpose without prior permission from yourself and the other participants. If at any time you feel that you wish to withdraw from the study, you are free to do so without any form of disadvantage for you. You are not obliged to answer any questions that you feel uncomfortable with. When the transcriptions are done, I will discuss with you whether the material that is written is what you meant. If you feel uncomfortable with any part, it will not be used. All the costs for your participation in the study will be borne by me (transportation and food). There are no known risks and/or discomforts associated with this study. I am hoping that your participation in this study will help you reflect on benefits and limitations of foreign consultants in Lesotho curriculum design.

I would like, therefore, to request your participation in this study. Please feel free to inquire at any moment should you require further information. My contact details as well as those of my supervisor on this research are provided. If you agree to participate in the study, please indicate that you are informed about the study and understand its intention by giving your consent in the form of a signature below. A copy of the signed letter will be given to you to keep.

I understand the purpose of the study and hereby give my consent to participate.

Names _____

Signed_____ **Date**_____

Yours faithfully,
Molise David Nhlapo (Mr)
078442010/+266 631648
sekekete@yahoo.co.uk

Supervisor:
Lokesh Ramnath Maharajh (PhD)
031-260 3422/072-435 6968
maharajhlr@ukzn.ac.za

Appendix C: Informed Consent letter for Participants

Curriculum and Education Studies
School of Education, College
Humanities, University of KwaZulu-N
Edgewood Campus,

Dear Participant

INFORMED CONSENT LETTER

My name is **Molise David Nhlapo;** I am a **Doctoral (PhD)** candidate studying at the University of KwaZulu-Natal, Edgewood campus, South Africa. I am interested in **"An interrogation of consultant-driven curriculum design in Lesotho: Primary school science curriculum design"**. To gather the information, I will interview you, asking you questions based on current curriculum innovation and consultants' involvement.
Please note that:

- Your confidentiality is guaranteed as pseudonyms will be used to protect your ident
- I will conduct a face-face interview with you in your own convenient place.
- The interview may last for about 45 minutes to 1 hour.
- Any information given by you cannot be used against you, and the collected data w be used for purposes of this research only.
- Data will be stored in secure storage and destroyed after 5 years.
- You have a choice to participate, not participate or stop participating in the research You will not be penalized for taking such an action.
- Your involvement is purely for academic purposes only, and there are no financial benefits involved.
- If you are willing to be interviewed, please indicate (by ticking as applicable) wheth or not you are willing to allow the interview to be recorded by the following equipn

Equipment	Willing	Not willing
Audio equipment		
Photographic equipment		
Video equipment		

I can be contacted at:
Email: sekekete@yahoo.co.uk
Cell: 0784421010

My supervisor is Dr. Lokesh Ramnath Maharajh who is located at the School of Education, Edgewood campus of the University of KwaZulu-Natal.
Contact details: email: maharajhlr@ukzn.ac.za Phone number: +27312603422/072-435696

You may also contact the Research Office through:
Ms P Ximba (HSSREC Research Office)
Tel: 031 260 3587
Email: ximbap@ukzn.ac.za)
Thank you for your contribution to this research.

APPENDIX D: INTERVIEW SCHEDULES

Interview guidelines for Chief Education Officer – Curriculum and Assessment Services (CEO-CAS)

1. Who is involved in the selection of curriculum consultants to Lesotho?
2. What is the procedure on selection of curriculum consultants to Lesotho?
3. Who were the foreign consultants you have been involved with?
4. What is your experience of foreign consultants in Lesotho curriculum design?
5. What advantage do foreign consultants have over Lesotho curriculum designers or consultants?
6. What weakness or limitations do foreign consultants have over Lesotho curriculum designers or consultants?
7. What influence, if any, do foreign consultants have on Lesotho curriculum?
8. Is there any overlap between Lesotho curriculum designers' roles & responsibilities and terms of reference for curriculum consultants?
9. What are your opinions, feelings and emotions about engagement of (foreign) consultants in Lesotho curriculum design?

Interview guidelines for Directors of National Curriculum Development Centre (NCDC)

1. Who is involved in the selection of curriculum consultants in Lesotho?
2. What is the procedure on selection of curriculum consultants to Lesotho?
3. Who were the foreign consultants you have been involved with?
4. What is your experience of foreign consultants in Lesotho curriculum design?
5. What advantage do foreign consultants have over Lesotho curriculum designers or consultants?
6. What weakness or limitations do foreign consultants have over Lesotho curriculum designers or consultants?
7. What influence, if any, do foreign consultants have on Lesotho curriculum?
8. Is there any overlap between Lesotho curriculum designers' roles & responsibilities and terms of reference of foreign consultants?
9. What are your opinions, feelings and emotions about engagement of foreign consultants in Lesotho curriculum design?

Interview guidelines for Lesotho curriculum designers

1. Who is involved in the selection of curriculum consultants in Lesotho
2. What is the procedure on selection of curriculum consultants in Lesotho?
3. Who were the foreign consultants you have ever worked with in designing curriculum? Which curriculum?
4. What is your experience of working with foreign consultants to design Lesotho curriculum?
5. How does the foreign consultant's technical knowledge of curriculum design compare with Lesotho curriculum designers?
6. What weaknesses or limitations do you think foreign consultants have over Lesotho curriculum developers?
7. What influence, if any, do foreign consultants have on Lesotho curriculum?
8. Was there any overlap on your roles & responsibilities and terms of reference for foreign consultants?
9. What are your opinions, feelings and emotions about engagement of foreign consultants in Lesotho curriculum design?

Interview guidelines for Foreign Consultants

1. What is your experience on curriculum consultancy?
2. Why do you think you were successful to assist in curriculum design in Lesotho?
3. What weaknesses or limitations do you think Lesotho curriculum designers have?
4. What strengths do you think Lesotho curriculum designers have?
5. What value do you think you have added to the Lesotho curriculum?
6. Is there any overlap between your terms of reference and curriculum designers' roles and responsibilities?
7. What are your opinions, feelings and emotions about your consultancy in Lesotho curriculum design?

APPENDIX E: JOB DESCRIPTION OF CURRICULUM SPECIALISTS (advert)

JOB SUMMARY

Under the supervision of the **Learning Area Manager,** the incumbent will design, develop and implement curricular packages; prepare instructional materials; carry out educational research; disseminate curriculum reforms and carry out in-service programmes; liaise with relevant stakeholders and institutions nationally and internationally on matters relating to curriculum.

MAIN DUTIES

1. **Design and develop curricular in Linguistic and Literary Learning Area - Sesotho at all levels of basic and secondary education.**
   - **1.1** Carry out curriculum policy dialogue.
   - **1.2** Carry out needs/situational analysis.
   - **1.3** Develop curriculum framework and policy.
   - **1.4** Identify and recommend panel members for Linguistic and Literary Learning Area.
   - **1.5** Lead and direct Linguistic and Literary Learning Area panel discussions on curriculum design and development process.
   - **1.6** Draw scope and sequence chart.
   - **1.7** Carry out comparative analysis of curriculum from different countries for bench-marking.
   - **1.8** Develop Learning Outcomes, Learning Experiences, Assessment criteria and Teacher's Guides for Linguistic and Literary Learning Area – Sesotho in different educational levels.
   - **1.9** Advise on appropriate teaching and learning methodologies.
   - **1.10** Advise on appropriate teaching and learning periods for the Learning Area.
   - **1.11** Advise on minimum attainment targets to determine standards for learner progression from one level to another.

2. **Prepare instructional materials**
   - **2.1** Draw textbook technical specification and evaluation tool.
   - **2.2** Train textbook evaluators.
   - **2.3** Lead the evaluation process for Linguistic and Literary Learning Area - Sesotho.
   - **2.4** Design and select relevant instructional materials in support of the curriculum for Linguistic and Literary Learning Area - Sesotho.
   - **2.5** Design and develop supplementary materials.
   - **2.6** Advise on the design, planning, development and implementation of scheme and record of work, lesson plans and time-tabling.

3. **Carry out pilot testing of curriculum and instructional materials in schools.**
   - **3.1** Design and develop training manuals for pilot schools.
   - **3.2** Train Senior Education Officers, Education Officers, District Resource Teachers, pilot school teachers and principals on curriculum reform.
   - **3.3** Embark on follow-up school visits in order to assist pilot school teachers and monitor the pilot process.
   - **3.4** Solicit feedback that will inform revision of the trial materials.
   - **3.5** Produce pilot testing reports.
   - **3.6** Undertake educational research in support of curriculum activities.

4. **Carry out dissemination and in-service activities related to the revised and new curriculum as well as instructional materials.**
   - **4.1** Train national trainers on curriculum reform.
   - **4.2** Support national trainers during the nationwide/wholesale curriculum dissemination.
   - **4.3** Train personnel from all stakeholder institutions on curriculum reforms.

5. **Collaborate and liaise with other institutions nationally and internationally on matters pertaining to curriculum**
   - **5.1** Undertake consultancy on curriculum and instructional material development.
   - **5.2** Collaborate with other relevant stakeholders on in-service programmes in curricular related matters.
   - **5.3** Collaborate with ECoL in designing assessment packages.
   - **5.4** Collaborate with teacher-training institutions in the development and dissemination of curriculum reform.
   - **5.5** Collaborate with Non-Governmental Organisations in advocating curriculum reforms and other emerging issues.
   - **5.6** Collaborate with Development Partners to support curriculum reforms related to literacy.
   - **5.7** Liaise with other curriculum institutions in matters relating to curriculum reform.
   - **5.8** Liaise with Sesotho Academy and subject organisations in matters relating to language.

KNOWLEDGE, SKILLS AND ATTRIBUTES

- Communication and interpersonal
- Analytic
- Planning and organizing
- Liaising
- Report writing
- Coordinating
- Assertiveness
- Resilience
- Computer literacy
- Proactive and innovative.

JOB SPECIFICATION

1. Master's Degree in Education **plus** a minimum of three (3) years' work experience as a Curriculum/Subject Specialist in Sesotho. Specialization in Curriculum Design and Development as well as assessment will be an added advantage.

   OR

2. Bachelor's Degree in Education **plus** five (5) years as a Curriculum/Subject Specialist in Sesotho.

APPENDIX F: ROLES AND RESPONSIBILITIES OF CURRICULUM SPECIALISTS

The functions of NCDC in 1980:

- Research and implement work in curriculum development
- Review and revise syllabuses
- Design new syllabuses as appropriate
- Produce teaching materials for use in the implementation of new syllabuses and in co-operation with appropriate subject experts.
- Evaluate and validate new materials using the experimental schools as hothouse.
- Introduce new curriculum materials into schools. (Mosisidi, p 23 1981 p 23; Khoboli, 2005).

Functions of NCDC as in 2009

- Develop suitable curricula and instructional materials to meet the needs of Basotho nation;
- Disseminate curricula and instructional materials to schools;
- Devise an evaluation system for curriculum activities and for assessment of students' learning;
- Collaborate with other institutions on matters related to curriculum;
- Advice the Ministry on policy issues related to curriculum.

Duties and responsibilities of a curriculum specialist at NCDC:

- Conduct situational / contextual analysis to guide decision-making in planning.
- Analyse policy guidelines for developing curriculum and develop curriculum objectives.
- Prepare for curriculum trial-testing, undertake trial-testing follow-ups, revise trial-tested materials and disseminate trial-tested materials to all schools.
- Conduct in-service training workshops on subject content.
- Coordinate and participate in relevant NCDC based project activities.
- Undertake educational research in support of curriculum activities.

APPENDIX G: REQUEST FOR CONSULTANCY GRADE 1, 2 AND 3

INDIVIDUAL CONSULTANT TO ASSIST LESOTHO NATIONAL CURRICULUM DEVELOPMENT CENTRE IN THE DEVELOPMENT OF THE CURRICULUM MATERIALS FOR BASIC EDUCATION # GRADES 1, 2 AND 3

Request For Expressions of Interest

General Information

Country:	Lesotho
Notice/Contract Number:	wb:op00007916
Publication Date:	Mar 23, 2011
Deadline	Apr 28, 2011
Funding Agency:	The World Bank
Buyer:	LS: Basic Education FTI Grant
Original Language:	English

Contact information

Address:	Ms. L. Hlasoa Lesotho Ministry of Education and Training Headquarters Corner Constitutional Road and Pioneer Road, PO Box 47 Maseru Maseru 100 Lesotho
Telephone	+266 22311248
Email:	Click here

Assignments

Primary education services

THE GOVERNMENT OF THE KINGDOM OF LESOTHO
MINISTRY OF EDUCATION AND TRAINING
(CURRICULUM DEVELOPMENT SPECIALIST)
INDIVIDUAL CONSULTANT TO ASSIST NATIONAL CURRICULUM DEVELOPMENT CENTRE IN THE DEVELOPMENT OF THE CURRICULUM MATERIALS FOR BASIC EDUCATION #GRADES 1, 2 AND 3

This request for expression of interest follows the general procurement notice for this project that appeared in the market on the 17 September 2010.

Within the context of the Fast Track Initiative III project, the Ministry of Education and Training(MOET) has received funds from the Fast Track Initiative and Irish Aid to implement a Basic Education Project aimed at improving the quality of basic education in Lesotho, and intends to apply part of these funds to eligible payments for individual consulting services of a short term Curriculum Development Specialist
The main objective of this Individual Consultant consulting assignment is to engage a Curriculum Development Specialist to assist the National Curriculum Development Centre curriculum packages for Grade 1 # 3, develop Monitoring and Evaluation tools and systems; produce a Training Plan for Pilot School Teachers and train National Curriculum Development Centre professional staff and Pilot School Teachers.

The expected implementation period of the services is for 3 months from June 2011 to August 2011.
The Ministry of Education and Training now invites eligible individual consultants to provide their detailed curriculum vitae that indicate that they are qualified and experienced to perform the services for which they are expressing their interests.
An individual consultant will be selected in accordance with the procedures set out in the World Bank's *Guidelines: Selection and Employment of Consultants by World Bank Borrowers, October 2006 Revised* May2010.

Interested individual consultants may obtain further information at the address below from [*i.e. 0900hours to 1200hours and 1430hours to 1600hours*] between Monday and Friday:

Director Education Planning
Ministry of Education and Training
Corner Constitutional Road and Pioneer Road
PO Box 47
Maseru100
Telephone: +26622311248
Lesotho
and rinamelek@gmail.com and lelingoanamakong@yahoo.com

APPENDIX H: TERMS OF REFERENCE FOR CONSULTANT:

:MS OF REFERENCE FOR A CONSULTANT TO ASSIST NCDC IN THE DEVELOPMENT OF THE RICULUM MATERIALS FOR BASIC EDUCATION – GRADES 1, 2 AND 3 LEVELS.

:KGROUND

National Curriculum Development Centre (NCDC) as an integral part of the Ministry of Education and Training ET) is charged with the responsibility of designing and developing the National Curriculum and its supportive rials, for both basic and secondary education.

)C is currently working on the curriculum reform, necessitated by the introduction of a new Curriculum and ssment Policy Framework. The new policy advocates for a curriculum which is highly integrated. To achieve this,)C has decided to change the current organization of the curriculum into subject areas, to adopting a new one of ning Areas.

ıe moment the process is at the stage where curriculum packages for grades 1 – 3 have been prepared. The ctation is for them to be ready for piloting early next year, hence the need for a technical support of a consultant, will work with NCDC professional staff.

1.0 PURPOSE

To assist Curriculum Developers at NCDC, finalize curriculum packages for grades 1 -3, by providing technical know-how on integrated curriculum, and prepare the packages for piloting.

2.0 TERMS OF REFERENCE

- 2.1 Bring Curriculum Materials from other countries to share with curriculum developers at the National Curriculum Development Centre (NCDC).
- 2.2 Support Curriculum Developers to refine the curriculum packages, including Teachers Guides/Manuals for Grade 1 – 3 and prepare them for piloting.
- 2.3 Advise on how to produce appropriate Monitoring and Evaluation tools/systems.
- 2.4 Assist in the writing/drawing of a Training Plan for the Pilot School Teachers.
- 2.5 Present periodic feedback reports and consultancy exit report that covers all activities undertaken to the NCDC professional staff and Chief Education Officer (C.E.O.) Curriculum and Assessment.

3.0 SCOPE OF WORK

- 3.1 Conduct training on Integrated Curriculum with special emphasis on the different approaches/methods of curriculum delivery.
- 3.2 Review draft curriculum packages for Grade 1, 2 – 3 including the Teachers Guides/Manual, identify gaps and assist the Task Teams in amending them.
- 3.3 Help prepare the packages for piloting in seventy (70) Primary Schools.
- 3.4 Assist in the development of Monitoring and Evaluation tools/systems.
- 3.5 Produce progress report.

4.0 EXPECTED DELIVERABLES

- 4.1 Refined curriculum packages for Grade 1 – 3
- 4.2 Monitoring and Evaluation tools and systems
- 4.3 Training Plan for Pilot School Teachers
- 4.4 Trained NCDC professional staff
- 4.5 Trained Pilot School Teachers

5.0 REQUISITE SKILLS AND EXPERIENCE

- 5.1 Qualified Curriculum specialist
- 5.2 Senior degree in Curriculum Development plus five (5) years post qualifying work experience.
- 5.3 Broad knowledge and experience in comparative Curriculum Studies in other countries
- 5.4 Knowledge and Skills in Approaches/Methods of curriculum delivery.
- 5.5 Good communication and interpersonal skills.
- 5.6 Ability to work beyond normal working hours.

6.0 TIME FRAME

2 – 3 Months

7. PROGRAMME MANAGEMENT STRUCTURE

The Consultant will work under the general supervision of the Director NCDC. The Consultant will also liaise with the CEO Curriculum and Assessment through the Director NCDC. For each of the specific tasks, and in consultation with the Director NCDC, the Consultant shall work with the relevant Task teams at NCDC.

NCDC has a small unit within it whose mandate is to conduct evaluation and monitoring. However, new arrangements are that, it will collaborate with Examinations Council of Lesotho (ECOL), to do its work. The consultant will, therefore, be required to assist in the development of evaluation and monitoring tools/systems for the new curriculum.

8. CONDITIONS OF PROCUREMENT

The procurement will be based on the consultant's qualifications and cost of services.

TERMS OF REFERENCE FOR A CONSULTANT TO ASSIST NCDC IN THE DEVELOPMENT OF INTEGRATED CURRICULUM MATERIALS FOR BASIC EDUCATION – GRADES 4 AND 5

BACKGROUND

The National Curriculum Development Centre (NCDC) as an integral part of the Ministry of Education and Training (MoET) is charged with the responsibility of designing and developing the National Curriculum and its supportive materials, for both basic and secondary education

NCDC is currently working on the curriculum reform, necessitated by the introduction of a new Curriculum and Assessment Policy Framework. The policy advocates for a curriculum which is highly integrated. To achieve this, NCDC has decided to change the current organization of the curriculum from subjects, to adopting a new one of learning areas through the pedagogy of integration.

At the moment, the process is at the stage where the curriculum packages for Grade 4 have been prepared. The expectation is for them to be ready for piloting in August, 2013. Grade 5 curriculum packages have not yet been developed, and are expected to be ready for piloting in January 2014.Thus, the need for a technical support of a consultant, who will work with NCDC professional staff.

1.0 PURPOSE

To assist curriculum developers at NCDC to:

1.1 Specify kind of instructional materials that publishers and freelancers ought to develop for Grade 4 and 5.

1.2 Refine curriculum packages for Grade 4 by providing technical know-how on integrated curriculum and prepare the packages for whole-sale implementation.

1.3 Develop Grade 5 packages by providing technical know-how on integrated curriculum and prepare the packages for piloting in January 2014.

1.4 Maintain consistency and continuity of the integrated process between Grade 3, 4 and 5.

2.0 SCOPE OF WORK

The consultant shall work with NCDC's professional staff to review and refine curriculum packages for Grade 4. The consultancy will further provide support and expertise in the development of Grade 5 curriculum and accompanying monitoring and evaluation tools.

3.0 TASKS

3.1 Conduct training on integrated curriculum with special emphasis on different approaches or methods of curriculum organization and delivery.

3.2 Support curriculum developers in the refinement of the curriculum packages for Grade 4 and prepare them for whole-sale implementation.

3.3 Support curriculum developers in the development of the curriculum packages for Grade 5 and prepare them for pilot testing.

3.4 Advise on how to produce appropriate monitoring and evaluation tools/systems.

3.5 Assist in designing a training plan for whole-sale implementation of Grade 4 and pilot of Grade 5 school teachers.

3.6 Present periodical feedback reports and consultancy exit report that covers all activities undertaken to the NCDC professional staff and Chief Education Officer (CEO) – Curriculum and Assessment.

3.7 Advice on the structure of instructional materials for the curriculum.

3.8 Help refine specifications and evaluation tool for desired instructional materials.

4.0 EXPECTED DELIVERABLES

4.1 Refined curriculum packages for Grade 4.

4.2 Curriculum packages for Grade 5.

4.3 Trained NCDC professional staff.

4.4 Progress and exit reports of the consultancy.

4.5 Refined instructional materials specification and evaluation tool.

5.0 REQUISITE SKILLS AND EXPERIENCE

5.1 A curriculum development specialist.

5.2 A minimum of Masters' degree in curriculum development and 5 years post qualifying work experience.

5.3 Broader knowledge and experience in comparative curriculum studies in other countries.

5.4 Knowledge and skills in approaches or methods of curriculum organization and delivery.

5.5 Grounding in research and evaluation.

5.6 Computer proficiency

6.0 TIME FRAME

3 to 4 months

7.0 PROGRAMME MANAGEMENT STRUCTURE

The consultant will work under the general supervision of the Director-NCDC. The consultant will also liaise with the CEO-Curriculum and Assessment through the Director-NCDC. For each of the specific tasks, and in consultation with the Director-NCDC, the consultant shall work with the relevant officers at NCDC.

APPENDIX I: ETHICAL CLEARANCE

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

14 August 2012

Mr Molise David Nhlapo 209529054
School of Education

Dear Mr Nhlapo

Protocol reference number: HSS/0697/012D
Project title: An interrogation of consultant-driven curriculum design in Lesotho: A primary school science curriculum design

EXPEDITED APPROVAL

I wish to inform you that your application has been granted Full Approval through an expedited review process.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. PLEASE NOTE: Research data should be securely stored in the school/department for a period of 5 years.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

.....
Professor Steven Collings (Chair)

/pm

cc Supervisor: Professor Reshma Sookrajh
cc Academic leader: Dr MN Davids
cc School Admin: Mrs Sindhomoney Naicker

Professor S Collings (Chair)
Humanities & Social SC Research Ethics Committee
Westville Campus, Govan Mbheki Building
Postal Address: Private Bag X54001, Durban, 4000, South Africa
lephone: +27 (0)31 260 3587/8350 **Facsimile:** +27 (0)31 260 4609 **Email:** ximbap@ukzn.ac.za / snymanm@ukzn.ac.za
nding Campuses: Edgewood Howard College Medical School Pietermaritzburg Westville

APPENDIX J: Old primary Class 4 Syllabus
This document is bulky but it can be assessed from
http://www.ibe.unesco.org/curricula/lesotho/lo_pr_al_2006_eng.pdf

APPENDIX K: Lesotho New Integrated Curriculum