EVALUATIVE RESEARCH OF THE IMPLEMENTED SECONDARY SCHOOL CURRICULUM IN NAMIBIA

by

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DEDICATION

To my late mother and mentor, Vukuto Kumana, who in 1988 said "Yende kuchikolo ukabale kawize utuwane." Wherever you are mum, here is your wish; indeed, I went to school and with your blessings I finally made it!

DECLARATION

I, the undersigned, declare that the thesis hereby submitted by me for the **PHILOSOPHIA DOCTOR** degree at the University of the Free State is my own independent work and that I have not previously submitted the same work for a qualification at another university. I further cede copyright of this thesis in favour of the University of the Free State.

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Godfrey M. Tubaundule

Date: November 2014

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ABSTRACT

EVALUATIVE RESEARCH OF THE IMPLEMENTED SECONDARY SCHOOL CURRICULUM IN NAMIBIA

This evaluative study examined the factors that influence the implementation of the intended secondary school curriculum in Namibia's classroom environment. Quantitative data were collected from 260 teachers in 15 randomly sampled schools, supplemented by interview data from 15 purposively selected teachers.

To address the main research question the study analysed various curriculum interpretations and their implications on classroom teaching and learning. In addition, the study examined the influence of teachers' age, gender, number of subjects taught, professional qualification and teaching experience on the implementation of the intended secondary school curriculum at the classroom level. Moreover, the study examined how teachers' knowledge, attitudes, beliefs and self-efficacy influence curriculum implementation in the classroom situation. Furthermore, this study addressed the question of how learners' characteristics, teachers' professional development and school leadership influence the implementation of the intended secondary school curriculum in the Namibian classroom environment. Lastly, the present study also examined how resources, stakeholders' support and teachers' involvement in the curriculum development process influence the implementation of the intended secondary school curriculum within the classroom environment.

Results of this study found that most teachers interpret curriculum as a document used to transmit objective knowledge to learners. This interpretation of the curriculum demonstrates that although the 2010 intended secondary school curriculum for Namibia was founded on a learner centred philosophy of education, most teachers in this study understand it in terms of the teacher-centred approach.

Within the context of the interpretive-critical view adopted in this study, the results further indicated that lack of knowledge and clarity of curriculum goals, limited resources and inadequate involvement of teachers in the curriculum development process, may influence teachers to revert to a technical implementation of the intended secondary school curriculum at the classroom level.

Results also revealed that although teachers' age, gender, number of subjects taught and self-efficacy may have a small effect on the implementation of the intended secondary school curriculum; teaching experience, teachers' attitudes, beliefs and professional development were found to have a medium effect on the implementation of the intended secondary school curriculum. Results of teachers' professional qualification, knowledge, learners' characteristics, resources, school leadership, stakeholders' support and teachers' involvement in the curriculum development process were found to have a large effect on the implementation of the intended secondary school curriculum.

Teachers' opinions confirmed quantitative findings. First, an overwhelming majority of participants indicated that age, teaching experience and professional qualification influence the implementation of the intended secondary school curriculum. Some teachers, however, stated that commitment is the main factor that influences the implementation of a curriculum policy innovation at classroom level.

Second, a majority of participants in this study confirmed that most teachers received copies of the curriculum policy, and that they were thus aware of the 2010 National Curriculum for Basic Education. However, most participants interviewed revealed that the majority of teachers have little knowledge of the contents of the curriculum policy despite their access to the document.

Third, most teachers interviewed were not satisfied with the implemented secondary school curriculum and suggested for the revision of the curriculum policy to include vocational subjects.

Fourth, the majority of teachers in this study had negative beliefs regarding the principles of learner centred education. For example, most teachers indicated that learner centred education is only appropriate for lower primary school phase. Some teachers stated that they were frustrated with the competence-based continuous assessment practice adopted in the learner centred approach.

Fifth, the majority of teachers in this study concurred with quantitative data and stated that lack of teachers' participation in the curriculum development process and ineffective school leadership influence the implementation of the intended secondary school curriculum at the classroom level.

Sixth, the results found that although the majority of teachers interviewed in this study were keen to engage in continuous professional development; most participants indicated that they had limited opportunities in their schools to participate in professional development programmes. Teachers in this study were also of the opinion that undisciplined learners, weak school-parent relationships and language barriers influence curriculum implementation at the classroom level.

Seventh, teachers' oral responses also confirmed that lack of resources mainly in rural schools impedes the implementation of the intended secondary school curriculum at the classroom.

This study discusses the implications of the findings on how teaching and learning of the intended secondary school curriculum is conducted in Namibia's classroom level environment. The study also provides recommendations for consideration by curriculum policy decision makers.

KEY WORDS

- **Implementation**
- **Evaluation**
- **Secondary school curriculum**
- **Intended curriculum**
- **Implemented curriculum**
- **Attained curriculum**
- **Learner centred curriculum**
- **Social constructivist theory**

ACRONYMS

AAAS	American Association for the Advancement of Science
AASA	American Association of School Administrators
ADEA	Association for the Development of Education in Africa
AIDS	Acquired Immune Deficiency Syndrome
APS	Aviral Payment System
BTI	Bertelsmann Stiftung's Transformation Index
CBE	Competence-Based Education
CCG	Curriculum Coordinating Group
EFA	Education for All
EMIS	Education Management Information System
ETSIP	Education and Training Sector Improvement Programme
GBV	Gender Based Violence
GCI	Global Competitiveness Index
GRN	Government of the Republic of Namibia
HCP	Health Communication Partnership
HIGCSE	Higher International General Certificate of Secondary Education
HIV	Human Immunodeficiency Virus
HoDs	Heads of Departments
ICTs	Information and Communication Technologies
IGCSE	International General Certificate of Secondary Education
ILO	International Labour Organization
LCE	Learner Centred Education
LSMs	Learning Support Materials
MBEC	Ministry of Basic Education and Culture
MEC	Ministry of Education and Culture
MECYS	Ministry of Education, Culture, Youth and Sport
MBESC	Ministry of Basic Education, Sport and Culture
MoE	Ministry of Education

MGCW	Ministry of Gender and Child Welfare
MLSW	Ministry of Labour and Social Welfare
MVA	Motor Vehicle Accident Fund
NamBic	Namibia Business and Investment Climate Survey
NAMCOL	Namibia College for Open Learning Centre
NANTU	Namibia National Teachers' Union
NCCI	Namibia Chamber of Commerce
NCS	National Curriculum Statement
NEF	Namibia Employers' Federation
NGOs	Non-Governmental Organisations
NGSTP	Namibia Government Scholarship and Training Program
NID	Namibia Institute for Democracy
NIED	National Institute for Educational Development
NLFS	Namibia Labour Force Survey
NMA	Namibian Manufacturers' Association
NPC	National Planning Commission
NQA	National Qualification Authority
NQF	National Qualification Framework
NSSCH	Namibia Senior Secondary Certificate Higher level
NSSCO	Namibia Senior Secondary Certificate Ordinary level
OBE	Outcomes-Based Education
OECD	Organisation for Economic Cooperation and Development
OVC	Orphans and Vulnerable Children
SACMEQ	Southern and Eastern Africa Consortium for Monitoring Educational Quality
SPSS	Statistical Programme for the Social Sciences
SSA	Sub-Saharan Africa
SWAPO	South West Africa People's Organisation
TUCNA	Trade Union Congress on Namibia
TUN	Teachers' Union of Namibia
UNDP	United Nations Development Programme
UNESCO	United Nations Education, Scientific and Cultural Organisation

USAID	United States Agency for International Development

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CHAPTER 1
ORIENTATION

1.1 Introduction

At independence in 1990 Namibia's per capita income was US$2,220 per year (Marope, 2005: xix); more than four times higher than the sub-Saharan Africa (SSA) average. Despite an increase in per capita income to US$4,267 (Bertelsmann Stiftung's Transformation Index (BTI, 2012:15-16) Namibia continues to have the highest income inequalities in the world with a Gini-coefficient of 0.74 (United Nations Development Programme (UNDP,1998:9). This means that there is a huge income disparity between the poorest and the highest income groups (BTI, 2012:15-16). Available data show that the household income of the highest quarter (N$ 52, 672) is twenty-six times that of the lowest (N$2, 067).

This synopsis indicates that in Namibia, like other sub-Saharan African countries, poverty, inequity and unemployment are entrenched in the economic system (BTI, 2012:15-16; Namibia Labour Force Survey (NLFS, 2012). According to Marope (2005:xix), "the main liability affecting Namibia's competitiveness negatively is lack of skilled labour."

As a result, during the past two decades, the economic discourse has dominated the country's government policy. Specifically, the focus of the government policy has been on the improvement of human capital as a basis for stimulating economic growth and enhancing technological development and innovation. Thus, human capital development has been singled out as a strategy for creating new knowledge and entrepreneurship applicable to business development (Marope, 2005:xiii).

Consequently, terms such as 'the knowledge economy," "the new economy" and "the service economy" (Brady & Kennedy, 2003; Marope, 2005:xiii; Ministry of Education, 2010:2) have become common in Namibia's economic vocabulary. As discourses for developing Namibia as a knowledge-society through information technology and life-long learning intensifies, government policy and public opinion have shifted their attention to the role of the school curriculum. Following Green's (1997) advise that schools have always played a critical role in the development of the modern nation states the language and discourse of the education reform proposals in Namibia have supported the idea that the school curriculum should be at the heart of the knowledge-based economy (MoE, 2013:2).

Thus, since the beginning of the new century the school curriculum has been at the centre of most education reforms in Namibia. It has been argued that the school curriculum should be a vehicle for addressing "life-long" learning, unemployment and skills shortages. Brady and Kennedy (2003:9) noted that the school curriculum of most countries including Namibia has, since the turn of the century, been characterised by diversity rather than uniformity. In other words, curriculum has been redefined in terms of various skills and competencies that all students ought to have irrespective of their curriculum experiences. According to Brady and Kennedy (2003) 21st century citizens will require a combination of cultural, personal, vocational, social and economic skills, various forms of knowledge and context appropriate values in order to survive in a knowledge society. The argument is, therefore, that governments should constantly improve their school curriculum.

1.2 Background and rationale of the study

The emergence of the knowledge-based economy towards the end of the 20th century placed Namibia's education system in a position of paramount importance. Namibia inherited an education system that was characterised by acute disparities and inequalities based on policies of racial discrimination. These policies left a legacy of segregated education offered along lines of social class. Historical evidence shows that while some schools had highly educated teachers, extensive equipment and relatively small classes, other schools had teachers with limited training and overcrowded and poorly equipped classrooms.

Therefore, "schooling in pre-independent Namibia was once the privilege of the few'' (Ministry of Education and Culture (MEC), 1993:18). Christie (2009:34) recalled that secondary schooling was not free, and was available only to those who could afford to pay.

Literature on the history of education shows that in the early days of the colonial era the school's primary purpose was to teach children to read scriptures and notices of civil affairs (Ornstein & Hunkins, 2009:63-64). Historians therefore point out that because education was justified for its vocational utility, schools taught learners reading, writing and basic numeracy including discipline, obedience and value for work (Christie, 2009:36; MEC, 1993:2).

At independence in 1990, the new SWAPO-led government introduced numerous educational changes based on international agreements, Namibia's Constitution and national development strategies.

Like other African countries Namibia embraced the educational priorities expressed by the Charter on Education adopted at the Addis Ababa Conference of 1961 and the World Declaration on Education for All at Jomtein in 1990 (MEC, 1993:3).

Therefore, in line with these agreements Namibia dislodged the Apartheid idea of "elite education" and adopted the concept of "education for all" as provided for in Article 20 of the country's Constitution. Based on this new ideology, the government's educational change efforts has since aimed at achieving the major goals of expanding access to education, providing equitable access to schooling for all children, improving the quality of schools and developing a democratic education system (MEC, 1993:31-44).

Government reports reveal that since 1990, the Ministry of Education has received the largest budget allocation in relation to other ministries. At the opening of the National Conference on Education in July 2011, the Minister gave a progress report of how Namibia has performed in achieving the educational goals and objectives since 1990. According to him over the last decade the budget for the Ministry of Education increased steadily from N$1.8 billion (2000/1) to N$8.3 billion (2011/12). This is a significant increase of 361 percent in 11 years. He reiterated that the budget increase demonstrated the government's recognition of the importance of education in the economic growth of the nation (Namibia Today newspaper, Friday 01 - 07 Thursday July 2011).

Though these educational and financial changes have affected the entire education system from pre-primary to higher education; the secondary school curriculum has received tremendous attention since independence in 1990. Thus, the political and social-economic changes and pressures imposed on the secondary school curriculum have significantly altered the organisation and delivery of education at the classroom level. For example, as part of the overall education reform, learner-centred principles of teaching, assessment, evaluation, classroom management and school leadership were introduced throughout the school system (MoE, 2010:30-32).

However, research analyses of the performance of the new government since 1990 have reported remarkable quantitative achievements on student enrolment rates. According to the 2005 Ministry of Education and Culture report, between 1992 and

2002, there was a 60% student enrolment in secondary schools and a twelve times enrolment increase in vocational and technical education. A 50% tertiary enrolment increase between 1996 and 2001 was also reported (MoE, 2005).

Contrary to these quantitative achievements, there are grave concerns in Namibia today about the school curriculum as manifested in lower Grade 10 and 12 learner achievements. Reports show that despite considerable investments in education inputs (policy, finance, infrastructure, books and materials) and processes (curriculum, teaching, and school leadership) learner outcomes are disappointing (Organisation for Economic Cooperation and Development (OECD), 2008). A meta-analysis of the 2008-2012 Grades 10 and 12 cumulative examination results showed that during this five-year period, the majority of schools failed to achieve a mean score of 60% or better (MoE, 2012).

Unsurprisingly, the writers of a 2011 internal ministerial report on the state of Namibia's education system wondered whether the annual budget increases allocated to the Ministry of Education since independence have been translated into improved classroom practices (Africa Review, Wednesday, May 11, 2011). What is clear however is that since 1990 the national pass rate for both Grades 10 and 12 on the end-of-the year examinations has never reached 60 percent. Critics continue to argue that the performance of Grade 10 and 12 students on previous and the 2010 curriculum has suffered. The 2011 Africa Review summarised an internal ministerial report about the state of Namibia's education system as follows:

> On the surface, Namibia's education sector would appear to be doing just well, but scratch below the surface and one discovers there is more to the figures. In fact, critics have been insisting on a complete overhaul of the current education system, which they blame for having failed to produce quality graduates that can compete with the rest of Africa. The critics' demands are not far-fetched. The Grade 10 average for the November 2010 examination was a mere 33.8 per cent for fulltime examination takers, and only 50.1 per cent of them managed to achieve grading (A-G) for English. More than one out of every 10 learners failed to score any grade in Mathematics, and even the best average in the subject was less than 40 per cent. And this is despite the education sector receiving the largest chunk, more than half, of the national budget annually (ibid).

This ineffectiveness of the education system has ignited a countrywide debate. While most parents have repudiated the secondary school curriculum and Grade 10 and 12 examination results, academics and policy makers alike have been speculating about the reasons for the ineffectiveness of the secondary school curriculum. The speculation has centred around two perspectives.

First, against the background of a learner centred curriculum, there are sentiments that Namibian secondary school leavers are not acquiring the necessary skills, values, competencies and knowledge that will enable them on a life-long basis, to understand, critique and transform Namibia's knowledge-based economy.

Second, there are serious inhibitory factors influencing the implementation of the official secondary school curriculum, and thus negatively impacting on the achievement of Namibia's educational goals.

Numerous labour market and investment survey reports have confirmed speculations that Namibia has a shortage of skilled personnel, which stifles its competitiveness in the knowledge-based globalised economy (Global Competitiveness Index (GCI), 2011; Namibia Business and Investment Climate Survey (NamBic), 2009; Namibia Employers' Federation (NEF), 2010; Namibia Labour Force Survey (NLFS), 2012; National Planning Commission (NPC), 2006).

Critics through various local print media argue that this lack of skilled personnel is a result of a mismatch between the theoretical and practical elements of the school curriculum that exists throughout the educational experience (New Era, 19 February 2010). Contrary to popular beliefs, previous research studies have shown that most policies do not follow the predictable path of formulation, adoption, implementation to reformulation (Chisholm & Leyendecker, 2008:196).

Based on this cautious statement two important questions relevant to this study arise. First, is the lack of skilled labour force in Namibia a result of the non-implementation of

the intended secondary school curriculum policy by teachers at the classroom level? Second, assuming that the first question is true, why then are Namibian teachers not implementing the intended curriculum as designed by policy makers?

To provide answers to the two questions above requires an understanding of the complexities involved in implementing Namibia's secondary school curriculum, which is the purpose of the current evaluative research.

Literature indicates that evaluative research is generally applied research, whose primary objective is to determine the extent to which a given programme or procedure is changing some desired result (Suchman, 1967:21; Patton, 1990:11-12). Researchers further indicate that as an applied research, the unique purpose of evaluative research is to inform action, enhance decision making and apply knowledge to solve human and social problems. In this context applied evaluative research can be judged by its usefulness in making human actions and interventions more effective and by its practical utility to decision makers, policymakers and others who have a stake in the efforts to improve the world (Patton, 1990:11-12).

On the basis of these assumptions many 'experts' agree that evaluative research should be a "prevalent activity in contemporary society" (Anderson, 1998:136) especially in the field of education in which it can be used to reflect and learn-in-action about policy development, classroom application and policy influence on teacher practice (ibid).

Contributing to the discussion about the purpose of evaluative research, Patton (1997) the advocate of Utilisation-Focused Evaluation stated that "evaluative kinds of information" are needed to "inform and empower people at the local level" (Patton, 1999). Patton further argues that evaluative findings can only be credible if they build users' capacity to think and act evaluatively and use the findings to improve their environments (Patton, 1999).

In line with this argument Patton (1990:13) made two important observations that should be taken into account for evaluative research to be successful. The first observation is that evaluative research should strive to get the best possible information to the people who need it. The second observation is that people who need evaluation findings should actually use the information in appropriate ways for its intended purposes.

Among others, these observations have over time influenced the evolution of evaluative research and thinking. As a result, the Bruner Foundation in the United States of America has recently linked evaluative research to evaluative thinking, which is a type of reflective practice that fully integrates evaluation skills of systematic questioning, data, and action into an organisation's work practices to improve learning and decision making (Baker & Bruner, 2012). With specific reference to the curriculation process, Suter (2006:150) asserts that evaluative research is concerned with assessing the value of a programme or to recurriculate it to enhance its effectiveness.

The current study was an evaluative research of the implemented secondary school curriculum in Namibia's classroom environments.

My interest in curriculum studies, and particularly, in curriculum implementation and evaluative research, stems from my involvement in the curriculum development process of the post-independence teacher education curriculum in Namibia. I was personally involved in the first teacher education reform conference that took place in 1993, in Ongwediva College of Education and this laid the foundation for my involvement in curriculum planning and implementation.

Subsequent to this conference, I served as a Broad Curriculum Coordinator representing the then Caprivi College of Education on the national curriculum committee from 1993 to 2001. As a member of the Curriculum Coordinating Group (CCG), which met quarterly at the National Institute for Educational Development (NIED) to review and discuss curriculum issues, I was also a lecturer implementing the same curriculum policy that the Curriculum Coordinating Group (CCG) was recommending.

Since 2001, I worked on numerous donor funded programmes responsible for implementing and appraising social and community-based development projects related to HIV and AIDS, Orphans and Vulnerable Children (OVC), gender and gender-based violence (GBV), culture and pre-primary, primary, secondary and post-secondary education. Also, I worked on capacity building projects and programmes for adult education and out-of-school youth groups.

My participation in classroom teaching, curriculum development and coordination, capacity building programmes and project monitoring and evaluation gave me first-hand insight into the frustrations; joys and limitations that teachers, grant beneficiaries and implementers of various social intervention projects and programmes were experiencing in their daily work endeavours.

Therefore, as a teacher, mentor, coach and programme evaluator, the need to understand the implementation of the secondary school curriculum resonated in my mind for two important reasons.

First, there is the need for the continuous study of curriculum implementation in the local context. This evaluative study was undertaken with my full conviction that by investigating the actual classroom practices of the intended and implemented curriculum, I will generate knowledge that will help Namibian educators and policy makers to understand the factors influencing the implementation of the secondary school curriculum. Wiles and Bondi (2007) cited in Ornstein and Hunkins (2009:249) argued that over 90 percent of the new curricula fail to be implemented, because educators lack knowledge necessary to deliver a new curriculum.

Second, results of the Grades 10 and 12 examinations only provide surface information about students' low pass rates, but do not present data on the challenges teachers encounter as they implement the curriculum at a micro-level. Through this study therefore, it is my way of contributing to this complex discussion of the possible

factors that continue to undermine the delivery of quality education to secondary school learners in Namibia.

1.3 Research problem statement

The sad history of education in Namibia has been documented in numerous research reports and continues to be the subject of much debate 23 years after the country's independence from South Africa in 1990. Quoting from Marope (2005), the 2010 Namibian Employers' Federation (NEF) Skills Research Deficit survey reported that: "The education and training system still fails to meet labour market skills requirements. The report suggested that a key cause of the skills deficits is the narrow pipeline of good-quality senior secondary school graduates, especially those with good grades in English, Mathematics, Science, and Information and Communication Technologies (ICTs)." The same report concluded that "The low quality and quantity of the secondary school throughout therefore limits the potential of post-secondary education and training institutions to respond to current labour market needs, and to supply the high-level skills required in the key growth areas." (Marope, 2005; NEF, 2010).

Therefore, building on curriculum statements and policy directives developed since 1990, the 2010 National Curriculum for Basic Education (NCBE) reiterates that the objectives of the secondary school curriculum will be to: develop democratic attitudes and skills, develop and instil a sense of national identity, unity and loyalty to Namibia, prepare learners to obtain qualifications of internationally recognised standards, that will provide entrance to tertiary institutions, develop self-reliance and entrepreneurship as preparation of the world of work, including self-employment and encourage lifelong learning (NIED, 1998; MoE, 2010:4-17).

As a result, within the context of learner-centred approach adopted since 1990 and further articulated in the 2010 NCBE, the secondary school curriculum outlines seven key competencies of the enhancement of understanding, creativity and an investigative and critical mind; productivity; ability to apply knowledge, skills and attitudes in a

practical way to problem solving and real life situations; moral development, awareness of one's own beliefs and opinions and respect for others; the ability to make informed decisions; the ability to communicate effectively and values of reliability, cooperation, tolerance, mutual understanding and service to others (ibid).

It is in this context that the introduction of the 2010 National Curriculum for Basic Education was received with great enthusiasm and hope by most education stakeholders in the country. For instance, for most stakeholders the National Curriculum for Basic Education's emphasis of a social constructivist philosophy, with regard to teaching and learning methods, assessment techniques, language teaching and students promotion (MoE, 2010:4) was hailed as a panacea to student underachievement and to the skills shortage problem of the country. For example, many Namibians regarded the curriculum policy as a progressive document and a good strategy towards the achievement of Vision 2030.

Developed in 2004, Vision 2030 is a Policy Framework for Long-Term National Development, which provides long-term policy alternative scenarios on the future course of development in Namibia at different points in time until the target year 2030. The Vision provides guidance to three planning questions. First, given the past and current conditions, what would development in the country portray by year 2015, 2020 and 2030? Second, what do the people want their country to depict by these future points in time? Third and lastly, what should Namibians do, between now and the year 2030, to elevate the country to the level of a developed society? With reference to education, Vision 2030, provides long term perspectives of how education will look like by the year 2015, 2020 and 2030? (NPC, 2004:20).

Thus, based on the intended secondary school curriculum's outcomes, core skills and knowledge areas highlighted in the curriculum policy most Namibians had hoped that the curriculum will adequately prepare school learners to be able to navigate the social, moral and technological complexities of the 21st century (MoE, 2010:7-9).

However, since the introduction of the new constructivist secondary school curriculum in 2010, some critics including senior government officials have publicly acknowledged that Namibia's education has not lived to its expectations. For instance, on July 27, 2011 in his keynote address to the National Conference on Education, the late Minister of Education, Dr. Nicky Iyambo characterised the Namibian education system as "crippled" (MoE, 2011).

The minister's characterisation of Namibia's education system has resulted in many questions. Why is Namibia's education system described as "crippled"? Could it be that the conditions in and around the school do not promote effective teaching and learning? Could it be that the teachers mandated with the responsibility of implementing the national curriculum do not have the required knowledge and skills and are thus failing to implement the new learner-centred curriculum? Could it be that the curriculum itself has too many conflicting needs and demands making it difficult for teachers to identify and implement priority areas? Or could it be that there are numerous misunderstood factors that exist between curriculum developers and key implementers of the curriculum policy framework?

In an attempt to respond to these questions, some critics have suggested that one of the key challenges in Namibia is that prior curricular policies including the 2010 secondary school curriculum have not been implemented as intended by policy makers. For instance, Mr Nahas Angula, the former Prime Minister, in his address at Namibia's National Conference on Education on 27 June 2011, stated as follows:

> "A number of research and policy documents capture the new thinking on education in the country. It is clear that with so many documents it indicates that the policy terrain of education and training is well researched, documented and developed. It is reasonable to conclude, therefore, that the weaknesses in our education and training sector are not likely to be in respect of policy development, but rather in terms of policy implementation. To my mind, one of the principal areas of concern in the education system is that sound principles of the current curriculum are not being implemented" (Angula, 2011:8-10).

Moreover, he claimed that:

> "Teacher education programmes at the University of Namibia have not responded by producing professionals equipped to implement the curriculum. It is for this reason that the curriculum fails to be implemented. Therefore, the key word should be implementation, implementation, and implementation. I cannot stress it enough. In my view, the curriculum has not been implemented, and this is the central problem or weakness in the education sector today, perhaps even in the public sector as a whole" (Angula, 2011:8-10).

In his concluding remarks the former Prime Minister observed that the Ministry of Education's leadership has resorted to:

> "Cheap talk, whilst doing something has become a real challenge."

He asked:

> "Why is the ministry not implementing the policies that are already in place?" (ibid).

The question above underscores the purpose of this thesis. In the present study I ask the same question but slightly different:

> "What are the factors that influence the implementation of the intended secondary school curriculum at the classroom level as designed and developed by policy makers in Namibia?"

A critical difference of opinion across the world exists on possible factors that influence the implementation of a curriculum innovation at the classroom level.

However, the key factors attributed to this situation are divergent. A lot of the blame for the current state of affairs in the education system is placed, some say wrongfully, on Namibia's apartheid era under which most of the country's black majority suffered at the expense of a white minority (Africa Review, Wednesday, May 11, 2011). Some critics assert that the curriculum is overloaded with too many subjects and lacks clear standards; while others regard the shortage of schoolbooks, and the fact that 21 per cent of all schools have no permanent classrooms as reasons for the poor performance

of the education. Moreover, other commentators believe that methods used by teachers to assess pupil performance, and by school principals to assess teacher standards are weakening the Namibian education system (Africa Review, Wednesday, May 11, 2011).

The Organisation for Economic Cooperation and Development (OECD, 2008:24) reported a public opinion that perceives teachers as unmotivated, incompetent, uninterested and negligent to the plight of students. However, teachers, on the other hand, blame students whom they regard as incapable and bad students who are always "absent minded." In addition, there is a widespread perception by teachers that they are subjected to serious stress by the behaviour of students, their parents and society at large (OECD, 2008:84). Nevertheless, students see things differently. Many students believe that teachers are at fault as they do not help them to study or to develop as individuals (OECD, 2008:84).

Further, it has been suggested that inadequate teacher preparation, language issues, shortages of learning materials such as textbooks and limited "opportunity to learn" because of tight timetables and a lack of basic resources, could be the main barriers to the successful implementation of the secondary school curriculum (OECD, 2008:84).

Generally, Payne showed that support and external assistance, staff training and motivation; clarity about the innovation, resource materials and school organisational arrangements can influence the implementation of a curriculum innovation (Payne, 2008).

Put together, Connelly and Lantz (1991) observed that the view that the intended and implemented curriculum should match poses challenges for policy makers, school administrators, and classroom teachers worldwide. Therefore, Bekalo and Welford (2000), believe that a discrepancy will continue to exist between what is intended and what is implemented because despite policymakers' good intentions to produce and introduce a curriculum policy, there will be unforeseen challenges that might negatively affect its translation at the classroom level (Connely & Lantz, 1991).

Fullan and Stiegelbauer (1991:345), for instance, stated that one of the inevitable problems arising from curriculum implementation is the complexity caused by the fact that stakeholders at different levels interpret the curriculum policies differently than originally conceived.

In other words, as Carl (2012:172-173) put it, the real test for successful curriculum development is usually the operationalisation and institutionalisation of the curriculum innovation. It can therefore be stated that although the Ministry of Education adopted the National Curriculum Framework in 2010, numerous challenges continue to hamper the successful implementation and effective institutionalisation of the secondary school curriculum at the classroom level.

Given the amount of criticisms, the confusion and the lack of clarity of factors inhibiting the implementation of the NCBE, I found it necessary to carry out a study of the 2010 implemented secondary school curriculum.

This study acknowledges that various research studies have been conducted on learner-centred education in Namibia; however, evaluative research studies on the factors inhibiting or facilitating the implementation of the intended secondary school curriculum have been difficult to find. The current study, therefore, aims at contributing to the literature on factors that inhibit or facilitate the implementation of the intended constructivist secondary school curriculum change in Namibia.

1.4 Main purpose and research objectives of the study

According to Cooper, Slavin and Madden (1998) understanding the factors that affect the process of micro-level curriculum implementation has become increasingly important in the field of curriculum studies. To support this view Carl (2012:135) observed that the factors which may influence curriculum implementation must constantly be borne in mind during the implementation phase and continuously endeavour to break them. He cautions that many curriculum initiatives have miscarried because curriculum developers underestimated the importance of implementation.

Carl (2012:137-138) therefore advised that it is necessary for curriculum developers to plan effectively for the implementation phase, with a view of identifying facilitating and inhibiting factors and to follow a suitable strategy which will ensure the success of the implementation of a teacher's subject curriculum in a particular classroom.

In view of this understanding, the main purpose of this evaluative research study was to examine the factors that influence the implementation of the intended secondary school curriculum at the classroom level in Namibia.

1.4.1 Research questions

The research study addressed the following specific subsidiary questions:

- What are the implications of the various curriculum interpretations on classroom teaching and learning?
- What teachers' demographic variables (age, gender, number of subjects taught, professional qualification and teaching experience) influence the implementation of the intended secondary school curriculum?
- How do epistemological factors of teachers (knowledge of the curriculum, attitudes towards the curriculum, beliefs and self-efficacy) influence the implementation of the intended secondary school curriculum?

- How do internal factors in the school (learners' characteristics, professional development and school leadership) influence the implementation of the intended secondary school curriculum?
- How do factors outside of the school (resources, stakeholder support and teacher involvement) influence the implementation of the intended secondary school curriculum?

1.4.2 Research objectives

The objectives of this study were to:

- analyse various curriculum interpretations and their implications on classroom teaching and learning,
- determine whether teachers' demographical variables of age, gender, teacher qualification, teaching experience and number of subjects being taught have an influence on the implementation of the intended secondary school curriculum,
- ascertain whether teachers' epistemological variables of knowledge, attitudes, beliefs, behaviour or self-efficacy have an influence on the implementation of the intended secondary school curriculum,
- find out whether internal school factors (learners' characteristics, professional development and school leadership) have an influence on the implementation of the intended secondary school curriculum,
- determine whether external school factors (resources, stakeholder support and teacher involvement) have an influence on the implementation of the intended secondary school curriculum,
- formulate recommendations based on the findings of the study.

Based on the main purpose, questions and objectives outlined above, the hypotheses statements (H_0 and H_1) of the current study were formulated as presented in Chapter 4 (see 4.4).

1.5 Significance of the study

This research study explored factors that influence the implementation of the intended secondary school curriculum at the classroom level in Namibia. I felt that an evaluative study of the secondary school curriculum change and implementation could be carried out in the Namibian education system for several reasons.

As this study considers issues of curriculum policy change, implementation, theory and practice at the classroom level, the research findings will provide policy makers with knowledge of the difficulties that teachers experience when linking theory and practice in the classroom situation. Therefore, the findings of this study aim at providing stakeholders with knowledge and understanding of the challenges that teachers are experiencing as they implement a learner-centred curriculum in the Namibian classroom environment.

Also, the study intends to offer expert advice on how to introduce curriculum change that serves the needs of teachers as key curriculum implementers. Similarly, it is hoped that the findings of this study will likely affect curriculum planning, development, review, revision, and adoption particularly at the classroom level. In addition, the study results will assist other researchers in the field of curriculum studies and curriculum policy makers and implementers to monitor and document the effects of curriculum change on future curricular options that may become available to Namibian educators and students.

Further, by undertaking this evaluation of the implemented secondary school curriculum, this study hopes to present evidence of what role teachers charged with curriculum implementation should play in the overall curriculum development processes.

In addition, it is envisaged that the present study will provide an opportunity for secondary school teachers to express their views and experiences, in a non-threatening environment about the challenges they face when implementing the intended curriculum

at a micro-level. From my experience as an educator, many teachers are reluctant to critique the current secondary school curriculum for fear of reprisals from their immediate supervisors and the regional office of education.

Moreover, I hope that the findings of this study will contribute to the literature on how to approach the implemented curriculum reform process at national, regional, circuit, cluster, school and classroom levels of the Namibian education system. Therefore, this research study seeks to provide guidance to educators, policymakers, and researchers, all of whom agree that change in Namibia's public education system is needed, but may lack certainty on how best to lead and manage the process of curriculum implementation. The lessons learned from the study will inform schools, regional and national authorities on how to implement the secondary school curriculum (Cooper, Slavin & Madden, 1998).

Finally, because educational change and curriculum implementation are a worldwide phenomenon, it is likely that the theoretical constructs and recommendations that emerge from this study will not only be applicable to the Namibia situation but to other countries worldwide.

1.6 Delimitation and scope of the study

This evaluative study is carried out in the field of curriculum studies. Carl (2012:23) noted that the field of curriculum is very broad and often vaguely defined. However, without going into a detailed discussion of the curriculum field, it is suffice to mention here that curriculum studies can conceptually be classified into psychological, educational, administrative and philosophical aspects (Carl, 2012:23-24).

Carl (2012) writing from a South African experience observed that teacher education programmes in South Africa lack extensive curriculum theoretical field. As a result he argues that the study of curriculum studies and in-depth curriculum inquiry are essential,

as a high level of mastery in both theory and practice is necessary in order to be able to curriculate effectively (Carl, 2012:21).

Based on this argument, the scope of the present study is curriculum implementation, a part of the curriculum field in which inquiry is concerned with the application phase of the core syllabi, the school's broad curriculum, every subject curriculum and every lesson unit/lesson (Carl, 2012:134). Because implementation can take place at different levels (Carl, 2012:136) such as macro-, meso- and micro levels, inquiry can as well take place at any of these levels. Thus, this evaluative study concentrates on factors that inhibit or support teachers to implement the secondary school curriculum at the micro level, that is, at the school and classroom level.

According to Carl (2012:137) because the micro-implementation level includes the implementation of a teacher's subject curriculum or specific lessons in a particular classroom, it can be regarded as the level at which the curriculum consumer applies the curriculum in reality.

The research study was conducted in Namibia. Namibia is geographically a huge country with a total of 824, 292 square kilometres and a population of 2 085 927 (Namibia Labour Survey (NLFS), 2012). The country is divided into 13 political regions. However, this evaluative study was delimited to only three regions (Kavango, Oshikoto and Caprivi), located in the north and north eastern part of Namibia. Specifically, 260 teachers from 12 public secondary schools were involved in the study.

In Namibia secondary schools refer to combined, junior and senior secondary phases, ranging from Grade 8-12. Thus, as indicated in section 1.9.5 of this chapter and Chapter 4 (see 4.6), all teachers in the sampled secondary school grade levels were eligible to participate in this study.

The following section discusses the key concepts that are relevant to the current study.

1.7 Explanation of concepts

In Babbie and Mouton (2001:111) a “concept” is defined as a “family of conceptions” or a construct used in day-to-day communication, which usually occurs through a system of vague and general agreements about the use of terms.

Babbie and Mouton (2001:111) noted that usually, imprecision in communication leads to misunderstandings resulting in interpersonal conflicts. Marshal and Rossman (1995:18) once stated that science does not operate in a context of imprecision. These authors advice that research as a science should therefore strive to present a “conceptual funnel” through the focusing process linked to the language of the research project.

Within this context social researchers agree that conceptualisation, that is, the process of specifying the meaning of particular terms should be encouraged in every research study. The process should be based on developing working agreements about the meaning of terms which guide the researcher to work on the research question (Babbie & Mouton, 2001:111).

Babbie and Mouton (2001:111) contended that the clarification of concepts is a continuing process in social research which takes place at both data collection and text analysis phases of a study. This “hermeneutic circle”, a cyclical process of ever deeper understanding takes place through a process in which the meaning of the separate parts is determined by the global meaning of the text as it is anticipated.

Kvale (1996:47) asserted that the closer determination of the meaning of the separate parts can eventually change the originally anticipated meaning of the totality, which again influences the meaning of the separate parts, and so on. This continual refinement and clarification of concepts proceeds into the writing up of the final report.

The topic of this study is to evaluate the factors that influence the implementation of the secondary school intended and enacted curriculum at the classroom level.

To contextualise parameters of the present study the following nominal definitions of key concepts are discussed. The definitions are used to minimise disagreements and confusion pertaining to analyses in this research study.

- **Curriculum Framework** – A school curriculum typically consists of a number of subjects to be taught. The actual number varies between primary and secondary schools. In an endeavour to rationalise and to control the number of subjects taught, education systems in many countries have resorted to the use of curriculum frameworks. A curriculum framework can be defined as a written document in which general policy for one or more instructional presentations in a particular subject is set out. It contains the broad objectives of the instructional presentation(s), the similarly selected and classified core content in the form of subject/themes as headings, guidelines (Carl, 2012:35).

- **National Curriculum for Basic Education** – A National Curriculum is a public representation of what are considered the purposes of education at a national level, and it serves as a documented map of theories, common beliefs and ideas about schooling, teaching and learning and knowledge. It is generally developed and mandated by a national jurisdiction to provide the same basic education to all students mainly in public schools across a country. National curricula commonly establish national standards for the performance of all students in the subjects they include. They mostly incorporate overarching legal statements that outline how teachers can modify, as necessary, curriculum programs of study to provide all school children with relevant information at main key stages. Many developing countries and countries in transition have highly centralised education and state mandated national curriculum. In Namibia the Namibia Curriculum for Basic Education is the name of the document referred to as the national curriculum (Kridel, 2010:600; MoE, 2010).

- **Planned curriculum** – A planned curriculum is the curriculum document and statements of intent of curriculum developers. It has been suggested that in an ideal world the planned curriculum is faithfully reflected in the teaching-learning situation, but in the real world, the planned curriculum, will be transformed by such things as the hidden agendas of the learners, the moment-by-moment realities of the learning process and the decisions made by teachers on the spur of the moment as they monitor and react to unfolding classroom events (Murphy & Pushor, 2010:659-659).

- **Secondary school curriculum** – In the Namibian context secondary school curricula are all those guides and syllabi that are developed to cover Grades 8-12 school phase (MoE, 2010:36). Curricula of the secondary school phase offer deeper students' understanding of the disciplines of knowledge while simultaneously demonstrating their connectedness to the skills that students learned in the previous phase. A common arrangement of the secondary school curriculum is its separate subject approach. Another common attribute of the secondary school level is that it addresses the human needs and concerns of young adolescents by educators who implement different curriculum philosophy and practices. As a result the secondary school curriculum offers advanced disciplines to students. Teachers help students to examine gaps that need to be filled in students' knowledge bases and skills and prepare lessons, activities and assessments with the intention of filling those gaps. Thus the secondary school curriculum helps students to acquire and apply the learning of the essential concepts of every unit to real life situations (Kridel, 2010:151).

- **Curriculation** is regarded as the systematic and effective planning action during which components such as objectives, goals, situation analysis, selection and classification of content, selection and classification of teaching experiences, planning of teaching methods and teaching media, planning of the instructional-learning situation, implementation and learner evaluation are systematically planned in order to bring into being an effective design. Curriculation takes place at various levels, but not all elements will arise at all levels (Carl, 2012:34).

- **Learning area**. In the context of this study a learning area is a new grouping of contents that replaces the old school subjects outlined in the 1998 Pilot Curriculum Guide for Formal Senior Secondary Education (Grades 11-12). According to the 2010 Namibia Curriculum for Basic Education a key learning area is defined as a field of knowledge and skills which is part of the foundation needed to function well in a knowledge-based society. There are therefore *seven* key learning areas on which the Basic Education in Namibia is based: Languages, Mathematics, Natural Sciences, Social Sciences, Technology, Commerce, Arts and Physical Education MoE, 2010:12).

- **Curriculum design**. This is a phase during which a new curriculum is planned, or during which the replanning and review of an existing curriculum is done after a full re-evaluation has been done (Carl, 2012:41). Because there are different levels at which curriculum may take place, the emphasis of the present study is to understand how teachers are curriculating the nationally designed curriculum for specific learners at micro-level (Carl, 2012:67).

- **Curriculum development.** For the purpose of the current study, curriculum development is defined as an umbrella and continuing process in which structure and systematic planning methods feature strongly from design to evaluation (Carl, 2012:38). In addition, this study regards the curriculum development process taking place as a multilevel and multisector process involving various individuals, groups and agencies (Oliva & Gordon, 2013:28).

- **Curriculum dissemination.** Literature regards dissemination as a process which describes the question of 'who says what to whom by what channel to what effect for what purpose' (Carl, 2012:118). For instance, Carl (2012:118) regards dissemination as a process of interaction or coupling between a potential source and a potential consumer. Thus curriculum dissemination regarded as a structured and planned process is part of systematic administration with meetings, plans of action,

timetables, distribution of information circulars and organised in-service training programmes. In this thesis the dissemination phase which follows after the design of the curriculum has been finalised is regarded as an important milestone in the future success of the curriculum policy. Because the curriculum dissemination comprises the preparation of curriculum utilisers through the distribution or promulgation of information, thoughts and concepts, it is at this phase that stakeholders are made aware of the implications of the envisaged curriculum.

- **Curriculum implementation.** Schubert (1986:42) defined curriculum implementation as traditionally, the delivery process or a system of engineering that takes design specifications through various channels to the teacher and classroom. Carl (2009:133) concurred and emphasised that this is the *application phase* of not only core syllabi but also the school's broad curriculum, every subject curriculum and every lesson unit or lesson. This study adopted these descriptions because it is at this phase that the disseminated intended curriculum policy document is put into actual use.

- **Curriculum evaluation** is the determination of to what extent the objectives of the curriculum have been achieved (Carl, 2012:42). Doll (1978:433) regarded curriculum evaluation as *inter alia* a broad and continuous effort to inquire into the effects of utilising educational content and process according to clearly defined goals. Therefore, curriculum evaluation is the process during which a value determination of the standard and outcome of the relevant curriculum (broad, subject or lesson curriculum) is made. The process of evaluation process takes place [before], during and after each design phase, with the view to making timeous adjustments and determining success. There are two facets in respect of the curriculum which must be evaluated, namely *effectiveness* and *acceptability*. The effectiveness is determined by the measure in which whether a minimum number of learners have reached a specific minimum expected objectives at a specific level. On the other hand, acceptability measures whether the curriculum has been acceptable to both learners and teachers (Mostert, 1986:38). According to Carl (2012:142), curriculum

evaluation comprises the description and judgement of curriculum anticipation and curriculum realities, i.e. intended and operational curriculum (Eisner, 1985:46). In a nutshell, curriculum evaluation deals with curriculum processes such as the instructional actions, contents, and learning experiences to which learners are exposed (realities) and curriculum outcomes such as the anticipated and unanticipated effects of the curriculum events on learners (Carl, 2005:141).

- **Implementation evaluation** is the evaluation of the extent to which curriculum anticipations become a reality (Carl, 2012:42).

- **Macro-implementation** is the application of policy and curriculum initiatives which have been determined at national level by curriculum authorities. This will include an interaction between this authority and the practice within which it is implemented. It is therefore the implementation of a broad curriculum or other core syllabi designed at national level; which have been distributed and applied country-wide (Carl, 2012:136).

- **Micro-implementation** is defined as the process during which local decisions are taken. This leads to application-in-practice and the eventual institutionalisation. In practice it means that core syllabi must be implemented at school and classroom level by subject teachers. Teacher participation and initiatives are normally high at this level as, through their implementation, they make their own mark on the development of a syllabus (through syllabus interpretation, subject and lesson curriculation, etc.). In this manner, the initial curriculum initiative is established in practice (institutionalised). Micro-implementation may therefore also include the implementation of a subject teacher's curriculum or specific lessons in a particular classroom. The micro-level is therefore that level at which the so-called curriculum consumer applies the curriculum (Jordan, 1989:393; Mostert, 1986) cited in Carl, 2012:137).

- **Learner-Centred Education**. Based on Namibian policy framework *Toward Education for All: A Development Brief for Education, Culture and Training (1993)* and existing broad curricula, Learner Centred Education presupposes that the teacher has a holistic view of the learner, valuing the learner's life experiences as the starting point for their studies. Teachers select content and methods on the basis of an analysis of the learner's needs, use local and natural resources as an alternative or supplement to ready-made materials, and thus develop their own and the learners' activity. A learner-centred approach demands a high degree of learner participation, contribution and production. It is based on a democratic pedagogy, a methodology which promotes learning through understanding and practice directed towards empowerment to shape the conditions of one's life (MEC, 1993, 1998:1-2).

  In Namibia social constructivism underpins learner centred education. Social constructivism as defined in the Namibian context is a belief system that regards learning as an interactive, shared and productive process, where teaching creates learning opportunities which enables learners to explore different ways of knowing and develop a whole range of their thinking abilities both within and across subject areas of the whole curriculum (MoE, 2010:4).

The following subsection briefly outlines the research paradigm of this thesis.

1.8 Research paradigm

During the discussion in Section 1.4 the main purpose of the study and research questions were presented, whereas hypotheses (see 4.6) are formulated in Chapter 4. This section, however, briefly discusses the importance of the philosophy in the present study. Because Chapter 4 provides a detailed discussion of the importance of the philosophy in research, it is suffice to state here that central to questions of 'How to research?' and 'What to research?' is the researcher's perspective of 'Why research?' (Remenyi, Williams, Money & Swartz, 1998). Remenyi *et al.,* (1998) reiterated that this perspective is based on the researcher's assumptions about the interrelated concepts of

ontology (nature of reality), epistemology (knowledge), and methodology, methods and data sources. These assumptions point to the need of a paradigm in any research study.

The term paradigm has its origin in Kuhn's writings during the 1970s, who used it to explain the scientific revolution that took place in the natural sciences (De Vos, *et al.,* 2011:40). The use of the term in the sciences has generated numerous debates and definitions. Barker (2003:312) regarded a paradigm as a model or pattern containing a set of legitimated assumptions and a design for collecting and interpreting data.

Mouton and Marais (1992:150) stated that Kuhn's use of the term *paradigm* has had a major impact on the philosophy and methodology of the social sciences. Williams (2012) on the other hand, observed that research paradigm and philosophy are an important part of research methodology because they help a researcher to collect data in an effective and appropriate manner. Johnson and Christensen (2010), defined research paradigm as a perspective that is based on the set of shared assumptions, values, concepts and practices. In other words, paradigm is a function of how a researcher thinks about the development of knowledge.

Johnson and Christensen (2010) emphasised the fact that because a research paradigm includes the research methods and research philosophies, it means that this combination in research does not only help a researcher to develop the understanding and knowledge about the topic of research, but also helps a researcher to eliminate time and budget constraints, that is, factors that might affect the researcher to implement a method in an effective way. McNabb (2007) contributed to this debate by stating that there are three different research philosophies, namely positivism, interpretivism and realism, which are associated to research paradigm. Cohen, Manion and Morrison (2007:1-45), on the other hand, identified positivism; interpretivism and critical theory as the three main paradigms used in educational research (see Chapter 4).

The current study is positivist in the sense it uses highly structured methodology to enable generalisation and quantifiable observations and evaluate the result with the

help of statistical methods. Thus, the study includes the various philosophy of natural science which regards reality as objective, unchanging, and universal (Saunders, Lewis, & Thornhill, 2003:83).

On the other hand, this study has hallmarks of interpretive philosophy, in which the researcher is concerned with meanings, understanding and interpretations of nature within a subjective exploration of reality from the perspective of an insider (Cohen, *et al.,* 2007:31; De Vos, *et al.,* 2011:308).

Equally important is the fact that the current study has characteristics of a critical theory paradigm, which does not only strive to understand and interpret the world in terms of its actors, but also criticises the existing power relations with the intent to effect change (ibid). Therefore, in this study I employed an interpretivist paradigm with a critical disposition. This means that my intention was to uncover the different interests that influence the implementation of the curriculum in the classroom and interrogate those interests so as to transform the curriculum development and implementation process and promote teachers' and learners' individual freedoms within a democratic education system (Cohen, *et al.,* 2007:37). This decision is influenced by critical theorists such as Habermas's (1972) emancipatory interest and Freire's (1972:65) critical pedagogy, also referred to as praxis (see Chapter 3).

1.9 Research methodology

This section presents the research methodology of the study outlining the research design that was considered to be the most appropriate to investigate the research topic.

According to Williams (2012) methodology gives a clear cut idea on what the researcher is carrying out in his or her research. Methodology therefore provides a researcher with a platform for mapping out his or her research work based on a solid plan within a specified time frame. Williams (2012) noted that methodology is important because it

guides researchers to be active in their particular field of inquiry. In addition, by adopting a suitable methodology it helps the researcher to align the aims and objectives of the research with the research topic. Further, the methodology drives the researcher to understand and identify the right type of research, strategy, philosophy, time horizon, approaches, followed by right procedures and techniques based on his or her research work.

In a nutshell, the research methodology acts as the nerve center of any research study because binds the entire research process. Williams (2012) noted that a right methodological process, which meets internal and external environmental criteria is required for any researcher to perform a good research work.

To reiterate, the present study is an evaluative research of the factors that influence the implementation of the intended secondary school curriculum at the classroom level in Namibia. To answer specific research questions related to this research topic the present study adopted a quantitative-qualitative methodological approach. Although a detailed account of the research methodology is described in Chapter 4 of this study, a brief outline is introduced here.

1.9.1 Research design

Of the forty mixed-methods research reported in literature (Tashakkori & Teddlie, 2003), this thesis used a sequential explanatory design. As De Vos *et al*., (2011:441) stated the explanatory design is a two-phase mixed methods design, in which the design starts with the collection and analysis of quantitative data followed by the collection and analysis of qualitative data.

Therefore, through this research design, I collected and analysed first quantitative and then qualitative data in two consecutive phases within this study. As highlighted in

Chapter 4 (see 4.8), the main unit of analysis of this study were teachers and principals of all participating secondary schools.

The main purpose of using this design was that the qualitative data would help explain or build upon initial quantitative results from the first phase of study (Creswell & Clark, 2007:71). Though the design proved challenging to implement due to time limitations imposed by the two-phase data collection process, I found it convenient to implement as one type of data was collected at a time (De Vos, *et al.,* (2011:441) without confusion.

1.9.2 Mixed methods research

Despite various conflicting definitions of what constitutes mixed methods research, the approach has become popular among social research studies. De Vos, *et al.,* (2011:434) stated that experts in the field of mixed methods research define this concept in two common ways. First, some methodologists describe it is a form of research with separate methodology and its own philosophical assumption and considerations for methods of inquiry (Creswell & Clark, 2007:5; De Vos *et al.,* 2011:434). Second, other mixed methods authors describe it as a form of research that combines techniques or methods of collecting and analysing quantitative and qualitative data. This conception of research methods is interested more in triangulation that enriches one particular approach, but does not consider a mixed methods approach in which both qualitative and quantitative approaches, methods and procedures are combined or “mixed” to come up with a complete picture of the research problem (De Vos, *et al.,* 2011:434).

Given these points, the second conception of mixed methods research underpins the present study. By definition, mixed methods research is used in this study to refer to the view that it is a separate methodology. This view builds on Johnson and Onwuegbuzie (2004:17) who described mixed methods research as “the class of research where the researcher mixes or combines quantitative and qualitative research techniques,

methods, approaches, concepts or language into a single study." This definition is more or less the same with that of Tashakkori and Teddlie (2003:711) who defined mixed methods research as "a type of research design in which qualitative and quantitative approaches are used in types of questions, research methods, data collection and analysis procedures, and/or inferences". In the same vein, Ivankova, Creswell and Clark (2007:261) defined mixed methods research as "is a procedure for collecting, analysing and "mixing" both quantitative and qualitative data at some stage of the research process within a single study to understand a research problem more completely".

As has been noted, and based on the view of mixed methods research adopted in this study, I collected both numeric information using a survey instrument and text information using open-ended interviews to answer the study's research questions. The collected data were mixed and integrated at the interpretation phase within the study (De Vos, *et al.,* 2011:434-435).

1.9.3 Validation of quantitative data

1.9.3.1 Validity

According to Wholey, Hatry and Newcomer (2004:549) validity tries to answer the question: “Are we accurately measuring what we intend to measure?” In other words, validity is concerned with the accuracy of measurement, that is, the extent to which the research instrument measures what it is intended to measure (Rossi, Lipsey & Freeman, 2004:218-220). In order to meet the research requirements of validity, content and face validities were established prior to data collection, while criterion and construct validities were established after the instrument has been used to collect data (De Vos *et al.,* 2011:173). For instance, the researcher ensured that the questionnaire not only measured the attributes of the study accurately, but also that the instrument was a relevant measure of the attributes (De Vos *et al.,* 2011:174) that the study was set to investigate. Regarding criterion and construct validities, the researcher had to establish whether items in the instrument were clustered together according to the constructs of demography, knowledge, attitudes, beliefs, behaviour, internal and external school factors, theoretical dimensions (De Vos *et al.,* 2011:175) on which research findings would be based.

1.9.3.2 Reliability

Conversely, reliability measures the extent to which the instrument produces the same results when used repeatedly to measure the same thing. Therefore, reliability asks the question: “Will the measurement procedures produce similar results on repeated observations of the same condition or event?” According to Creswell (2012:159); Wholey *et al.* (2004:549); Babbie (2007:143) and Gravetter and Forzano (2003:91) a measuring instrument’s numerical results are reliable to the extent that the criteria and questions consistently measure target behaviours or attitudes; it does not fluctuate unless there are variations in the variable being measured.

To meet the criteria of both validity and reliability, the questionnaire design was grounded in the literature reviewed for the present study. Further, the Cronbach’s alpha

was used to measure the internal reliability (or consistency) of items within the questionnaire. As the Cronbach's alpha determines agreement of answers on questions targeted to a specific trait, (McMillan & Schumacher, 2010:182) alpha coefficients for each category of the independent variable were computed and reported to describe the reliability of the measures.

According to Maree (2007:216) if the items are strongly correlated with each other, their internal consistency is high and the alpha coefficient will be close to one. But if, on the other hand, the items are poorly formulated and do not correlate strongly, the alpha coefficient will be close to zero (see 4.19). Moreover, data collection instruments used in this study were piloted to test for language appropriateness and relevance of questions. Further, the main sections of the questionnaire and questions were clearly defined with instructions stating what was expected of the research participants.

1.9.4 Validation of qualitative data

With regard to the qualitative dimension of the current study the conventional criteria for good research, namely validity, reliability and objectivity applied to the quantitative phase described above were not applicable (De Vos *et al*., (2011:419). Therefore, establishing the credibility/trustworthiness of the qualitative findings for this study involved six strategies based on the work of McMillan and Schumacher (2010:331-332). First, qualitative data collected using interviews were triangulated with document data in order to obtain different insights about the critical cases that were identified for analysis. The use of these data sources helped the researcher to corroborate data and develop different perspectives on how to interpret the data. These strategies were used in an attempt to increase the credibility of findings.

Second, in order to minimise bias of collected qualitative data, the researcher used verbatim accounts of participants' narratives encountered during interviews. In the same vein data were recorded mechanically using a tape recorder to provide accurate and relatively complete records of informants' data. These strategies helped the researcher

to present study findings in concrete terms. In addition, in order to be able to identify patterns in the data the researcher had to write precise and almost literal descriptions from field notes and interview elaborations. Also the researcher conducted extensive discussions with informants in order to reach agreements on meanings and to ask them to corroborate or refute what has been recorded.

To further enhance data credibility the researcher kept a diary or records of the overall interviewing process. Moreover, in one instance, the researcher shared the interview transcript with the interviewee to which the informant modified interview data for accuracy. In addition, the researcher included both opposite findings and findings that can be regarded as not consistent with emerging themes. This last strategy helped the researcher to minimise his subjective realities and to "let the informants speak for themselves" (McMillan & Schumacher, 2010:333).

1.9.5 Population and sample

The population of study was secondary school teachers in three northern regions (Caprivi, Kavango and Oshikoto) of Namibia. A random of 15 schools was drawn from all public secondary schools. The selection of schools was made by stratifying the population of secondary schools by location, namely rural and urban. All teachers from these schools were supplied, via field workers and principals with a copy of the questionnaire and were asked to participate in the study. Altogether 370 teachers received the survey instrument. Two hundred and sixty (260) questionnaires were returned.

Once received all questionnaire scores were entered into the Statistical Programme for the Social Sciences (SPSS) spread sheet in accordance with the data entry and management procedures highlighted in Chapter 4 (see 4.16). Qualitative data were collected second using an interview guide or protocol developed to answer specific research questions developed to shed light on raw and simple statistics generated during the quantitative analysis phase (Feilzer, 2010).

With regard to the qualitative phase of this study, the sample consisted of 15 teachers (5 females and 10 males) who were purposively selected across the three participating regions of Caprivi, Kavango and Oshikoto (see Table 4.1).

Five participants were selected from Caprivi region (a male school principal from an urban senior secondary school) and two female teachers and a male teacher from one rural combined school. Another male teacher was selected from an urban senior secondary school.

In Kavango region, eight teachers were interviewed with two female teachers selected from an urban senior secondary school. Of the six male teachers, two teachers were drawn from a rural senior secondary school, while four teachers were selected from a rural combined school.

In Oshikoto region, two teachers (a male principal from an urban senior secondary school and a female teacher from a rural combined school) participated in this study (see Table 4.1).

The criteria for selecting the 15 teachers for interviews were influenced by factors such as the epistemological perspectives, research design and practical considerations of the present study (see 4.18).

1.9.6 Data collection

Within the context of the above research questions, the current study addressed both the 'what' quantitative and the 'why' qualitative questions (Cohen, *et al.*, 2011:26) through deductive and inductive methods of data collection involving literature reviews, questionnaires, in-depth interviews and field notes.

1.9.7 Data collection procedures

Data collection process took place in October to November 2012; and January to March 2013. However, prior to fieldwork both the questionnaire instrument (Appendix 1: Teachers' questionnaire) and the interview protocol (Appendix 2: Interview protocol) were piloted on a purposively selected number of secondary school teachers. Piloted, questionnaire and interview instruments, were not, however, part of the sampled group. Experiences from the piloting exercise were used to adjust the instruments in terms of language and terminology used, and sequencing of questions.

Data were collected in a sequence starting with self-administered questionnaires followed by in-depth interviews with 15 sampled teachers (see Table 4.1). For instance, after adjustments to the questionnaire resulting from the piloting exercise, the final questionnaire was printed and distributed to fieldworkers in each participating region. The researcher conducted all the briefings about the research study and made appointments with principals of participating schools. Also the researcher informed fieldworkers of all confirmed appointments; whose responsibility was to deliver questionnaires to the headmasters of each participating schools according to agreed dates.

1.9.8 Data analysis

A sequential data analysis process was conducted in accordance with the research design outlined in section 4.16, Chapter 4. Therefore, based on the sequential explanatory design chosen for this study, priority was given to the quantitative phase in addressing the research problem (De Vos, *et al*., 2011:444).

Three types of analysis were used to describe the sample of the quantitative data of this study. First, in order to provide a description of the sample from which data were collected, descriptive/univariate information on age, gender, region of employment, teaching experience of teachers, teachers' highest professional qualifications, current

grades taught and number of grades and subject(s) taught and class size are described using graphs and tables.

Also measures of central tendency (means, modes, range, and standard deviations) are tabulated. In addition, descriptive data for teacher epistemologies, internal and external school factors were computed and presented graphically.

Second, to determine the relationship between independent and dependent variables, Pearson product-moment correlations were calculated. Third, regression analyses were used to examine for any significant differences among independent and dependent variables and to test, reject or accept the research hypotheses (see Chapter 4). All hypotheses were examined at a minimum of the $p<.05$ level of significance.

After collecting quantitative data through a survey instrument and analysing them using statistical procedures, qualitative data were then collected using semi-structured interviews, transcribed, entered into Atlas, coded and analysed by means of a critical case approach. Finally, results of the qualitative analysis were mixed at the interpretation phase in accordance with research questions. This phase was followed by the discussion of research findings. Lastly, conclusions, recommendations, limitations of the study, research implications and suggestions for future research studies were highlighted as discussed in Chapter 6 of this thesis.

1.9.9 Ethical issues

The Faculty of Education under the auspices of the University of the Free State, on behalf of the Ethics Board issued the ethical clearance certificate (**UFS-EDU-2011-0047**) to conduct the present study on 25 August 2011 (Appendix 5: Ethical Clearance Letter). The Permanent Secretary of the Ministry of Education through the Directorate of Programmes and Quality Assurance granted permission to carry out this study in October 2012 (Appendix 8: Request for permission to conduct research study in some secondary schools).

As stated in Chapter 4 (see 4.15) all ethical considerations related to research participants' potential benefits and hazards, recruitment procedures, informed consent, voluntary participation, confidentiality, anonymity, data protection and trustworthiness of findings were explained and observed during fieldwork.

1.10 Layout of the study

This chapter has presented the overview and structure of the research project. This research study is organised into six chapters.

Chapter 1

Chapter One consists of the introduction, the background and rationale of the study, the problem statement, significance of the study, research purpose and objectives, research questions, hypotheses and delimitation and scope of the study and explanation of concepts relevant to this study. The chapter also presents a brief account of the research methodology that was adopted for this study. Finally, this section outlines the summary of chapters.

Chapter 2

This chapter presents the reviewed literature with regard to three different curriculum manifestations, the origin and definitions of the term curriculum and eight 'images' of the curriculum. Furthermore, the chapter presents Habermas's theory of knowledge-constitutive interests and the theory's implications on curriculum implementation in Namibia. In addition, the chapter discusses the concept of change, educational and curriculum change and the reasons for curriculum change in Namibia. To discuss the reasons for curriculum change in Namibia seven forces are presented. A summary of the chapter concludes the discussion.

Chapter 3

Chapter Three provides a historical overview of educational and curriculum reforms that have taken place in pre and post independent Namibia. Also this chapter presents the 2010 National Curriculum for Basic Education with an emphasis on the secondary school curriculum. Finally, a discussion of the possible factors inhibiting or facilitating curriculum implementation drawn from literature and the researcher's personal reflections on the secondary school curriculum concludes the chapter.

Chapter 4

Chapter Four provides the research methodology of the study. This includes the research design, population, sample and sampling procedures and data collection methods. Further, the chapter presents data analysis procedures, data validity and reliability for both quantitative and qualitative data and the ethical issues observed during the present study. A summary of the chapter concludes the discussion of the Chapter 4.

Chapter 5

This chapter presents the results of the current study. First, quantitative descriptive data presented followed by results of inferential data analysis. Also the chapter presents findings of the qualitative data analysis which are integrated with the results of quantitative data analysis.

Chapter 6

In this chapter, the findings with regard to the research questions are summarised and discussed in line with the literature outlined in Chapters 3 and 4. In addition, the limitation of the research study, the implications of the study for practice and theory and

suggestions for future research in curriculum implementation are presented. The chapter concludes with recommendations based on research questions and findings guided by the literature reviewed in this thesis.

1.11 Summary

Chapter One discussed the current situation of the Namibia's education system with reference to skills shortages. The chapter demonstrated that while some commentators blame the lack of skilled human resources in the country on learners, parents, apartheid and lack of resources, most critics believe that despite increases in the budget of the Ministry of Education, most educational reforms have not been implemented as intended by designers of such reforms. The criticism has been levelled against the 2010 National Curriculum for Basic Education, which as critics argue, teachers have not been able to implement at the classroom level.

Moreover, the chapter presents the main purpose and objectives of the study, including the significance of the study, and the delimitation and scope of the study, explanation of key concepts used in the study. In addition, research paradigms and the methodology adopted in this study are briefly described. Finally, the chapter concludes with a layout of the study.

The next chapter discusses curriculum inquiry by clarifying the main concepts central to the current study and describes how these concepts are interrelated in curriculum theory and practice.

CHAPTER 2
CURRICULUM INQUIRY

2.1 Introduction

Curriculum inquiry is a species of educational research or inquiry, which addresses particular kinds of educational research questions related to the formulation of policies, developing curriculum programs, and enacting these policies and programs. Curriculum inquiry therefore involves identifying those curriculum questions that are amenable to inquiry, knowing what form of inquiry to use in attempting to answer those particular questions, and carrying out the appropriate processes of inquiry in order to obtain those answers (Short, 1991:2).

In view of the above introductory remarks this chapter examines how the 2010 intended curriculum policy was developed by policy makers and their key education stakeholders within Namibia's socio-political context. Also the chapter discusses three curriculum manifestations (intended, implemented and attained); the eight main curriculum concepts (see 2.3) used in the current research study and how such concepts are different and interrelated in the field of curriculum inquiry.

The main aim of this foundation information is to delineate the different interpretations of curriculum which might have influenced Namibia's curriculum development and implementation processes. The secondary aim of this chapter therefore is to utilise the information to answer the question of the current study: "What are the factors that influence the implementation of the intended secondary school curriculum in Namibia's classroom situation?"

For instance, drawing on Beane, Toepfer and Alessi (1986), Schubert (1986) and Abell and Lederman's (2007) work eight concepts of curriculum are discussed, which in turn are classified according to Habermas's (1972) knowledge-constitutive interests. The

three Habermas's (1972) knowledge-constitutive interests (technical, practical and emancipatory) are then applied to Namibia's context, highlighting their implications in terms of curriculum design and teaching and learning. Further, against the backdrop of the discussion of change, educational and curriculum change, the chapter presents seven forces (political, philosophical, psychological, cultural, economic, technological and social) explaining their individual and collective influences on curriculum change and reform in Namibia. A summary of the chapter concludes this chapter's discussion.

The introduction of the 2010 National Curriculum for Basic Education (NCBE) was hailed as the "curriculum for the future" by some senior officials of the Government of the Republic of Namibia. For instance, at the launch of the learner-centred curriculum, in 2009, the then Minister of Education, Nangolo Mbumba, indicated that the goal, aims, competencies, core skills and key learning areas contained in the 2010 curriculum were identified in relation to Namibia's Vision 2030, a blueprint for the country's development agenda, which envisaged Namibia becoming a highly innovative, industrialised and knowledge-based society supported by a dynamic, responsive and highly effective education and training sector by 2030 (MoE 2010:i).

The minister announced that the new curriculum framework, which would serve as the official curriculum policy for Formal Basic Education in Namibia will guide schools on how to organise the teaching-learning process and provide a coherent framework to ensure consistency in the delivery of the curriculum in schools throughout the country (MoE, 2010:i).

Literature shows that the readiness with which teachers accept a new curriculum partly (Ornstein & Hunkins, 2009:250) influences the implementation of the curriculum policy framework. At the time of launching the NCBE the Ministry of Education argued that the greatest challenge that will withhold the achievement of the curriculum reform would be how the intended curriculum is implemented (MoE, 2010:5).

In order to explore the preconditions necessary for curriculum implementation, diverse literature relevant to research on the factors that influence curriculum implementation at classroom level is reviewed. Therefore, this chapter provides a summary of topics considered to be most relevant to the research problem. It begins with a brief description of the manifestations of curriculum, followed by a discussion of the origins and definitions of the term curriculum. This is followed by an analysis of eight images of curriculum, which are subsequently summarised and classified under Habermas's (1972) theory of 'knowledge-constitutive interests'. Finally, there is a review of the current literature on the factors that influence the implementation of the intended secondary school curriculum at the classroom level.

2.2 Curriculum manifestations

In the context of this thesis three typologies based on McKnight, Crosswhite, Dossey, Kifer, Swafford, Travers and Cooney (1987:25) are used to help understand the relationships and discrepancies between different representations of the curriculum in practice (Pelgrum, & Plomp, 1993; Robitaille, & Garden, 1989; Ottevanger, 2001:23).

2.2.1 Intended curriculum

The intended curriculum is defined by officials at a system/society/nation/state/regional (or macro) level. It consists of the topics that teachers are expected to teach. Curriculum topics are often prescribed by content standards set by the state. In the context of Namibia the intended curriculum is represented most directly by learning support materials provided to teachers such as teachers' guides, textbooks, videos and computer software. Because the intended curriculum is a set of goals for what teachers and students address in the classroom, the intended curriculum has limited value to those interested in knowing how those goals are implemented and how they relate to student learning.

2.2.2 Implemented curriculum

The implemented curriculum is defined (at the meso-level) as that curriculum which describes how teachers translate the intended curriculum into practice. It includes that part of the intended curriculum that is actually taught, the instructional practices and tools employed, and the conditions under which those things happens. It has direct implications for how course content is covered, how much time is available for other topics, and ultimately, how much and how well students might learn.

Aspects of the implemented curriculum that might reflect school quality include not only the content of the implemented curriculum (the curriculum topics usually addressed in the classroom), but also the pedagogy (or instructional practices), the materials and equipment (such as technology), and the conditions under which the curriculum is implemented (such as the number of students in the class). Furthermore, each of these aspects must be related to student learning.

2.2.3 Attained curriculum

The attained curriculum is defined (at the micro-level) as what students learn represented by their scores on standardised assessments. The attained curriculum is the final product of that part of the intended curriculum that was implemented.

These three curriculum representations are linked together in a classroom input-process-output model, where the intended curriculum represents inputs; the attained curriculum equals the outputs, whereas the implemented curriculum which represents the process has the greatest potential of variation and has a direct effect on student learning (ibid).

The next section therefore discusses the origin of the term “curriculum” and provides the different perspectives by which curriculum can be defined.

2.3 Origin and definitions of curriculum

In studies of schooling, curriculum is a ‘keyword’ and a subject of conflict. Therefore, to develop an understanding of the context in which any curriculum discourse is undertaken, an examination of the term is required; and is the subject of the next discussion.

One of the biggest challenges in curriculum studies is how to define the concept ‘’curriculum’’. The origin of the word “curriculum” can be traced to Latin. Its first meaning referred to “running,” “a race,” or “a course,” and its secondary meanings were “a race-course” or “a career” (Connelly & Lantz, 1991:15; Egan, 2003:10).

The Oxford Advanced Learner’s Dictionary (Hornby, 2010:359) defines curriculum as “a course; a regular course of study or training, as at a school or university”, or as “a course, especially, a specific fixed course of study, as in a school or college, as one leading to a degree.

Jacobs *et al.,* (2000:92) defined curriculum in terms of two meanings. First, curriculum indicates the specific subjects and courses a student needs in order to acquire a certain certificate, diploma or degree. Second, it indicates the content of a subject or course.

A closer analysis of the above definitions shows that these interpretations represent a narrow view of ‘’curriculum’’. Therefore, some curricularists have presented several broader interpretations of the concept of curriculum.

Kelly (2005:6-7) asserted that “we need a definition which embraces at least four major dimensions of educational planning and practice, which describes the intentions of the planners, the procedures adopted for the implementation of those intentions, the actual experiences of the pupils resulting from the teachers’ direct attempts to carry out the planners’ intentions, and the ‘hidden’ learning that occurs as a by-product of the organisation of the curriculum, and indeed the school.”

Therefore, the discussion that follows eight distinct conceptions of curriculum based on Beane, Toepfer and Alessi (1986), Schubert (1986) and Abell and Lederman (2007) are presented.

2.3.1 Curriculum as product, content or subject matter

Curriculum as a product resonates the idea of the curriculum of the school which, in most school systems is demonstrated by the presence of various documents outlining the different courses of study to be taught to learners over a given period of time. For instance, documents such as the social sciences, mathematics, physical science curricula, are commonly found in schools. These documents include lists of courses, syllabi for various courses, lists of skills and objectives, titles of books and assessment procedures and are always referred to as curriculum for the specific subject area, but collectively are regarded as 'school curricula'.

Defining a curriculum as a product is similar to something that is manufactured and emphasises the fact that such documents were produced through the process of curriculum planning, development or engineering. Proponents of this school of thought claim that this definition recognises the fact that a curriculum should be designed according to a series of steps (diagnosis of need, formulation of objectives, selection of content, organisation of content, selection of learning experiences, organisation of learning experiences, determination of what to evaluate, and the ways and means of doing it) leading to the product (Mednick, 2006).

This definition of curriculum allows curriculum practitioners to think of the term in a concrete and definite way and directs curriculum planning and development by specifying their purpose as the product of the document (Beane *et al.*, 1986).

However, critics are rather concerned that defining curriculum in this way limits the idea of "curriculum" to specific courses of study as described in the various school documents. Also it presumes that the curriculum document can describe *all* the possible

“courses of events in the school.” Additionally, critics argue that because the product orientation of curriculum operates on a *pre-specified plan* it tends to focus attention on how the information should be given to students (Mednick, 2006).

Moreover, Schubert (1986:26) argued that the exclusive focus on subjects does not account for other planned or unplanned activities that are major part of students’ experiences in schools. In fact, he reiterates that school subjects only account for topics to be covered and neglects important dimensions of cognitive development, creative expression, and personal growth.

Schubert (1986:26) contended therefore that there is much more involved in planning than the subject to be taught. For instance, instructional strategies, sequencing procedures, the scope of the subject, motivational devices, evaluation instruments, and interpretations of content are but a sample of planned attributes that make an immense difference in the character of a subject. In addition, he points out that unplanned aspects such as the student’s prior knowledge, student attitude about the subject and learning, teacher attitude and mode of interaction with students, students’ interactions with each other, and messages about learning conveyed by the social, organisational, and physical features of the learning environment, are powerful forces in what is learned.

Likewise, the many informal social interactions among students in corridors, on playgrounds, and during lunch and free periods, as well as the formal organisations and events that make up extracurricular features of education, are major factors in what is learned. Thus, critics agree that an image that equates curriculum with subject matter or formal content is easy to use but they charge that it simplifies and limits the problem too much. They maintain that schools provide learning for students that go far beyond the confines of subject matter. Such learnings, as well as those unintended and embedded in the culture of schooling, critics suggest, must be included to give us a comprehensive view of curriculum (Schubert, 1986:26).

Therefore, opponents of this conception of curriculum suggest that curriculum should be defined in terms of a programme of planned activities as explained in the following discussion.

2.3.2 Curriculum as programme of planned activities

This view of curriculum was embraced by Saylor, Alexander and Lewis (1981). These authors stated that this view present narrow and broad perspectives of a curriculum. In the narrowest sense, they regarded curriculum as a course of study that is offered by the school, either required or elective courses, sometimes referred to as an individual student's curriculum expressed in written documents (Carl, 2012:93-94).

The broader definition, however, encompasses all aspects that learners learn in school including those activities that they learn outside the classroom situation. An analysis of this definition, proponents suggest, shows that it recognises that learning is not only limited to school or classroom situation, rather can take place anywhere, for example, in cafeteria, buses, clubs, and so forth.

As a result, Saylor *et al.,* (1981) indicated that this view of curriculum has two strengths. First, curriculum is described in concrete terms and secondly it recognises the fact that learning takes place in various settings other than the school situation.

Despite these purported strengths Schubert (1986:28), indicated that there are several criticisms associated with this image of curriculum. For instance, he posits that characterising curriculum as planned activities simply places major emphasis on outward appearance rather than inner development.

According to Schubert (1986:28) this image of curriculum simply values outcomes and neglects the students' learning process. Thus, the emphasis on activities implies that more careful attention should be given to ends than means. For instance, Schubert (1986) argued that a school system that promotes an activity-oriented curriculum merely assists students to achieve high marks on a state-run examination and less on enhancing skills development. This way the purpose of the activity-oriented curriculum

may be lost resulting with less impact on the learning process or students' personal meaning. The second argument against an activity curriculum is that the attention to pre-specified activities obscures consequences of unintended outcomes. For example, they state that any number of children who engage in a given classroom activity will produce different responses.

Therefore, Schubert (1986:28) suggested that school systems should rather focus on students' experiences than on the planned activity itself. This image of curriculum is the subject of the next discussion.

2.3.3 Curriculum as intended learning outcomes

This definition of curriculum refers to the learnings that are intended for students. In other words, its focus is on the question of "what is to be learned" as distinct from "how it is to be learned." Beane *et al.,* (1986) explained that during the educational planning process that is based on this conception of curriculum the "what" always precedes the "how" question suggesting that curriculum does not include consideration of "why" something is to be learned.

As a result, therefore, Beane *et al.,* (1986) stated that this image of curriculum specifies beforehand knowledge or content, skills, attitudes and behaviours that students are supposed to learn in school. In addition, these authors explain that because "intended learnings" are often described in documents, they may include student objectives for learning or lists of facts, principles, concepts and understandings from various subject fields.

Both Beane *et al.,* (1986) and Schubert (1986) indicated that the conception of curriculum as intended learning outcomes has several advantages to classroom. First, the curriculum becomes a concept or idea rather than a product, and secondly it puts curriculum into a more manageable focus by limiting its scope.

On the contrary, the idea of curriculum as intended learning has been criticised for not paying attention to unintended outcomes also known as the outcomes of the hidden

curriculum, which are an exceedingly powerful force in what students learn in and outside the classroom milieu (Beane *et al.,* 1986; Schubert, 1986). These authors were of the opinion that the intended learning outcome perspective to curriculum overlooks the fact that predetermined knowledge produces different types of impacts on students. For instance, intended learning outcomes may have positive effects on students' cognitive and affective repertoire, but may be harmful to other students. These criticisms led Schubert (1986) to conclude that specifying learning outcomes for every student across the school system and using uniform instructional strategies does not guarantee that intended results will have the same impact on a group of students.

The focus, merits and demerits of curriculum as cultural reproduction are discussed next.

2.3.4 Curriculum as cultural reproduction

This school of thought asserts that curriculum in any society is and should be a reflection of that culture. Therefore, it is the responsibility of the community, state, or nation to take a lead in identifying skills, knowledge, and appreciations that should be taught in school. The job of the school and professional educators should be to transform and reproduce these salient knowledge and values through a curriculum delivered to children from generation to generation. For example, ideas of national identity, cultural convention, mores, values and folkways, economic systems are elements of culture that should be reproduced in public institutions from generation to generation (Schubert, 1986:29).

However, several studies have raised major concerns about this type of curriculum. Apple (1979), Anyon (2005), and Giroux (1983), argued that to use the curriculum as an instrument of uncritical cultural reproduction assumes that the *status quo* is good enough and should be perpetuated as cultural and social improvements are not needed.

In addition, Apple and Weis (1983) believed that any imposition of cultural reproduction through the school curriculum perpetuates existing massive inequalities and social

injustices. These social injustices negatively affect the poor and the destitute in their quest to govern their own lives.

Apple and Weis (1983) demonstrated that the opponents of this view of curriculum argued that school curriculum should not be used to perpetuate existing social injustices to which the middle and working classes surrender their destiny under the control of the wealthy and powerful. Rather the school curriculum should be used to exert force for greater freedom, equality, justice and the development of skills for the creation of job opportunities and alleviation of poverty (Apple & Weis, 1983). The next section discusses a skills-oriented curriculum.

2.3.5 Curriculum as discrete tasks and concepts

Within Schubert's (1986:31) framework, this conception of curriculum is inherit in the skills development approach. This image of curriculum focuses on learners' behaviour development, knowledge creation and appreciation of nature. As a result, Schubert (1986) wrote that this curriculum image promotes the affective, cognitive, psychomotor, and social domains of the learner. The curriculum as discrete tasks and concepts is analogous to task-oriented curriculum which derives its approach from training programmes in business, industry, and the military where the mastery of pre-determined ends and pre-post-test assessment of potential learners are promoted.

Nonetheless, this conception has been the subject of much criticism by its adversaries. Many scholars agree that while task analysis may be highly appropriate for learning certain mechanical activities, it is very limited. For instance, they stress that while a simple additive set of procedures may produce the appearance of a skill well learned, it may not provide for variation that is essential in today's ever changing world. Therefore, opponents suggest that what is required is knowledge of principles, not just isolated skills or concepts. Knowledge of principles, is necessary because it promotes the quest for excellence, virtue, and goodness that comes from a careful study and considerable experience with the topic to be discussed or appraised (Schubert, 1986:31).

Due to the criticisms associated with the image of curriculum as discrete tasks, some educationists regard learners' experiences as the basis of describing curriculum (Schubert, 1986:31). This alternative image of curriculum is explained in the following sub-section.

2.3.6 Curriculum as experiences of the learner

This image of curriculum has its roots in Dewey's work, who during the early twentieth century asserted that students should be the focus of the curriculum. He, for instance, noted that the spontaneous power of the child, namely, his demand for self-expression cannot by any possibility be suppressed and education should therefore commence with the experience learners already possessed on entering school, for it is the foundation for all further learning (Schubert, 1986:30; Ornstein & Hunkins, 2004:220-221, 2009:237).

Based on Dewey's notion of curriculum, his followers agreed that though it is abstract and complex, it focuses on learning and the learner, and not on teaching. Also they acknowledged that this image of curriculum includes both the planned and unplanned experiences of learners (Schubert, 1986:30).

Kelly (2005:7) suggested instead that any definition of curriculum must embrace all the learning that goes on in schools whether planned and intended or a by-product of teachers' planning and/or practice. In addition, Kelly (2005:7) noted that the 'informal' or 'hidden' curriculum, ('extracurricular') has much educational validity similar to any of the formal curriculum of the school. Moreover, some educationists even argue that in certain cases extracurricular activities have more influence than much of the formal arrangements; therefore, they 'ought to be recognised as an integral part of the total educational programme' and must be included in the formal definition of curriculum (Kelly, 2005:7).

Schubert (1986:30) noted that the merits of curriculum as learner experiences have called for the existing school system to lead the way to a better social order.

2.3.7 Curriculum as an agenda for social reconstruction

The social reconstructionists' view of curriculum pioneered by Counts (1932), championed by Brameld (1940) and inspired by Dewey's work, hold that schools should be centres of knowledge and values and guide students to build a better society (Schubert, 1986:32).

Furthermore, advocates of this school of thought assert that in order to achieve the desirable changes of cultural reproduction, the curriculum should promote critical thinking. Ornstein, Pajak and Ornstein (2011:89) stated that the idea is that teachers should capture the students' imaginations, to have them explore ideas and issues, support arguments, and draw conclusions. In other words, the curriculum should help students to ask and act on the question of "What should be changed, how, and why?"

However, this view has been criticised for insisting that schools through their curricula could be sources of change. As Schubert (1986:32) noted, opponents of this view of curriculum argued that schools are not politically powerful enough to exert major social changes. Also, they contended that if this were possible, teachers' actions would tantamount to indoctrination of students as has been experienced in the past century in totalitarian nations. As a result, Schubert (1986:32) wrote that some observers argued that this view of curriculum was difficult to implement because teachers did not have the right to dictate or determine the type of change that should take place in society.

Another way of understanding the concept of curriculum is by examining it from the view of what Schubert (1986:33) referred to as "curere". This conception of curriculum is discussed in the next section.

2.3.8 Curriculum as "curere"

The view of curriculum as in the case of curriculum as "curere" emphasises the personal growth (Anderson, 2004) of the learner. According to Schubert (1986:33) the central focus, however, is autobiographical. That is, the curriculum is regarded as the interpretation of lived experience.

Reconceptualists criticised the notion that a curriculum is a logical and technical document that should be expended by teachers in a classroom situation. Pinar (1975), Grumet (1981) and Schubert (1986:33) suggested that a more relevant notion of a curriculum should provide possibilities for individuals to 'reconceptualise their own autobiography'. This means that students should have the opportunity to use the curriculum to reflect on their own past experiences so that based on their autobiographical accounts they can create their personal meanings and future directions (Grumet, 1981:115; Pinar, 1975:391).

The foregoing section presented various viewpoints of curriculum based mainly on Schubert's work. These conceptions of curriculum are not meant to be the blueprint of defining curriculum. However, they are made to offer us an understanding of the various alternatives of describing the complex concept such as curriculum.

The next section discusses the contribution of Habermas's theory to curriculum understanding and interpretation. In this respect the section presents three broad categories of definitions that are based on Habermas's theory of knowledge-constitutive interests as commonly used in the curriculum field.

2.4 The influence of Habermas's theory of knowledge-constitutive interests on curriculum reconceptualisation

Literature shows that much of the present curriculum debate does not provide a philosophical framework for understanding what school theorists and academics conceive of curriculum (Fraser & Bosanquet, 2006). However, in the 1980s and 1990s Habermas's theory of 'knowledge-constitutive interests' (1972) expounded by Cornbleth (1990), Grundy (1987) and Kemmis and Fitzclarence (1986), became a useful framework for interpreting curriculum.

These authors maintained that curriculum is *a* social and cultural construction, the form and purpose of which are determined by Habermas's three fundamental human interests (Smith (1996/2000), Bobbitt (1928); Tyler, (1949); Taba (1962), Blenkin, Edwards & Kelly (1992:23). These knowledge-constitutive interests, the technical, practical/communicative and emancipatory/praxis interests, guide humanity's search for knowledge about us, others and the world.

2.4.1 Curriculum from a technical interest

According to Habermas (1972:309) cited in Grundy (1987:12) the technical interest of the curriculum is to structure and manage objects and the environment. In these terms, the function of the curriculum is to define and control student learning. That is, the curriculum is used to produce tangible learning outcomes in conformity to the teacher's original lesson plan.

Habermas stated that the focus of planning, design and practice of this type of curriculum is on unit or subject outlines. This means that the programme structure is highly controlled by the formal education system. From a curriculum design stand point, the unit and programme structures exist prior to the arrival of students; and students are separate from the learning experiences of the programme. Most curriculum practitioners of this tradition have regarded such a framework as rational because it sets out ends and the means to achieve the ends are mutually exclusive. For instance, educators who

use this type of curriculum are expected to follow step-by-step procedures to obtain the predetermined end state (Cornbleth, 1990:14).

Cornbleth (1990:14) commenting on this type of curriculum stated that “it is through the teacher’s skill as a disinterested specialist that the curriculum plan is implemented and the learning outcomes are achieved.” In this way, both curriculum and teaching are product-oriented, separate from its structural and socio-cultural contexts, and therefore value-neutral. In addition, this view of curriculum promotes rigid relationships of power in the learning environment. For example, the teacher with power constructs the learning outcomes and plans how they will be achieved and assessed.

In his writings during the 1980’s Giroux (1981) stated that this view of curriculum regarded knowledge as a commodity and a means to an end. He went on to lament that this type of curriculum treats “knowledge as objective, bounded and out there, independent of time and place, countable and measurable discipline-based and compartmentalised” (Giroux, 1981:52-53).

As a result of this conceptualisation of curriculum, it can be said that Schubert’s (1986) images of curriculum discussed above (content or subject matter, programme of planned activities, intended learning outcomes, cultural reproduction and as discrete tasks) display a technical interest.

As was discussed above (see 2.3.1 & 2.3.2), a document can encompass the unit and the programme in which students are enrolled. Curriculum is ‘designed-in-advance’ (Barnett & Coate, 2005); it is developed from a generic template of some sort, by subject experts in their knowledge of the discipline and their assumptions about student needs. The teacher implements the curriculum and student learning is controlled, so that at the end of the teaching process students can be judged in terms of how well they achieved the unit or programme goals. Content is a highly significant aspect of the curriculum, is selected by the teacher, and acts as both constrain curriculum change and determine which aspects are modified.

2.4.2 Curriculum from a practical/communicative interest

The work of Stenhouse (1975) in school education epitomises a practical interest. He understood curriculum development to be a process which “rests on teacher judgement, rather than teacher direction” (Stenhouse, 1975:96). Teachers are researchers of their own practice, with skills and commitment to study their own teaching and test theory and practice (Kemmis & Fitzclarence, 1986).

Teachers with a practical cognitive interest are concerned that interactions in the learning environment provide appropriate opportunities for learning. The curriculum places emphasis on actions or practices which arise as a consequence of reflection: “It is not enough that teachers’ work should be studied, they need to study themselves” (Stenhouse, 1975:3). Teachers see their role as using their judgement in interpreting the curriculum for their students, and making meaning of the unit or programme of study and discipline for them, in an environment based on open communication, trust and mutual respect.

Students are themselves an important part of the curriculum. Grundy (1987:76) suggested that students are the subject of the curriculum, not its objects. Learning, not teaching, is the central concern of the teacher. Content is selected for the purpose of assisting” meaning making and interpretation, and is likely to be holistically oriented and integrated”.

Thus, Grundy (1987:65-67) noted that a practical interest curriculum aims at reaching an understanding that enables appropriate action to be taken. It aims to analyse and clarify human experience, uncovering meanings, prejudices and presuppositions. The student and teacher interact to make meaning of the subject matter, thus equipping students to act on these meanings.

Advocates of curriculum as experiences (Schubert, 1986:30) display a practical interest conception of curriculum. They act as interpreters of contemporary social and educational circumstances in order to provide an effective learning environment. The

student learning experience is central to the curriculum, and reflective practice is at the center of their teaching. Teachers reflect on their teaching, student feedback, and what the literature can contribute to the process of improvement. Curriculum change comes about as a result of such deliberation (Grundy, 1987:68-70).

2.4.3 Curriculum from an emancipatory interest

Based on Freire's (1972:45) writings, an emancipatory interest strives for empowerment, rational autonomy and freedom, emancipating others from "false ideas, distorted forms of communication and coercive forms of social relationships which constrain human action" (Kemmis & Fitzclarence, 1986:72).

Teaching is a shared struggle towards emancipation and functions to challenge common understandings and practices, and to enable students and teachers to change the constraints of the (learning) environment. The end result of an emancipatory interest is 'a transformation of consciousness in the way one perceives and acts in the world' (Grundy, 1987:99). Grundy discussed such curriculum praxis in terms of three principles that serve as its basis. First, learners should be active participants in the learning programme; second, the learning experience should be meaningful to the learner; and third, learning should have a critical focus.

It is the third principle, that of critical pedagogy, that separates the emancipatory interest from a practical interest. From this perspective, learners are regarded as active creators of knowledge. In this context learning is thought of as a social act which consists of a dialogical relationship between the teacher and student. This process ensures that the educational experience is negotiated, resulting in a curriculum that is based on the systematic reflection of those engaged in the pedagogical act (Grundy, 1987:103). The curriculum develops through the dynamic relationship between action and reflection, in which the process of critical reflective practice is incorporated into the process of curriculum development. The critique of all knowledge is inherent in curriculum praxis: critical reflection involves more than knowledge of one's own values and understanding of one's practice. It involves a dialectical criticism of one's own values in a social and

historical context in which the values of others are also critical (McTaggart & Garbutcheon-Singh, 1986:44).

Content selection is not arbitrary; rather, the teacher and students negotiate what will be included in the curriculum. The students are the final authorities on what is 'authentic knowledge', as they judge it by both whether it is generally true and whether it is also true for them. As a result, students develop the capacity of 'being-in-the-world' (Barnett & Coate, 2005), fending for themselves in an ever-changing world.

The academics in the last conception of curriculum regard curriculum as a dynamic process of interaction that changes the world-views of the teacher and student, thus demonstrating an emancipatory interest. The curriculum that they envisage is a process which strives for social and intellectual empowerment, and is truly negotiated. Curriculum design is 'designed-in-action' (Barnett & Coate, 2005), it is dynamic and in flux, and has aspects that cannot be anticipated or held in a template (Schön, 1987). The power resides with the students as learning takes place within a community of scholars, with the ultimate aim of empowering them to be effective as individuals and members of society. Their vision is potentially boundary-less, with change the outcome and process of curriculum.

2.5 Implications of Habermas's theory of knowledge constitutive interests on curriculum implementation in Namibia

In the current study understanding of the product-praxis nexus to curriculum guided the discussion of the experiences of teachers engaged in the implementation of the present intended curriculum for secondary schools in Namibia as advocated from an implementation-as-praxis perspective.

The Habermas framework proves useful for analysing the different conceptions of curriculum discussed above. For instance, the orientations helped to explain how the 2010 curriculum might have been designed and how it has been implemented since its

launch in 2009. For instance, from a traditional or positivist perspective also known as the technical interest, the curriculum would result in a reflection on teaching and learning that is fairly empirical.

With regard to knowledge, a curriculum designed under the technical conditions regards knowledge as a set of skills to be transferred from the educated teacher to the uneducated learner (Ornstein & Hunkins, 2009:212) and therefore the teachers' role is to prepare learners with the skills of being able to predict and control the environment. Freire (1972:52-52) referred to it as the "banking" concept of education because according to him "knowledge is a gift bestowed by those who consider themselves knowledgeable (teachers) upon those whom they consider to know nothing (students)".

In Ornstein and Hunkins's (2009:214) viewed Tyler's technical-scientific model is one of the best known approaches for its emphasis on objectives, linear-oriented curriculum. Tyler believed that curriculum could be simplified if its objectives could be carefully structured and its inputs (teachers, learners and learning materials) were carefully measured, then one could achieve the desired outputs or pass rate (McKenna, 2003).

In the context of Namibia, the technical approach to curriculum development has several implications on how the curriculum is implemented. First, the emphasis on the product or plans has made the technical interest attractive to regional directorates of education senior staff, school principals and teachers who are under enormous pressure to their regional and school education systems more efficient and to produce more learners passing grade 10 and 12 examinations with resource-constrained conditions (Luckket, 1995). In other words, McKenna (2003), pointed out that "immediate, measurable and methodological aspects of the curriculum are valued highly".

Secondly, a technical interest to curriculum development may influence a syllabus that is designed many discrete units of study (see 2.3.5) with little broader context or integration (McKenna, 2003). For instance, where the NCBE is implemented according

to the technical interest paradigm, outcomes are perceived as a set of skills, which are taught by teachers and then demonstrated by their learners. A current example of the technical interest to curriculum implementation in Namibia involves the on-going grades 5-12 teacher training workshops on textbook utilisation for Mathematics, Science and English. In 2012 the Ministry of Education decided that due to the high grade 10 and 12 failure rate, training would be provided to teachers on how to use Mathematics, Science and English textbooks and other Learning Support Materials (LSMs).

Thus, the main purpose of the training modules is to provide the knowledge, skills, values and attitudes that are needed by educators to use textbooks and other LSMs (MoE, 2013:2). In this endeavour, the Ministry of Education seems to suggest that teachers lack proficiency in these specific disciplines and therefore such difficulties should be remedied in an isolated and measured way by providing teachers with “facts” of how to teach their respective subjects.

This technical approach to teaching and learning does not promote “critical thinking” among teachers. During training teachers are not allowed to examine, analyse and interpret ideology laden textbooks to help them understand the relations between power and politics in curriculum (Ornstein, Pajak & Ornstein, 2011:89).

One can assume that in the same manner as they are being trained, teachers will not encourage their students to raise questions, explore ideas and issues, support arguments, take positions and draw conclusions (ibid) on learning materials during classroom interactions.

That said the implications of the practical interest to curriculum development and implementation differs. For instance, while the technical interest seeks to control the environment, the practical interest seeks to understand the environment so that humans can take “the right action (practical action) within a given environment” (Grundy, 1987:13).

In other words, the practical or communicative interest regards knowledge or reality as a process of making meaning through interaction. Therefore, the implications of the practical interest on curriculum design is that curriculum is not a linear equation but rather is an on-going activity concerned with interaction between the educator, learners, classroom and broader context (Cornbleth, 1990:24; Grundy, 1987:68).

Cornbleth (1990:24), for instance, indicated that the practical curriculum design is “an on-going activity that is shaped by various contextual influences within and beyond the classroom and is accomplished interactively, primarily by teachers and learners”.

Grundy (1987:68-69), on the other hand, indicated that “if we accept that the curriculum is a practical matter ... all participants in the curriculum event will be ... regarded as subjects, not objects”. Further, Grundy (1987:69) pointed out that, “the process of curriculum implementation as a practical activity” informed by a practical cognitive interest, involves “interpreting the curriculum as text” and this type of analysis “denies the authority of the document to impose its own meaning”.

This means that in the case of the current textbook utilisation programme taking place in Namibia, artefacts of the education system informed by the practical interest would not only be prepared and used to train teachers to understand the purposes of the prescribed content, but should also prepare them on how to make meaning using the subject content so that in turn teachers can help their learners to interpret curriculum texts with an understanding of what the textbooks prescribe. For example, instead of training mathematics teachers on how to achieve correct answers based on the prescribed formulae, teachers could be provided with ideas of how they can actively engage their students in making meaning of mathematical problems and their possible solutions.

A similar approach could be applied for English and Science training workshops informed by a practical interest. For example, in training teachers on how to conduct reading comprehension (one of the English communication skills), informed by the

practical interest, the task would be to orientate teachers on how they could create an atmosphere where the reader interacts with the author for the generation of meaning. This way, as Grundy (1987:70) put it, reading comprehension will no longer be an exercise where teachers and learners ascertain the author's meaning, but will become an act of personal meaning-making on the part of the reader.

With regard to Science, Grundy (1987:77) noted that, a curriculum informed by a practical interest should move away from an emphasis upon factual recall to an emphasis upon 'process of discovery' and 'problem-solving'. In Freire's (1972:61-67) words, the practical interest can be regarded as the "problem-posing education", in which students are presented with challenging problems relating to themselves in the world and with the world and are thus obliged to respond to the challenges within their context.

The responses to these challenges evoke new challenges, followed by new understandings and commitments among students. Within the context of the 'process' approaches to curriculum, the science education teacher training programme on textbook utilisation as an artefact to curriculum implementation in Namibia, can only be regarded as informed by the practical interest if it takes into consideration the importance of deliberation, judgement and meaning-making as the basis upon which the learning experience becomes more meaningful for both teachers and students (Grundy, 1987:77).

Habermas's emancipatory interest has implications on Namibia's curriculum development and implementation process. The emancipatory interest also known as praxis or critical theory has much in common with the interpretive paradigm (Guba, 1990). As was mentioned in section 2.4.3 above, because the practical interest seeks to understand a phenomenon based on its context, the emancipatory paradigm seeks to challenge and transform the social power relations.

However, what separates the emancipatory interest from a practical interest is the principle of critical pedagogy, that is, the idea that learning should have a critical focus. This means that critical pedagogy goes beyond situating the learning experience within the experience of the learner. It is a process which, through dialogue and negotiation recognises the experiences of both the learner and the teacher as problems (Grundy, 1987:103) to be understood and action upon. By arguing from the grounds of the problem-posing education Freire (1972:61) suggested that knowledge is socially constructed and as such may either serve or critique existing social structures.

Therefore, the emancipatory interest advocates for emancipation, empowerment, action and reflection. It is this form of critical pedagogy that promotes the control of knowledge in terms of both production and application with the learning group as opposed to being determined elsewhere. Based on Freire's work, Grundy (1987:114-119) suggested that for the curriculum to be informed by an emancipatory interest, the curriculum should be regarded as a form of praxis.

The notion of curriculum as praxis has implications for curriculum development and implementation in Namibia. First, because the elements of praxis include the dynamic interaction of action and reflection, the curriculum itself is an active process in which planning, acting and evaluation are all reciprocally related and integrated into the process. In other words, the curriculum cannot simply be a set of plans to be implemented.

Second, if curriculum is to be regarded as a social praxis, not a product it cannot be developed from the act of 'implementation'. On this issue Grundy (1987:115) noted that a curriculum that promotes the ideals of praxis must be developed with real learning situations and not imaginary learners. For example, if a mere 0.8% of Namibia's population speaks English as mother tongue, (Brock-Utne & Holmarsdottir, 2001; Pütz, 1995), why did the present government introduce an English monolingual policy as a medium of instruction against 10 indigenous African languages spoken by 87.8% of the population? (ibid).

Because the National Curriculum Framework promotes the constructivist view (Mezirow, 1991) of critical pedagogy and social construction of knowledge resulting from dialogue and negotiation (Grundy, 1987; Freire, 1985) one wonders whether from a praxis point of view the language classrooms in Namibia encourage a critical awareness of the ways in which language both subjugates and empowers!

With regard to the current textbook utilisation teacher training programmes discussed above, it was indicated that they are directed towards changing, among others, the individual teachers' knowledge and attitudes. Although they are being implemented to promote Learner Centred Pedagogy, the fact that they lack a critical focus of confronting the material conditions through which students exist, suggests that the programmes are not informed by an emancipatory interest.

Taken together, curriculum development informed by an emancipatory interest would have an open purpose that exposes the ideologies of teachers, learners and those embedded in the subject matter (McKenna, 2003). And because the curriculum is scrutinised for ingrained power relations, the questions asked of the curriculum would be: "Whose interests are served by the curriculum? How is power distributed in the teaching learning process and how can it be more equitably distributed? How can the curriculum promote greater equity, emancipation and social justice? (Grundy, 1987:121).

Regarding the 2010 National Curriculum for Basic Education in Namibia, it would be scrutinised on the basis of who is being served by the learning outcomes (see 3.4.5) selected and in whose interest were the assessment criteria (see 3.4.8) designed?

As demonstrated above, the term curriculum 'remains contentious in terms of definition and delineation' (Schubert, 1986:26) among curriculum theorists. This lack of a shared understanding has the potential to impact on the implementation of curriculum change and development. Barnett and Coate, (2005:24) argue that 'in the absence of a serious

debate about curriculum per se, the tacit idea of curriculum that is developing is unduly narrow'. However, Schubert (1986) cited in Anderson, (2004) asserted that although the conceptions vary substantially, they also have considerable overlap in that they often intend to reach similar goals.

After this overview of the concept of curriculum, the next section discusses the concepts of change, educational and curriculum change within the context of Namibia.

2.6 Change

According to Print (1993) change refers to the process of transforming phenomena into something different. It has the dimensions of rate (speed), scale (size), degree (thoroughness), continuity (profoundness) and direction. Change is a lifelong process, similar to learning, that is, it is continuous (McCombs & Whisler, 1997). Markee (1997) stated that change is an ongoing, almost unconscious process that involves reworking familiar elements into new relationships. Change is at once simple and complex, and therein lays its fascination (Fullan, 2007:65).

2.6.1 Educational change

Alwan (2006) defined educational change as an ongoing process that takes place with or without deliberate introduction of something different to education.

Based on the above understanding, educational change in developed and developing countries has turned into a fact of everyday life (Hodgkinson, 1991). In developing countries, for instance, education has been an arena for change where both public opinion and political debates agree on two fundamental statements. First, education is the most important thing for the country‘s future.

Second, education is not going well. This consensus continuously trigger governments to initiate three educational changes (hardware, software and interpersonal relations) aimed to improve schools, set higher academic standards and increase students’ achievement rates (Harris, 2009; Moreno, 2009).

First, the hardware change, ‘that is, additions to school equipment, such as new classrooms, teaching machines, books or playgrounds may be undertaken on the premise that rural and urban schools in a given country, province or region have varying degrees of physical facilities. Second, software changes involve those related to the content and range of the curriculum, or in the methods of delivery and reception. Third, interpersonal relations, as a subcategory of software involve changes in the roles and relationships between teachers and students, between teachers and administrators or teachers and teachers (Huberman, 1973).

Other educational changes that may occur include changes in policy goals, curriculum design and implementation, assessment techniques, administrative issues and leadership. Moreover, other educational changes may include classroom practices, instructional technologies and resources, teacher capacities to analyse factors affecting those changes, change agents and contexts (Towndrow, Silver, & Albright, 2009).

2.6.2 Curriculum change

Curriculum change is a subset of educational change (Lovat & Smith, 2003). According to Everard and Morris (1996) and Markee (1997) when curriculum change is considered, there is a deliberate attempt to introduce one or more components of the curriculum which are different or new.

Sahlberg (2005) stated that the processes of curriculum change involve complex interactive relationships between a number of social and political factors. As a result, curriculum change is not always well understood by those who implement it. Therefore, in order to introduce change into curriculum, it is necessary to understand the forces that promote and resist the change.

In view of our understanding of the change process and its implications on educational and curriculum changes, the next section discusses the forces that necessitated the change of the secondary school curriculum in Namibia.

2.7 Reasons for curriculum change in Namibia

2.7.1 Political forces

According to Hoadley and Jansen (2009:207) curriculum change is often caused by a change in government. This is particularly true in oppressive countries in which an existing curriculum is regarded as representing a small minority of the population, and an illegitimate ideology. When apartheid in Namibia was replaced by a democratic system, the majority of Namibians expected the new government to change the curriculum to one that reflected the values and beliefs of a non-racial democracy. Thus, many of those denied education expected the new government to develop a system that provided them with access to good education.

During the post-independence era therefore the new political leadership argued that the "best way a democratically inclined State could overcome gross disparities rooted in the past prejudices and socioeconomic injustices was a massive expansion of education. In programmatic terms, this meant the expansion of universal primary education for children, increased *access* for and equity of opportunity to all young people to secondary and higher education, introduction of remedial literacy instruction for adults, equal educational opportunities for women and broader adult education options" (Coombs,1985:66; MEC, 1993:41-42).

Thus, in line with Namibia's Constitution and the Education Act the post-colonial government was compelled to remove curriculum content and practices which were regarded at odds with the principles of social justice, equity and redress; and has significantly increased educational spending (Hoadley & Jansen, 2009:207).

Currently, Namibia allocates more than 20 percent of its national budget to education, that is, about six to seven percent of Namibia's total Gross Domestic Product (USAID, 2008). In addition, based on the notion of nationhood and unitary state the new government has tightly controlled what is included in the curriculum, how and when it's taught, and *how* it is evaluated and disseminated (Hoadley & Jansen, 2001:77).

2.7.2 Philosophical forces

Although the primary responsibility for secondary school curriculum in Namibia is determined by the State, philosophical changes have always had an impact on the prescribed curriculum. Beane *et al.,* (1986:89) posited that different educational philosophies are an important tool in curriculum change. This means that any education programme is underpinned by one type of a philosophy or another, whether it is implicit or explicit, considered or rarely thought about, consistent or inconsistent (Beane, *et al.*, 1986:89).

A philosophy of education serves many functions in curriculum change. In the context of Namibia it served as a foundation area in formulating educational objectives, gave directions about what values and knowledge to include in the curriculum, outlined assumptions about learners and teachers; and learning and teaching techniques including proposals about learner assessment (Beane, *et al.,* 1986:89; Postlethwaite, 1973).

According to Taba (1962:278) cited in Ornstein and Hunkins (2004:308, 328) every change in curriculum is value-laden by the educational philosophy of those directly involved in the process of curriculum change.

Ornstein and Hunkins (2004:35-36), for instance, argued that there are three distinct schools of thought, that is, transmission, transformation and individual, which represent different value-laden philosophical positions. These paradigms with their mutually exclusive goals have influenced school curricula change overtime. For example, the transmission model rooted into the Perennialist and Essentialist philosophies has remained the most common and pervasive force in curriculum thought during Namibia's colonial era. Its opposition to social change and reform and the promotion of teacher-directedness and content-centred curriculum (Armstrong, Henson & Salvage, 1981:219) earned it much criticism among progressive curricularists in the past century worldwide, including in colonial Namibia.

Given the criticisms of the transmission model, curriculum developers in an independent Namibia promoted a transformative curriculum. Thus, the current national curriculum is associated with the philosophy of pragmatism. In his book, *Curriculum-From Theory to Practice,* Null (2011:117) influenced by John Dewey, noted that pragmatists view curriculum as a process of fixing problems through empirical means and therefore believe that the curriculum should be solution-oriented and that it must help students figure out what works within a given context.

Because of these philosophical influences Namibia's national school curriculum aims at fostering individual learners' personal fulfilment and critical thinking. Also the curriculum aims at preparing learners to adapt to the ever-changing world driven by technology and the acquisition of values of cooperation, which are consistent with the surrounding society (MoE, 2010:5).

Moreover, based on these philosophical influences the current Namibian school curriculum supports both norm- and criterion-referenced forms of learner assessment and evaluation corresponding to different school phases (Hearne & Cowles, 2001).

2.7.3 Psychological forces

For centuries theories of educational psychology have attempted to describe how people behave in satisfying their physical and psychological needs. Similarly, for centuries educational psychologists have been pre-occupied with issues of how people learn and how they could be taught in order to achieve effective learning (Barker, 2001:28).

Educational literature abounds with learning theories including the constructivist learning theory. Literature shows that the constructivist learning theory which was founded by among others, famous educators, philosophers, psychologists, and sociologists such as Lev Vygotsky (1934), Jean Piaget (1958), David Ausubel (1968), Jerome Bruner (1996), and Lave and Wenger (1991) have had major influences on the 20th century curricular systems worldwide (Barker, 2001:28).

For instance, it was Vygotsky who introduced the social aspect of learning into constructivism. According to him students can solve problems beyond their actual developmental level or "zone of proximal learning," as long as they were under adult guidance or in collaboration with more capable peers (Barker, 2001:28).

On the other hand, in 1958 Piaget published the 'stage theory' in which he argued that every humans being's cognitive development passes through the construction of one

logical structure after another. He also concluded that the logic of children and their modes of thinking are initially entirely different from those of adults.

The implications of this theory shaped the foundation for constructivist education since its publication in the 1950s. In Namibia, the idea of 'levels', which is defined in Namibia's Curriculum for Basic Education, clearly has its origin in the general stages of cognitive development as espoused by Piaget's stage theory of 1958 (Barker, 2001:28).

However, at different periods of their work Ausubel, Bruner, Piaget and Vygotsky immensely contributed to the alternative conceptions of constructivism and social constructivism. As a result, social constructivism is publicly influential around the world (Barker, 2001:28).

In Namibia, for instance, the 2010 National Curriculum for Basic Education is closely aligned to the social constructivist theory of learning, which proposes that because knowledge is socially constructed, learners must have the opportunity to construct their own understanding and knowledge of the through experiencing things and reflecting on these experiences (Ministry of Education (MoE), May 2013:5).

2.7.4 Cultural forces

In a broad anthropological sense, the culture of any society includes the features that account for its distinctive identity, cohesiveness and continuity. Culture includes the society's system of values, ideology, and social codes of behaviour; its productive technologies and modes of consumption; its religious dogmas, myths and taboos; its social structure, political system and decision making processes. A society's culture is expressed in many forms: in its literature, art, architecture, dress, food, and modes of entertainment" (Coombs, 1985:244).

According to Coombs (1985:244) education is central to the identity and survival of a culture. Historically, education and schools in particular and in all societies were primarily responsible for the conservation and protection of culture and transmitted it

intact from generation to generation. Today, few cultures, if any, can remain static for any long period of time (Coombs, 1985:244); and Namibia is no exception!

Namibia has eleven ethnic groups with their distinct cultural practices. This means that Namibia does not have a common culture. Therefore, in an attempt to foster cohesion and nationhood in diversity, the school curriculum has been changed to accommodate the country's heterogeneous cultural values. For instance, the national school curriculum promotes progressive values and mores of gender equality, democracy, self-fulfilment and personal meaning relevant to one's individual lifestyle.

Moreover, the national curriculum statement supports bilingual education throughout the school system. It states that learners should become proficient in the Mother Tongue or predominant local language and in English as an official language (MBESC, 2004:12). From this explanation it is evident that many interrelated cultural factors have influenced the classroom teaching-learning process in order to meet the diverse learners' and societal needs.

2.7.5 Economic forces

As Namibia moves from an agricultural society to an industrial /commercial economy, the curriculum has changed to reflect and meet the industry's needs. For instance, during the past twenty years since independence numerous combinations of business management and commercial subjects have been introduced and experimented within Namibia's secondary school curriculum. Such experiments have been conducted against the backdrop that business skills are pillars of economic growth and development of any modern society.

Recently, Entrepreneurship Education was integrated in Namibia's secondary school curriculum. Motivated by the country's youth unemployment rate (41.5%) the subject is meant to empower learners with functional and financial literacy skills required in the business world (International Labour Organization (ILO), 2000).

Furthermore, as Namibia moves into the information age, in which employees' roles in the workplace require different sorts of skills and attitudes, curriculum change is inevitable (Hoadley & Jansen, 2009:208). Anecdotal evidence shows that employers with their strong opinions about the curriculum are calling for a curriculum that emphasises transferable skills such as communication, social, analytical, and critical-thinking skills in graduates.

2.7.6 Technological forces

Since the turn of the century the world has experienced remarkable developments in Information and Communication Technologies (ICTs). The growing number of microelectronics, computers and telecommunications has made ICTs attractive in different spheres of human life. Despite the massive contributions that ICTs have made in both the social and economic sectors, the Information Age has put educational institutions across the world under tremendous pressure (Ministry of Basic Education, Sport and Culture (MBESC), 2001:2).

Therefore, apart from ensuring that every educational institution and perhaps every learner is provided with information and communication technologies, namely computers, their accessories and connectivity to Internet, ICT for education has been recognised as means of stimulating creative thinking and knowledge among learners.

According to Hoadley and Jansen (2009:208) because economic and technological changes often go together, the school curriculum may be revised to respond to significant technological changes. Therefore, when computers first came widespread in modern societies, many countries including Namibia introduced ICT education into its curriculum. Seen by many as a catalyst for innovation and technological advancement, Namibia adopted an ICT Policy for Education in 2001.

This policy aims to promote three aspects of the role of ICT in the curriculum. First, the curriculum for ICT skills and knowledge, secondly ICT as a curriculum subject and thirdly the curriculum for the usage of ICT within subjects other than ICT (MBESC, 2001:14). But change has not only been confined to the content of the curriculum. Pedagogy has also begun to change in which in addition to textbooks, audio-visual technologies have become part of the teaching and learning process (Hoadley & Jansen, 2009:208).

2.7.7 Social forces

In the modern world system, national educational systems and their school curricula are likely to be influenced by the social dynamics in the wider environment. Changes in Namibia's curriculum were responses to major social challenges such as the impact of HIV/AIDS, global warming, poverty and unemployment.

For instance, the health threat caused by HIV and AIDS influenced Namibia to include HIV and AIDS education, sexuality education and Life Skills in the school curriculum. Similarly, the increasing recognition of racism as a major social problem has often led to the introduction of multicultural and anti-racist education in the school system.

According to Kelly (2005), "teachers are struggling with overcrowded school curriculum; since there is no shortage of groups continually promoting the need for additional specialised courses."

In the context of Namibia, since the 2002 World Summit on Sustainable Development held in Johannesburg, environmental education has been strengthened in the country's school curriculum. The subject aims to promote environmental awareness among learners and the protection of nature for sustainable development.

2.8 Summary

The literature on curriculum definitions and the discussion of the concepts of change, educational and curriculum change including the forces central to curriculum change provided evidence that change and reform in education is dynamic. In addition the discussion of curriculum manifestations provided a macro-view of the curriculum development process by showing that curriculum development is a large-scale enterprise irrespective of whether it takes place at a system, regional or school level (Grundy, 1987:38). Based on Habermas's theory of 'knowledge-constitutive interests', this chapter discussed the different implications of the technical, practical and emancipatory interests on Namibia's curriculum development process. For instance, the chapter noted that the technical interest is grounded in the positivist ideology (see 1.7), which based on a series of hypotheses regards knowledge as objective and absolute.

Also this chapter discussed the consequences of the technical interest on the classroom teacher in terms of curriculum design, teaching and learning. For instance, it was revealed that in the technicist's view curriculum is designed elsewhere and handed down to teachers for implementation as envisaged by its designers. According to this approach the nature, status and quality of the teachers' work is judged by the products of their actions (Grundy, 1987:38).

It was also highlighted in this chapter that because the technical interest regards knowledge as a commodity (knowledge as a means to an end), the technicist's curriculum is academically oriented. In addition, it was further noted in this chapter that because the technical interest is about control, teachers are trained in how to gain control over their teaching, that is, teachers are trained on how to use a set of 'methods' so that they can do things better.

In other words, teachers are taught 'skill knowledge', that is, knowledge on how they should act in a certain situation to improve the outcome of the act of teaching and to better control students (Grundy, 1987:47). It was thus argued that unfortunately,

because teachers have no control on the development of the curriculum, every curriculum policy change means teachers are de-skilled. As teachers become de-skilled pedagogically, they lose control of the curricular and pedagogic skills, though they are re-skilled as educational managers in techniques for classroom management, which helps them (Grundy, 1987:33-39) to control the behaviour of learners.

It also became apparent in this chapter that because in the technical sense curriculum content is imparted through the lens of objectivity in which facts are expressed in precise non-emotive language, students' understanding of the world is thwarted, thus using learning to preserve and reproduce the established power relationships of schooling. Furthermore, as Grundy (1987:47) noted, teaching based on a technical paradigm is discipline-based and treats subject matter in a compartmentalised fashion. It also emerged from the discussion in this chapter that the assessment of learners' work according to the technical interest is based on norm-referenced testing, which is objective and uses test scores to rank and compare students' achievements.

This chapter also provided evidence of how the practical interest informs curriculum practices and how it manifests itself in the classroom situation. For instance, it emerged that the practical interest is concerned with 'practical' judgement which gives rise to practical action or interaction.

In the classroom situation, a teacher who is informed by practical judgement is concerned that the interactions of the classroom environment should provide appropriate opportunities for learning, and that ensures that the learning moment 'is its own end'. (Grundy, 1987:63-65). Therefore, practical action is characterised by choice and the deliberation of 'not about ends but about means'.

Deliberation (reflection) and debate are, thus, essential elements of practical action as it is through these two attributes that a thorough understanding and meaning of the situation can become clear (ibid). It was also noted that the practical interest generates action between subjects not action upon objects (ibid). It is through deliberation which

includes the process of interpretation and meaning making of a situation that appropriate action can be decided upon and taken.

Appropriate action was referred to as that which is deemed to further the ‘good’ of participants in the action. It was also argued in this chapter that because the selection of the content is based on meaning-making and interpretation, curriculum content is holistically oriented and integrated, and not fragmented and subject-specific.

For instance, it was demonstrated that (see 2.4.2) a practically oriented curriculum does not encourage rote learning based on pre-specified skills. According to the practical interest assessment is regarded as an integral part of the whole educative system, which is carried out by teachers who are involved in the learning situation, with those from outside the teaching situation providing valuable reflections (Grundy, 1987:76).

Moreover, this chapter discussed how the emancipatory interest informs the curriculum with regard to the nature of knowledge, content selection and assessment of the students’ learning. The chapter argued that an emancipatory curriculum is based on liberation and freedom which comes about through teachers’ and learners’ speech as part of the teaching-learning process.

Further, it was indicated in this chapter that curriculum praxis informed by the emancipatory interest, is interested in two questions. First, it asks questions of whether or not the curriculum practices operate to emancipate both the teachers and learners engaged in the process of learning. Because speech is a fundamental human good, the second question that the curriculum praxis asks is whether the power to initiate speech and to ask questions in the pedagogical situation is equally distributed amongst learners.

In other words, in a curriculum praxis informed by an emancipatory interest teachers have the duty of constantly examining whether or not learners are involved within classroom discourses pertaining to their own learning. Also it was stated that an

emancipatory curriculum will only be possible if both curriculum developers and implementers play equal roles in developing such a curriculum through dialogue and not by means of the monologue of those in power. This means that the 'teacher-student' has both the right and the responsibility for contributing to curriculum content (Freire, 1972:92).

Based on these assumptions, in the curriculum praxis informed by emancipatory interest ideas such as collaboration, negotiated curriculum, 'contract learning', critical community, autonomous learning, critical reflection and consensus are fundamental in the learning situation. It was further highlighted that assessment is not a practice that is imposed by those outside the pedagogical situation; rather assessment is determined by teachers and learners based on some criteria for judging about the quality of the work of learners. In other words, learners' work is judged through criteria such as comprehensiveness, truthfulness, authenticity and correctness and appropriateness of their utterances and actions.

With regard to comprehensiveness, the key question is whether learners' discourses are based on actual life situations, which are commonly shared and understood by group members. In the case of authenticity, the judgement of learners' work is based on the length and quality of the group members' interactions with each other. The key question though, is whether or not learners are participating 'in truth or honestly' or merely acting strategically, pretending to engage in communication action', (Grundy, 1987:128).

With regard to truth, assessment is judged on the basis of the rigour of the critical discourse. Two questions are important here. First, does what learners regard as true knowledge imposed upon them by the authority of the teacher? Second, does what learners claim to be true knowledge a result of an agreement within their group based on common understanding of the social and epistemological principles that supports their claims. In the case of correctness and appropriateness, learners' work is judged on the basis of critiquing ideology.

In other words, within the discourse of the group, participants are supposed to transform facts into challenges, problems, solutions and recommendations, assumptions and warnings, which may be both correct or appropriate, incorrect or inappropriate. It is through the establishment of this critical community that an alternative discourse will be created in schools. Once these critical communities are established within the school system, the principles of change will occur by means of consensus and through self-reflection groups themselves will make judgements about whether their schools are enlightened and emancipated (ibid).

The next chapter therefore presents a trajectory of educational and curriculum changes and reforms that took place in pre- and post-independent Namibia. The trajectories illustrate two interconnected pieces of information. First, the chapter describes a chronological arrangement of the development and implementation of curricular over time during different political dispensations. Secondly, the chapter describes curriculum practices with regard to epistemological stance, curriculum content selection, power relationships within and outside the classroom situation and the meaning of assessment as a way judging learners' work.

Moreover, the chapter presents the National Curriculum for Basic Education for Namibia, so as to help link how the fundamental educational and curriculum changes and reforms have evolved over time in Namibia. Furthermore, the chapter discusses potential factors inhibiting or facilitating the implementation of the 2010 secondary school curriculum as gleaned from the past and recent literature on curriculum theory and practice, implementation and evaluation research.

CHAPTER 3
THE SCHOOL CURRICULUM TRAJECTORY IN NAMIBIA

3.1 Introduction

Building on the previous chapter, this section briefly presents a historical overview of the geopolitical situation of Namibia before independence, focussing mainly on how the education system was organised. This historical account is important for three reasons.

First, to understand the different conceptions of curriculum theory and practice in colonial Namibia based on the backdrop of the perspectives presented in Chapter Two. Second, to reflect on the different educational changes and reforms that took place in Namibia after independence in 1990 within the context of the forces that determine change discussed in the previous chapter.

The third and perhaps the most important reason, is that historical accounts in this chapter can help us understand the factors that support or impede the implementation of the secondary school curriculum in a Namibian classroom that is surrounded by many forces all vying for a stake in its daily business.

3.2 Pre-independence secondary school reforms

Much has been written about the past educational policies and practices in Namibia. It is suffice to mention here that formal education provision before independence in Namibia passed through three very important phases illustrated by Katzao (1999:20-21)

First, western education in Namibia began as an adjunct to missionary endeavour, in 1884 shortly after the territory was colonised by German. Katzao (1999:20) stated that the school system was established to mainly supplement the work of Christianisation, to

give rudimentary education to catechists and to change the cultural patterns that were considered to be pagan.

However, two education systems emerged during this phase, one for Whites and the other for indigenous people. Historical evidence show that during this period religious instruction throughout the school cycle played a key role for ideological control on Africans with teachings emphasising unconditional subservience to the Germans.

Second, the German education system did not differ much from that of the different missionaries, except that the education for Africans mainly focussed on teaching conversational German and preparing them for semi-skilled employment.

Third, after 1915 the German education system was abolished as South Africa took over the administration of Namibia. However, in 1953 when the Bantu Education Act, No. 47 of 1953 was adopted, the education administration and control of Bantu Education was transferred from the missionaries to the Government of the Union.

Across all these periods, however, the provision of education followed a uniform pattern throughout Namibia. For example, the curriculum continued to provide rudimentary skills to Africans and the education system remained largely segregated on the basis of race and territory of ethnic origin.

However, throughout the pre-independence period the education system and curriculum theory and practice were guided by a teacher-centred education, which was based on the positivist ideology (see 4.3).

According to Esland (1971:75) teacher-centeredness as a pedagogical paradigm is deeply entrenched in the objectivist epistemology, which views knowledge as ‘detached from the human subjectivity in which it is constituted, maintained and transformed’.

Reality under this epistemology was viewed as being 'out there,' fixed, static, unchanging and objective, existing independently of the learner (Tabulawa, 2013:51). The history of objectivism can be traced to the philosophical tradition of rationalism founded by the seventeenth-century French philosopher, René Descartes, though it dates back to Plato. Its basic premise is that knowledge exists *a priori*, that is, knowledge is a certainty and has a status independent of the knower. In extreme cases, rationalists believe that God is the source of all knowledge (Peters, 1965:11).

Kelly (1986:35) pointed out that this epistemological tradition also became the orthodox view of knowledge of the Christian theology which also stressed the certainty of knowledge and played down the sensual and emotional aspects of human existence. Rationalism leads to totalitarianism and in education it stressed knowledge/subject matter rather than the learner (Kelly, 1986).

As a result the epistemology put children 'in the position of the barbarians outside the gates' who must be taken 'inside the citadel of civilisation' (Peters, 1965:107) through the process of education (Tabulawa, 2013).

Rusk (1954:158) argued that this idea of the innate corruption of the human nature was in line with the medieval, Calvinist doctrine and the Catholic belief in original sin. And because according to these doctrines, human beings were born evil and corrupt, only training could improve this innately bad state (Tabulawa, 2013:51).

Consequently, Bowen (2003:186) stated that it was only through education that the 'badness' would be removed out of the child before 'goodness' could be poured in. Various studies illustrate that it was this Western Christian theology, which once imported to Africa by missionaries, converged with native cultures and the twin systems determined curriculum development (Tabulawa, 2013) in Africa and Namibia.

Christie's (2009:168) study on classroom teacher-learner discourses found that in the rest of 20th century colonial Africa, including Namibia the teacher usually stood up front,

while students sat passively at their desks. The students' role was to listen to and to memorise what the teacher said. In other words, students were not active and for this reason, they simply 'received' the knowledge which teachers 'deposited' in their minds.

Three years after independence the Ministry of Education and Culture recounted similar incidences to the ones described above as common in the Namibian school system: "Currently, teaching methods in our schools tend to foster memorisation and rote repetition" (MEC, 1993:119).

Admittedly, the teacher-centred paradigm had numerous implications for curriculum design, teaching and learning and assessment in Namibia. Without doubt this view resonates with the characteristics of a teaching and learning process that is rooted in a teacher-centred pedagogy; a practice associated with the psychology of behaviourism and positivism philosophies (de la Sablonnière, 2009).

Freire (1985: 2; 1993:52) and others called this system the 'banking system of education,' or 'education for domestication,' a process in which teachers 'deposit' or 'transfer' knowledge into the 'empty' minds of their students. Freire and his colleagues indicated that this approach to education treats knowledge like an object, that is, a commodity that can be exchanged but not something which people can create. In other words, most students are not given the opportunity to think for themselves or to discover things for themselves. As a result, students do not develop a critical awareness of the world.

In Bernstein's (1996) terms teacher-centred pedagogy is based on a performance curriculum model. According to him in the performance curriculum, the process of learning is more strongly defined and controlled by the teacher. In other words, the teacher's role is overt and makes direct interventions in order to lead learners to the desired learning and tends to have more control over the selection, sequence and pace of learning. This therefore suggests that in performance models of curriculum, there are explicit rules about how to learn, and definite criteria for judging right from wrong.

Bernstein (1996) cited in Hoadley and Jansen (2001:121-122) further showed that performance approaches are predominantly more content- and teacher-centred, with teaching taking place in specific learning sites (in classroom, laboratory or training workshop), where access to formal school knowledge is easier.

3.3 Post-independence secondary school reforms

At independence in 1990 there was a vigorous public debate and criticism about the relevance and quality of Namibia's education system. Notably, the White Paper on Education described the pre-independence curriculum as "very distant from the lives and experiences of most Namibians" (MEC, 1993:120-130).

Since then Namibia has experienced unprecedented curriculum reforms in its classroom theory and practice. First and foremost curriculum reformers refocused curriculum change on the role of the learner in the teaching and learning process. This meant the introduction of a learner-centred pedagogy, which was regarded by many as an 'effective antidote to the prevalence of teacher-centred didactic classroom practices' (O'Sullivan, 2004:585). In Namibia the constructivist philosophy of learning is also referred to as Learner-Centred Education (MoE, 2013:5).

Therefore, as a guiding framework for "what is planned, implemented, learned, evaluated and researched in schools at all levels of education" (McKiernan, 2008) cited in (Oliva & Gordon, 2013:6), the National Curriculum for Basic Education is founded on the social constructivist philosophy (see 1.7 & 3.4.5). To reiterate what was discussed in section 3.4.5, the constructivist philosophy regards learning as a dialectic interaction between and among individuals and communities in an attempt to create, recreate, and actively construct knowledge and understanding in order to change, for the better, the socio-cultural and material environment (National Institute for Educational Development (NIED, 2003).

Nearly a decade later the Education For All (EFA) Assessment Country Report found that the education system was still characterised by fragmentation along racial and ethnic lines; unequal access to education and training at all levels of the system; low student achievements and high wastage rates; lack of democratic participation within the education and training systems; and irrelevance of the curriculum to the needs and aspirations of individuals and the nation (EFA, 2000).

Since the publication of the White Paper on Education (MEC, 1993) and the EFA report of 2000, system-wide curriculum reforms were undertaken as mirrored by curriculum changes that have taken place since the new political dispensation in 1990. For instance, in 1993, the Ministry of Education introduced a five national post-apartheid curriculum reform focusing on schools, content and pedagogy.

LCE is often seen as a policy panacea (Sripakash, 2010). The powers it is assumed to have are many, and in many countries we find the introduction of LCE being proposed as a solution to a myriad of problems (Schweisfurth, 2011). At the levels of the classroom and the education system, these include: a narrow examination-focused orientation in teaching (Dello-Iacovo, 2009); the irrelevance of existing content to learners' own lives (George & Lubben, 2002); and the need for the inclusion of all learners (Layne, Jules, Kutnick & Layne, 2008).

In 1993 in the policy directive *Toward Education For All* for Namibia, the Ministry of Education and Culture promised that introducing LCE would bring about an enlightened understanding of humankind, will promote learning through understanding and practice directed towards the autonomous mastery of living conditions; will reorganise school work by fostering the acquisition of basic knowledge and skills by all pupils; and introduce and encourage practices that reflect and reinforce both the values and practices of democracy (MEC, 1993:120).

In short the Ministry of Education and Culture thought this change was necessary because the inherited curriculum from the previous administration was concerned with

describing, labeling and categorising with students spending most of their time memorising what things are called and how their textbooks and teachers organise those names (MEC, 1993:121).

It should be noted that this curriculum reform was in line with Freire's argument who once asserted that there are other forms of education possible, and that if we want social change we need to develop new forms of education. These would be based on collective learning or dialogue on the part of teachers and students. Teachers and students would both be active participants in the learning situation (Freire, 1993).

As a matter of fact, there is no surprise that the Ministry of Education and Culture (MEC) announced in 1993 that "the curriculum will no longer treat students as empty buckets into which teachers pour knowledge. Instead, the curriculum must treat learning as an active process that works best when learners participate in developing, organising, implementing, and managing it" (MEC, 1993:121). Similar ideologies were co-opted and are expressed in the 2010 National Curriculum for Basic Education.

Thus, a learner-centred curriculum was introduced with a central focus on learners' needs, potentials and abilities (MEC, 1993:20-21).

A learner-centred curriculum was proposed because it promoted a skills development approach based on democratic principles. Specifically, the learner-centred approach was favourable because it promoted:

- learning as an active process which allows learners to participate in developing, organising, implementing and managing their own learning;
- learning as a strategy for cooperation in which both teachers and students have important roles;
- teachers as facilitators and not dispensers of knowledge and relied on learners' life experience as a starting point for teaching and learning; and

critical or reflective thinking among leaners and teachers (MEC, 1993:20-21; 120-130).

The second reform (1991–1993) was the introduction of the Junior Secondary school curriculum (grades 8-10), which was phased in per grade per year covering all subject areas. The decision to start the curriculum reform at Junior Secondary level was twofold.

First, to ensure an immediate change where the negative effects could be absorbed with the least harm to individuals; and second to experiment the integration of English as the official language of instruction with its low levels of proficiency amongst learners, teachers and community countrywide (Association for the Development of Education in Africa (ADEA, 1999).

The third effort (1994–1995) was followed by the phasing in of the senior secondary school curriculum (grade 11-12). At secondary level the last Cape Education Department matriculation examination was written by full-time candidates in 1994. In the same year a new secondary school curriculum that would lead to the International General Certificate of Secondary Education (IGCSE) examination was introduced countrywide (ADEA, 1999).

The fourth step (1993–1999) was the implementation of the language policy in the Upper Primary (grades 4-7) curriculum as well as the phasing in of English as the medium of instruction per year for the subject area across all grades.

Lower Primary (grades 1-4) reform (1996–1999) was recognised for the first time as the most important phase and the foundation of schooling (ADEA, 1999).

At a glance there are sound reasons for all these curriculum reforms. However, there has been a growing dissatisfaction with the effectiveness of the secondary school learner-centred curriculum. The principal criticism is that the intended secondary school curriculum has not been implemented according to the intentions of the developers.

For instance, the 1998 National Institute for Educational Development (NIED) Education Conference observed that the 10-year implementation of the learner-centred curriculum was compromised by unimplemented plans. The main reason has been “lack of a common understanding of the learner centred philosophy” (NIED, 1998).

Similarly, the 1999 Presidential Commission on Higher Education found that “the change process in schools towards a learner-centred approach was slow” (GRN, 1999:73).

Thus, since the 1998 NIED Conference and the 1999 Presidential Commission on Higher Education, the demand for curriculum reform has been a dominant theme in Namibia. This resulted in many educational changes, including the secondary school curriculum.

For instance, in 2002 the Higher International General Certificate of Secondary Education (H) IGCSE curriculum was changed and localised to the National Education examination system. This was done to improve grade 10 and 12 examination results. Also the change was meant to align the curriculum goals with Namibia’s development priorities (Government of the Republic of Namibia (GRN), 1999).

To this end the introduction in 2010 of a more progressive constructivist curriculum, was hailed by many commentators as a panacea to the socio-economic challenges of the country (MoE, 21 May 2013:4).

However, the National Conference on Education (27 June - 1 July 2011) observed two challenges facing the Namibian education system today. First, most teachers do not understand and know how to implement the learner-centred curriculum policy at the classroom level.

Second, teachers' lack of understanding of the learner-centred education policy has led to a gap between the intended and the implemented curriculum. This means that teachers are not implementing the original ideas and intentions of the curriculum developers.

In his keynote address, the Prime Minister, stated that the failure of the education system to deliver on its promises is caused by the partial or incomplete implementation of the curriculum reforms initiated since independence. He reiterated that the sound principles of the current curriculum are not being implemented as required by the pupil-centred curriculum (*The Namibian,* Tuesday, 28 June, 2011a).

From the illustration above it can be deduced that despite the NCBE's rhetorical educational aims (see 3.4), which seek to provide equal opportunities to learners so that they become independent thinkers capable of participating successfully in society (Barell, 1996: 1) and in the knowledge economy, Namibian teachers' have not been able to implement the learner-centred pedagogy in their classrooms.

Past and latest research reviewed for the current study report that though the LCE approach have been introduced as policy panacea (Sripakash, 2010) to offset the so-called problems caused by the teacher-centred approach many critics argue that little empirical evidence exists to support this instructional strategy (Mayer, 2004; Kirschner, Sweller & Clark, 2006). Why have critics argued that the LCE paradigm is not achieving its principles?

First, numerous studies show that too large and lofty goals, accompanied by the complex language used in policy documents on LCE make the implementation of an innovation difficulty. For example, Todd and Mason (2005) reported that in South Africa, the average teacher was not able to demonstrate comprehension of the demands of Outcomes Based Education (OBE), and in Namibia, teachers have had conceptual and practical misunderstandings (O'Sullivan, 2004) of the leaner-centred pedagogy, making the implementation of the curriculum reforms difficult to realise. In addition, Rowell

(1995) found that in Namibia one of the curriculum implementation barriers has been the policy language which has not always been consistent and even contradicting itself in setting out expectations.

Second, researchers of classroom practices have attributed cultural contexts, teacher–learner power relations and the nature of teachers' own learning experiences, pre- and in-service training, and on-the-job experiences as some of the factors that inhibit the implementation of the LCE (Bernstein, 1990; Sripakash, 2010; Barrett, 2008).

For instance, in some contexts of Namibia, teachers may find collaborative and the dynamic nature of interactions between the task, educator and learners as suggested by the LCE as intimidating and undermining their authority. Therefore, they may label those learners who actively engage in social and practical activities of their learning as difficult learners, while treating passive learners as well-mannered and helpful to the implementation of the intended curriculum.

Lastly, most research articles report that classroom realities in developing country contexts evidently create challenges for LCE. For example, Jansen's 1989 review of curriculum reform in Sub-Saharan Africa (SSA) mentions material and practical concerns as 'technical' issues responsible for most of the implementation gaps.

Other studies have reported that in some developing countries where the LCE philosophy has been implemented teachers continue to express concerns associated with difficulties in implementing the LCE curriculum. Evidence abounds that both teachers and students are, contrary to policy directives, working hard to maintain and sustain the teacher-centred paradigm. For instance, numerous studies have found that for teachers, teacher-centred pedagogy is a fallback position where they are expected to be in control, and learners are expected to be obedient and not to question their authority (O'Sullivan, 2004; Dyer, Choksi, Awasty, Iyer, Moyade, Nigam, Purohit, Shah, & Sheth, 2004).

For example, reminiscent to how the teacher-centred pedagogy has been perceived in some African countries are sentiments nicely captured by the title of an article on Tanzanian secondary schools by Stambach (1994, as cited in Vavrus, 2009:304): 'Here in Africa, we teach; students listen'. Based on these teachers' descriptions Tabulawa (2013) observes that one is yet to come across evidence of both teacher and student satisfaction with the learner-centered pedagogical paradigm in the sub-Saharan African context.

In summary, this section does not only highlight Namibia's pre and post-independence educational reforms but also discusses the numerous challenges experienced by the country at different points of its history. The section also shows that the various educational reforms that took place at different historical phases of Namibia were influenced largely by political and ideological objectives of those in power in terms of their preferred kind of society and people. However, it is significant to note that senior government officials are among the critics who claim that the 2010 National Curriculum for Basic Education is not being implemented according to the intentions of the designers.

The next section presents the 2010 National Curriculum for Basic Education with a focus on the tenets of the secondary school curriculum.

3.4 The National Curriculum for Basic Education

The following section describes the goals and aims, core skills and learning areas of the national and secondary school curriculum. Also the section explains the philosophy of teaching and learning, medium of instruction, assessment and the promotion procedures of the secondary school learners.

The current national curriculum is based on the Namibian *Constitution* and the Education Act (Act No. 16 of 2001) (GRN, 1990, 2001). While the Constitution states that education is a right for all persons, the Education Act defines basic education as consisting of grades 1-12 (MEC, 1993:2). Basic education in Namibia is subdivided into five phases, namely pre-primary and lower primary (grades 1-4), upper primary (grades 5-7), junior secondary (grades 8-10) and senior secondary (grades 11-12). The present study focuses on the intended curriculum of the secondary school phase (grades 8-12) which was launched in 2010.

The NCBE was designed on the experiences and successes of the first cycle of curricular introduced in the 1990s. It responds to recent socio-economic challenges experienced in the Namibian society such as globalisation, poverty, unemployment, environmental factors, and HIV and AIDS (MoE, 2010:3).

Thus, the goals, aims, competencies, core skills and key learning areas of the curriculum are in line with the National Development Programmes 2 and 3, the Education and Training Sector Improvement Programme (ETSIP) and Vision 2030. Vision 2030 expects the national curriculum to develop citizens from a literacy society to a knowledge–based society (MoE, 2010:7).

3.4.1 Goals of the Curriculum

According to Ornstein and Hunkins (2004:274) goals are statements of purpose with some outcome in mind. Sowell (1996:20) suggests that goals furnish answers to the following question: “what destination do you have in mind for learners as far as a particular curriculum or subject is concerned?” Curriculum goals or desired outcomes provide teachers and curriculum decision makers a philosophical base and a long-term framework for learners as a result of experiencing the curriculum (Ornstein & Hunkins, 2004:274).

In line with Vision 2030 the goal of the National Curriculum for Basic Education is “to empower learners for the future development of Namibia as a knowledge-based society” (MoE, 2010:7).

To achieve this goal the current national curriculum places emphasis on two mutually exclusive aims of developing a learner’s self-growth and critical thinking within a democratic society (MoE, 2010:7-8).

According to Ornstein and Hunkins, 2009:97), the school’s first responsibility especially in developing countries is to foster “nation-state,” and secondly to promote individual growth. This dual school responsibility of promoting society and the fulfilment of the individual has been a major philosophical issue in western society for centuries. Dewey (1964, cited in Ornstein & Hunkins, 2004) once claimed that we not only wish “to make [good] citizens and workers,” but also we ultimately want to “make human beings who will live to the fullest.” Ornstein and Hunkins (2004:33) agreed that “when many individuals grow and prosper, then that society flourishes because it is comprised of many individuals.”

A careful analysis shows that these two assertions influenced curriculum developers in Namibia to formulate national curriculum aims within the framework of social and personal fulfilment.

In the belief that the school curriculum can provide learners with knowledge, understanding, attitudes, skills and values required for the knowledge-society, the national curriculum outlines six social and individual sub-aims (MoE, 2010:3).

First, the school curriculum should *develop* a caring society. Curriculum developers envisaged that this aim could be achieved by fostering in learners moral and ethical values of reliability, co-operation, democracy, tolerance, mutual understanding and service to others. As a result schools should develop learners who have social responsibilities towards others, the family, the community and the nation as a whole. In addition, learners should be taught to respect individuals' beliefs, religion, cultures, sexual orientation and socio-economic backgrounds.

Second, the curriculum should develop a healthy society. It is at school that the learners' attitudes, practices, knowledge and activities which promote physical and mental health should be developed. Also the school has a responsibility of supporting, stimulating and promoting learners' potentials to optimal development.

Third, schools should promote democratic principles and practices and human rights, unity in diversity, peace, liberty and justice.

Fourth, it is expected that schools develop a productive society through problem solving programmes. This will enhance learners' self-reliance and entrepreneurial skills needed for the world of work and self-employment.

Fifth, the curriculum should aim to develop an environmentally sustainable society. To achieve this aim schools should provide learners with scientific knowledge, skills, attitudes and values on which present and future socio-economic choices will be based.

Sixth, curriculum should develop an information society by teaching information literacy at school.

In summary, the national curriculum aims at developing individual learners as useful members of society through literacy, numeracy, science and technology enhanced education (MoE, 2010:7-8).

3.4.2 Core skills and key learning areas

A skill refers to all attributes that make an individual competent of performing a given task or responding to a situation. In other words, a skilled person should be able to use one's cognitive, social, affective, meta-cognitive and psychomotor faculties to perform a task or solve a problem (Birenbaum, 1996). The concept promotes a 'holistic approach' to human development.

According to Birenbaum's (1996) analysis students need four categories of skills in order to function well in the information society:

- cognitive competences such as problem solving, critical thinking, formulating questions, searching for relevant information, making informed judgements, efficient use of information, conducting observations, investigations, inventing and creating new things, analysing data, presenting data communicatively, oral and written expression;
- meta-cognitive competences such as self-reflection, self-evaluation, self-regulation;
- social competences such as leading discussions, persuading, cooperating, working in groups and affective dispositions such as perseverance, internal motivation, self-efficacy, independence, flexibility, or coping with frustrating situations (Birenbaum, 1996:4).

The Curriculum of Australia (2012) agrees with Birenbaum's (1996) skills analysis. It stated that within the social and individual aims framework, skills are interwoven into all parts of human beings' lives. Therefore, skills are directly or indirectly linked to physical, social and economic wellbeing of individuals. Also skills are associated to workplace productivity and safety, community interaction and capacity, and ultimately to any

country's economic and community wellbeing (Curriculum of Australia, 2012). In line with these assumptions Namibia's national curriculum has the following seven core skills required for learners to function in a knowledge-based society (Table 3.1).

Table 3.1: Core skills and basic competencies

Core Skills	Basic Competences
Learning to learn	• Setting goals, solving problems, evaluating and reflecting on completed processes; • Working effectively, independently and in groups; • Increasingly taking responsibility for their own learning and work
Personal skills	• Making informed choices, decisions and judgements; • Evaluating beliefs and opinions; taking initiative, acting creatively, producing, innovating, etc.
Social skills	• Showing respect, tolerance, trustworthiness, honesty; • Co-operating, accepting encouragement and positive criticism, showing appreciation, etc.
Cognitive skills	• Exploring, investigating, enquiring, recognising, contextualising, hypothesising, interpreting, weighing up alternatives, analysing, synthesising, evaluating, thinking creatively, creating knowledge, etc.
Communication skills	• Talking fluently, writing, eliciting, explaining, discussing, convincing, demonstrating , presenting, acting out, dramatising, drawing, showing, displaying, reporting; being clear, concise, expressive, meaningful, etc.
Numeracy skills	• Estimating, approximating, measuring, calculating, tabulating, drawing graphs, charts, diagrams, shapes, figures; • Using instruments; • Being accurate, logical,; • Solving problems, presenting information; • Using mathematical language, etc.
Information and Communication Technology skills	• Choosing appropriate communication solutions; • Utilising hardware and software; • Evaluating information; • Transforming information to knowledge; • Following ethical practice; • Interacting considerately; • Communicating clearly, etc

Source: Ministry of Education (2010:11)

In the Namibian context, a learning area describes in broader terms the field of knowledge, understanding, attitudes, skills and values which all learners need to acquire by the end of their schooling.

The National Curriculum for Basic Education has eight such learning areas applicable to all grades within the school system, but with varying degree of emphasis across each phase level. These learning areas include Languages, Mathematics, Natural Sciences, Social Sciences, Technology, Commerce, Arts and Physical Education (Table 3.2 below).

In addition, there are five cross-curricular learning themes, namely HIV and AIDS Education, Health and Wellness Education, Human Rights and Democracy Education, Information and Communication Technologies and Environmental Learning. Each of these sub-topics is placed under appropriate subjects and grades concerned.

Table 3.2 shows the learning areas and the rationale for their inclusion in the national curriculum. According to Davis (1998) a curriculum rationale explains “why we are teaching what we are teaching.” A curriculum rationale forms the philosophical basis for the curriculum, setting a tone and direction. A rationale includes statements about the nature of our learners, views of our society, and school subjects (mathematics, science, language and arts). Also a curriculum rationale serves as a guide to the development of broad programme goals, standards, student learning outcomes, and content. Moreover, it is a guide to the way teachers work with learners in the classroom (Davis, 1998).

Table 3.2: Learning areas and rationales for inclusion in the National Curriculum for Basic Education

Learning area	Rationale for inclusion in the National Curriculum for Basic Education
Languages	Because language is a means for thinking, communication and identity, learning languages is necessary in a knowledge-based society.
Mathematics	Mathematics is an essential tool for everyday life, science, technology and commerce. Through mathematical skills and knowledge learners can explore, model and interpret numbers and patterns that exist in the world.
Natural Sciences	Natural Sciences transform societies worldwide. They equip learners with scientific knowledge, skills and attitudes. Also they help learners to develop theories, examine, see, infer and understand the physical world. However, they motivate learners to develop positive values towards the natural environment.
Social Sciences	The Social Sciences assist learners to understand social, cultural, economic, civic and political and environmental issues. Subjects such as Environmental Studies, Social Studies, Religious and Moral Education, Life Skills, Geography, History and Development Studies teach learners personal values of human rights and democracy and nationhood.
Technology	Technology in the 21st century has become part of human life. It is important for learners to learn various technologies for Namibia's socio-economic development.
Commerce	Commerce is central to the trade and industrial development of a knowledge-based society. Therefore, it is essential that learners get commercial knowledge, work attitudes and skills necessary for effective business life
Arts	Arts contribute to learners' capacity to be creative through artistic design and communication using visuals, music and drama. As a result, teaching Arts becomes central in developing learners' personal and socio-cultural identity.
Physical education	As societies become more rich, health problems such as obesity, diabetes and stress increases. Thus, teaching learners how to prevent such diseases and preserve personal wellness behaviour increases their chances of being productive citizens.

Source: Ministry of Education (2010:12)

3.4.3 Fields of study

Based on the development priorities of *Namibia Vision 2030* and Education Training Support Implementation Programme (ETSIP) the national curriculum emphasises Mathematics, Natural Sciences and Information and Communication Technologies. Overall, the NCBE offers four Fields of Study: Natural Sciences and Mathematics, Social Sciences, Technology and Commerce.

A Field of Study consists of three inter-related mutually supportive subjects. The choice of option within a Field of Study is guided by subjects learners achieved good grades at the end of grade 10 examination. At the end of Grade 12 learners take the Namibia Senior Secondary Certificate examination at Ordinary (NSSCO) or Higher levels (NSSCH).

Learners take any two supplementary subjects if they follow a one-language curriculum. However, they take any one supplementary subject if they follow a two-language curriculum. Supplementary subjects should be chosen on the basis of the learner's interest and aptitude. It is hoped that the combination of Fields of Study and supplementary subjects will give greater depth or breadth in terms of learners' academic development.

The Namibia Secondary Certificate is awarded either as a subject or group certificate recognised by the Namibia Qualifications Authority (NQA). In the subject certificate, each subject that is graded in the examination is entered on the certificate, and `supplementary subjects can freely be combined with fields of study within the limits of the guidelines.

To qualify for the group certificate a learner must offer a minimum of six subjects from the NSSC Ordinary and Higher Level approved list of subjects based on the following requirement:

- at least two of the six subjects must be languages

- one of the language subjects must be English at First or Second Language level, as an Ordinary or Higher Level subject and
- at least one of the language subjects must be a first language at Higher or Ordinary Level.

However, since January 2012 Mathematics (Higher or Ordinary level) has been one of the six subjects offered (MoE, 2012).

Concerning the number of subjects a teacher is allowed to teach, the 2010 National Curriculum, states that “At Junior Secondary level a teacher must be qualified to teach either two languages of Mathematics and Natural Science and Health, or Social Sciences. Or a teacher may teach two prevocational subjects and cover other subjects such as Arts in Culture or Physical Education. At the Senior Secondary level, teachers should be single-subject specialists as far as possible, but where full teaching posts cannot be filled in this way, a teacher must not be allocated more than two mutually related subjects” (MoE, 2010:38).

3.4.4 Learning outcomes

The secondary school curriculum was designed for preparing learners for adult life, tertiary studies or direct entry to employment (MoE, 2010:17). This purpose is being translated into several learning outcomes as outlined in specific subject and syllabus areas. The learning outcomes cover three areas of the learners’ development, namely, cognitive, personal and social development.

Based on these broad areas the national curriculum describes the kind of learners the education system intends to develop in terms of knowledge, understanding, values, attitudes and skills at the end of the secondary phase. However, greater demands are made on learners in terms of academic achievement, taking responsibility for their own learning, good work ethics and practices (MoE, 2010:17).

3.4.5 The Philosophy of teaching and learning at the secondary school phase

The National Curriculum for Basic Education was founded on the philosophical and educational foundations of socio-constructivism. Socio-constructivist lessons foster cooperation with others, both within and outside the classroom community (Moll & González, 2004; Prawat & Floden, 1994; Shulman, 2000).

Socio-constructivist practice is democratic and inclusive as it provides for student direction of the curriculum and encourages personal responsibility for learning (Donlevey, 2000; Shapiro, 2000). Palincsar (1998) asserts that socio-constructivist practice benefits culturally diverse students. For examples, it promotes the use of prior knowledge and the honoring of cultural backgrounds in the classroom, a shared learning relationship between student and teacher, and the contextual learning of curriculum material.

In the Namibian context, the socio-constructivist practice is referred to as learner-centred education. Learner centred education has its roots in democratic principles. At independence in 1990 it was argued that a democratic pedagogy should be the cornerstone of Namibia's education system.

As a continuation from the 1993 foundation policy on learner-centred education the 2010 NCBE reiterates that the secondary school curriculum is based on three pedagogical principles (MEC, 1993:119-121; MoE, 21 May 2013:6-7). First, knowledge and concepts are constructed by people based on their local environment. Learning should be treated as an active process that works best when learners participate in developing, organising, implementing and managing their own learning. In this sense, the Namibian school curriculum should be a strategy for cooperation in which both teachers and learners have important roles. That cooperation should be based on mutual respect and understanding rather than on suspicion and punishment (MEC, 1993:121).

Second, teachers should encourage teaching and learning process that goes beyond what is read in textbooks and told by teachers. Learning should become more than simply memorising and repeating of facts. Learners should be stimulated to learn, think independently and critically so that they master strategies that will help them identify, analyse and solve present and future problems (MEC, 1993:119).

Third, teachers should promote and protect the fundamental equality of all learners and equity in access to the learning environment; and schools should introduce and encourage classroom practices that reflect and reinforce the values and practices of democracy (MEC, 1993:120).

3.4.6 Medium of instruction

Based on the Namibian Constitution, the national curriculum regards national languages as instruments for preserving and revitalising the cultural heritage of Namibia. However, the curriculum policy promotes English as the official language and the main means of communication with the world at large (Ministry of Education, Culture, Youth & Sport (MECYS), 1990; MoE, 2010).

Therefore, the National Curriculum for Basic Education in line with the language policy promotes a two-language curriculum. For instance, the national curriculum statement states that English is a compulsory subject from Grade 1 to 12 and a medium of instruction at Secondary phase with mother tongue as a subject. This stipulation applies to all fields of study and supplementary subjects chosen by a learner in a given school.

3.4.7 Assessment

The curriculum supports criterion-referenced assessment, focusing on what a learner knows and can do. This form of assessment involves continuous assessment which may be both formative and summative.

The National Curriculum for Basic Education defines formative continuous assessment as any assessment conducted during the school year in order to improve learning and to help shape and direct the teaching-learning process. It is planned and programmed at the beginning of the year, and involves marks given for class activities, practical activities, project work, assignments, homework, and short tests on completion of a topic. This mode of assessment also applies to non-promotional subjects (MoE, 2010:31).

Summative assessment, on the other hand, is an assessment made at the end of the school year. It is based on the accumulation of the progress and achievements of the learner throughout the year in a given subject, together with an end-of-year tests or examinations. The result of summative assessment is a single end-of-year promotion grade (MoE, 2010:31).

3.4.8 Learner promotion

Promoting learners at the senior secondary phase depends on three criteria. First, learners whose school-based Grade 11 examination results, class attendance and devotion to school work during the year have been satisfactory, should be promoted from grade 11 to 12.

Second, a learner who achieves less than 40 percent in a higher level subject in grade 11 should be persuaded to continue with the subject on an Ordinary level in grade 12.

Third, grade 11 learners may not be promoted if they lack commitment to their studies, have failed more than 3 subjects, have shown unacceptable patterns of behaviour and have been absent for more than 20 school days (MoE, 2006).

Taken together, in order to achieve the intended learning outcomes among learners, the National Curriculum for Basic Education recommends a class size of not more than 35 learners at the secondary school phase (MoE, 2010:39).

3.4.9 Personal reflections on the National Curriculum for Basic Education

From the foregoing presentation three critical points emerge about the National Curriculum for Basic Education in Namibia that deserves mention. The first issue is that there are strong indications that developers of the 2010 curriculum made attempts to move away from the perennialist (subject-centred) curriculum, which subscribes among others to defined disciplines and a strong teacher control of teaching and learning. The movement towards a broad-based curriculum are clearly articulated in the description of learning areas and the justifications for their inclusion in the National Curriculum for Basic Education (Table 3.2).

Second, the current curriculum is underpinned by a constructivist theory of learning, which is commonly referred to as Learner-centred pedagogy in which learners are regarded as creators of their own knowledge. The 2010 national curriculum states that teaching and learning will be guided by strategies such as discovery learning, hand-on activities, experiential learning, collaborative learning, project-based and task-based learning, concepts associated with constructivism (MoE, 21 May 2013:5; MoE, 2010:26).

In addition, it is worth mentioning that in relation to the constructvist philosophy, the national curriculum implicitly promotes the ideals of a competence-based education (CBE), which also incorporates the tenets of outcomes-based education (OBE). In

addition, the curriculum framework uses terminology such as goal-oriented, process-oriented and empowering or emancipation education.

In my view the National Curriculum Statement for Namibia is too ambitious and that is its main shortcoming. The fact that the philosophy underpinning the education system is represented by too many other ideologies such as empowerment, emancipatory, outcomes-based and competence-based, child-centred education sends mixed intentions and messages, which may confuse most teachers.

This lack of a clear and well-articulated ideological framework may be detrimental to the implementation of the curriculum goals and objectives by teachers at the school and classroom levels. However, while the curriculum is rich with these jargons, again one wonders whether teachers clearly understand the differences and similarities or interrelationships among these concepts; let alone interpreting them in the school and classroom situation.

Third, although the NCBE recognises the importance of language as the most essential tool for all communication, learning, personal and cultural identity, the discussion on the Language Policy in the curriculum seem to promote an English-only medium of instruction throughout the school system.

One therefore wonders whether such a mono-language policy to teaching and learning promotes local cultural heritage, enhances the quality of opportunities to education for learners or merely preserves interests only of the elite group.

Stated differently, if Article 19 of the Namibian Constitution states that “All persons shall have the right to education,” how then, might that right be achieved when the English language is promoted as an official medium of instruction in schools above other national languages?

One of the major observations from the researcher's point of view is that despite the good intentions articulated in the NCBE, in practice Namibia still bears the characteristics of a traditional philosophy of essentialism which is rooted in idealism and realism; 20th century philosophies which emphasised the promotion of Mathematics, Science and English in the secondary school curriculum because of their purported prestigious status in contributing to economic development of the country.

Thus, based on experience the researcher concludes that the present secondary school curriculum largely reflects the essentialist views, despite the political rhetoric to the contrary. For example, essentialist views are reflected mainly in public pronouncements by education officials who are calling for academic excellence by raising education standards.

As the debate on raising academic excellence continues unabated, there are incidentally, strong calls from policymakers suggesting that curriculum content must be aligned to high-stakes tests and examinations. This move has seen the institutionalisation of the league table system in the school system in Namibia. It has become customary in Namibia that annually best performing schools are selected and awarded with a floating trophy based on the performance of their learners on the grade 10 or 12 end-of-year examinations (Namibian Sun, 2013). This move is creating a strong dichotomy between the constructivist theory of learning and the assessment practices promoted in the school system.

This contradiction can be explained at least in two ways. First, in section 3.4.8 of this chapter, the National Curriculum for Basic Education (MoE, 2010:31) describes the purpose of assessment as follows:

> The curriculum supports criterion-referenced assessment, focusing on what a learner knows and can do. This form of assessment involves formative continuous and summative assessments.
>
> Formative continuous assessment is formative continuous assessment as any assessment made during the school year in order to improve learning and to help shape and direct the teaching-learning process. It is planned and programmed at the beginning of the year, and involves marks given for class activities, practical activities, project work, assignments, homework, and short

> tests on completion of a topic. Summative assessment is an assessment made at the end of the school year. It is based on the accumulation of the progress and achievements of the learner throughout the year in a given subject, together with an end-of-year tests or examinations. The result of summative assessment is a single end-of-year promotion grade (MoE, 2010:31).

These conceptions of assessment are in conflict with current definitions and international trends in the field of assessment. The main shortcomings of these definitions is that they regard summative assessment as a means of testing what has been learned and therefore tends to drive the teaching for the test.

Therefore, as Birenbaum, Breuer, Cascallar, Dochy, Ridgway, Dori and Wiesemes (2005:3) put it, this type of assessment system does not allow learners to improve their own learning because the assessments are ”considered to be an end point instead of a beginning or a step forward.”

In other words, defining summative assessment as an assessment made at the end of the school year which contributes to an overall calculation for a grade is not only too simplistic but at best, misleading. Literature based on much recent work in the field of assessment show that it is perfectly possible for summative assessment to have a formative component (Broadfoot, 2007:110; Council on Higher Education, 2001); and that is more desirable than the common assessment practice described in Namibia’s National Curriculum Statement, when the assessment (either coursework or exam) comes at the end of the course.

That said there is an increasing understanding that summative (continuous) assessment takes place throughout a curriculum at points when judgement is made about whether a learner is able to progress to the next level/semester/unit of learning. It can be based on the curriculum which consists of a series of small or large learning programmes. A learning programme can be considered small if it covers only a particular unit of learning (skills programme), or a short course, or part of module) while large if it ends only at the completion of a full year of study in a discipline (Council on Higher Education, 2001).

Second, Namibia's current understanding of assessment, highlighted above, is not in agreement with international trends in education and training and does not support the constructivist theory of learning, which puts the learner at the centre of learning.

For instance, in section 3.4.1 it is stated that the goal of the National Curriculum for Basic Education is "to empower learners for the future development of Namibia as a knowledge-based society" through developing a learner's self-growth and critical thinking within a democratic society (MoE, 2010:7-8).

However, it may be argued that this strong movement in Namibia towards building a knowledge-based society fostered through life-long and new types of learning is under jeopardy. The rapid rise in recent years of much greater use of traditional forms of assessment (examination and tests) for the purpose of monitoring standards and providing for accountability appears to be working directly against this 'knowledge society' agenda because education systems are not delivering the necessary competencies (Broadfoot, 2007:49, 52).

At this juncture therefore one may wonder whether the misconceptions inherent in the current national curriculum could possibly inhibit efforts by teachers to implement the intended curriculum. The next section attempts to explore this question by reviewing specific literature related to the factors that inhibit or facilitate the implementation of the intended curriculum within the Namibian context.

In order to understand the possible reasons why Namibia's curriculum and education system are portrayed as "crippled," several questions were raised at the beginning of Chapter 2. The next section explores literature to discuss the factors that inhibit or facilitate the implementation of the secondary school curriculum.

3.5 Factors influencing the implementation of the intended secondary school curriculum in Namibia

Mayer (1999:25) discussing about curriculum development and implementation observed that the implemented curriculum as represented by instructional delivery or pedagogy has increasingly become researchers' attention because it illuminates the black box between educational inputs and student outcomes. This research area, as Mayer (1999:25) noted has a potential to investigate the gap between the intended curriculum and the implemented curriculum.

This study investigated the factors that influence the implementation of the secondary school curriculum as intended by curriculum developers. Thus, the following section discusses current literature on the factors that influence the implementation of the intended secondary school curriculum at the classroom level.

In the Namibian situation the 2010 National Curriculum for Basic Education was hailed as a significant paradigm shift in classroom practice mainly for adopting a Learner-Centred Pedagogy. However, shortly after its adoption the lack of implementation of the intended secondary school curriculum became the subject of much of its criticism discussed in section 3.3 of this chapter.

Drawing from extensive literature on educational change and school development, research argues that implemented curriculum reforms frequently fail during their implementation due to interrelated school-level factors. Factors frequently cited include teachers' willingness to change, clarity of curriculum goals, school environment, socio-cultural settings, and availability of resources, teaching-learning methodologies and evaluation strategies. Also included are learners', teachers' and other stakeholders' attitudes (Carl, 2009; Fuchs, 2003; Fuchs, Fuchs, & Compton, 2004; Oliva & Gordon, 2013:83; Rogan & Grayson, 2003; Sarason, 1990, 1995; Speece, Case & Molloy, 2003).

Data from self-reported evaluation studies reported (Avramidis, Bayliss, & Burden, 2000; Cornoldi Terreni, Scruggs, & Mastropieri, 1998; Harvey, 1985; Heiman, 2001; Stoler, 1992; Whiting & Young, 1995) that teachers' background (age, gender, number of subjects taught, professional qualifications, class size, teaching experience, and region of employment); teachers' epistemologies (knowledge and understanding, attitudes, beliefs, self-efficacy/behaviour); internal and external school factors may influence the implementation of a 'new' curriculum at school and classroom levels (Bandura, 1997; Boyd-Dimock, 2009; Fullan, 1991:105-109); Hall & Hord, 2001; Kennedy & Kennedy, 1996; Spillane *et al.,* 2002; Blignaut, 2006; Rogan & Grayson, 2003; Welch, 1995).

The present study attempted to follow this line of inquiry for two reasons. First, the researcher realised that in the context of Namibia no evaluative research has been conducted which has examined the effects of teachers' demographics, epistemologies, internal and external factors on curriculum implementation in the classroom situation.

Secondly, most of the research studies on the factors that influence the implementation of the intended curriculum concentrate mainly on isolated factors and their potential effects on the implemented curriculum. Therefore, by following this line of inquiry, the present study looks at how multiple factors interact to influence the implementation of the intended secondary school curriculum in Namibia's classrooms.

In other words, this study is based on the premise that multiple factors (teacher's demographic, epistemologies, internal and external school factors) might influence the implementation of the intended secondary school curriculum in the classroom environment. It is to the understanding of these ideas and their influence on the implementation of the intended curriculum that we turn to now.

3.5.1 Teachers' demographic factors

In the present study teachers' demographic characteristics encompass age, gender, teaching experience, professional qualification and number of subjects taught.

Research states that teachers are integral to the implementation of any curriculum innovation (Haskell, 2000). More significant is that some studies have concluded that teachers' characteristics such as age, length of professional experience and gender are correlated with teachers' attitudes to reform (Huberman, 1989; Datnow, 1998).

Several other studies have investigated whether there is any significant correlation between a teacher's age, years of experience and qualification (Avramidis, Bayliss, & Burden, 2000; Cornoldi Terreni, Scruggs, & Mastropieri, 1998; Harvey, 1985; Heiman, 2001; Stoler, 1992; Whiting & Young, 1995) and curriculum implementation. Some of these studies reported that older teachers appear to foster less positive attitudes than younger teachers (Cornoldi *et al.,* 1998; Lampropoulou & Padelliadu, 1997).

This means that younger teachers appear to accept more of a new initiative than their more experienced counterparts (Cornoldi *et al.,* 1998; Harvey, 1985). Also research suggests that the most experienced educators have the lowest level of acceptance of (Forlin, Douglas, & Hattie, 1996; Knight, 1999) an innovation. For instance, Whiting and Young (1995) concluded that older, more experienced teachers are uncomfortable with the introduction of new ideas, because they intrude in their already existing belief systems.

With regard to teachers' educational qualifications, Heiman (2001) and Kuester (2000) concluded that a teacher's level of educational qualification did not significantly influence the teacher's ability to implement an innovation.

Interestingly, a study by Rivikin, Hanushek and Kain (2005) reported that teachers' own background including teacher preparation and training and teaching experience are key

factors that may influence teachers' capacity to implement a school curriculum innovation.

In line with these reviewed literature, the 2010 NCBE reiterates that qualified teachers will be required to effectively implement the intended curriculum (MoE, 2010:26).

The Ministry of Education asserted that teachers will not deliver the learner-centred curriculum if they lack planning skills, do not reflect on their classroom practices and are incompetent at multi-grade teaching. Also the Ministry of Education observed that appriopriate teacher placement, maintaining a normal class size and the effective use of school time may positively influence the implementation of the secondary school curriculum (MoE, 2010:26). Schweisfurth (2011) observed that the failures of implementing LCE in different contexts are due to teachers' limited capacity, lack of personal experience and high pupil: teacher ratios.

Other studies suggest that teachers' level of experiences also affect curriculum implementation's effectiveness. Sarason (1995), for instance, reported that depending on their prior experiences teachers may be more or less open to change processes.

Studies by Rosenholtz and Simpson (1990) established that inexperienced teachers typically are less effective than more senior teachers, but the measurable benefits of experience appear to level off after 5 years. In a similar study (Rosenholtz & Simpson, 1990), teachers aged 30-45 years old, with 11-16 years teaching experience displayed a considerable amount of enthusiasm in implementing curriculum innovation. On the contrary, results of the oldest teachers (46-over 50 years) with the longest teaching experience (13 and more years) showed a low self-efficacy in implementing the Learner Centred Education curriculum.

Other studies report that the more the number of teachers' years of experience, the more likely teachers will be confident to implement the curriculum. For instance, results

from Richards and Farrell's (2005) study indicated that experienced teachers are more capable and willing to carry out the curriculum than novice teachers.

3.5.2 Teachers' epistemological factors

Spillane, Reiser, and Reimer, (2002) suggested that teacher epistemologies (prior knowledge, understanding, attitudes, beliefs and experiences) help teachers on how to interpret a curriculum policy and subsequently influence the construction of their new understandings. Therefore, this research explores how teachers' knowledge and understanding affect the implementation of a curriculum innovation. Also this subsection discusses what role teachers' attitudes, beliefs and experiences play in whether or not they implement the curriculum as designed by policy makers.

3.5.2.1 Teachers' knowledge

Viewed from the cognitive perspective, Spillane *et al.,* (2002) and Blignaut (2006) stated that what a new policy mean for teachers depends to a great extent on their repertoire of existing knowledge and experience. Drawing from this explanation, one could say that Namibian teachers' existing knowledge about the purpose of the secondary school curriculum, serve as a lens influencing how they are subsequently interpreting the curriculum policy.

For instance, as the 2010 Namibia Curriculum for Basic Education advocates a learner-centred pedagogy, teachers may find this paradigm at odds with their tacit knowledge of what they know about teaching and learning derived from their socialisation into teacher-centred environment (Spillane *et al.,* 2002). As a result of this contradiction, implementing the intended secondary school curriculum policy may be difficult if teachers perceive it to be alien to their tacit knowledge (Spillane *et al.*, 2002).

Ajzen (1991) pointed out that if teachers lack skills and knowledge, they are likely to interpret the curriculum in their own way and continue to use familiar strategies which they are comfortable with. Through this perceived behavioural control teachers are able to control and feel easy about the curriculum content and the class. To reiterate, it was discussed in Chapter 2 that knowledge can be interpreted from various perspectives

depending on how it is used. For instance, it was noted that the notion of knowing can be understood in terms of its positivist, interpretive and critical perspectives.

As a result, other studies of teacher epistemologies posit that declarative (positivist), procedural (interpretive) and conditional (critical) knowledge are key forms of knowledge that teachers should possess if they are to implement a curriculum innovation that will result in meaningful changes (Anderson, 1985; Garner, 1990). The two researchers argued that while declarative knowledge may help teachers to know the factual information regarding concepts and their interrelationships, procedural knowledge will assist them to understand how to perform or apply the available curriculum information.

Additionally, studies by Jewett, Bain and Ennis (1994:165), concluded, also in support of Anderson (1985) and Garner (1990) that conditional knowledge is a critical component of the curricular expertise because it helps teachers to make relevant curricular decisions about how to teach the “right” content to the “right” child at the “right” time.

Therefore, Zais (2010:112) maintained that epistemology and curriculum are interrelated and for that reason teachers’ understanding of the various forms of knowledge and patterns of knowing influence their decisions concerning content selection and its organisation during curriculum design and implementation. The implementation processes may include teaching, learning and assessment of learning (Sowell, 2010).

3.5.2.2 Teachers’ attitudes

Despite a lack of agreement among researchers regarding the relationships between knowledge and attitudes, Kollmuss and Agyeman (2002) suggested that knowledge exerts critical influence on individuals’ attitudes about the problem and that prior modification of their attitudes may help them to take action about the phenomenon. Boyd-Dimock (2009), on the other hand, commented that teachers’ attitudes regarding change can influence teachers’ behaviour in implementing or resisting school

improvement, which comes about if teachers know, understand and can interpret information regarding the envisaged change.

Although there are no known empirical studies examining the characteristics linked to teachers' attitudes to curriculum change in Namibia, a wealthy of examples exist elsewhere. Kennedy and Kennedy (1996) described attitude as an individual's affective and evaluative response to something. Studies argue that attitudes are a crucial variable in implementing a curriculum innovation and without effecting a change in teachers' attitudes any systemic innovation in the curriculum will not have a significant effect on what goes on elsewhere (Young & Lee, 1984:184).

Oughton (1999) asserted that any planned curriculum change is only as good as the teachers working in a school. Since teachers shape what happens with students in classrooms and how curriculum plans are interpreted, change in schools can only occur because teachers' attitudes change. It can therefore be stated that teachers' positive attitudes towards the secondary school curriculum may facilitate its successful implementation in the classroom (Ramsay *et al.,* 1999).

In addition, research (Brown & McIntyre, 1982; Morris, 1995; Richardson, 1991) demonstrated that although positive attitudes toward a curriculum innovation may not be an accurate predictor of its implementation, teachers' attitudes are crucial in determining the success or failure of an innovation.

Morris (1988), for instance, argued that even with a more than 25.0% positive attitude, most teachers might not implement the curriculum policy with fidelity. For example, Morris (1988) noted two important findings in a project that attempted to move teachers from a product-based transmission towards a more process-oriented interpretative approach through in-service training.

First, it was found that when teachers were asked of their attitudes to the educational change that they were being introduced; teachers appeared to evaluate positively the new process-based curriculum.

Second, it emerged that although teachers responded positively to questions on attitudes towards operational aspects of the curriculum; the extent of the positive evaluation was less than that found on questions on the curriculum in general.

This difference in attitude was demonstrated when teachers were observed putting the curriculum into practice in the classroom after their training. Morris (1988) further reported that results from classroom observations showed that in general, teachers did not implement the new approach in the classroom as was originally intended.

However, despite some of these inconclusive research findings of whether or not teachers' attitudes influence curriculum implementation, Morris's (1988) study suggested that the successful implementation of a curriculum depends on teachers' receptivity of a curriculum innovation.

3.5.2.3 Teachers' beliefs

Attitudes and beliefs are sometimes used interchangeably (Lumpe, Haney & Czerniak, 2000; Oliver & Koballa, 1992), although some researchers argued that they are two constructs. While attitudes are individuals' general feelings about certain things or situations, beliefs are propositions individuals hold to be true. They are, however, non-evidential and are based on personal judgement and evaluation (Koballa & Crawley, 1985; Pajares, 1992).

According to Bord, O'Connor and Fisher (2000), attitudes are a set of beliefs "connected with pursuing a given line of behaviour and the relative rewards and costs connected with those outcomes". Given the differences and connections, attitudes and beliefs are both critical in understanding, for instance, how they influence teachers' decisions of whether or not to implement a new curriculum.

Therefore, in the case of beliefs, Kennedy and Kennedy (1996) stated that beliefs are cognitive and reflect the knowledge or information one may have about something. In this context teachers' belief systems reflect personal theories about the nature of knowledge and knowing that, in turn, influence teachers' curriculum decision making and teaching approaches (Hofer & Pintrich, 1997; Lovat & Smith, 1995; Pajares, 1992).

According to Thompson (1984:112) teachers' beliefs can be regarded as abstract views that an individual teacher holds which are based on a general ideology of teaching. In other words, a teacher may have implicit assumptions about curriculum, schooling, students, teaching and learning and knowledge. These assumptions could be both cognitive and affective in nature, which may become the basis on which the teacher eventually interprets and acts once confronted with new knowledge (Artzt & Armour-Thomas, 1996; Lovat & Smith, 1995).

A growing body of literature suggest that teachers' beliefs affect classroom practices (Pajares, 1992; Thompson, 1985). Although many studies on teachers' beliefs suggest that there is a relationship between beliefs and practices, causality has been difficult to explain. It has been found that while some studies strongly suggest that teachers'

beliefs influence instructional behaviour, other studies contend that it is rather instructional practice that influences teachers' beliefs (Buzeika, 1996; McGalliard, 1983).

Nevertheless, Short and Burke (1996) argued that if an implemented curriculum is a set of beliefs put into action, then curriculum policy-makers may do well to look in depth at teachers' beliefs. It is important to do this because if teachers' beliefs are not congruent with the beliefs underpinning an educational reform, then the aftermath of such a mismatch can affect the teachers' willingness to implement the innovation. Whereas, if teachers hold beliefs compatible with the innovation then acceptance will be more likely to occur.

Also previous research has found that teachers' beliefs and practices may have stronger effects on implementing curriculum goals including student learning at the classroom level (Blake & Monahan, 2007). With respect to the current study, it was stated (see 1.1 & 3.4.1) that the main purpose of the secondary school curriculum is to prepare learners for adult life, tertiary studies or direct entry to employment (MoE, 2010:17).

Handal and Herrington (2003) pointed out that if teachers' beliefs are not congruent with the goals of a curriculum innovation, the mismatch may not only affect the degree of success of the curriculum but also the teachers' morale and their willingness to implement the innovation. However, if teachers hold opposing beliefs or perceive barriers in enacting the curriculum, then low-take up, dilution and corruption of the reform will likely follow (Burkhardt, Fraser & Ridgway, 1990).

On the other hand, Berliner and Biddle (1995) stated that in most cases teachers' erroneous beliefs about a new innovation can cause implementation failures despite its good intentions. In support of this argument Nisbett and Ross (1980) found that teachers' strong beliefs about an innovation can become part of their decision-making

structure for a long period and may continue to influence their curriculum implementation decision making process.

Haynes (1996); Jackson (1968, 1986); Koehler & Grouws (1992); Sosniak, Ethington and Varelas (1991) also concluded that teachers' beliefs can play either a facilitating or an inhibiting role in translating curriculum guidelines into the complex and daily reality of the classroom environment.

For instance, Namibia's education system was founded on the premise of education for all, regardless of the socio-economic or any special circumstances of the learners (MEC, 1993:3). Therefore, today most classrooms in Namibia include learners with different interests, aptitudes and abilities (below average, average and above average) (MoE, 2010:27), whom teachers expect to succeed regardless of their abilities.

However, Moore and Hansen (2012:28-29) noted that teachers' beliefs about their learners' strengths, weaknesses, aspirations, limitations and special needs have a powerful effect on learners' performance. These authors further argued that if teachers hold high, realistic expectations for themselves and all students and act as though they expect their students to be hard working, interested and successful in class, their students will more likely to be so.

In other words, because teachers communicate their expectations and beliefs toward their students through their actions and words, their communication results in a positive self-fulfilling prophecy as learners begin to behave and achieve in accordance with teachers' expectations. This means that for both low and high achieving learners to develop self-esteem and improve their academic achievements, teachers should first and foremost develop high expectations for their learners and believe that achievement is possible, not only on current assignments but also on long-term (Moore & Hansen, 2012:29-30) achievements.

Therefore, for any curriculum reform to be successful, policy makers must take into account teachers' beliefs (Handal & Herrington, 2003) as key implementers of the curriculum.

3.5.2.4 Self-efficacy

Following Bandura's (1977) theory of self-efficacy, individuals' behaviours depend upon the beliefs in their own coping abilities and the expected outcomes of their proposed behaviours. In the context of curriculum implementation how teachers perceive themselves can affect the way they behave. In other words, the concept of self-perception or commonly known as self-efficacy is fundamental to the way people conduct themselves (Welch, 1995).

Self-efficacy can be defined as one's belief in his or her effectiveness to complete a task or goal (Bandura, 1997). Bandura (1977:79) suggested that self-efficacy comprises two dimensions which he labelled "outcome expectancy" and "efficacy expectation". The former represents "a person's estimate that a given behaviour will lead to certain outcomes", and the latter is the "conviction that one can successfully execute the behaviour required to produce the outcomes".

Furthermore, Bandura (1977) suggested that the two dimensions are differentiated, because those individuals who believe that certain behaviours will produce certain outcomes may also believe that they are not capable of performing the activities or the relevant behaviours which bring about the desired outcomes (Welch, 1995).

The second type of teacher self-efficacy which is relevant to the present study, describes teachers' sense of whether or not they, on a personal level have the skills and abilities necessary to enhance student learning.

In a meta-analysis of the effect of self-efficacy on successful performance Stajkovic and Luthan (1998) found a 0.38 weighted average correlation across 114 studies involving 21,616 subjects and a 72% probability that people with high self-efficacy would have better performance than those with low self-efficacy.

Taken together, research is uncertain regarding the relationship between knowledge, attitudes, beliefs and behaviours (self-efficacy). However, attempts to understand if such a relationship exits has very important implications in determining teachers'

reactions to a curriculum change and reform, particularly its implementation at the classroom level. Research using the knowledge-deficit model (Hansen, Holm, Frewer, Robinson & Sandoe, 2003) suggests that a relationship among these constructs may exist, though it may be weak and influenced by several situational factors such as social and economic pressures.

Also the relationship may be weak because the likely effect of one construct may not happen in a step-wise fashion. In other words, high levels of knowledge about a curriculum may not necessarily guarantee that teachers' attitudes and beliefs will change in a positive direction and in turn result in adopting the change (Monroe, 1993; Hwang, Kim & Jeng, 2000).

However, research implies that by exposing teachers to information about an innovation may help them understand and increase their literacy level about the innovation, modify their attitudes and beliefs and ultimately influence or determine their behaviour or self-efficacy level (Ajzen, 1991; Bandura, 1977; Hansen, Holm, Frewer, Robinson & Sandoe, 2003) to implement an innovation.

3.5.3 Internal school support factors

However, these teacher epistemologies do not take place in a vacuum but may be shaped by, amongst others, inadequate internal and external support systems required to implement the curriculum.

3.5.3.1 Learners' characteristics

The low self-efficacy of teachers to implement the secondary school curriculum does not occur in a vacuum. Research shows that low self-efficacy among teachers may be influenced by local factors which are more directly related to the school where change is occurring (Richardson & Placier, 2001).

Previous school improvement studies (Osher, Dwyer & Jimerson, 2006) demonstrated that students' attitudes towards their learning may also influence teachers' success in implementing the school curriculum. First and foremost, as a source of teachers' success, students contribute to an exciting or dull classroom learning experience. For instance, the learning process can be more difficult in classrooms where student discipline is a problem; where students are regularly absent or late (ibid).

In the case of student discipline, critics argue that the abolishment in 1990 of corporal punishment in Namibian schools in accordance with Article 8 (2b) of the country's Constitution, children have been allowed too many liberties without responsibilities, resulting in numerous incidents of discipline problems in schools (Namibian Sun, 2010).

With respect to Article 8 (2b), the Namibian Constitution (Chapter III) consists of 21 articles (Articles 5-25), all referring to Fundamental Human Rights and Freedoms (GRN, 1990:15). Therefore, against a history of an authoritative regime in schools and with the intention of achieving a more democratic atmosphere in schools, the Namibian government included Article 8 (2b), which states that "No persons shall be subject to torture or cruel, inhuman or degrading treatment or punishment" (ibid.).

Because corporal punishment has to do with a person in authority using physical force (smacking, slapping, spanking, beating, kicking, shaking, pinching or burning) with the intention of causing pain for disciplinary purposes, it was thought that through discipline (the art of teaching a person the difference between right and wrong without causing injury) (Ministry of Gender & Child Welfare (MGCW), n.d.), effective teaching and learning would take place and improve learners' performance (NIED, 2002).

Secondly, research shows that the social background of learners may also affect how the curriculum is implemented at the classroom level. For example, the nature of home environment, level of support, family and cultural related commitments may significantly influence the learner's attitudes towards schooling and learning (Osher *et al.,* 2006).

In view of the impact that social forces play on curriculum change and reform discussed in Chapter 2 (see 2.7.7), the National Curriculum for Basic Education acknowledges that as many Namibian children experience emotional and social traumas caused by the effects of HIV and AIDS the situation can inhibit the achievement of the secondary school curriculum objectives.

This assertion is supported by the 2012 EMIS report, which shows that nationally about 20.3% of learners in Namibia were orphans and 17.3% were classified as vulnerable children. For the three regions that participated in the present study, the data are quite revealing. For instance, both Kavango (34.7%) and Caprivi (22.9%) had Orphans and Vulnerable Children (OVC) average rates higher than the national mean. Only Oshikoto (19.5%) had an OVC average rate slightly below the national mean.

To counter the drastic impact of HIV and AIDS, and also to enrich the formal curriculum and thus make school life enjoyable for learners the Ministry of Education regards extra-curricular teaching as a crucial component of the school system. In other words, organised HIV and AIDS and science clubs, environmental groups, debating societies, school newspaper and school websites, dramas, music, dance, art groups and choirs;

sports and games are encouraged so as to significantly support the aims of the official curriculum (MoE, 2010:39).

Furthermore, the National Curriculum for Basic Education contends that the language of classroom instruction is a key factor that may have a direct bearing on how the curriculum is implemented in the classroom situation.

In section 3.4.6 of this chapter the NCBE states that English is the official medium of instruction throughout the school system including grades 8 to 12. Before independence the majority of Namibian school used Afrikaans as the dominant language of instruction (Graham-Brown, 1996:169).

However, at independence in 1990, English replaced Afrikaans as an official language of communication and of classroom instruction. The new language policy which was announced in November 1991 (REF NO 68/91/11/28) and its implementation discussed in a National Conference in 1992 and revised in 2003 states that: “In the case of Namibia, English will be used in its official capacity as a medium of instruction and assessment throughout the education system in public schools as from grade 4 onwards.” (MBESC, 2003:3)

This language policy was adopted and incorporated into Namibia’s 1990 Constitution, which gave English an official status above all other languages spoken in the country. For instance, Article 3 states that: “The official language of Namibia shall be English; while Article 19 reiterates that “All persons shall have the right to education.”

A review of previous research on languages in Namibia reveals that the country has 13 languages recognised as national languages, including 10 indigenous African languages spoken by 87.8% of the population and 3 Indo-European languages spoken by 11.2% of the population. Of these languages 10 are indigenous languages include Oshikwanyama, Oshindonga, Rukwangali, Otjiherero, Rugciriku, Thimbukushu, Silozi and Setswana, all belonging to the Bantu language group, and Khoekhoegowab and

Ju/'hoan which belong to the Khoisan language group. The three Indo-European languages include English, German, and Afrikaans. Afrikaans is spoken by 9.5% of the population, German by 0.9%, and English by a mere 0.8% (Brock-Utne & Holmarsdottir 2001; Pütz, 1995).

With this background information, critics are surprised that ironically, English, the first language of the smallest percentage of Namibia's population, was chosen as the official language of the country. Expert opinion dating back to Namibia's independence show that two perspectives have always been advanced for the choice of English as a medium of instruction in all Namibian public schools.

One argument from 'aid' experts is that: "English has both material resources (trained teachers, teacher trainers, teaching materials, literature, dictionaries, multinational publishers, computers and software, low priced book schemes) and immaterial resources (knowledge, skills, know-how via its 'experts')" (Phillipson, 1992*)*.

The second, the English-functional argument as applied to this study is false. Several scholars have written about the ineffectiveness of the current monolingual English-only policy of Namibia as employed in the classroom. For instance, Harlech-Jones (1997) posed the following question: "How, and to what extent, does the current language policy in education hinder or support the attainment of the constitutional aims?"

A recent study by Harris (2011:41) found that on average, teachers reported that 61% of learners have difficulty with the English language. 57% of teachers with a language qualification expressed similar observations. With regard to English proficiency among teachers, Harris (2011:18) reported an admission by a government official that "the low English language proficiency among teachers contributes to low English language proficiency among learners. In the same study, Harris (2011:40) found that only 30% of the 138 teachers that participated in her study preferred to teach in English.

There is yet another crucial argument to this issue. Critics believe that while the decision to make English the official language was rationalised in part by its suitability to serve in the domain of science and technology, in the current education environment of Namibia, English is not effectively serving this domain. English is ineffective in this regard because it continues to discourage individuals who lack high competence in English's technical vocabulary to pursue studies or work in this field. As a result of this deficiency, very little progress has been made by Namibians in the fields of science and technology (Brock-Utne & Holmarsdottir, 2001).

A study by Ansre (1979:13) argued that English as the language of technology and advancement has only managed to produce drop-outs and failures in schools in Africa, and certainly in Namibia as teachers lack the ability to manipulate the language of education adequately.

A number of studies (Brock-Utne & Holmarsdottir, 2001; Cantoni, 2007), however, demonstrated why English is unsatisfactory for and even detrimental in the education sector. For instance, literature on cognitive and language acquisition theory, show that English as a language of instruction (Bokamba, 2007) impedes quality teaching and learning. Some critics further argue that the use of English as a medium of instruction is contributing to extremely poor academic performance and high rates of failure, repetition, and wastage among students (Brock-Utne & Holmarsdottir, 2001; Cantoni, 2007).

Most critics contend that these consequences are not only financially costly to the government, but also to the development of human capital for Namibia. Because students are required to learn in English at the same time they are learning English, content information often gets lost to language difficulties. As a result, students gain little knowledge in school, and they produce even less (Brock-Utne & Holmarsdottir, 2001).

This point of view is confirmed by a common sense understanding of how communication works, how information is exchanged via language, and on the theoretical understanding of the relationship between language acquisition, language proficiency and learning. The common sense understanding states that: “it is beyond dispute that the educational process in any society ought to be conducted through a language that both the learner and the teacher command well. This is a minimum requirement for any communication to take place in the teaching/learning situation” (Rugemalira, Rubagumya, Kapinga, Lwaitama, & Tetlow, 1990:28).

Gleaned from teachers’ sentiments and the various critical analyses reviewed in this study, there is sufficient evidence to suggest that the implementation of the English-only language policy in Namibia’s education system remains impractical and inappropriate (Graham-Brown, 1996; Harris, 2011; Phillipson, 1992). Skutnabb-Kangas (1981:237) concluded that mono-lingual means of instruction employed by governments at all costs, cannot promote equality of opportunities among its teachers and learners. Namibia is no exception!

It is evident from these data that for many learners in schools in Namibia, the language of instruction is not the first, or even their second language. Also it is clear that English is spoken by a minority population. Hence, it can be assumed that the level of proficiency in the language of instruction may likely determine the learners’ success or failure in the classroom environment (MoE, 2010:27).

For instance, research (Trappes-Lomax, 1990:97) further shows that at individual level, the failure to understand the language of instruction has devastating effects on the child’ progress at school. This is not only because the information contained in the teaching materials or in the teachers’ instructions is not getting across to the child, which is of course most serious in itself. In addition, it is because language is used not only as a tool for the transfer of information, but also as a medium of self-expression and as a tool for cognitive operations (ibid.).

This assertion resulted in Trappes-Lomax (1990:97) to suggest that because children lack an understanding of the language of instruction, their relations with their teachers and in some cases with their fellow students will be impoverished, and that children will risk being at a potential intellectual disadvantage.

Moreover, the children's lack of understanding of the medium of instruction may also result in three negative societal consequences. First, the objectives of the education may not be achieved. Secondly, those children, who through their home environment have privileged access to the foreign language, will be at an unfair advantage in relation to the majority. Lastly, the cost of failure caused by the children's poor understanding of the language of instruction will be felt in economic, social and political domains, as well as in the waste of time and money (ibid).

Seen from a different perspective, Akinnaso (1991:42) therefore suggested that vernacular education could be promoted based on several positive outcomes for both individuals children and society. For instance, the promotion of vernacular education will not only have possible long-term effects on the development of local languages, but also can result in the reduction of illiteracy, better use of educational opportunities and better access to life chances (ibid).

Put together, from the information presented in this section, it became apparent that students' attitudes toward learning as well as their classroom conduct may support or inhibit how a curriculum innovation is implemented. In addition, the section also held that learners' social background including their proficiency, for instance in the language of instruction may have an inhibitory or supporting to whether or not the intended curriculum policy is implemented as envisaged by the its designers.

3.5.3.2 Professional development

The other factor that has been found to impede the implementation of the intended curriculum is unsustainable professional development initiatives for teachers (Carl 2009: 3).

According to Knoff and Batsche (1995) continuing professional development or commonly known as staff development training and follow-up are critical to the success of any education change. Teacher professional development can be divided into two distinct categories, namely pre-service and in-service training.

Carl (2009:215) opined that aspirant teachers should already during their original training, receive training in skills that will enable them to curriculate, skills with regard to curriculum planning and insights with regard to broader curriculum matters and research.

According to Short and Rinehart (1992) and Carl (2009:3-4) continuing professional development enhances teacher empowerment and a sense of self-efficacy. In other words, empowered teachers can assume responsibility for their own growth and for decisions about their work and practice.

Moreover, empowerment provides teachers with an opportunity for autonomous professional behavior (Bredeson, 1994), cultivates a spirit of a shared vision among teachers (Van Slyke, 1998) and thus can influence the implementation of a curriculum policy with lasting effects (Little, 1982).

Therefore, teachers need adequate professional development in order to obtain the skills necessary to implement the desired change effort. However, Knoff and Batsche (1995) argued that in order for the professional development initiative to have a lasting effect on the implementation process, the training should be multidimensional, have clear goals, and embrace a multiyear perspective and a mastery/skill-based orientation.

In their study Huberman and Miles (1984:273) also found that the role of professional development and on-going technical assistance in enhancing implementation was dependant on the amount and quality of assistance that their users received once the change process was underway. Specifically, teachers discovered benefits in providing on-going opportunities such as external conferences, in-service trainings, team meetings, materials, peer consultation, external consultation and access to central office personnel (Huberman & Miles, 1984:273).

In Carl's (2009:215) words, in-service training can be help teachers to be effective if it is planned as an integral part of the school's instructional development programme in which use is made of subject meetings, workshops, personnel meetings and so on, and where principals and other training leaders play a dominant role. Carl (2009:215) further believed that by strengthening a subject group approach through class visits and subject group meetings, schools can create valuable in-service opportunities as subject groups link up with inspectors and subject advisers to influence the process of training.

Moreover, research on continuous professional development argues that in-service training for teachers should aim at changing their classroom behaviour in order to achieve more effective curriculum implementation. McGee (1997:294), for instance, reported that most in-service education programmes developed to enhance curriculum implementation are one-shot in-service courses and sessions, lack follow-up activities, lack focus and specificity to classroom teaching behaviour, and are imposed upon teachers. Also there is a concern that the purposes of such in-service courses are not often matched by the material delivered.

Therefore, McGee (1997) suggested that for a teacher development model to be effective it should incorporate three connected aspects. First, every teacher development initiative should include professional aspects which should be related to teachers' classroom practice.

Second, the model should include personal aspects, which are related to how teachers will cope with their own views about changing themselves. Third, the inclusion of social aspects will help teachers to understand how they should work with other teachers and their students. These three aspects lead to collaborative ways of working, the development of alternative classroom practices and a sense of empowerment over changes of teaching (Bell, 1993).

As discussed in Chapter 2 of this thesis, teacher empowerment is not only a process of equipping teachers with certain skills, knowledge and attitudes decided upon by external powers. It should rather also be about teachers' ability to play an active role in contributing to change from within their own power in a true democratic climate (Carl, 2009:219).

3.5.3.3 School leadership

The quality of school leadership has the potential to influence the success of any school environment. Research shows that the leadership role and style of the principal strongly influence the implementation of an educational change (Hall & Hord 1987). For example, in their study of the role of leadership in implementing educational change, Hall and Hord (2001) found that principals' leadership styles greatly influence the successful implementation of an educational change.

To amplify the importance of leadership in school and its contribution to effective curriculum implementation, the 2008 McKingsey report stated that one of the three lessons learnt from studies of good performing schools is that "Quality schools have quality leaders." In other words, noted the report "school leadership is second only to classroom teaching as an influence on learning". The report further contended that "without an effective headmaster (principal), a school is unlikely to have a culture of high expectations, or strive for continuous improvement. In conclusion the authors of the report believed that "schools are vulnerable where a formerly good head teacher becomes less effective over time, or where a strong head teacher leaves the school without having developed a confident and effective leadership team" (ibid).

Using the same data to retrospectively examine teachers' implementation of an innovative science curriculum, Hall and Hord (2001) discovered three groups of schools that emerged based on their level of implementation, and these groupings were explained by principal leadership style. Specifically, these researchers found that high implementing schools had Initiator principals who provided very active support to teachers to enhance student learning and utilise the new curriculum.

In contrast, the middle implementing schools had managing principals, who did not push their teachers to perform beyond the minimum requirements. Finally, the lowest implementing schools had Responder principals. Unfortunately, these principals did not help teachers to understand and implement the new curriculum initiative.

Barth (1991:70) contended that principals suffer from presumed competence. Policy makers, parents, business people, and learners believe that principals know everything about curriculum development and implementation. As a result principals themselves are trapped into pretending that they know everything about school management.

It is for this reason that Barth (1991:72) believed that although principals are regarded as knowers, many lack specific knowledge and skills to be effective school leaders. As a result, he concluded that principals will continue to walk a narrow edge between being able and not being able to fulfil their complex job as many principals face dramatic changes in their roles. In Oliva and Gordon’s (2013:70) words, the presence or absence of competence in leadership has an impact on all other individuals who take part in the curriculum implementation process.

Oliva and Gordon (2013:70), therefore, suggested that success in curriculum implementation is more likely to be achieved when leadership skills for the principal interface with those of teachers, resulting in a total team approach to the solution of curriculum problems. However, these authors cautioned that not only are the leaders’ leadership skills and the followers’ followership skills significant in themselves, even

more important is the manner in which they come together. For instance, they believed that in the same manner a superb leader is going nowhere without committed followers; superb followers will go nowhere without competent leadership (ibid:70).

In his studies on school leadership, Barth (1991) has found that teachers are willing to lead in all aspects of curriculum implementation. However, Barth (1991:444) observed that although teachers are willing to lead they are not being offered the opportunity to lead. For instance, research has discovered that even within reform-minded schools teacher leaders do not constitute more than 25% of the school personnel. This reality claims Barth (1991) means that few opportunities for school-wide leadership are offered to teachers.

Barth (1991) explained that this lack of teacher leadership in schools aggravates a very sore spot within the teaching profession and "it is alarming that teachers so central to the learning process are still treated as incidental to the enterprise called "school." However, factors within the school system are not the only ones that influence the implementation of the intended curriculum at the classroom level. Factors outside the school environment also facilitate or inhibit the implementation of the curriculum policy. The next section discusses how resources, stakeholder support and teacher involvement in curriculum development may influence the implementation of the intended secondary school curriculum.

3.5.4 External support factors

3.5.4.1 Resources

Fullan (2007:65) maintained that change can only make a positive impact on an educational organisation if there is a continuous maintenance of the change process. Change, he reiterated, is of little value to the organisation if shortly after its implementation maintenance of the change process is not addressed. The continuous maintenance of the process of change focuses on the roles and strategies of various types of change agents.

According to Fullan (1991:30-46); Fullan and Stiegelbauer (1991:345) and Ellsworth (2001) continuation of a change process is a decision about institutionalisation of an innovation based on the reaction to either a negative or positive change. These authors emphasised that continuation depends on whether or not the change is embedded or built into the structure through policy, budget or timetable.

Second, continuation also depends on whether the change process has generated a critical mass of administrators or teachers who are skilled and committed. Another decision that determines whether or not change continues is whether the change process has established procedures for continuing assistance.

More than three decades ago researchers (Berman & McLaughlin, 1977) indicated that sustained interest, financial support, and structural support are needed to continue a positive level of change. These researchers argued then that if funding for the educational organisation's change is coming from an outside source, the chances that the change process will continue after the funding has ceased is less likely.

In support of this view, Carl (2009:143) contended that the implemented curriculum may be enhanced or inhibited by the availability or scarcity of resources such as study materials, instructional and learning aids, equipment, physical accommodation and other facilities. He concluded that poor resources and conditions can limit the performance of even the best of teachers and undermine learners' efforts to focus on learning.

However, Fullan (1991:30-46) has indicated another challenge facing teachers which is related to the perception and potential use of curriculum materials. In Fullan's (1991:30-46) words "teachers as the main implementers of a curriculum innovation must recognise the 'inert' character of curriculum materials otherwise their attempts to implement the curriculum may be futile". This means that the mere availability of materials may not by themselves generate changes in the classroom.

Therefore, while resources such as textbooks, photocopying machine and Information and Communication Technologies are tools that can assist teachers to enact changes, it is rather the teachers' beliefs and behaviours that are a critical factor in how the curriculum is put into action (Fullan, 1991:30-46). The 1993 American Association for the Advancement of Science (AAAS) report observed that for the most part the interaction of the teacher with the materials determines what happens in the classroom.

3.5.4.2 Stakeholders' support

The education system of Namibia is founded on four major goals of access, equity, quality and democracy. While access is ensuring that many children enter school through increased resources, equity means making education a right for every school-going child irrespective of race of ethnicity.

On the other hand, quality refers to good schools in terms of well trained teachers and adequate learning resources and materials and functional infrastructure. Democratic education is organised around broad participation in decision making and clear accountability mechanisms by both leaders and learners (MEC, 1993:32-42).

There are many stakeholders that are key in ensuring that these four main principles of the Ministry of Education are realised (MBESC, 2004:21-28). In the context of Namibia, stakeholders in education are divided between primary and secondary stakeholders, both of whom are important, interconnected and involved in improving the quality of learning and teaching in schools (ibid).

Whereas, among others, the Ministry of Education, regional directorate of education, parents, school boards, teachers and learners are regarded as the primary stakeholders in education, secondary stakeholders include regional legislators, teacher unions, business owners and institutions of higher learning (ibid).

Despite how stakeholders are classified, one of the goals of Namibia's education system is democratic participation of everybody involved in education. Therefore, according to the Education Act (No. 16 of 2001) all stakeholders (regional government directorates of education, business owners, regional legislators, institutions of higher learning, teacher unions, school boards, parents and teachers) play a pivotal role in the effective implementation of the goals and objectives of the education initiatives in Namibia.

In other words, education in Namibia is regarded as "everyone's business" and a "shared responsibility" in which individuals and non-governmental organisations, national and international organisations, public and private enterprises, teachers' and learners' unions, faith-based and community-based organisations, and other institutions of higher learning support, directly and indirectly a wide range of education activities (MEC, 1993:176-177).

In their research on the role of outside support in the implementation of innovations, Rogan and Grayson (2003) reported that organisations such as government directorates, non-governmental organisations (NGOs) and unions, with their different agendas, all vying for and/or collaborating with one another play a significant influence on how an innovation is developed and implemented.

Therefore, research reveals that depending on the authority and credibility of each of these organisations they may influence how the secondary school curriculum is developed and implemented; and implementation could be achieved either through material or non-material support, internal or external pressure, edicts or persuasion (ibid).

Similar studies in the United States of America (American Association of School Administrators (AASA), 2009) reported that stakeholders outside the school's direct control affect how the curriculum policy is developed and implemented in the classroom situation. For instance, the AASA report learnt that regional offices of education,

community and school board members, business leaders, regional legislators, teachers' unions and higher education leaders with their competing interests in the education enterprise do indeed, in many ways influence the classroom curriculum implementation process (AASA, 2009; Ornstein, Pajak & Ornstein, 2011:44-45).

3.5.4.2.1 National government

These findings may be relevant to the Namibian curriculum change context. With regard to the role of the national government and regional directorates of education, business owners, regional legislators, institutions of higher learning and teacher unions, each of these outside organisations influence the implementation of the curriculum policy depending on its mandate and interest in the education system.

For instance, according to the 2004 SACMEQ report, since 1990 a single Ministry of Education was created to unify the previous racially and ethnically based education authorities (MBESC, 2004:7). However, though the Ministry of Education decentralised the bulk of the implementation of educational programmes to regions in 2002, it still returns the overall responsibility for the running of the entire education system (ibid).

This means that within the decentralised system the National Institute for Educational Development (NIED), an arm of the Ministry of Education, is responsible for designing, developing and evaluating curricula for the education system (MBESC, 2004:6). Research shows that in centralised systems there is a top-down hierarchy where communication is direct and teachers are told what to do (AASA, 2009).

Writing from an American perspective Oliva and Gordon (2013:39-41) admitted that although in most decentralised systems teachers are involved in curriculum planning, it is the national level that represents a unique blend of control through authority and persuasion. In other words, the national level exerts a potent influence on the curriculum of the schools throughout the country, through the dollar they distribute, which in itself is a powerfully persuasive instrument (ibid).

3.5.4.2.2 Regional directorates of education

The relationship between the regional level administrative support and schools plays a pivotal role in the implementation of the curriculum particularly at the classroom level. For example, in their study of the relationship between region-level administrative support and change implementation, Datnow and Stringfield (2000) found that there was a positive relationship between strong regional-level support and the degree of change being implemented among schools implementing educational change programmes.

Previous research show that in decentralised settings regional offices of education are supposed to play the role of service providers or support agency (Conley, 1993:71). Fullan (2007:7), therefore, pointed out that without a school-wide administrative support of an initiative by the regional directorate of education, any change sought at national level will likely not progress.

In the case of Namibia, until 2002 when the central government policy of decentralisation was introduced the primary role of regional office staff was to deliver policies developed by the central office. However, with regard to the Namibian setup, one wonders whether regional directorates of education are active resources for, and facilitators of, school-level efforts aimed at assisting teachers to implement the intended secondary school curriculum.

On the other hand, there are concerns that when ministerial-civil service relationships are tense, teachers may find it difficult to implement an educational change. For instance, Al-Qahtani (1995) argued that when the 'cycle of recrimination' is the norm, the successful implementation of any curriculum policy may not be realised. This means that where teachers blame policy-makers and administrators for unsuitable policy and lack of support, and policy-makers blame teachers for not implementing the curriculum, attempts to implement the educational change as desired by policy makers may prove difficult (ibid).

Schweisfurth (2011) agreed that culturally appropriate distance between regional education authorities and teachers, which is locally deemed to be respectful, is often cited as an issue in implementing a reform. In the absence of respect or in a highly confrontational environment implementers are more likely to feign intention and success of the implemented prescribed policy resulting in a rhetoric-reality gulf (ibid).

3.5.4.2.3 School Board Committees

The influence of school board committees cannot be overemphasised. In the Namibian education system, school boards play several roles in the administration of schools. For instance, they are responsible for developing the vision and policies of the school, advising the regional director on curriculum related issues as well as advising the school management on the extra mural curriculum (MBESC, 2004:30-32).

Therefore, the school board as one of the main stakeholders has an important advisory and decision making role at school level by ensuring that the quality of education is provided to all learners (MBESC, 2004:30-32). In short, school boards with their governance and oversight roles may facilitate or inhibit the implementation of the school curriculum.

3.5.4.2.4 Business leaders and owners

Ornstein, Pajak and Ornstein (2011:241) for instance, suggested that all parties affected by the curriculum should be involved in deciding its nature and purpose. These authors believe that because these key players have different skills, they may play different roles at different times in the change process. For instance, studies show that business leaders and owners do not only influence the type of skills and knowledge that should be included in the school curriculum, but also determine how the proposed curriculum should be implemented (AASA, 2009; Ornstein, Pajak & Ornstein, 2011:44-45).

In addition, research shows that if business needs a “world-class force”, the business sector has a social responsibility and civic orientation towards students and schools by not only being engaged in curriculum development but by also supporting its

implementation (ibid:44-45). In the case of Namibia, the business community (industry and commerce), which is part of the larger community is expected to contribute financially to the school development fund to enhance the level of education and that of the school, which will turn learners into workers with a better level of schooling (Van der Westhuizen, 2011:385-386).

3.5.4.2.5 Parents and community members

In 1993, the MEC issued a policy directive stating that “Schools can meet the needs of communities only if there is a genuine and working partnership between the government and the community” (MEC, 1993:179-180).

Previous research has shown that parent-school relations influence not only student achievement but also the success of the school implemented educational change programmes (Epstein, 1995).

In fact in his study on parent-school relations, Sarason (1995) found that parents who attended seminars on teaching of a newly introduced mathematics curriculum dropped out of such seminars due to the confusing content. Subsequently, the same parents resented the fact that they had to spend much of their time with their kids doing homework. It is thus reported that the refusal of parents to participate in their children’s school work ultimately contributed to the failure of the programme in the target schools.

This led Matthews (1996) to conclude that "school reform may need to be recast as community building and that certain things must happen in our communities before we can see the improvements we want in our schools." Such a statement remains true when attempting to implement a school curriculum change.

As part of a larger community individual parents, can support curriculum implementation in many ways. For instance, parents can monitor their children’s learning at home and provide external data as part of progress monitoring (Matthews, 1996).

Also parents can share their expertise in language and cultural traditions, crafts, sports, health, entrepreneurship and agriculture. In the case of Namibia, the then Ministry of Education and Culture indicated that because schools are located in the communities to serve them, communities must therefore be fully involved in the affairs of their schools.

Furthermore, the ministry suggested that parents and communities, among others, may help to build schools and later maintain them, monitor the education of their children, ensure that the term has started on schedule, may verify that teachers turn up for their classes and that children receive the books and materials allocated to them and to participate in education policy formulation process (MEC, 1993:180).

Unsurprisingly, the 2010 National Curriculum for Basic Education (NCBE) regards communities around schools as sources of knowledge and providers of support needed to implement the intended curriculum. Moreover, the NCBE encourages schools to promote strong partnerships with communities by sharing Information, Communication and Technological resources, libraries, classrooms, meeting places and research outputs so as to realise the objectives of the intended curriculum (MoE, 2010:4).

3.5.4.2.6 Institutions of higher learning

Traditionally, universities, as institutions involved knowledge production and education are hugely influential in curriculum-making processes. One of the roles that universities have played, traditionally, has been to define, to a large extent, what knowledge is valuable and useful to society (Hoadley & Jansen, 2009:322-323).

There is therefore a common belief that the school curriculum is largely based on, controlled by and given legitimacy by the academic domain in society. For instance, many curriculum planners are lecturers at universities, while assessment boards are often staffed by university academics. Therefore, the function of universities is to produce academic knowledge, so it is in these institutions that what counts as valid knowledge is defined in laboratories, lectures, libraries, seminars, conferences, books and journals (Hoadley & Jansen, 2009:322-323).

Namibia has two public higher education institutions (University of Namibia and Polytechnic of Namibia). Despite their main campuses being located in Windhoek, Namibia's capital city, each of these institutions has a satellite campus in major cities and towns of the country. Generally speaking, the University of Namibia has responsibility of providing advanced education and research, while the Polytechnic of Namibia provides high level technical and vocational education and training (MEC, 1993:109).

Given their central role to the development of education in the country, these two institutions of higher education were involved in the debates that led to the development of secondary school curriculum through the different subject-specific working groups (mathematics, languages, social sciences, natural sciences and economic and management sciences) (Hoadley & Jansen, 2009:323).

With this understanding, one may assume that because institutions of higher education had such a pivotal role in the development of the secondary school curriculum, they would at all costs, through their expertise, want to ensure that their aspirations are

implemented as intended by them at the design phase. The challenge for the current study is therefore to find out whether institutions of higher education are supporting or not supporting the implementation of the intended secondary school curriculum at classroom level.

3.5.4.2.7 Teachers' unions

Like in other countries teacher unions play a powerful role (Hoadley & Jansen 2009:319) in Namibia's society. In Namibia there are two teacher unions. The Namibian National Teachers' Union (NANTU) is the largest and the oldest, with approximately 15 000 members in 2014 (NANTU, 2014). The Teachers' Union of Namibia (TUN) consists of approximately 3 577 members in 2014 (TUN Database, 2014).

Compared to other teacher unions elsewhere in the world, both teacher unions in Namibia have moved beyond issues concerned only with narrow workplace and salary concerns. For instance, NANTU's professional responsibilities, include "conducting research in the field of education, identifying and conducting in-service trainings and other professional development programmes for teachers, and analysing educational policies in Namibia and their implementation" (NANTU Constitution, 2009).

Though NANTU is committed to the philosophy of learner centred education, the union has in the recent past expressed dissatisfaction with the learner centred education and characterised it as "an insult to the Namibian nation and a mere reactionary rubbish", which is a "system that tells you that you have passed and gives you a certificate, but you find yourself on the street" unemployed (Namibian Sun, 2011a).

On the other hand, in June 2011 the Teachers' Union of Namibia also issued a statement about the ineffectiveness of the learner centred education system by claiming that: "The high Grade 10 failure rate is a testimony that the education system is not accepted by the Namibian people" and therefore called for "reforms and practical

positive changes" in the current education system (Namibian Sun, 2011b, The Namibian, 2011b).

Seen from these different perspectives of teacher unions, it is evident that union voices in the curriculum change process and in its implementation have been and continue to be highly pronounced. However, the question for the current study is that: "In the past 12 months which of the following services aimed at improving teaching and learning did Teacher Union representatives provide to your school?" (See Appendix 1: Question 39).

3.5.4.2.8 Regional councillors

There is belief that the successful implementation of policies can often be attributed to backing from a charismatic political personality or an influential powerhouse. Studies on Namibia's decentralisation policy suggest that of all Namibia's political institutions, Regional Councils have the potential to be the closet to the country's citizens and their aspirations (Hopwood, 2005), and thus through their regional councillors may influence the successful implementation of the enacted policies.

In the case of education, it can therefore be said that while academics conduct research on the curriculum, present reports to the bureaucrats and 'package' knowledge in the form of policy documents, guidelines, and syllabuses, the legislators ultimately take these ideas, reinterpret them, and write them up as policy or curriculum statements (Hoadley & Jansen, 2009:214-216) and issue these policies to the micro level for implementation purposes.

It is in the context of these conditions that in recent years, regional councillors have issued several influential statements of the aims and state of education in Namibia. For example, in September 2013, the governor (who is also a regional councillor) of Otjozondjupa region convened an extraordinary meeting with school principals, inspectors of education and advisory teachers of junior and secondary schools to exchange ideas on how to improve grades 10 and 12 examination results.

In his motivational speech, the governor said that: “I am here to support your efforts. I know you are doing a good job already by educating our learners to become great future leaders of this country”. The governor further encouraged learners to study hard and excel in their examinations. He challenged learners that if they gave him good results, he would in turn give them a floating trophy (Namibian Sun, 2013).

Within this context one wonders whether or not the regional councilors of Caprivi, Kavango and Oshikoto have embarked on similar initiatives aimed at supporting the teachers, leaners and parents’ efforts in improving the teaching and learning process.

3.5.4.3 Teachers’ involvement in curriculum change

Literature reviewed for the current study argues that although teachers do not initiate change, they have been identified as the key agents of change (Hoadley & Jansen, 2001:200). This being the case, the Ministry of Basic Education, Sport and Culture (2004:30) identified teachers as one of the main stakeholders in education in Namibia. Two questions may, however, arise. First, “do teachers see themselves as the key implementers of a curriculum policy?” Second, “at what level should teachers be involved in the curriculum process?”

These questions are vital to the extent that if teachers have subjective realities and false perceptions about themselves with regard to an educational change, their uncertainties and anxieties may influence them to resist change (Carl, 2009:199; Fullan, 2001:42).

In response to the first question, Carl (2009:193) observed that often teachers perceive a curriculum as a document that is developed “elsewhere” and that they simply need training for the “correct application” of a curriculum which is handed down to them from the national government.

Carl (2009:193) has thus cautioned that the times of a well-polished, ‘teacher-proof’ curriculum document are gone. Policy makers should no longer assume that curriculum

implementation is a process that translates directly into the classroom reality at the expense of the key implementers.

On the contrary, as Locks and Lieberman (1983:131) pointed out, teachers are key personnel not only in the development of the curriculum but mainly in its implementation. No wonder several studies indicate that teachers' responsibilities do not only involve teaching and educating learners, but are also burdened by administrative workload. For instance, in their study, Bexley, James and Arkoudis (2011) found that over half of educators (53.4%) believed that they undertook an unreasonable amount of administrative work, resulting in less time to conduct teaching.

However, in response to the second question, Turnbull's (2002) study reported that teacher support, or "buy-in," is one of the most important factors to consider when implementing an educational change. In addition, research findings from Horner and Sugai's (2005) study also indicated that teacher buy-in from 80% of staff is necessary to achieve implementation success.

In other words, it could be said that teacher support may come about as a result of teacher involvement in the development of a curriculum innovation. For instance, when Sarason (1995) examined teacher involvement in the change process, he found that classroom teachers were minimally, if at all, participating in decision-making process. It turned out that teachers felt that school administrators forced the new programme upon them.

As a result, he concluded that lack of participation in decision-making may contribute to resistance by teachers and to the ultimate failure of the implementation of a new programme. In Locks and Lieberman's (1983:131) words, cited in (Carl, 2009:196) "Without teachers' adequate participation, the chance of successful implementation greatly diminishes."

In addition, Carl (2009:196) maintained that for a curriculum innovation to be successful, it is important that teachers play an active role from the design, planning, implementation and evaluation processes of the curriculum policy. In fact when referring to teacher involvement in a curriculum innovation, teachers do not make a contribution to the curriculum solely within the context of the school and classroom; rather teachers can as well perform numerous curriculum functions outside the classroom environment.

In Oliva and Gordon's (2013:38-39) view, while all teachers can be involved in curriculum planning at the classroom level; most teachers can participate in curriculum planning at the school level; some may take part at the district level; and fewer may engage in planning at the state, regional, and international levels. A few teachers, however, can participate in curriculum planning at all levels. These authors believe that teacher participation at different levels entails participation in the following types of activities.

First, at school level, teachers' activities in curriculum design may include writing curricular goals and objectives, selecting subject content, choosing materials, identifying resources in the school and community, sequencing or re-sequencing the subject content, deciding on the scope of topics and revising the content (Oliva & Gordon, 2013:44).

Second, at classroom level, Oliva and Gordon (2013:43) reiterated that teachers can participate in activities such as deciding on the types of instructional plans to use, constructing of the plans, developing of their own curricular materials, writing instructional goals and objectives and selecting and carrying out strategies for classroom presentation and interaction.

Therefore, contrary to the common belief that teachers are simply there to receive and implement an already developed curriculum, teachers are capable of making some decisions, either simple administrative or sweeping and far-reaching curricular decisions

(Oliva & Gordon, 2013:44); besides what matters is the level at which teachers are engaged in the curriculum planning and implementation process.

Glatthorn (1987b:40) cited in (Carl, 2009:195) believed that “the teacher is the curriculum. They do not neutrally implement the curriculum - they adapt, translate and modify and develop their own”. In this regard, Carl (2009:195) commented that the “teachers’ direct involvement in curriculum development process determines its level of success and therefore their voices must be heard”.

In the same context, a 1990 OECD report pointed to teachers as having the key responsibility for educational improvement. For instance, the report argued that teachers lie at the heart of the educational reform process. The report thus cautioned that the lack teacher involvement in the curriculum decision making process may result in an uncommitted and poorly motivated teaching body, which can have disastrous results for even the best intentions for improvement (OECD, 1990:9).

Kennedy (1988:272-273) reiterated that for any kind of educational reforms to be successful and raise teachers’ commitment to their implementation, policymakers need to convince teachers that the reforms being proposed are in the best interest of students.

In addition, one of the lessons that the 2008 McKinsey report learnt from good performing schools is that “The quality of an education system cannot exceed the quality of its teachers.” The report indicates that in high performing education systems one strategy to maintain teacher quality, is to ensure that teachers’ professional careers begin with a period of teacher training consisting of a three- or four-year undergraduate program, or a one-year postgraduate program after an undergraduate degree in a subject other than education (McKinsey & Company, 2008).

3.6 Summary

It transpired from the foregoing discussion that the 2010 National Curriculum for Basic Education (NCBE) came about through a complex process paradigm-switching policy visions from a content-based, often ideologically distorted, examination-oriented apartheid curricula to a 'learning by doing', problem-solving, skills development, continuous assessment oriented curriculum (Gultig, Hoadley & Jansen, 2002:171).

In addition the chapter discussed the National Curriculum for Basic Education in terms of its lack of clarity and consistence with regard to the differences and similarities between continuous summative and formative assessments.

This chapter also discussed factors that may influence the implementation of the National Curriculum Framework for Basic Education in Namibia. Based on reviewed literature, it was suggested that teachers' demographic characteristics (age, gender, number of subjects taught, professional qualifications and teaching experience) can facilitate or limit the implementation of the intended secondary school curriculum.

Moreover, the chapter also pointed out that teachers' epistemological factors (knowledge, attitudes, beliefs and self-efficacy) may influence the implementation of the intended curriculum policy. It was also argued in this chapter that internal school factors (learners' characteristics, teachers' professional development and school leadership) may influence the implementation of the intended curriculum innovation at the classroom level.

Lastly, the chapter also discussed the influence of external support factors (resources, stakeholders' support and teachers' involvement) in the implementation process of the intended curriculum innovation.

In short, based on Habermas's and Freire's work (see 2.4) this chapter attempted to argue that curriculum development and implementation are "people" processes, human

endeavours and thus the “people” factor must far outweigh the physical setting (Oliva & Gordon, 2013:69).

To summarise, this chapter suggested that factors that influence the implementation of the intended secondary school curriculum may be inherent in the type of curriculum development paradigm adopted by those in power. Therefore, within the interpretive-critical perspective adopted in the current study, this chapter demonstrated that if Habermas’s communicative interest is used in the curriculum development process it may improve teachers’ knowledge, attitudes, beliefs and behaviours towards a positive implementation of the intended curriculum policy.

According to Grundy (1987:181), communicative action promotes interaction, deliberation, shared understanding, choice from a set of alternatives and is governed by binding consensus and reciprocal expectations about behaviour between two equal subjects who are acting for the common good.

The chapter therefore concludes that if Habermas’s communicative action was to be used as a tool in the curriculum development process and at the implementation phase, teachers’ practical action may not only be limited to improved intersubjective understanding of the curriculum, but can also help teachers to move into the realm of emancipatory praxis (see 2.4) through the medium of critical self-reflection (ibid:188).

For instance, involving teachers in practitioner-based professional development programmes and in curriculum development initiatives, helps them in the process of ideology critique through which teachers themselves will begin to ask critical question of “whose interests does the curriculum serve?, why should learners be taught only in the medium of English?, Does learner centred education enhances learning among learners? Can teachers achieve the same learning outcomes by using collaborative learning in all school contexts?

To examine and understand empirically whether the factors explored in this chapter influence the implementation process of the National Curriculum Framework for Namibia, Chapter 4 discusses in detail the research methodology employed in the current research study.

CHAPTER 4
RESEARCH METHODOLOGY

4.1 Introduction

The previous chapter presented a brief historical account of curriculum change and reform in pre- and post-independent Namibia. These introductory remarks provided a framework for understanding the philosophical foundations of the 2010 National Curriculum for Basic Education. It emerged from the discussion in Chapter 3 that the once popular learner-centred secondary school curriculum has not been without criticisms since its launch in 2010.

Gleaned from literature on curriculum implementation four broad categories of factors (see Table 4.2) were identified as inhibiting or supporting the implementation of the intended curriculum. The analysis of these various factors demonstrated that curriculum implementation is a highly challenging endeavour whose success depends on the availability of multiple non-material and material inputs, most importantly teachers.

The purpose of this chapter is to delineate the research methodology employed in this study. First, I provide a detailed rationale for the choice of the research method, including a discussion of why the selected method was chosen instead of another.

Second, I provide the rationale by explaining why the chosen research is appropriate to the present study. Moreover, the section explains how the chosen research design achieved the purpose and objectives of this study.

Further, included in this section is a description of research questions and hypotheses, the study population, the sample and sampling procedures; followed by a detailed explanation of data collection methods and procedures used.

Lastly, I explain the types of data collection instruments, including validity and reliability of quantitative data. Strategies of how qualitative data were enhanced are also discussed, followed by ethical issues and how quantitative and qualitative data were analysed. A summary of the chapter is provided.

4.2 Research methodology

Research methodology refers to the methods, techniques and procedures that are employed in the process of implementing the research design or plan (Mouton, 2001:xxvi). In other words, methodology is a set of all strategies and specific methods that could be chosen to deal with specific issues in the research (Babbie & Mouton, 2001:74-75; Mouton, 2001:55-56). Specifically, it focuses on the research process and the kind of tools and procedures to be used specifying activities such as types of measurements, sampling, data collection methods and procedures, data analysis methods and the sequence in which they are employed based on the research questions.

However, as was briefly stated in Chapter 1 (see 1.8), all research is based on some philosophical assumptions, which determine the type of research methodology to employ during an inquiry (Mouton & Marais, 1992:150).

4.3 Research paradigm

Remenyi *et al.* (1998:34), for instance, stated that research philosophies provide guidance about how to conduct a research project and helps researchers to comply with research standards specific to the research paradigm used rather than those that guide alternative approaches.

De Vos *et al.* (2011:41) indicated that it is important for all scientific research to be conducted within a specific paradigm and that researchers must decide within what paradigm they are working, know the nature of their selected philosophy very well, and spell this out in their research report in order to keep communication with their reading public clear and unambiguous. The term paradigm has numerous definitions. Barker (2003:312) defined paradigm as a pattern containing a set of legitimated assumptions and a design for collecting and interpreting data.

Most authors (Babbie, 2007:43; Creswell, 2007:19; Welman, Kruger & Mitchell, 2005:13) described a paradigm as a framework, viewpoint or worldview based on people's philosophies and assumptions about the social world and the nature of knowledge, and how the researcher views and interprets material about reality and guides the consequent actions to be taken.

Within this context, three research philosophies influenced the present study, namely positivism, interpretivism and critical theory (Cohen, *et al.,* 2007:31; Rubin & Babbie, 2005:38-42), each with its own ontology, epistemology, methodology and methods of data collection and analysis (De Vos, *et al.,* 2011:309). Therefore, the present study is influenced by three overriding assumptions.

First, based on the research purpose and objectives there is a belief that there is external reality that can be studied objectively. This perspective is predominant in the quantitative paradigm (De Vos, *et al.,* 2011:309), which is aligned with positivist philosophy.

Positivism philosophy is based upon a highly structured methodology (Saunders, *et al.,* 2003:83) and through the positivist paradigm, one of the purposes of the current study

is to prove or disprove various hypotheses (see 4.4) by means of inferential statistical analysis (see 4.16, 5.7) with the intention of eventually generalising the findings of the study.

A hypothesis, as one of the tools of science, is a conjectural statement of the relations between two or more variables, or 'an educated guess' often resulting from a considerable, reflective thinking and observation (Kerlinger & Lee, 2000:15).

In the current study hypotheses were tested empirically in order to confirm or reject the relations between two or more variables based on the research question and objectives (see 4.4). Second, this study has characteristics of interpretivism; a philosophy which is fundamentally different from that of positivism. Interpretivism also known as the constructivist or qualitative paradigm is concerned with understanding that social reality is subjective in nature as there are many truths and meanings to every social phenomenon (De Vos, *et al.,* 2011:309; Johnson & Christensen, 2010).

In Cohen*, et al.*'s (2007:17) words, because the central endevour of the interpretive paradigm is to understand the subjective world of human experience, the paradigm focuses on action, which can be explained as behaviour with meaning and is thus future-oriented. In this regard therefore the interpretive researcher studies individuals and sets out to understand research participants' (who are the source) interpretations of the world around them. In other words, the data collected from individuals are used to make meanings, generate insights and understandings of the people's behaviour within their various situations and contexts (Cohen*, et al.,* 2007:18).

Against the backdrop that the interpretivist paradigm promotes the engagement of all human beings in the process of making sense of their worlds and continuously interpret, create, give meaning, define, justify and rationalise their daily actions (Babbie & Mouton, 2001:28), this study also analysed and interpreted its findings from an interpretive perspective.

However, because both positivism and interpretivism approaches present an incomplete picture of social behaviour by not including political and ideological contexts in the current study, the researcher decided that the interpretive data will also be analysed

and interpreted through the critical theory perspective. Therefore, as a mixed methods research study interested in equity, social justice and transformation (Mertens, 2007), the third element that typifies the current study is critical theory analysis.

It was decided that while the interpretivist paradigm aims to study, understand and interpret society in terms of its actors, the critical theory's perspective of emancipation, freedom, ideology critique and self-reflection should be included in the analysis and interpretation of the results of the current study.

According to Cohen *et al.,* (2007:31) and Patton (2002:130-131) critical theory focuses on how injustice and subjugation shape people's experiences and understanding of the world. In other words, as critical theory concerns itself with issues of repression, voice, ideology, power, participation, representation and inclusion, among others, the substantive agenda of the current study was to examine and interrogate the relationships between school and society in terms of how schools perpetuate or reduce inequality; the social construction of knowledge and curricula (ibid).

Thus, by employing a critical theory in the analysis and interpretation of the research findings, the data for the current study are used to raise questions of the political agenda of the curriculum. Among others, such questions include "who defines what is worthwhile knowledge included in the secondary school curriculum", "whose ideological interests are served by the curriculum", "how is power produced and reproduced in the classroom situation" and "how are teacher freedoms and empowerment in curriculum development" (Cohen *et al.,* 2007:36-37) promoted?

Therefore, following from the above assumptions, the current study argues that "multiple realities" exist in the social environment and hence the mixed methods research approach can help to understand "a complex" picture of a social phenomenon (Greene & Caracelli, 1997:7) such as that of curriculum development and implementation.

As it was discussed above, the current study was designed based on both quantitative and qualitative research approaches. The next section provides a detailed account of the rationale for the choice of a mixed methods approach.

4.4 Rationale for the choice of a mixed methods approach

Several reasons based on opinions of various authors (Bergman, 2008; Creswell & Clark, 2007; Hanson, Creswell, Clark, Petska & Creswell, 2005; Johnson & Onwuegbuzie, 2004; Teddlie & Tashakkori, 2009; Rossman & Wilson, 1985) influenced the researcher to adopt a mixed methods approach. For instance, mixed methods research provides strengths that offset the weaknesses of both quantitative and qualitative research, with the potential of providing better or strong inferences.

In addition, mixed methods research encourages the use of multiple worldviews rather the typical association of certain paradigms for quantitative researchers and others for qualitative researchers. Moreover, mixed methods research has the potential of eliminating different kinds of bias by explaining the true nature of the phenomenon under study and improves various forms of validity or quality criteria.

Other reasons are that mixed methods research enables confirmation or corroboration of each other through triangulation, provide richer data and the mixing of methods initiate new modes of thinking by attending to paradoxes that emerge from the two data sources.

In this thesis the main justifications for conducting a mixed-methods research study were to enhance triangulation (seeking convergence and corroboration of findings from different methods that study the same phenomenon) and significance enhancement (facilitating thickness and richness of data, augmenting interpretation and usefulness of findings) (Collins, Onwuegbuzie & Sutton, 2006; Greene, Caracelli & Graham, 1989).

4.5 Research design

Mixed methods designs differ to a great extent, depending on the purpose of the research (Creswell, 2012:535; De Vos *et al.,* 2011:439; McMillan & Schumacher, 2010:401).

In this thesis a sequential explanatory design was used to obtain teachers' responses to research questions. The design involved collecting quantitative and qualitative data at two phases, with the primary emphasis on quantitative methods. The advantages of this design are that its two-phase nature makes it uncomplicated to implement and to report on. Secondly the researcher conducts the two methods in separate phases and collects only one type of data at a time (De Vos *et al.,* 2011:441). Despite its popularity and multiple advantages this research design posed numerous limitations to the execution of the present study. For instance, the researcher spent too much time and resources on collecting and analysing both types of data (Ivankova, Creswell & Stick, 2006).

4.6 Research questions and hypotheses

The main purpose of the current study was to evaluate the factors that influence teachers to implement the intended secondary school curriculum in their classrooms.

To explore the main purpose of the study, five broad questions guided the present study, namely

- What are the implications of the various curriculum interpretations on classroom teaching and learning?
- What teachers' demographic variables (age, gender, number of subjects taught, professional qualification and teaching experience) influence the implementation of the intended secondary school curriculum?
- How do epistemological factors of teachers (knowledge of the curriculum, attitudes towards the curriculum, beliefs and self-efficacy) influence the implementation of the intended secondary school curriculum?
- How do internal factors in the school (learners' characteristics, professional development and school leadership) influence the implementation of the intended secondary school curriculum?
- How do factors outside of the school (resources, stakeholder support and teacher involvement) influence the implementation of the intended secondary school curriculum?

In tandem with the stated questions, fifteen null (H_0) and alternative (H_1) hypotheses were formulated, tested, rejected or accepted. For teachers' demographic (d) characteristics, five null (H_0) and alternative (H_1) hypotheses were formulated, rejected or accepted.

Hypothesis one

- H_0(d1): The age of teachers does not have an influence on the implementation of the secondary school curriculum
- H_1(d1): The age of teachers does have an influence on the implementation of the secondary school curriculum

Hypothesis two

- H_0(d2): The gender of teachers does not have an influence on the implementation of the secondary school curriculum
- H_1(d2): The gender of teachers does have an influence on the implementation of the secondary school curriculum

Hypothesis three

- H_0(d3): The number of subjects that teachers teach does not have an influence on the implementation of the secondary school curriculum
- H_1(d3): The number of subjects that teachers teach does have an influence on the implementation of the secondary school curriculum

Hypothesis four

- H_0(d4): The professional qualifications of teachers do not have an influence on the implementation of the secondary school curriculum
- H_1(d4): The professional qualifications of teachers do have an influence on the implementation of the secondary school curriculum

Hypothesis five

- H_0(d5): The teaching experience of teachers does not have an influence on the implementation of the secondary school curriculum
- H_1(d5): The teaching experience of teachers does have an influence on the implementation of the secondary school curriculum

Four null (H_0) and alternative (H_1) hypotheses were formulated for teachers' epistemological (e) characteristics as follows:

Hypothesis one

- H_0(e1): The knowledge of teachers does not have an influence on the implementation of the secondary school curriculum.
- H_1(e1): The knowledge of teachers does have an influence on the implementation of the secondary school curriculum.

Hypothesis two

- H_0(e2): The attitudes of teachers do not have an influence on the implementation of secondary school curriculum.
- H_1(e2): The attitudes of teachers do have an influence on the implementation of the secondary school curriculum.

Hypothesis three

- H_0(e3): The beliefs of teachers do not have an influence on the implementation of the secondary school curriculum.
- H_1(e3): The beliefs of teachers do have an influence on the implementation of the secondary school curriculum.

Hypothesis four

- H_0(e4): The self-efficacy of teachers' does not have an influence on the implementation of secondary school curriculum.
- H_1(e4): The self-efficacy of teachers' does have an influence on the implementation of secondary school curriculum.

Three null (H_0) and alternative (H_1) hypotheses were formulated for the internal (i) school support factors.

Hypothesis one

- H_0(i1): The characteristics of learners do not have an influence on the implementation of the secondary school curriculum.
- H_1(i1): The characteristics of learners do have an influence on the implementation of the secondary school curriculum.

Hypothesis two

- H_0(i2): The professional development of teachers does not have an influence on the implementation of the secondary school curriculum.
- H_1(i2): The professional development of teachers does have an influence on the implementation of the secondary school curriculum.

Hypothesis three

- H_0(i3): The leadership of the school does not have an influence on the implementation of the secondary school curriculum.
- H_1(i3): The leadership of the school does have an influence on the implementation of the secondary school curriculum.

Three null (H_0) and alternative (H_1) hypotheses were formulated for the external (x) school factors.

Hypothesis one

- H_0(x1): The resources of the school do not have an influence on the implementation of the secondary school curriculum.
- H_1(x1): The resources of the school do have an influence on the implementation of the secondary school curriculum.

Hypothesis two

- H_0(x2): The support of stakeholders to the school does not have an influence on the implementation of the secondary school curriculum.
- H_1(x2): The support of stakeholders to the school does have an influence on the implementation of the secondary school curriculum.

Hypothesis three

- H_0(x3): The involvement of teachers in curriculum development does not have an influence on the implementation of the secondary school curriculum.
- H_1(x3): The involvement of teachers in curriculum development does have an influence on the implementation of the secondary school curriculum.

The chosen level of significance (p) was 0.05, which means that if the $p<0.05$, the decision would be to reject the null hypothesis; whereas if the $p>0.05$, it would be decided not to reject the null hypothesis (Ary, Jacobs, & Razavieh, 2003; Judd, Smith & Kidder, 1991).

4.7 Population

The present study was conducted in Namibia, situated on the south west coast of Africa bordering Angola and Zambia to the north and north-east respectively, and Botswana and South Africa to the east and south respectively. The country spreads over a vast area of 824, 292 square kilometres with a total population of 2.1 million comprising of different ethnic and language groups. About 60% of the 2.1 million people live in the northern parts of the country, while the remaining 40% of the population is sparsely distributed in the rest of the country (MBE, 2010).

The school system of Namibia consists of 13 years of schooling (one-year of pre-primary schooling, three years of lower primary education (grades 1-3), three years of upper primary education (grades 5-7); three years of junior secondary schooling (grades 8-10); and two years of senior secondary education (grades 11-12) (MoE, 2007).

In 2012, there were 176 secondary schools in Namibia of which 158 were public schools, with two thirds located in the six northern regions of Caprivi, Kavango, Ohangwena, Oshikoto, Oshana and Omusati. In fact more than two thirds of the entire school population is concentrated in these mainly rural areas (MoE, 2012). Based on the 2012 Educational Management Information System database, approximately 4,854 teachers were teaching in the 158 public secondary schools. About 2,203 or 45% of these teachers were teaching in the northern regions of Namibia (MoE, 2012).

However, approximately 893 teachers were teaching in the regions of Caprivi, Kavango and Oshikoto.

4.8 Sample and sampling procedures

Based on the research design described in section 4.5 of this chapter, a sequential explanatory mixed methods sampling (Teddlie & Tashakkori, 2009:189-191) was used in this study. In other words, both probability and non-probability sampling techniques were used, in which numerical data set the scene for in-depth interviewing (Cohen, Manion & Morrison, 2011:162). Teddlie and Tashakkori (2009:180-181), for instance, indicated that it is commonplace for mixed methods research to use more than one kind of sample (probability, non-probability) and to use samples of different sizes, scope and types, (cases: people; materials: written, oral observational; other elements in social conditions: locations, times, events) within the same piece of research.

In addition, Teddlie and Yu (2007:85) contended that when sequential explanatory mixed methods sampling is used the probability sampling and sample size calculation may predominate, at the expense of qualitative data which emphasises purposive and non-probability sampling.

The rationale for using sequential sampling was twofold. One, the quantitative data and their subsequent analysis provided a general understanding of the research problem, whereas the qualitative data and their analysis refined and explained those statistical results by exploring participants' views in more depth (Creswell, 2003; Rossman & Wilson, 1985; Tashakkori & Teddlie, 1998) regarding the factors that hinder or support the implementation of the intended secondary school curriculum.

Moreover, by using two samples sequentially, this research study attempted to meet three major types of generalisations outlined by Onwuegbuzie and Leech (2005): (a) statistical generalisations (making generalisations or inferences on data extracted from a representative statistical sample to the population from which the sample was drawn), (b) analytic generalisations ("applied to the wider theory on the basis of how selected cases 'fit' with the constructs" (Curtis, Gesler, Smith & Washburn, 2000:1002), and (c)

case-to-case transfer (making generalisations from one case to another similar case (Firestone, 1993; Kennedy, 1979)).

In particular, the large quantitative random samples allowed for statistical generalisations, while the small qualitative purposive samples facilitated analytical generalisations and case-to-case transfers (Collins *et al.*, 2007).

In this study, the unit of analysis are teachers teaching in public government secondary schools. According to Watson (2001), determining an appropriate sample size depends on the goals of the study, the desired precision of results; confidence level of the sample as representative of the population, the estimated degree of variability of the population under study and estimated response rate.

Two samples were obtained for the present study. First, random sampling also known as probability sampling (McMillan & Schumacher, 2010:399) was used to select teachers based on the Ministry of Education's Education Management Information System (EMIS). A list of all public and private secondary schools was obtained for each region from the EMIS database. Overall a list of 15 schools was drawn for the current study. The criteria used to select these schools included regional location of schools and geographical status (urban or rural) of each school. Also criteria such as school status (public school, junior, combined and senior secondary school) were considered.

Based on these accuracy factors the first sample of 270 (25%) teachers was drawn from a population of 893 teachers. This sample size was determined at a confidence level of 95% and the margin of error of 0.05. To obtain a sample of 270 or more teachers an oversample of 370 questionnaires were prepared and distributed to 12 public secondary schools from Caprivi, Kavango and Oshikoto regions in northern Namibia. Of the distributed questionnaires 260 (a response rate of 72%) were returned and analysed for this study.

No research participants were excluded for any reason at the quantitative phase of the study. This means that all teachers in sampled schools were eligible to participate in the study.

The second technique used purposive or judgemental sampling (Rubin & Babbie, 2005:247). This non-probability sampling technique deliberately avoids representing the wider population and thus seeks only to represent a particular section of the named section of the population (Cohen *et al.*, 2011:155). Therefore, in order to enrich the findings of the quantitative data, the selection of research participants involved both maximum variation and critical case sampling techniques (McMillan & Schumacher, 2010:326). For instance, whereas maximum variation sampling was used to choose samples that exhibited a very wide range of characteristics or behaviours about research issues, critical case sampling was utilised to identify particular teachers or cases in order to generate insights that could be applied to the wider population (Cohen *et al.,* 2011:157; McMillan & Schumacher, 2010:326).

This means that after the analysis of quantitative data, 15 (5 females and 10 males) research participants (see Table 4.1) for interviews were selected based on observable patterns in the quantitative data. Across the three regions, 10 of the 15 teachers were teaching in rural schools, while 5 taught in urban schools. In order to maintain the anonymity of the research interviewees teachers are denoted as Teacher 1 to 15. Thus, the choice of teachers for interviews was based on the maximum differences of perceptions and critical cases that were displayed by information-rich participants (McMillan & Schumacher, 2010:326), which emerged after analysing quantitative data.

Table 4.1: Characteristics of teachers for interviews

Region of employment	Location and type of school	Gender	Years of experience	Survey number	Position
Caprivi					
	Urban senior secondary school	Male	13	Teacher 1	Principal
	Urban senior secondary school	Male	12	Teacher 2	Teacher
	Rural combined school	Female	10	Teacher 3	Teacher
	Rural combined school	Female	8	Teacher 4	Teacher
	Rural combined school	Male	17	Teacher 5	Teacher
Kavango					
	Urban senior secondary school	Female	11	Teacher 6	Teacher
	Urban senior secondary school	Female	9	Teacher 7	Teacher
	Rural senior secondary school	Male	10	Teacher 8	Teacher
	Rural senior secondary school	Male	13	Teacher 9	Teacher
	Rural combined school	Male	11	Teacher 10	Teacher
	Rural combined school	Male	12	Teacher 11	Teacher
	Rural combined school	Male	9	Teacher 12	Teacher
	Rural combined school	Male	10	Teacher 13	Teacher
Oshikoto					
	Urban senior secondary school	Male	12	Teacher 14	Principal
	Rural combined school	Female	4	Teacher 15	Teacher

Table 4.1 above shows the characteristics of research participants selected for interviews in terms of their regions of employment, location and type of school, gender, years of experience, survey number and their positions in school.

4.9 Data gathering methods

Data collection is the systematic gathering of information and recording in such a way that it can be preserved and analysed by a single researcher or a team of researchers (Creswell, 2003). In mixed methods research data collection can be carried out concurrently or sequentially. To evaluate the factors that support or hinder teachers to implement the intended secondary school curriculum at the classroom level, a sequential data collection approach was utilised.

This means that data were collected at two consecutive phases. For instance, the researcher first collected quantitative data using a self-administered questionnaire (Appendix 1). Then, qualitative data were collected second using semi-structured interviews (Appendix 2) and were related to the outcomes from the first, quantitative phase. The decision to follow the quantitative-qualitative data collection approach was informed by the purpose and design of the study, as well as the research questions seeking for the contextual field-based explanation of the statistical results (Creswell, 1999; Greene & Caracelli, 1997).

4.10 Data collection procedures

Data collection for this thesis followed a two-phase process based on a sequential data collection approach. Quantitative data from 260 teachers were first collected to provide a general understanding of the research problem using a self-administered questionnaire.

4.11 Self-administered questionnaire design process

The choice of the questionnaire design was guided by three considerations as advocated by Creswell (2012:157-158) and Harkness, Fons, Van de Vijver and Mohler (2003). Based on their work on cross-cultural survey methods, Harkness *et al.*, (2003) advised that the first consideration in questionnaire design is to determine whether the researcher uses an old or new instrument. In using an existing questionnaire, Harkness *et al.*, (2003) pointed out that many survey questions tend to use the Ask-the-Same Question (ASQ) format on all research participants without considering contextual differences. At the same time, designing new questionnaires is time consuming and expensive (Harkness *et al.*, 2003).

The second consideration was to adopt or adapt an existing instrument (Harkness *et al.*, 2003). For an existing instrument, considerable modification and tailoring of the instrument would have been required to meet the research design, resulting in the researcher doing more work (Johnson, 2009).

As I could not find an appropriate existing instrument, I chose to develop my own research instrument. This third option involved the development of a new instrument based on the research design of this thesis (Creswell, 2012; Harkness, *et al.*, 2003; Onwuegbuzie & Leech, 2006).

4.11.1 Measuring the outcomes of the implementation of the intended secondary school curriculum

The focus of this study was to examine the influence of teacher demographic and epistemological characteristics, internal and external school related factors on the implementation of the intended secondary school curriculum at the classroom level (see 4.6).

To obtain information required for the purpose of this study, a closed-ended questionnaire (Appendix 1) divided into seven sections (Section A, Section B, Section C, Section D, Section E, Section F and Section G) was designed. The designed survey instrument used independent and dependent variable definitions described below.

Table 4.2: Independent-dependent variables definitions

Independent (control, predicator or explanatory) variables	**Dependent (outcome) variable**
Demographic variables 1. Gender 2. Age 3. Professional qualification 4. School type 5. Teaching experience as teacher 6. Teaching experience in current school 7. Grade taught 8. Position in school 9. Number of subjects taught 10. Class size	Implementation of the intended secondary school curriculum
Epistemological variables 1. Knowledge/understanding or awareness 2. Attitudes 3. Beliefs 4. Self-efficacy/behaviour	Implementation of the intended secondary school curriculum
Internal school variables 1. Learners' characteristics 2. School leadership 3. Professional development	Implementation of the intended secondary school curriculum
External support variables 1. Resources 2. Stakeholders' support 3. Teacher involvement	Implementation of the intended secondary school curriculum

According to Creswell (2012:116) an independent variable is an attribute that influences or affects an outcome or dependent variable. A dependent variable, on the other hand, is an attribute or characteristic that is influenced by the independent variable. As shown in Table 4.2 above the focus of this study was to examine whether independent variables (teachers' demographic characteristics, epistemological attributes, internal and outside school support factors) influenced the outcome variables of the implementation of the intended secondary school curriculum at the classroom level (Creswell, 2012:21).

The terms of "curriculum implementation" and "intended curriculum" are discussed in the present study (see 1.7 & 2.2) and both concepts imply that once the curriculum has been developed, teachers are expected to organise the content, select the learning

experiences, organise and provide the learning and then determine what and how to evaluate in order to determine the learning outcomes (Miller, 2011).

In Namibia, high-stakes examinations are mandatory and thus are conducted each year at grade 10 and 12 to determine schools', teachers' and students' performance status and to gauge whether or not teachers are meeting the desired curriculum standards designed by curriculum developers. In addition, student examination results are used to make within- and across school comparisons of performance every year.

Based on these assumptions, the present study used grade 10 average examinations scores for the 2010-2012 academic years as dependent variables and to determine whether or not there were "changes in curriculum implementation" over a period of three years (see Table 4.3). Due to their small numbers, grade 12 mean examination scores were not included in the correlation and regression analysis of this study.

Table 4.3: Quantitative measures of curriculum implementation

Region	Name of school, school type & grade level		Dependent variables		
Caprivi					
			2010	2011	2012
	School A	Urban senior secondary school			
		Grade 10	41.59	44.49	48.74
	School B	Rural combined school			
		Grade 10	46.69	47.77	49.41
	School C	Rural combined school			
		Grade 10	44.66	48.5	43.47
	School D	Rural combined school			
		Grade 10	43.44	44.03	45.08
Kavango					
	School E	Urban senior secondary school			
		Grade 10	47.84	46.45	48.52
	School F	Rural senior secondary school			
		Grade 10	46.47	45.45	44.56
	School G	Rural senior secondary school			
		Grade 10	47.25	46.44	47.89
	School H	Rural combined school			
		Grade 10	49.44	44.41	45.54
	School I	Rural combined school			
		Grade 10	48.05	46.78	47.48
	School J	Rural combined school			
		Grade 10	45.62	45.78	44.59
	School K	Rural combined school			
		Grade 10	47.78	48.47	47.49
Oshikoto					
	School L	Rural combined school			
		Grade 10	48.84	49.25	47.95

Source: Ministry of Education (EMIS Reports 2010-2012)

Table 4.4 below presents questionnaire-independent variables matrix detailing the questionnaire design format and the relationship between different parts of the survey instrument.

Table 4.4: Questionnaire-independent variables matrix

Questionnaire section	Independent (control, predicator or explanatory) variables	Question number
Section A	**1. Demographic variables**	
	Gender	Question 1
	Age	Question 2
	Professional qualification	Question 3
	School type	Question 4
	Teaching experience as teacher	Question 5
	Teaching experience in current school	Question 6
	Grade taught	Question 7
	Position in school	Question 8
	Number of subjects taught	Question 9
	Class size	Question 10
Section B	2. Knowledge/understanding or awareness of the curriculum	Question 11
		Question 12
		Question 13
		Question 14
		Question 15
		Question 16
Section C	3. Attitudes toward the curriculum	Question 17
		Question 18
Section D	4. Beliefs about the curriculum	Question 19
		Question 20
Section E	5. Behaviour/Self-efficacy	Question 21
		Question 22
		Question 23
		Question 24
		Question 25
Section F	**6. Internal school variables**	
	Learners' characteristics	Question 26
	School leadership	Question 32
	Professional development	
		Question 27
		Question 28
		Question 29
		Question 30
		Question 31
Section G	**7. External support variables**	
	Resources	Question 33
	Stakeholders' support	Question 34
		Question 35
		Question 36
		Question 37
		Question 38
		Question 39
		Question 40
		Question 41
	Teachers' involvement	
		Question 42

The first independent variable was that of teachers' demographic characteristics of gender, age, professional qualification, school type, teaching experience as teacher, teaching experience in current school, grade taught, position in school, number of subjects taught, class size. Of the ten questions designed in Section A of the questionnaire (see Appendix 1, Table 4.2) only five questions (age, gender, number of subjects taught, professional qualification and teaching experience) were considered for hypothesis testing (see Table 4.4: Section A). The other five questions are discussed as part of the biographical data (see 5.2).

The second category (see Table 4.4: Section B) of independent variable was that of teachers' epistemological characteristics (knowledge, understanding or awareness of the curriculum). The focus of the knowledge questions was to determine respondents' knowledge, understanding and their awareness of the implemented curriculum's goals and objectives. Participants responded to items using a scale, ranging from 1 = "yes," 2 = "no," and 3 = "not sure." Participants also rated how well they knew the curriculum content using a 5-point subscale and answered 1 = "excellent," 2 = "good," 3 = "satisfactory," 4 = "I need more," 5 = "not sure." There were 6 questions in this subcategory (see Section B in Appendix 1 & Table 4.4).

Attitude questions (see Appendix 1 & Table 4.4: Section C) aimed at finding out positive or negative emotions or feelings that teachers have toward the curriculum that may affect their behaviour to implement the secondary school curriculum (Health Communication Partnership, (HCP) 2005). Participants responded to two questions, one using a 5-point scale ranging from 1 = "don't know," 2 = "very positive," 3 = "partly negative," 4 = "fairly negative," and 5 = "very negative." The second question used a 1= "yes" and 2= "no" scale item (see Section C in Appendix 1 & Table 4.4).

Teachers' beliefs about the secondary school curriculum were also measured (see Section D in Appendix 1 & Table 4.4). Participants responded to 2 items, indicating their beliefs or opinions regarding different items related to the implemented curriculum. One

of the items is “I believe that based on the current National Curriculum Framework learners who complete the secondary school curriculum are more likely to be: “unemployed,” “to get a job,” “capable of handling everyday situation,” “more responsible and disciplined,” “to better prepared for further education,” or “more likely be self-employed.” Participants rated the extent to which they agreed or disagreed to statements using a scale, ranging from 1 = “strongly disagree” to 5 = “don’t know.”

The independent variable of teacher behaviour or self-efficacy had 5 items (see Section E in Appendix 1 & Table 4.4). Self-efficacy is the individual’s confidence in his or her ability to perform and sustain the recommended behaviour with little or no help from others (Schiavo, 2007:38-39). Participants rated their self-efficacy/experiences of implementing the secondary school curriculum using a 5-point scale and responded 1 = “strongly disagreed” to 5 = “don’t know”.

The instrument also measured internal school factors (see Section F in Appendix 1 & Table 4.4) that were regarded by literature to support or inhibit the implementation of the secondary school curriculum. The 7 items for internal school support factors were measured using a scale ranging from 1 = “Never” to 5 = “Always. One of the item questions asked was “How often do you speak in English?” While learners’ characteristics and school leadership independent variables had one question each, the professional development variable had five questions (see Table 4.4: Section F).

The seventh set of questions measured whether external support factors of resources, stakeholder support and teacher involvement (see Section G in Appendix 1 & Table 4.4) impede or facilitate curriculum implementation. Research participants responded to 10 questions ranging from 1 =”yes” and 2 = “no” items to a 5-point scale. For example, respondents used a 5-point scale (1 = “not at all”, 2 = “very little input”, 3 = “some little input”, 4 = “heavily involved” and 5 = “not sure” to answer question 34 “To what extent were the following stakeholders in your region involved in the development process of the 2010 secondary school curriculum?” Whereas eight questions were designed to

measure stakeholder support, independent variables for resources and teacher involvement in curriculum development had one question each.

Question 43 was an open-ended question, and was asked to identify any comments that respondents might have had beyond the responses to the closed-ended questions. Responses of the open-ended question were analysed by overlapping themes; interpreted and included in this study as part of the qualitative data presented in section 5.9 (Creswell, 2012:220).

4.12 Questionnaire piloting

The wording and pretesting are crucial to the success of questionnaires. For instance, piloting principally increases the reliability, validity and practicability of the questionnaire (Oppenheim, 1992; Wilson & McLean, 1994:47).

Based on these broad-based functions, piloting the questionnaire for this study was done to specifically check the clarity of the questionnaire items, instructions and layout, gain feedback on the validity of the questionnaire items, the operationalisation of the constructs and the purposes of the research, on the elimination of difficulties in wording and to check readability levels for the target audience. Also piloting served numerous purposes such as to gain feedback on the type of question and its format (rating scale, multiple choice, open, and closed), and for the appropriateness of specific questions and to identify omissions, redundant and irrelevant items.

In addition, piloting data collection instruments helped the researcher to gain feedback on leading questions, the attractiveness and appearance of the questionnaire, its layout, sectionalising, numbering and itemisation of questions.

Lastly, piloting the questionnaire also helped to check on the time taken to complete the instrument; redundancy identification and to try out the coding system for data analysis (Verma & Mallick, 1999:120; Youngman, 1984:172).

However, due to time and financial constraints the instrument was piloted only on five teachers who were not part of the sample and analysed data are not reported in the study‘s findings.

4.13 Questionnaire administration

There are two types of self-administered questionnaire, namely, those that are completed in the presence of the researcher and those that are filled in when the researcher is absent. Each of these two types of self-administered questionnaire has its advantages and disadvantages.

For instance, having the researcher present may be threatening and exert a sense of compulsion, where respondents may feel uncomfortable about completing the questionnaire, and may not want to complete it or even start it. Respondents may also want extra time to think about and complete the questionnaire, maybe at home, and they are denied the opportunity to do this. Also having the researcher present places pressure on the researcher to attend at an agreed time and in an agreed place, and this may be time consuming and require the researcher to travel extensively, thereby extending the time frame for data collection. Travel costs for conducting the research with dispersed samples could also be expensive (Cohen, *et al.*, 2011:404-405).

On the other hand, the absence of the researcher is helpful in that it enables respondents to complete the questionnaire in private, to devote as much time as they wish to its completion, to be in familiar surroundings, and to avoid the potential threat or pressure to participate caused by the researcher’s presence. Further, it can be inexpensive to operate, and is more anonymous than having the researcher present.

Cohen, *et al.* (2011:404-405), contended that this latter point, in turn, can render the data more or less honest: it is perhaps harder to tell lies or not to tell the whole truth in the presence of the researcher, and it is also easier to be very honest and revealing about sensitive matters without the presence of the researcher.

However, due to limited financial resources, the questionnaire for the current study was administered by field workers in the absence of the researcher. Questionnaires were hand-delivered by fieldworkers to principals of sampled schools. The headmasters of each participating school helped to motivate teachers and supervised the completion of the questionnaires. To minimise the shortcomings of this approach, each question had simple instructions and the majority of questions used tick-box answers.

4.14 Semi-structured interviews

The qualitative data collection process for this study occurred after the quantitative data were collected and analysed.

Semi-structured interviews of 60 minutes in length were conducted following a predetermined interview guide (see Appendix 2) (McMillan & Schumacher, 2010:355; Patton, 2002:343; Regehr, Marzialli & Jansen, 1999). The interview guide with teachers included open-ended questions to initiate the conversation and to explore the teachers' personal experiences in implementing the secondary school curriculum.

Consistent with a funneling technique questions were initially more general in nature and then gradually became more specific (De Vos *et al.,* 2011:352-353; Pooley, Breen, Pike, Cohen & Drew, 2008). An example of a general question was "Tell me about yourself." "Tell me about your school." These questions were used to probe further the teachers' understanding of the challenges not only in the general school environment but with regard to the classroom situation. With this approach, the researcher pursued the same line of inquiry with each teacher interviewed. However, questions did not

follow in any particular order during the interview process (Johnson & Christensen, 2010). Rather, using the interview guide which provided the topic dimensions the researcher was “free to explore, probe, and ask questions that would elucidate and illuminate that particular subject” of interest (Patton, 2002:343).

The question content varied based on the literature reviewed for this study. For example, questions were asked with a focus on background/demographic (see Section A in Appendix 2), knowledge, attitudes/feelings, opinion/values/beliefs, and experience/behaviour (see Section B in Appendix 2), dimensions of respondents (McMillan & Schumacher, 2010:357).

In addition, the line of inquiry also included questions about internal (see Section C in Appendix 2) and external (see Section D in Appendix 2) school factors that might have a potential to influence on the implemented curriculum.

For instance, teachers’ demographic information including routine information on gender and location were collected. An example of background information is “Tell me about yourself.” “How many years have you been a teacher?” “How many years have taught in current school?” (see Appendix 2).

Several knowledge questions were asked with the aim of collecting information from teachers on what they considered factual. An example question is “Did you receive the national curriculum document?” or “Do you have the national curriculum document?” (see Appendix 2).

However, attitudes/feelings questions elicited teachers’ reactions emotionally to their experiences of implementing the enacted curriculum, for example, “What is your attitude towards the current curriculum from which you are teaching?” (see Appendix 2).

Opinions/values/beliefs questions, on the other hand, elicited what teachers thought about their experiences, which helped to reveal teachers’ intentions, goals and values.

For example, “Should the current secondary school curriculum be changed?” “Do you believe that you are implementing the curriculum based on the learner centred philosophy on which it is based?”

In addition, self-efficacy / behaviour questions elicited what teachers have done in their attempt to implement the curriculum. An example question is “How would you describe your ability to teach in a learner centred manner?”

Moreover, data were collected on internal school factors (see Section C in Appendix 2) that teachers regarded as supporting or inhibiting the implementation of the secondary school curriculum. An example question in this case is “In your opinion what learner related factors play a role in whether or not you are able not able to implement the curriculum?”

The last group of questions involved factors outside (see Section D in Appendix 2) the school environment, which might have a direct positive or negative influence on how teachers implement the secondary school curriculum. An example question is “What factors outside your school system do you think have an influence on whether or not you implement your curriculum in your classroom situation?”

All interviews were tape-recorded following permission from respondents. Tape recording enabled the researcher to pay more attention to interview discussions, rather than concentrating on note taking. In cases where respondents were unwilling to be tape-recorded, the researcher relied on detailed “process notes” (De Vos, *et al*., 2011:359). Further, the researcher transcribed verbatim all interviews (Miles & Huberman, 1994).

4.15 Recruitment of fieldworkers

A total of five field workers located in the three northern regions, were recruited to conduct quantitative data collection in field. After sensitising on the purpose of the research study, the ethics of working with human subjects, the protocols for entering schools, the management of completed questionnaires and how to achieve high response rate, each field worker was requested to assign a letter of commitment (Appendix 3) detailing the purpose of the study and field workers' responsibilities.

4.16 Access into sampled schools

The researcher coordinated entry into the sampled schools with designated field workers in each region. First, permission was requested from the Ministry of Education through the Directorate of Quality Assurance. Subsequent to this consultation an official letter (Appendix 4) was sent from the Head Office to the three Regional Offices of Education. Upon obtaining the official response, the researcher consulted by phone each of the Regional Office of Education, circuit offices and principals of each of the sampled schools explaining the purpose of the study and asking for their school's participation.

Each regional field worker conducted pre-visits to sampled schools in order to explain to school principals the purpose of the study and to determine the appropriate dates for the administration of the research instrument.

4.17 Ethical issues

This mixed methods, sequential explanatory study followed the three ethical principles that emerged from the Belmont Report (1979): respect for persons, beneficence and justice. Respect for persons identified two primary concerns: it acknowledged the respondents' independence and the researcher's deference to this autonomy. The study also protected respondents from possible exploitation. The study was based on voluntary participation and informed consent.

After obtaining an ethical clearance letter (Appendix 5: UFS-EDU-2011-0047) from the university the researcher applied to the Permanent Secretary of the Ministry of Education for permission (Appendix 4) to enter sampled schools. At both national, regional and school levels, the informed consent (Appendix 6) was explained in terms voluntary participation by research respondents. Also procedures for withdrawal by research respondents during questionnaire administration and interviews were explained.

The principle of beneficence required that the researcher protects respondents from harm and reduce any dangers resulting from the research. Therefore, the researcher observed all protocols for privacy of the respondents by assuring their anonymity and confidentiality. Research respondents signed the consent as evidence that they agreed to take part in the study (Appendix 7).

4.18 Data analysis

As was mentioned in Chapter 1, three types of analyses are used to describe the sample of the quantitative data of this study (see 1.9.8).

4.18.1 Descriptive statistics

First, in order to provide a description of the sample from which data were collected, descriptive information on age, gender, region of employment, teaching experience of teachers, teachers' highest professional qualifications, current grades taught and number of grades and subject(s) taught and class size are described using bar graphs and tables. Nominal (gender, region of employment and qualification), ordinal (class size, years of experience, number of grades and subjects taught), ratio (age) were summarised and results reported by percentages. Measures of central tendency (means, modes, range, and standard deviations) for age were calculated and tabulated. In addition descriptive data on teacher epistemologies, internal and external school support factors were analysed and presented as part of the current study.

4.18.2 Pearson product-moment correlations *(r*)

Second, the Pearson product-moment correlations *(r*) were computed between dependant and independent variables of the current study (see Table 4.2).

The first product-moment correlations *(r*) computed were between curriculum implementation as the dependant variable and the independent variables of age, gender, number of subjects taught, professional qualifications and teaching experience (demographic variables).

The second product-moment correlations *(r*) computed was between curriculum implementation as the dependant variable and independent variables of knowledge, attitudes, beliefs and self-efficacy/behaviours (epistemological variables).

The third product-moment correlations *(r*) computed was between curriculum implementation as the dependant variable and independent variables of learners' characteristics, professional development and school leadership (internal school factors).

The fourth product-moment correlations *(r*) computed was between curriculum implementation as the dependant variable and independent variables of resources, stakeholder support and teachers' involvement (external support factors).

The Pearson product-moment correlations *(r*) were used to measure the strength of the linear relationship between two quantitative variables. The analysis was performed to reveal the direction and the strength of the relationship and to determine whether the relationship is statistically significant from zero (Maree, 2007:234).

In view of this issue, the decision to use the product-moment correlations *(r*) was to answer three questions about two variables of data. First, 'Is there a relationship between the two variables (or sets of data)?' 'What is the direction of the relationship?' and 'What is the magnitude?' It is important to note that correlations as used in the current study measured association and not causal relationships between variables (Cohen, *et al.,* 2011:632-635).

Based on Calder and Sapsford (2006:226); Pallant (2007:132) and Pietersen and Maree (2007:236), Table 4.5 provides guidelines on how correlation coefficients obtained for this study were interpreted at $p < .05$.

Table 4.5: Guidelines for interpreting Pearson correlations (*r)*

Statistic	Correlations coefficients	Relationship
Pearson's *r*	*r* = 0.10 - *r* = 0.29	Weak relationship
	r = 0.3 - r = 0.49	Medium relationship
	r = 0.50 - *r* = 1.00:	Strong relationship

Source: Calder & Sapsford (2006:226), Pallant (2007:132) and Pietersen and Maree (2007:236)

4.18.3 Logistic regression analysis

More often than not, researchers want to go beyond just summarising and describing the data they have collected. To be able to use the findings from the sample data and generalise or draw conclusions about the population (Maree, 2007:198) the current study employed inferential statistics of regression analysis.

Cohen, *et al.,* (2011:661) stated that regression analysis enables the researcher to predict 'the specific value of one variable when we know or assume values of the other variable(s)' (Cohen & Holliday, 1996:88). However, the most appropriate type of regression analysis used for this study was the logistic regression analysis. This type of regression analysis enabled the researcher to make predictions of the effects of multiple independent variables on the dependent variable (see Table 4.2).

The first logistic regression model examined the influence of teachers' demographic variables (age, gender, number of subjects taught, professional qualifications and teaching experience) on the implementation of the intended secondary school curriculum.

The second logistic regression model examined the influence of teachers' epistemological factors (knowledge, attitudes, beliefs and self-efficacy or behaviours) on the implementation of the intended secondary school curriculum.

The third logistic regression model examined the influence of internal school support factors (learners' characteristics, professional development and school leadership) on the implementation of the intended secondary school curriculum.

The fourth logistic regression model examined the influence of external support factors (resources, stakeholders' support and teacher involvement).

To determine whether the logistic regression model fits the population based on the sample data of the current study, a hypothesis test made up of two hypotheses for each category of independent variables was formulated (see 4.6).

As illustrated in section 4.6 the null hypotheses (H_0) of "does not influence" are stated for each of the independent variables and their influence on the implementation of the intended secondary school curriculum, the outcome variable in this study. Also in section 4.6 the alternative hypotheses (H_1) indicating a difference of influence for each of the independent variables and the two dependant values predicted are stated.

The chosen level of significance was 0.05, which means that if the $p<0.05$, the decision would be to reject the null hypothesis; whereas if the $p>0.05$, it would be decided not to reject the null hypothesis (Ary, Jacobs, & Razavieh, 2003; Judd, Smith & Kidder, 1991).

In other words, it was decided that because coefficients with p-values equal to or less than the chosen alpha (0.05) are statistically significant, the decision would be to reject the null hypothesis at a 2-tailed test of significance. This means that instead of "does not influence" as stated in the null hypothesis, the alternative hypothesis ("does influence") may probably be true (Creswell, 2012:189).

The hypothesis test of the current study was set at a 95% confidence interval for the differences between the means of two groups (Creswell, 2012:194).

Of the various techniques of interpreting the logistic regression coefficients, the current study used Cohen's conventional criteria of 'small', 'medium' and 'large' to determine the effect size. According to Creswell (2012:188-195) effect size is a means for

identifying the practical strength of the conclusions about group differences or about the relationship among variables in a quantitative study. Effect sizes provide information about how different the sample values are and allow researchers to make a judgement as to whether the conclusions are significant based on the researcher's knowledge of measures, research participants and the data collection efforts.

In the current study Cohen's (*d*) criteria effect sizes were used (see Table 4.6).

Table 4.6: Guidelines for interpreting Cohen's (*d*) criteria effect sizes

Statistic	Effect sizes	
Cohen's *d*	0.2 – 0.3	Small
	0.5	Medium
	0.8	Large

Source: Cohen (1988:25)

The following symbols used in the logistic regression model (see Tables 5.22–25) are delineated based on Cohen, *et al*., (2011:655).

The Beta (β) weighting tells us that, for every standard deviation unit change in the independent variable (age), the dependent variable (curriculum implementation) will rise or decrease by -0.149 (14.9%) of one standard deviation unit. This means that for every one unit decrease (rise) in the independent variable there is just around 15% of a unit rise in the dependent variable.

The S.E. or standard error in the tables is associated with the coefficients. The standard error is used for testing whether the parameter is significantly different from 0; by dividing the parameter estimate by the standard error you obtain a t-value. The standard errors can also be used to form a confidence interval for the parameter.

Tables 5.22–25 also show the Wald. This column provides the Wald logistic regression value and 2-tailed *p*-value used in testing the null hypothesis that the coefficient

(parameter) is 0. Using a 2-tailed test, each value is compared to the preselected *p*-value of .05.

The table also shows the degrees of freedom (df). This is the degrees of freedom for the Wald logistic regression test. There is only one degree of freedom because there is only one predictor in the model, namely the constant. Degrees of freedom refer to the freedom which the researcher is able to assign values to the cells, given fixed marginal total, usually given as (number of rows – 1) + (number of columns – 1) (Cohen, *et al*., 2011:655). This column lists the degrees of freedom for each of the tests of the coefficients. Tables 5.22 - 25 therefore, show and list the degrees of freedom (df) for each variable. Each variable entered into the model, for example, gender (female 1, male 2), age, and so forth has one degree of freedom, which leads to the total of five predictor variables shown at the bottom of the column.

The tables also show the Exp (β). This is the exponentiation of the (β) coefficient, which is an odds ratio. The values are given by default because odds ratios can be easier to interpret than the coefficient, which is in log-odds units.

In the current study, we opted for the Beta weightings and the 'Sig.'. The Beta weight (β) is the amount of standard deviation unit in the dependant variable for each standard deviation unit of change in the independent variable (Cohen, *et al*., 2011:663). The **'**Sig.**'**, in the tables is the significant level, which is 0.05 in the current study. This means that, for example, because the significance level is 0.008, we do not have a statistically significant relationship (which is the significant level is greater than the set *p*-value of 0.05) between the independent variable (age) and the dependent variable (curriculum implementation).

4.19 Validation of quantitative data analysis

4.19.1 Validity

As shown in Chapter One, validity is an important key to effective research and is a requirement for both quantitative and qualitative research (Cohen *et al.*, 2011:179). According to Babbie (2007:146) validity refers to the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration.

In the present study quantitative data validity was improved through careful sampling and appropriate instrumentation (Cohen *et al.*, 2011:179).

4.19.2 Reliability

Reliability is essentially a synonym for dependability, consistency and replicability over time, instruments and group of respondents. It is concerned with precision and accuracy. For research to be reliable it must demonstrate that if it were to be carried out on a similar group of respondents in a particular context, then similar results would be found (Cohen, *et al.*, 2011:199). For De Vos *et al.,* (2011:178) reliability is primarily concerned not with what is being measured, but with how well it is being measured.

According to Neuman and Kreuger (2003:179-180) and Salkind (2006:108) reliability can be increased by using two or more questions in a questionnaire to measure each aspect of a variable, eliminating items that are unclear and by asking higher level questions so as to obtain detailed information on different measures.

In addition, the researcher must ensure that the questions in the instrument are not too difficult or too easy as this may not provide an accurate picture of the respondent's responses. Moreover, Neuman and Kreuger (2003:179-180) and Salkind (2006:108) suggest that piloting the measuring instrument, standardising instructions and using consistent scoring procedures may also increase the reliability of measures.

Several procedures exist for establishing the reliability of an instrument, such as test-retest and alternate form methods and the split-half technique (De Vos *et al.,* 2011:177). In addition to the techniques mentioned by Neuman and Kreuger (2003:179-180) and Salkind (2006:108) the present study used Cronbach's Alpha coefficients to establish the reliability of the research findings. As shown below the Cronbach's alphas were computed to the current sample to estimate internal consistency as reported for each of the six items (Creswell, 2012:162) of knowledge, attitudes, beliefs, behaviour/self-efficacy, internal and external factors.

- Knowledge, understanding and awareness of the national curriculum framework (6 items, α. = *.69*, for example, "Have you received a copy of the Namibian Curriculum for Basic Education?")

- Teachers' attitudes towards the national curriculum framework (2 items, α. = .70, for example, "What is your attitude towards the implemented secondary school curriculum?")

- Teachers' beliefs about the implemented secondary school curriculum (2 items, *α*. = .70), for example, I believe that the ability of learners is below average compared to other learners in the same grade."

- Teachers' self-efficacy/behaviour (5 items, α. = *.70).* A sample item is "How often do you speak in English?" Below, Cronbach's alphas for the current sample are reported.

- Internal school factors (8 items, α. =*.70)* for example, "I received my teacher training in English as the official language mandated by the national curriculum from which I teach."

- External school factors (10 items, α. =*.70),* sample question, "Indicate yes or no to the following statements by circling your response using this scale."

The Cronbach's Alpha for the overall questionnaire was 0.68.

4.20 Qualitative data analysis

Qualitative research methods differ from quantitative approaches in many important respects, not the least of which is the latter's emphasis on numbers (Baker & Edwards, 2012). While quantitative researchers capture a shallow band of information from a wide group of people and seek to objectively use their correlations to understand, predict, or influence *what* people do, qualitative researchers generally study many fewer people, but delve more deeply into those individuals, settings, subcultures, and scenes, hoping to generate a subjective understanding of *how* and *why* people perceive, reflect, role-take, interpret, and interact. Although both research strategies offer possibilities for generalisation, they are about different things, and both approaches are theoretically valuable (ibid).

A key difference involves the hypothetico-deductive approach that guides quantitative research versus the inductive reasoning, thinking and theorising that frames qualitative research (Baker & Edwards, 2012; De Vos, *et al.,* 2011:48-399). For instance, in trying to verify hypotheses, quantitative researchers have finite ideas, prior to starting research, about the scope and aims of their projects, whereas qualitative researchers work in the context of discovery, are more open-ended, and often follow emergent empirical and conceptual findings in unexpected ways. And because qualitative researchers may not know, in advance, how much data they need to gather, the issue of the minimum size of a sample remains a contentious issue in qualitative research (Baker & Edwards, 2012).

Methodological experts argue that there is no formula or a way of calculating 'how many' samples should be included in a qualitative research. According to Baker and Edwards (2012) numerous research experts have suggested that the question of 'how many' is not even an appropriate question for qualitative research. Some researchers have wondered whether sampling in qualitative research is determined by epistemological factors (theory of the study, academic discipline, or the social population or group or context of the research area) or practical issues (availability of

time and resources, funding or supervisor of the research study, or review board and research ethics committee requirements) (Baker & Edwards, 2012).

Miles and Huberman (1994:34) suggested that sampling strategies in qualitative research can be evaluated in terms of six different attributes.

First, the sampling strategy should be relevant to the conceptual framework and the research questions addressed by the research. In other words, this attribute should be able to answer the question of whether sampling can provide cases in categories which are in line with a pre-existing conceptual framework for the research, how far the choice of cases might affect the scope for developing theory inductively from the data.

Second, the sample should likely generate rich information on the type of phenomena which need to be studied. The key concerns of this attribute are that the sample should be able to provide rich information on the phenomena of study. In addition, the appropriateness of the sample will be evaluated on whether the phenomena of interest in the research will likely 'appear' in the observations.

Third, the sample should enhance the 'generalisability' of the findings. As explained above, qualitative samples should ensure that they enhance analytic generalisability rather than statistical power to make statements about a general population on the basis of a sample.

Fourth, the sample should produce believable descriptions/explanations, which are true to real life of the phenomena that were studied. This criterion raises questions of validity and reliability of qualitative research. For instance, the sample should be able to answer to two questions of whether it provides a really convincing account and explanations of what is observed (validity), and whether the sources of data collection are complete and present non-biased explanations which can be based upon them.

Fifth, the sample strategy should meet acceptable ethical standards. The sampling strategy used will be considered appropriate if the study explains whether issues of informed consent, benefits or risks associated with selection for and participation in the study and the ethical nature between researcher and informants were considered.

Lastly, the sampling plan should be feasible. According to Miles and Huberman (1994:34), researchers should consider feasibility in terms of the resource costs of money and time, the practical issues of accessibility and whether the sampling strategy is compatible with the researcher's work style.

Other feasibility factors which should be taken into consideration include competencies of the researcher in terms of linguistic and communication skills, ability to relate to informants and their experiences, the capacity of researchers and informants to cope with the circumstances under which the data collection may take place.

Drawing on the tacit knowledge of the various social scientists with a range of epistemological and disciplinary positions reviewed above, sampling for the qualitative phase of this study consisted of 15 teachers (5 females and 10 males). Participating teachers and schools from each of the three regions (Caprivi, Kavango and Oshikoto) were drawn using purposively sampling strategies (see 4.8: Table 4.1).

The decision to involve only 15 cases for interviews was influenced by factors such as the epistemological perspectives, research design and practical considerations of the present study.

First, the current study was based on an explanatory sequential mixed methods design (see 4.5), with unequal weight between quantitative and qualitative approaches. Thus, with greater emphasis on the quantitative approach within this study, it was decided that quantitative data were collected and analysed first followed by the collection and analysis of qualitative data. As described in section 4.5 the overall purpose of the

design was that qualitative data would help explain the initial quantitative results from the first study (Creswell & Clark, 2007:71).

In view of this, Mason (2002) indicated that samples for qualitative studies are generally much smaller than those used in quantitative studies. Ritchie, Lewis and Elam (2003:84) stated that there are several factors that might affect the potential size of a sample. To this, Charmaz (2006:114) suggested that the aims of the study are the ultimate driver of the project design, and therefore the sample size. Morse (2000:4) on the other hand, added that "the scope of the study, the nature of the topic and the study design" are some of the reasons that may affect the size of the sample.

Taken together, while Jette, Grover and Keck (2003) suggested that expertise in the chosen topic can reduce the number of participants needed in a study, Lee, Woo and Mackenzie (2002) claimed that studies that use more than one method require fewer participants.

Second, in addition to the epistemological factors mentioned above, a number of practical issues were considered in deciding the number of samples for the qualitative phase of the present study.

Therefore, the practical concerns that influenced the selection of 15 samples included the availability of resources (time, money, equipment, transport, available data sources, own abilities, skills and the likelihood of gaining access to the key data sources) (De Vos, *et al.,* 2011:326). In other words, the researcher considered Mason's (2002) advice (cited in De Vos, *et al.,* 2011:327), which states that when deciding on practical considerations, it is helpful that researchers ask two pertinent questions. First, what can I as a researcher achieve given my resources? Secondly, what is the most sensible use of my resources in relation to my research question?

Moreover, as mentioned above the sample size in qualitative research methods is often smaller than that used in quantitative research methods. In the current study qualitative

data were concerned with garnering an in-depth understanding of the teachers' meanings and heterogeneities in the meaning of their social interactions (Dworkin, 2012) with the learners and curriculum materials at the classroom level. Therefore, based on various debates concerning what sample size is the right size for qualitative research, the current study sought 15 samples as the smallest acceptable sample suggested by Bertaux (1981:35) and Guest, Bunce and Johnson (2006) would be sufficient to meet the concept of saturation (Charmaz, 2006:113; Glaser & Strauss, 1967), when the collection of new data does not shed any further light on the issue under investigation.

Further, by selecting 15 samples, it was felt that this number would be adequate to distinguish conceptual categories of interest and maximise the chances that negative cases would have been explored in the data (Charmaz, 2006; Morse, 1994, 1995).

In view of the above understanding qualitative data analysis involved, transcribing and coding of interviews for maximum differences and critical-case analyses using Atlas. To obtain the maximum differences and critical cases from the data the researcher initially conducted open coding involving categorising of data according to broad themes. Secondly, analytic coding was performed by providing explanatory meaning to the categorised themes.

Lastly, axial coding helped the researcher to recombine small units of data under each broad category of common meaning based on the key variables of the study (Cohen, *et al.,* 2011:561-2). Thereafter, the maximum differences of perceptions and critical cases emerging from the quantitative data were used to refine, explain, and elaborate on, the statistical results obtained in the first phase (Creswell *et al.,* 2003; Rossman & Wilson, 1985; Tashakkori & Teddlie, 1998).

4.21 Validation of qualitative data analysis

Despite the difficulty associated with assessing the validity or trustworthiness of qualitative findings so as to determine the accuracy of qualitative data, four alternative constructs reflecting the assumptions of qualitative paradigm were used (Lincoln & Guba, 1999) in the current study.

4.21.1 Credibility / authenticity

Considered to be the most important criteria, credibility is a regarded as the alternative to internal validity, in which the general goal is to demonstrate that the inquiry was conducted in such a manner to ensure that the subject has been accurately identified and described. This means that findings must describe accurately the phenomena being researched. According to Onwuegbuzie and Leech (2006), interval validity is 'truth value, applicability, consistency, neutrality, dependability, and/or credibility of interpretations and conclusions within the underlying setting of group'.

However, according to the interpretive philosophy which underpins qualitative research, there is no objective truth and reality is relative to the meaning that people construct within social contexts. In other words, there are many truths and meaning of a simple fact and these are suitable for every situation and for every research problem (Johnson & Christensen, 2010).

Therefore, to increase credibility of the collected data, two methods were used, namely debriefing and member checking of the findings provided feedback from participants (Lincoln & Guba, 1999).

4.21.2 Transferability

Transferability is an alternative to external validity or generalisability. According to Vos *et al.* (2011:420) research findings are said to be transferable or generalisable if a set of findings from one context can fit to a specific situation or case (Lincoln & Guba, 1999). However, in qualitative studies generalisability of findings to other settings may be problematic.

Therefore, in this study a detailed description of the procedures on how data were collected and analysed provides a better understanding to the reader about whether or not the cases described can be generalised and transferred to other settings (De Vos, *et al.,* 2011:420). Another strategy that was used to enhance transferability of the results of the current study involved triangulating multiple sources of data or what Cohen, *et al.,* (2011:196) referred to as methodological triangulation in which different methods are used on the same object of the study. For instance, data from descriptive and qualitative data analyses were used to corroborate elaborate or illuminate the different research questions and hypotheses of this study.

In addition, to strengthen the usefulness of the findings of this study data were obtained from multiple informants across the three sampled regions working in different rural and urban social contexts and various other data gathering methods (document analysis) were used (De Vos *et al.,* 2011:420).

With regard to latter various government documents were examined to provide background information to the formulation of the problem statement for the current study (see 1.1 to 1.3). In addition, numerous other journal articles were reviewed to determine the conceptual framework of the current study (see Chapter 2 and 3).

4.21.3 Dependability

Dependability is analogous to reliability in which the researcher attempts to account for changing conditions in the phenomenon chosen for study as well as changes in the design created by an increasingly refined understanding of the setting. The positivist notion of reliability assumes that the universe is static and as such inquiry can be conducted logically and findings replicated to another situation (De Vos, *et al*., 2011:420-1).

Cohen *et al.* (2011:199) indicated that reliability is concerned with precision and accuracy. In other words, for research to be reliable it must demonstrate that if it were to be carried out on a similar context, then similar results would be found. However, as LeCompte and Preissle (1993:332), suggested the canons of reliability for quantitative research may be simply unworkable for qualitative research and therefore the concept of replication is itself problematic (De Vos *et al*., 2011:421).

As a result given the fact that the assumption of an unchanging social world is in direct contrast to the qualitative /interpretive assumptions, which regard the social world as always being constructed, Lincoln and Guba (1985:108-109); Anfara, Brown and Mangione (2002 cited in Cohen *et al.*, 2011:202) suggested that dependability can be enhanced through member checks (respondent validation), and debriefing by peers.

The same authors indicate that dependability can also be improved through triangulation, prolonged engagement in the field, persistent observations in the field, reflexive journals, negative case analysis and independent audits (identifying acceptable processes of conducting the enquiry so that the results are consistent with the data). In the present study, debriefing, triangulation, member checks and negative case analysis were used to enhance the dependability of the qualitative data.

4.21.4 Confirmability

Confirmability is analogous to the traditional concept of objectivity. According to Lincoln and Guba (1999) conformability is the degree to which findings of the study can be confirmed or corroborated by another. De Vos *et al.,* (2011:421) stated that by ensuring corroboration of research findings, the researcher removes evaluation from some inherent characteristics of the researcher (objectivity) and place it squarely on the data themselves.

Etherington (2006) suggested that auditing could also be used to establish confirmability of the research findings, in which the researcher maintains a documentation process of the researcher's continuous critical analysis of all decisions and actions taken during the entire research process. For instance, the auditing trail should display the interaction between the researcher and the research participants in such a way that the research can be understood not only in terms of what was discovered but also how it was discovered.

This strategy of enhancing confirmability of research findings has several advantages. For example, it helps the researcher's interpretations to be better understood and validated by readers who are informed about the decisions taken by researchers and their involvement in the study. In other words, interpreting one's own interpretations, looking at one's own perspectives and turning a self-critical eye on one's own authority as interpreter and author enhances the trustworthiness of the findings and outcomes of the research (Etherington 2006) cited in De Vos, *et al.,* (2011:422).

Because confirmability entails a full revelation of the data upon which all interpretations are based, confirmability for this study was enhanced by using audit trails (Lincoln & Guba, 1985:319), which involved the use of written field notes, a field diary and a reflexive journal (Denzin, 1994:513). In addition, by reporting on how data were collected and by appending the interview protocol used in collecting qualitative data

ensured transparency and provided an opportunity for readers to inspect the data, interpretations and the results of the present study.

4.22 Summary

This chapter discussed the research methodology employed in the present study. In addition, other issues covered include the research paradigm on which the study is based, an outline of the mixed methods approach, the rationale for the choosing the approach, research questions/hypotheses and an overview of the research design. Moreover, the population and sample selection procedures; development and administration of the research instruments, quantitative and qualitative data analysis procedures were presented. Further, the chapter explained ethical issues observed in this study.

The next chapter presents the findings of the current study.

CHAPTER 5
FINDINGS AND ANALYSIS OF THE EMPIRICAL STUDY

5.1 Introduction

The purpose of this evaluative research study was to examine the factors that have an influence on the implementation of the intended secondary school curriculum at the classroom level in Namibia.

Therefore, based on the main research purpose and objectives the present study had fifteen hypotheses.

Five null (H_0) and alternative (H_1) hypotheses were formulated for teachers' demographic (d) characteristics as follows:

Hypothesis one

- H_0(d1): The age of teachers does not have an influence on the implementation of the secondary school curriculum
- H_1(d1): The age of teachers does have an influence on the implementation of the secondary school curriculum

Hypothesis two

- H_0(d2): The gender of teachers does not have an influence on the implementation of the secondary school curriculum
- H_1(d2): The gender of teachers does have an influence on the implementation of the secondary school curriculum

Hypothesis three

- H_0(d3): The number of subjects that teachers teach does not have an influence on the implementation of the secondary school curriculum
- H_1(d3): The number of subjects that teachers teach does have an influence on the implementation of the secondary school curriculum

Hypothesis four

- H_0(d4): The professional qualifications of teachers do not have an influence on the implementation of the secondary school curriculum
- H_1(d4): The professional qualifications of teachers do have an influence on the implementation of the secondary school curriculum

Hypothesis five

- H_0(d5): The teaching experience of teachers does not have an influence on the implementation of the secondary school curriculum
- H_1(d5): The teaching experience of teachers does have an influence on the implementation of the secondary school curriculum

Four null (H_0) and alternative (H_1) hypotheses were formulated for teachers' epistemological (e) characteristics as follows:

Hypothesis one

- H_0(e1): The knowledge of teachers does not have an influence on the implementation of the secondary school curriculum.
- H_1(e1): The knowledge of teachers does have an influence on the implementation of the secondary school curriculum.

Hypothesis two

- H_0(e2): The attitudes of teachers do not have an influence on the implementation of secondary school curriculum.
- H_1(e2): The attitudes of teachers do have an influence on the implementation of the secondary school curriculum.

Hypothesis three

- H_0(e3): The beliefs of teachers do not have an influence on the implementation of the secondary school curriculum.
- H_1(e3): The beliefs of teachers do have an influence on the implementation of the secondary school curriculum.

Hypothesis four

- H_0(e4): The self-efficacy of teachers' does not have an influence on the implementation of secondary school curriculum.
- H_1(e4): The self-efficacy of teachers' does have an influence on the implementation of secondary school curriculum.

Three null (H_0) and alternative (H_1) hypotheses were formulated for the internal (i) school support factors.

Hypothesis one

- H_0(i1): The characteristics of learners do not have an influence on the implementation of the secondary school curriculum.
- H_1(i1): The characteristics of learners do have an influence on the implementation of the secondary school curriculum.

Hypothesis two

- H_0(i2): The professional development of teachers does not have an influence on the implementation of the secondary school curriculum.
- H_1(i2): The professional development of teachers does have an influence on the implementation of the secondary school curriculum.

Hypothesis three

- H_0(i3): The leadership of the school does not have an influence on the implementation of the secondary school curriculum.
- H_1(i3): The leadership of the school does have an influence on the implementation of the secondary school curriculum.

Three null (H_0) and alternative (H_1) hypotheses were formulated for the external (x) school factors.

Hypothesis one

- H_0(x1): The resources of the school do not have an influence on the implementation of the secondary school curriculum.
- H_1(x1): The resources of the school do have an influence on the implementation of the secondary school curriculum.

Hypothesis two

- H_0(x2): The support of stakeholders to the school does not have an influence on the implementation of the secondary school curriculum.
- H_1(x2): The support of stakeholders to the school does have an influence on the implementation of the secondary school curriculum.

Hypothesis three

- H_0(x3): The involvement of teachers in curriculum development does not have an influence on the implementation of the secondary school curriculum.
- H_1(x3): The involvement of teachers in curriculum development does have an influence on the implementation of the secondary school curriculum.

The hypotheses were based on the null hypothesis (H_0), which is a 'no difference' statistical hypothesis. It was decided that if there is no significant difference between the frequencies of the various descriptive categories the null hypothesis would be accepted. However, if a significant difference was to be noted, the null hypothesis would be rejected and the alternative (H_1) or research hypothesis accepted. The chosen level of significance (p) was 0.05, which means that if the $p<0.05$, the decision would be to reject the null hypothesis; whereas if the $p>0.05$, it would be decided not to reject the null hypothesis (Ary, Jacobs, & Razavieh, 2003; Judd, Smith & Kidder,1991).

In this section, results of the quantitative data analysis are presented. For instance, descriptive data analyses are presented first, followed by findings of inferential statistics. Findings of descriptive data include demographic characteristics of research respondents presented by question. This is followed by results obtained by Pearson product-moment correlations analysis, which are subsequently followed by the results of the logistic regression in which 15 null hypotheses (H_0), each accompanied by an alternative hypothesis (H_1) are tested, rejected or accepted.

Results of the qualitative data analysis are presented last based on the literature reviewed in 3.5 of this study.

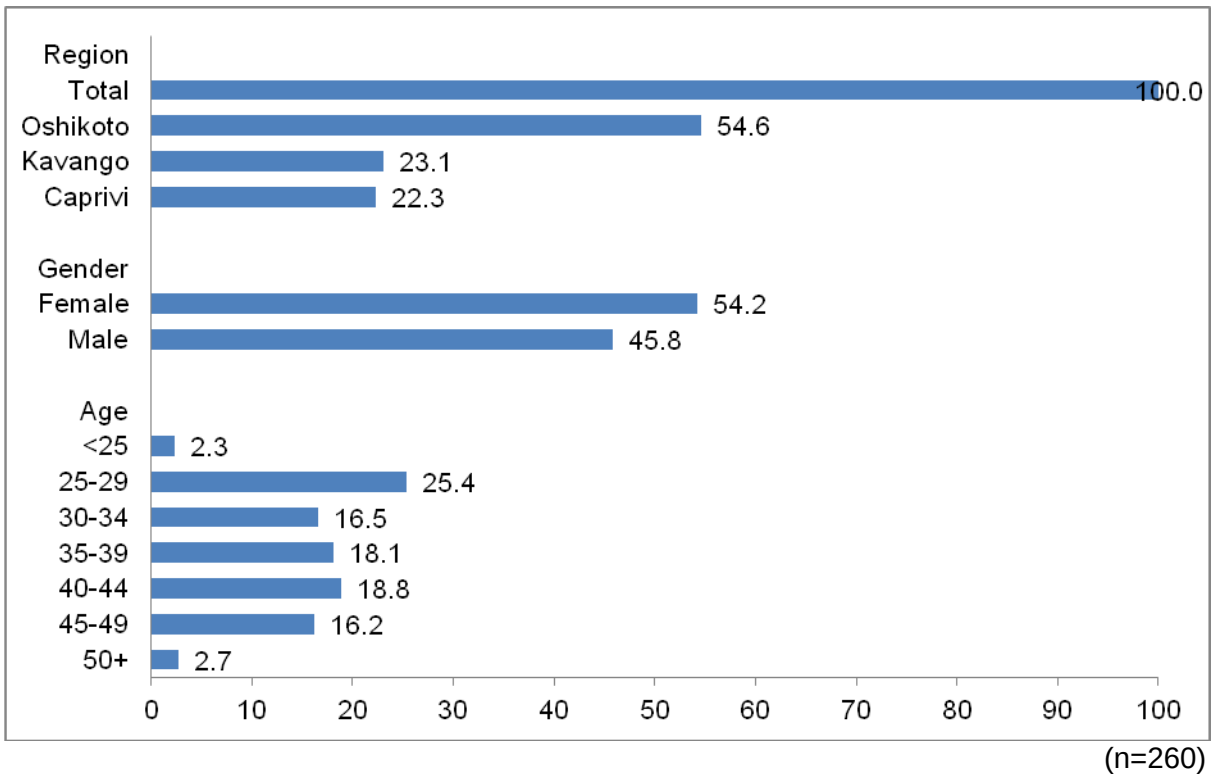
5.2 Biographical data

This first section of the thesis reports on the demographic characteristics (gender, age, teaching experience of teachers, teachers' highest professional qualifications, current grades taught, number of grades and subject(s) taught and class size) of the research respondents. Figures 5.1 - 5.7 provide details of the demographic status of respondents obtained from the questionnaire instrument. Tables 5.1 and 5.2 report on the measures of central tendency (means, modes, range, and standard deviations) for age, gender and teaching experience, respectively.

However, Figures 5.8 - 5.11 and Tables 5.3 and 5.4 present findings of teachers' knowledge, understanding and awareness of the curriculum. Figure 5.12 and Table 5.5 present findings of teachers' attitudes toward the curriculum. Findings about teachers' beliefs about the curriculum are presented in Figures 5.13 and 4.14. Furthermore, Figures 5.15 - 18 and Table 5.6 present findings of teachers' behaviour/self-efficacy about the implemented curriculum. In addition, Figures 5.19 - 5.21 and Tables 5.7 - 5.10 provide descriptive data of internal school factors, followed by Figures 5.22 - 5.24 and Tables 5.11 - 5.17, which present data on outside school support factors. Results are summarised and reported by percentages.

5.2.1 Demographic characteristics of sampled teachers

Figure 5.1 below displays the main demographic characteristics of the sample population (see Appendix 1).



(n=260)

Figure 5.1: Region, gender and age of sampled teachers

A total of 260 (54.2% females and 45.8% males) participated in this research study. More than half (54.6%) of teachers were in Oshikoto, followed by Kavango (23.1%) and Caprivi (22.3%) region. As seen from Figure 5.1, 25.4% of the participants were aged 25-29 years, followed by those who were aged 40-44 years (18.8%). The chart also illustrates that 18.1% of the teachers were 35-39 years old, whereas 16.5% were 30-34 years old. The chart below also shows that 45-49 years old teachers accounted for 16.2%, while only 2.7% and 2.3% of teachers were 50+ and <25 years old, respectively. From these data it appears that about 60% of the respondents are middle-aged, that is, are between 25 to 40 years old. The data also shows that more than half of the teachers in the sampled schools and regions for this study are females.

Table 5.1 presents the research participants' overall mean age in terms of the youngest and the oldest teacher who took part in the current study.

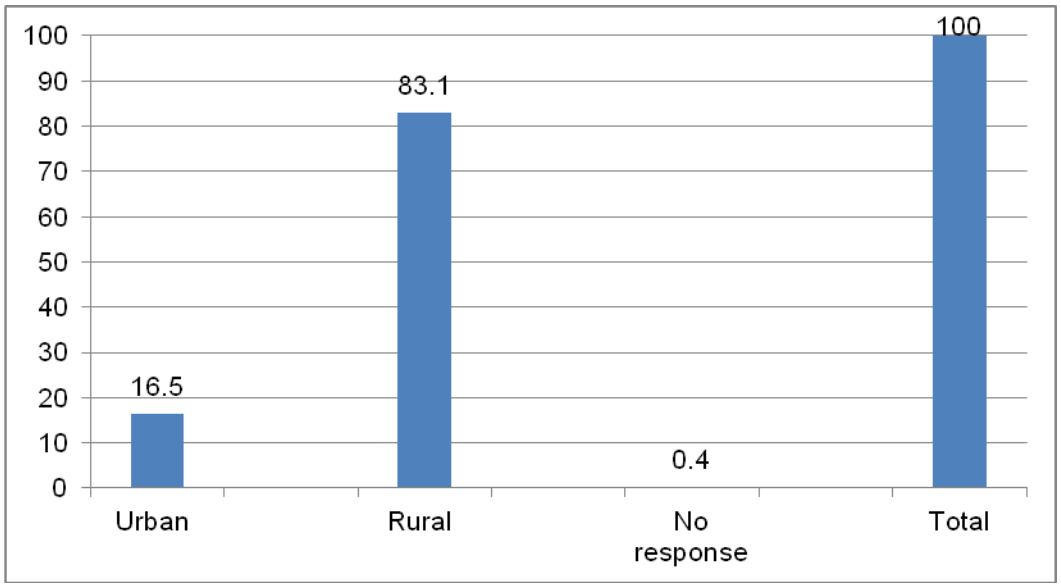
Table 5.1: Participants' overall mean age

(n=260)

Age	Number		Mean	Std. Error of Mean	Median	Mode	Std. Deviation	Variance	Skewness	Std. Error of Skewness	Kurtosis	Std. Error of Kurtosis	Range	Minimum	Maximum
	Valid	260	36.40	.463	36.50	28	7.471	55.823	.149	.151	-1.167	.301	29	23	52
	Missing	0													

In this table the average age of respondents was 36.40 years (*SD* = 7.471). From this table we can also see that the youngest, a female teacher, was 23 years old (*M* = 36.40, *SD* = 36.40, *SD* = 7.471). As illustrated in the table below male participants were slightly older than their female counterparts, with the oldest male teacher aged 52 years (*M* = 36.40, *SD* = 7.471).

Figure 5.2 below displays data of teachers who took part in this study by type of school location, 12 months prior to the time data for the current study were collected

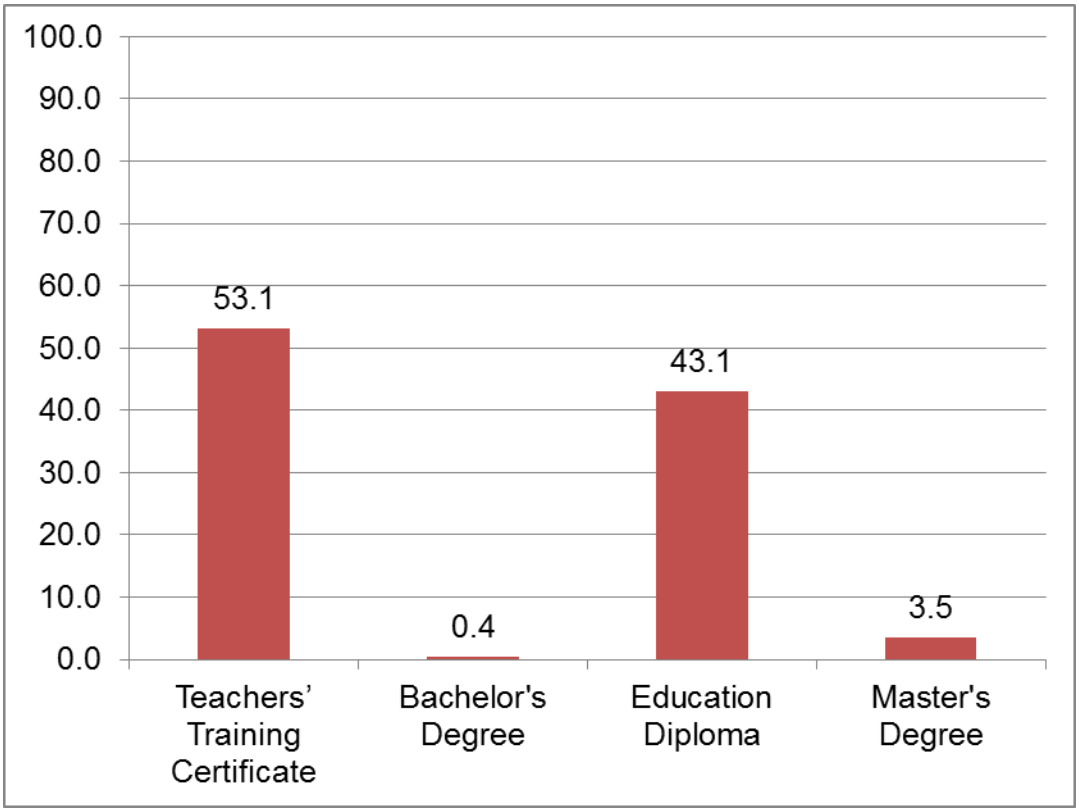


(n=260)

Figure 5.2: Percentage of teachers by school location

From the chart above we can see that the majority (83.1%) of respondents in the current study were teaching in rural areas. Less than a fifth (16.5%) of teachers taught in urban schools. As shown in this chart only 0.4% of respondents did not respond to this question. Read together with Figure 5.1, it appears that most of the teachers in the sampled secondary schools in the current study are females, and the majority of them are deployed in rural areas.

In Figure 5.3 below results to the question of teachers' highest professional qualification are displayed.



(n=260)

Figure 5.3: Highest professional qualification

As shown in Figure 5.3, about half (53.1%) of the participants in the current study had a teacher training certificate, with 43.1% qualified by an education diploma and master's degree (3.5%). While 3.5% of respondents had master's degrees, only 0.4% had bachelor's degree.

The findings indicate that the majority (96.2%) of the teachers in the current study either had a teacher training certificate (53.1%) or an education diploma (43.1%). The 2010 National Curriculum states that a Junior Secondary Level teacher must be qualified at diploma level, whereas a Senior Secondary teacher must have a degree in education or a degree and an education diploma (MoE, 2010:37). An interesting observation to note is whether the majority of teachers in the current study are qualified enough to teach at secondary school phase?

This study also collected data on teachers' teaching experience and the results in percents are shown in Figure 5.4 below.

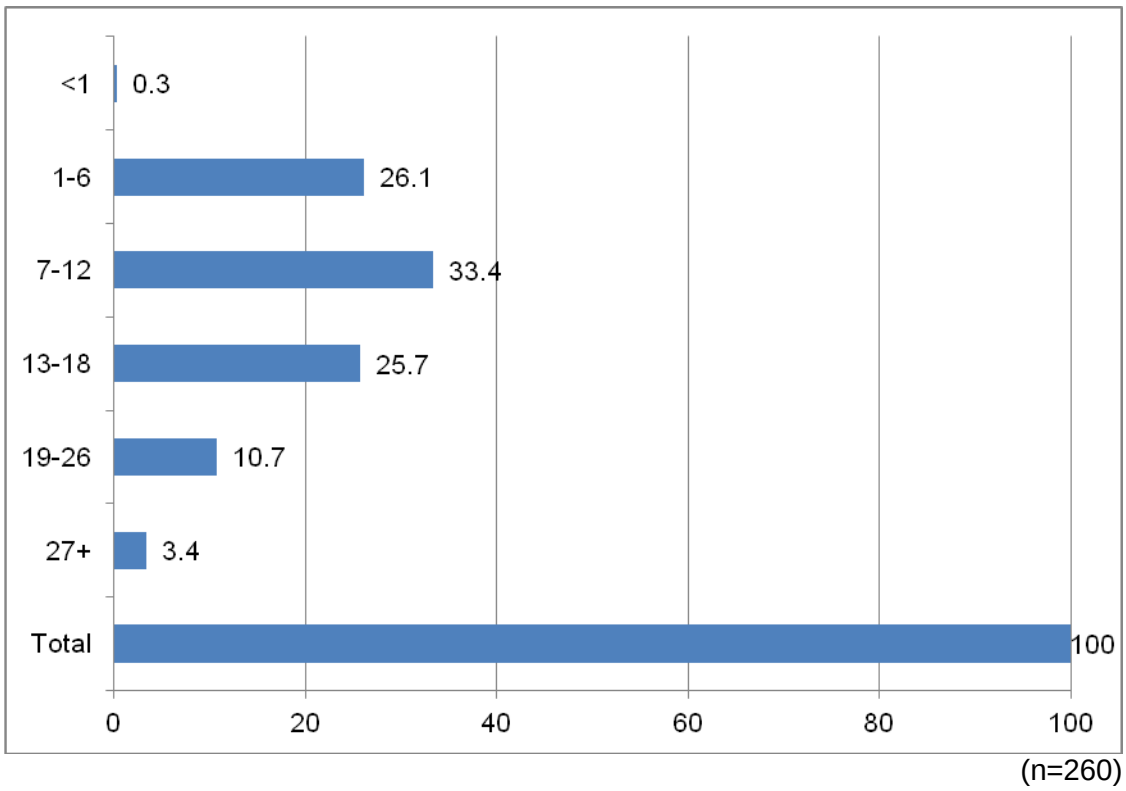


Figure 5.4: Teaching experience

From the chart above we can see that 33.4% of the respondents have 7-12 years of teaching experience. 26.1% of the respondents have 1-6 years of teaching experience. Around a quarter (25.7%) of teachers reported that they have 13-18 years of teaching experience. The same chart also shows that 10.7% of teachers have 19-26 years of teaching experience. Only 3.4% of teachers have 27+ years of teaching experience. 0.3% of teachers have <1 year of teaching experience.

These results seem to suggest that the majority of teachers in the current study had more than 5 years of minimum teaching experience. An interesting question is "does teachers' experience and qualification influence the implementation of the intended secondary school curriculum policy at the classroom level?"

The table below presents data in percentages on the overall average teaching experience of all respondents who took part in the current study and the mean teaching experience in their current schools.

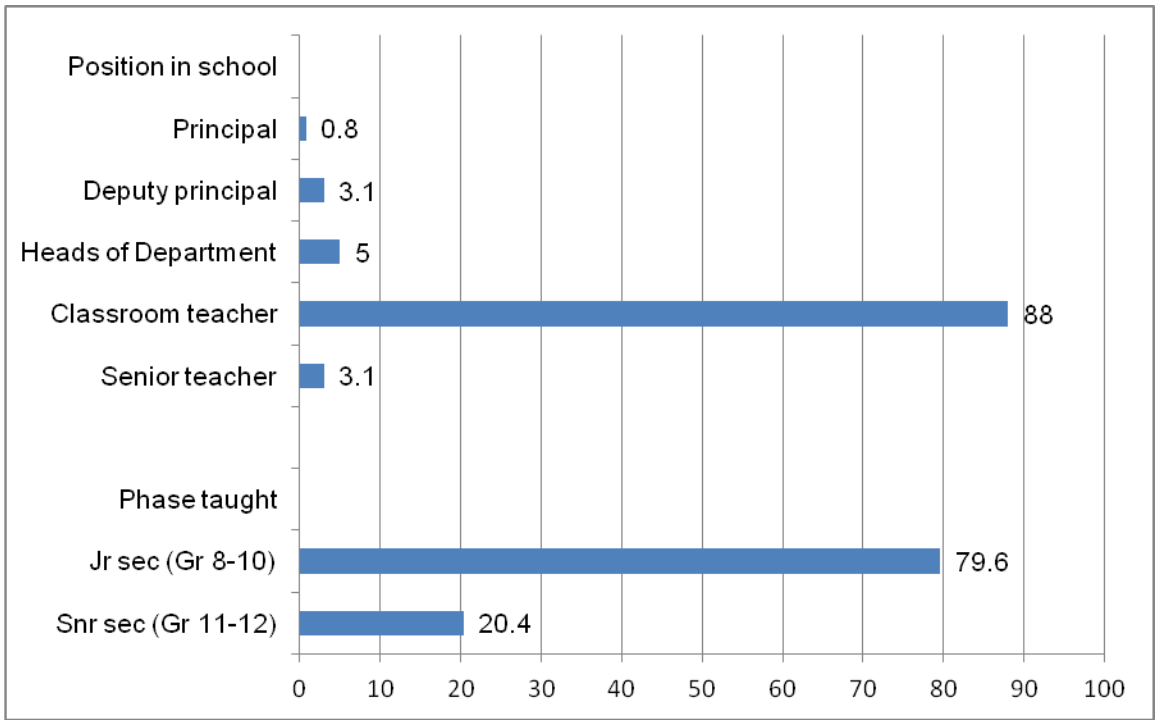
As can be seen in Table 5.2 below, the overall average teaching experience of all respondents was just more than 11 years (*M* = 11.5, *SD* = 6.495), whereas the mean teaching experience in their current schools was just more than six years (*M* = 6.8, *SD* = 4.794).

Table 5.2: Mean teaching experience

(n=260)

Question	N	Mean	Median	Std. Deviation	Minimum	Maximum
Number of years as a teacher	260	11.5	11	6.495	0	30
Number of years teaching in current school	260	6.8	5.5	4.794	0	25

Figure 5.5 below displays the current positions of respondents who participated in this study and the school phases they were teaching when the current study took place.

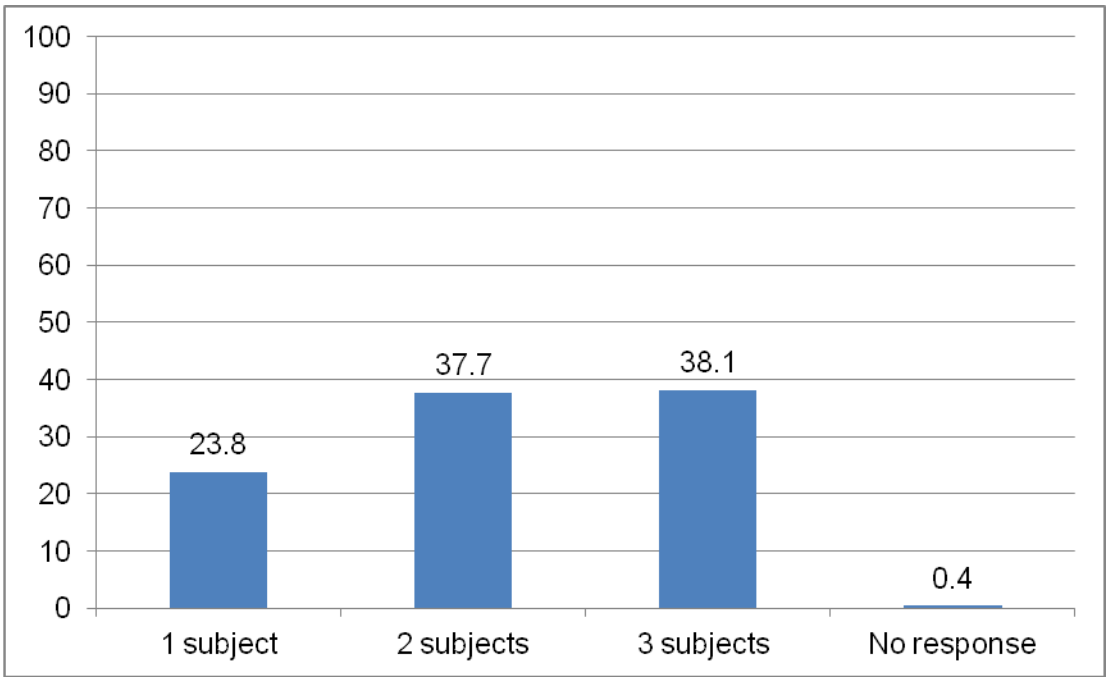


(n=260)

Figure 5.5: Current school position and phase taught

Figure 5.5 above illustrates that the majority (88%) of respondents in this study were classroom teachers followed by a sizable proportion of Heads of Departments (5%), senior teachers (3.1%) and deputy principals (3.1%). A small number (0.8%) were principals. While more than three quarters (79.6%) of the respondents taught at junior secondary phase, about 20.4% teachers in the current study taught at senior secondary phase.

Figure 5.6 presents the results of the question on the number of subjects teachers sampled for this study taught at the time when data for the current research study were collected.



(n=260)

Figure 5.6: Number of subjects taught

As shown in Figure 5.6 just over a third of respondents taught either two or three school subjects (37.7% and 38.1%) respectively. Whereas around 23.8% of teachers taught a single subject, only about 0.4% of respondents did not respond to this question. These findings are in line with the guidelines of the 2010 National Curriculum for Basic Education on the number of subjects teachers at junior and secondary phases are allowed to teach (see 3.4.3).

Teachers in the current study reported that they were teaching different class sizes as displayed in Figure 5. 7 below.

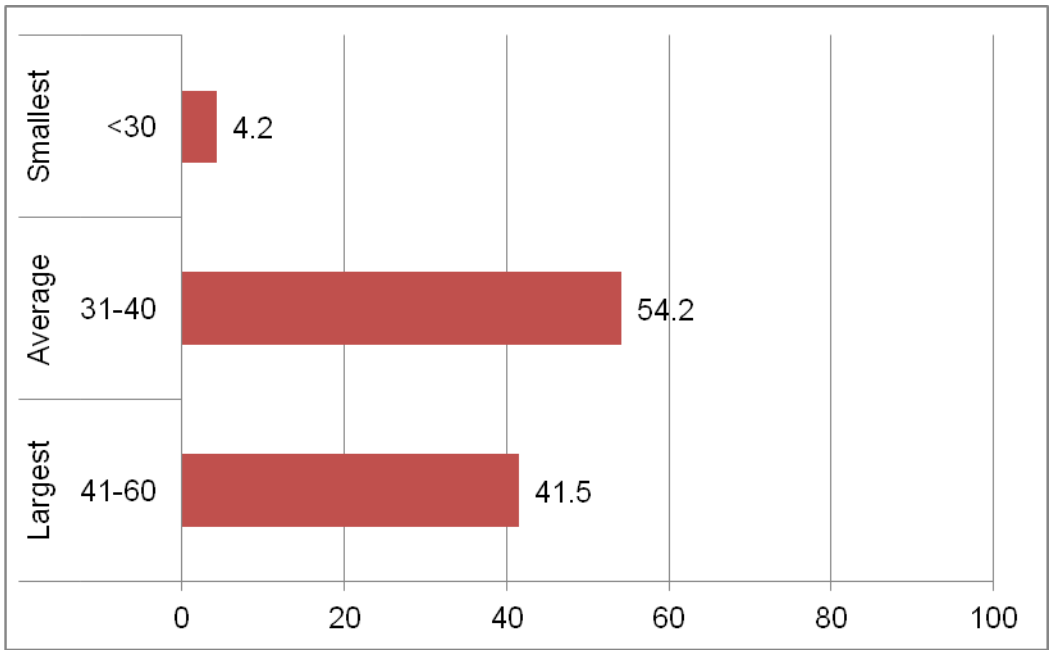


Figure 5. 7: Class size

Figure 5.7 above shows that 54.2% of respondents in this study had class sizes ranging from 31 to 40 learners. While 41.5% of respondents reported class sizes of 41 to 60 learners, a mere 4% of teachers taught classes with less than 30 learners. These findings contradict the recommendations of the National Curriculum for Basic Education of 35 learners per class at secondary school phase (see 3.4.8).

In summary, the demographic data presented above, show that more than half of the respondents in the present study were females; youthful and had 1-2 years of teacher training certificate or a 3 year diploma. The data also indicate that most respondents were class teachers teaching in rural schools with approximately 60 learners per class. In addition, the results of the demographic characteristics of the respondents show that teachers in this study were teaching a maximum of three school subjects. It also emerged from the demographic data that teachers in the current study had slightly more than 11 years of teaching experience, and slightly more than six years of teaching experience in their current schools. The results also showed that more than three quarters of teachers in this study teach at junior secondary phase.

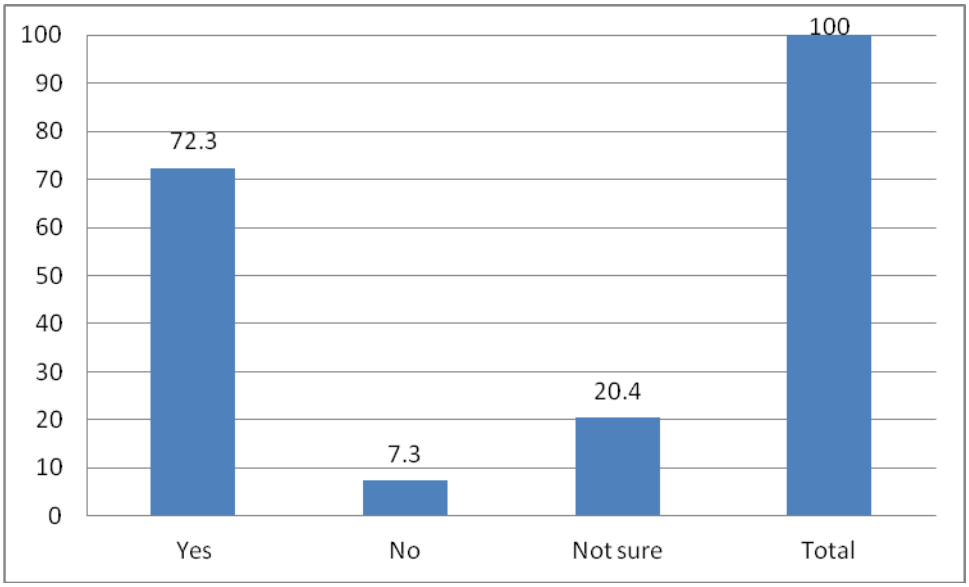
An interesting aspect of the teachers' demographic characteristics is that whereas more than half (53.1%) of the respondents have 1-2 years of teacher training certificate, about 43.1% have a 3 year education diploma (see Figure 5.3). A question that arises from these data is that given the criticisms leveled against the current state of Namibia's education system, does the 96.2% of teachers in the current study with a 1-3 year teacher certificate or diploma "good" enough to teach at the secondary phase and be expected to have positive effects on classroom results? Chapter 6 discusses this question in relation to the literature reviewed for the current study (see 3.5).

The following section presents the results of the questions on teachers' epistemologies with regard to knowledge, understanding and teachers' awareness of the 2010 national curriculum.

5.3 Teachers' epistemological factors

This section presents findings of the questions related to teachers' knowledge, understanding and awareness of the National Curriculum for Basic Education. In order to find out teachers' level of knowledge, understanding and awareness of the national curriculum six questions were asked (see Appendix 1). However, before we understand about whether or not teachers have knowledge, understand or are aware of the intended secondary school curriculum, research respondents were asked to indicate if they had received the National Curriculum for Basic Education. Figure 5.8 below presents the percent of the teachers who received and those who did not receive the National Curriculum for Basic Education.

5.3.1 Knowledge, understanding and awareness of the national curriculum



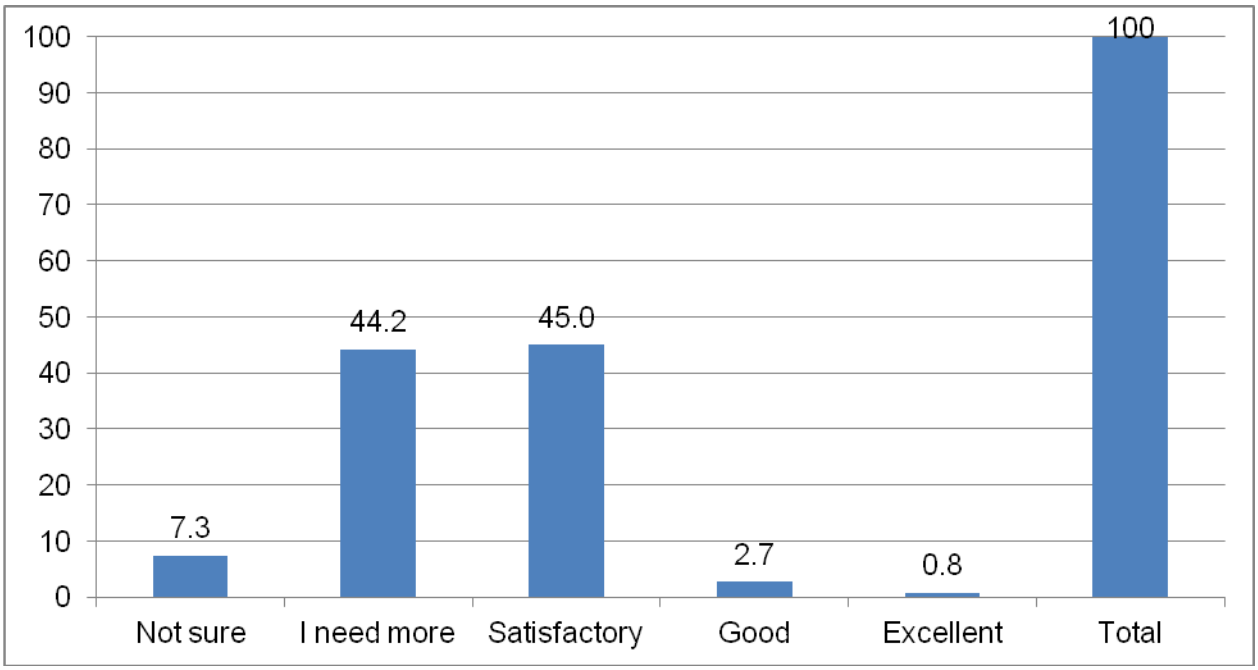
(n=260)

Figure 5.8: Received copy of the National Curriculum for Basic Education

In the chart above 72.3% of respondents admitted that they received a copy of the National Curriculum for Basic Education; whereas 20.4% who were not sure and 7.3% who did not receive the curriculum policy document.

These results tell us that though the Ministry of Education managed to disseminate or distribute the national curriculum policy document to nearly three quarters (72.3%) of the teachers surveyed in the current study, more could still be done to ensure that all teachers receive a copy of the national curriculum policy including the 7.3% of teachers who did not receive the curriculum document policy. In line with these results, Carl (2009:117) states that to improve teachers' self-knowledge about the curriculum and to enhance their understanding of the innovation the dissemination process should be carried out in a planned and structured manner (see 1.7).

Teachers in the current study were also asked to rate their own knowledge of the National Curriculum Statement and the results of their responses are displayed in Figure 5.9 below.



(n=260)

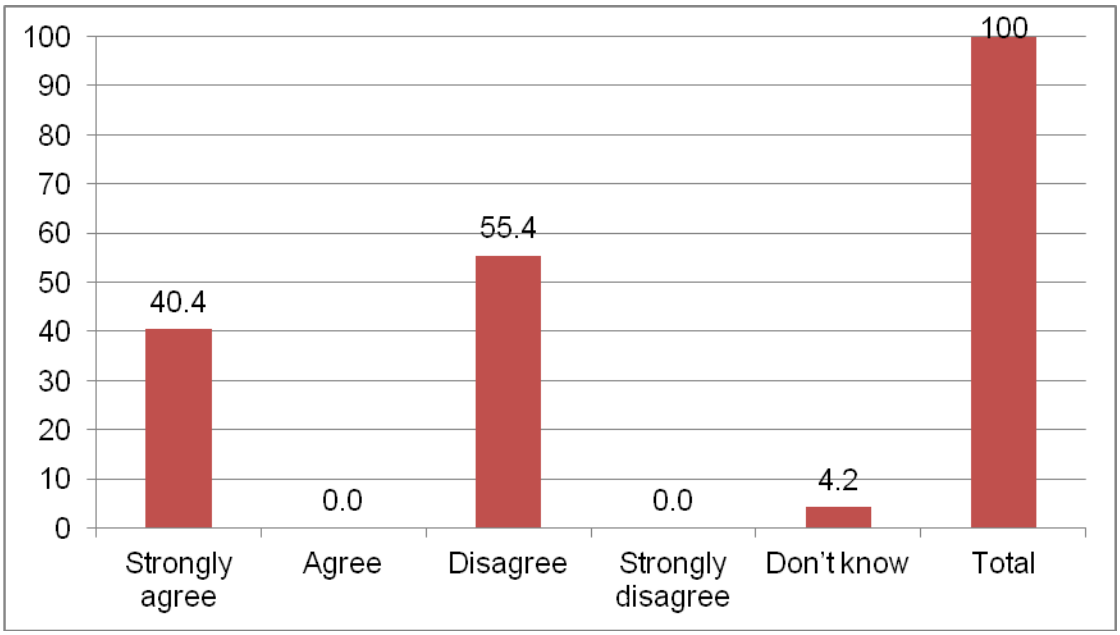
Figure 5.9: Rate of own knowledge of the National Curriculum Statement

In Figure 5.9 above, 45.0% of the teachers reported that they have a satisfactory knowledge of the National Curriculum for Basic Education; while about 44.2% of the respondents indicated that they need more information in order to increase their knowledge of the curriculum policy. About 2.7% and 0.8% accounted for good and excellent knowledge, respectively. Just 7.3% of respondents were not sure of their own knowledge of the National Curriculum Statement.

When these results are analysed together with those presented in Figure 5.8 above, it is evident that despite most teachers reporting that they received a copy of the curriculum document policy, just about 3.5% of teachers reported that they have good or excellent knowledge of the curriculum. Interestingly, the majority of teachers (89.2%) reported that their own knowledge of the national curriculum was either satisfactory (45%) or they need more information (44.2%) to improve their knowledge of the curriculum policy (see Figure 5.9).

Considering all the results displayed in Figures 5.8 and 5.9, therefore, it may be concluded that high access to information materials does not necessarily mean that teachers have high knowledge of the curriculum policy. There are possible reasons for this conclusion. First, it might mean that teachers in this study did not read the curriculum policy because they do not have copies of the curriculum document in their schools. Alternatively, it may show that teachers have limited access to the single copy of the national curriculum kept in the principal's office. Or it may demonstrate that teachers in the present study were not trained through subject meetings, workshops, personal meetings; coaching and mentoring opportunities to prepare them to curriculate (Carl, 2009:117).

After determining whether respondents received the curriculum policy, teachers were asked to indicate strongly agree, agree, strongly disagree, disagree or don't know to the statement whether they thought the national curriculum framework prepares students to live and work in the 21st century. Figure 5.10 below presents the results of this question.



(n=260)

Figure 5.10: Level of agreement to the National Curriculum Framework

The graph above highlights the fact that whereas 55.4% of teachers in this study disagreed that the national curriculum framework prepares students to live and work in the 21st century, about 40.4% of the teachers strongly agreed that indeed the national curriculum prepared students to meet the life challenges of the 21st century. Moreover, it can be seen from the Figure 5.10 that 4.2% of the teachers in this study indicated that they did not know whether the national curriculum framework prepared students to live and work in the 12st century or whether it prepared them to meet the challenges of the 21st century. There were no responses (0.0%) recorded from teachers for agree and strongly disagree on the same question.

It is interesting to note that because more than half (55.4%) of the teachers strongly disagreed or disagreed that the national curriculum framework prepares students to live and work in the 21st century, one may infer that teachers who responded to this question do not believe that the key learning areas of the implemented secondary school are sufficient to meet the current and future socio-economic needs of students required in the 21st century.

After gauging teachers' level of agreement to the statement of intent of the National Curriculum Framework, the current study asked a question to learn about teachers' knowledge of the National Curriculum Framework. The results of the teachers' knowledge about National Curriculum Framework are illustrated in Table 5.3 below. The data test for Question 14 (see Appendix 1) which had five items (SA= Strongly Agree, A= Agree, SD= Strongly Disagree, D= Disagree, DK= Don't Know was collapsed to form three (SA/A= Strongly Agree/Agree, SD/D= Strongly Disagree/Disagree, DK= Don't Know) response categories (see Table 5.3).

Table 5.3: Teachers' knowledge about the National Curriculum Framework

(n=260)

Type of skill	**Response in %**		
	SD/D	**SA/A**	**DK**
Communication skills	85.3	10.8	3.9
Information skills	74.2	21.3	3.5
Numeracy skills	74.5	21.6	3.9
Problem-solving skills	68.7	29.8	1.5
Physical skills	61.1	34.3	4.6
Self-management/competitive skills	61.5	37.0	1.5
Social/cooperative skills	74.6	22.7	2.7
Work/study skills	72.7	25.4	1.9

SA= Strongly Agree, A= Agree, SD= Strongly Disagree, D= Disagree, DK= Don't Know

Table 5.3 shows that the majority (85.3%) of teachers strongly disagreed or disagreed that communication skill is emphasised in the National Curriculum Framework. On the same skill, 10.8% of the teachers strongly agreed or agreed; whereas 3.9% replied don't know. Also in this table we note that whereas 74.2% of the teachers strongly disagreed or disagreed that information skills are emphasised in the national curriculum, 21.3% strongly agreed or agreed and 3.9% stated don't know. With regard to numeracy

skills about three quarters (74.5%) of the teachers surveyed strongly disagreed or disagreed that numeracy skills are emphasised in the national curriculum. Whereas 21.6% of the teachers strongly agreed or agreed, 3.9% indicated don't know to this question.

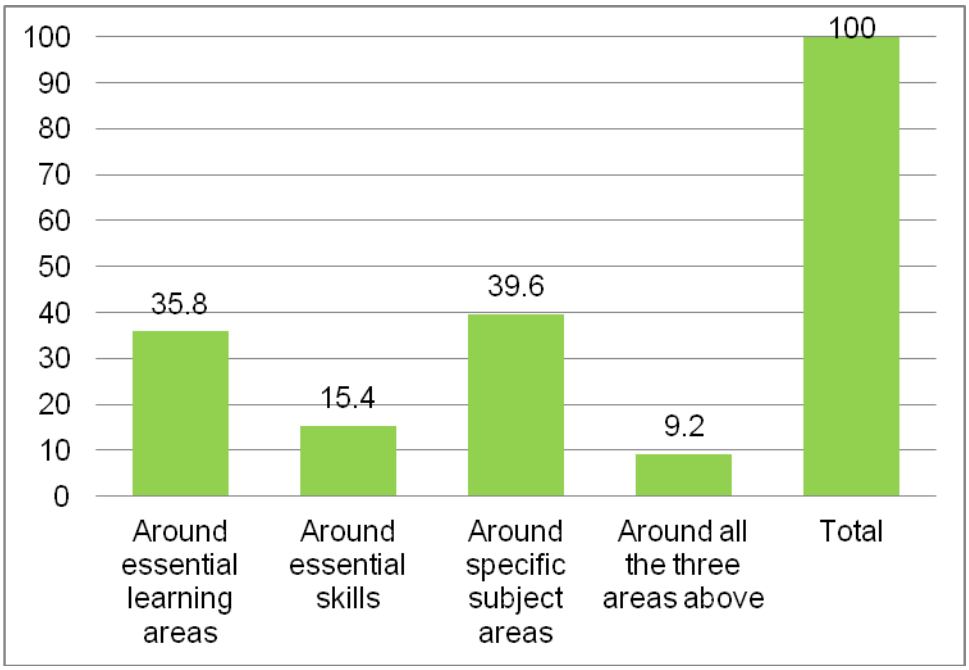
Moreover, Table 5.3 also displays data that shows that 68.7% of the teachers strongly disagreed or disagreed that the national curriculum emphasises problem-solving skills, 29.8% strongly agreed or agreed and 1.5% replied don't know. We can also observe from this table that 61.1% of respondents strongly disagreed or disagreed that the national curriculum emphasises physical skills, whereas 34.3% strongly agreed or agreed.

With respect to self-management/competitive skills, we can see in the table above that 61.5% of teachers strongly disagreed or disagreed, 37.0% strongly agreed or agreed, and 1.5% indicated don't know. Furthermore, we can also note from Table 5.3 above that 74.6% of teachers strongly disagreed or disagreed that social/cooperative skills are emphasised in the national curriculum. 22.7% strongly agreed or agreed and 2.7% replied don't know.

Also shown in this table is that whereas about three quarters (72.7%) of teachers strongly disagreed or disagreed that work/study skills were emphasised in the national curriculum, 25.4% strongly agreed or agreed and 1.9% responded don't know.

The results of Figures 5.8, 5.9 and 5.10 and Table 5.3 seem to concur with prior research on the effects of knowledge on teachers' ability to implement a curriculum innovation. As stated in section 3.5.2.1, what a new policy mean for teachers depends to a great extent on their repertoire of existing knowledge and experience. These analyses undoubtedly confirm that Namibian teachers' existing declarative knowledge base of the goals (see 3.4.1) and core skills (see 3.4.2) outlined in the national secondary school curriculum is low.

Figure 5.11 below provides results of the teachers' awareness of how the intended secondary school curriculum is organised. As indicated in section 3.4.2 the National Curriculum for Basic Education is organised around essential learning areas and essential skills.



(n=260)

Figure 5.11: Teachers' awareness of the organisation of the secondary school curriculum

Figure 5.11 shows that 39.6% of the respondents were of the opinion that the national curriculum was organised around specific subject areas; whereas 35.8% of the teachers replied that the national curriculum was organised around essential learning areas. Also as can be seen from this chart that 15.4% of the teachers surveyed indicated that the curriculum was organised around essential skills and 9.2% of teachers suggested that the curriculum was organised around all the three other areas (learning areas, essential skills and specific subject areas).

From these results we may conclude that with such small percentages split between the two items (essential learning areas and specific subject areas) and the spread of teachers' responses to other two items (around essential skills and around all the three

areas above) displayed in Figure 5.11, all teachers in the current study seem to suggest that they are not familiar with their curriculum.

Table 5.4 below displays results to the question of how teachers' understand the National Curriculum Framework. The dataset (see Appendix 1: Question 16) had five items (SA= Strongly Agree, A= Agree, SD= Strongly Disagree, D= Disagree, DK= Don't Know, which was collapsed to form three (SA/A= Strongly Agree/Agree, SD/D= Strongly Disagree/Disagree, DK= Don't Know) response categories (see Table 5.4).

Table 5.4: Teachers' understanding of the National Curriculum Framework

(n=260)

Statements	**Response in %**		
	SA/A	**SD/D**	**DK**
How I should plan my classroom teaching?	73.2	26.8	0.0
The progression of learners' knowledge, skills and attitudes.	63.4	36.6	0.0
How I should develop specific learning outcomes based on the achievements of objectives?	60.5	39.5	0.0
How I should assess students' achievement and progress?	73.1	26.9	0.0
How I should communicate students' achievement within the school?	66.1	33.9	0.0
How I should report students' achievements to parents/guardians?	72.4	27.6	0.0
How I should meet the needs of Namibian students?	69.3	30.7	0.0

SA= Strongly Agree, A= Agree, SD= Strongly Disagree, D= Disagree, DK= Don't Know

As we can see from Table 5.4 most teachers strongly agreed or agreed with the seven key pillars of the implemented secondary school curriculum. For instance, as displayed in this table, 73.2% teachers strongly agreed or agreed that the implemented curriculum

framework provided them with guidelines on how I should plan their classroom teaching, whereas 26.8% strongly disagreed or disagreed.

Table 5.4 also shows that 63.4% of the teachers strongly agreed or agreed that the curriculum statement clarified the knowledge, skills and attitudes which learners should acquire and the progression of their competencies from lower to higher grades. On the contrary, 36.6% of the teachers strongly disagreed or disagreed.

In addition, we can see from this table that whereas 60.5% of the teachers strongly agreed or agreed that the curriculum framework outlines how teachers should develop specific learning outcomes based on the achievements of objectives; 39.5% strongly disagreed or disagreed.

Moreover, as we can also see from the table above, whereas 73.1% of the teachers surveyed for the current study strongly agreed or agreed that the curriculum framework explains how teachers should assess students' achievement and progress, less than one third (26.9%) strongly disagreed or disagreed.

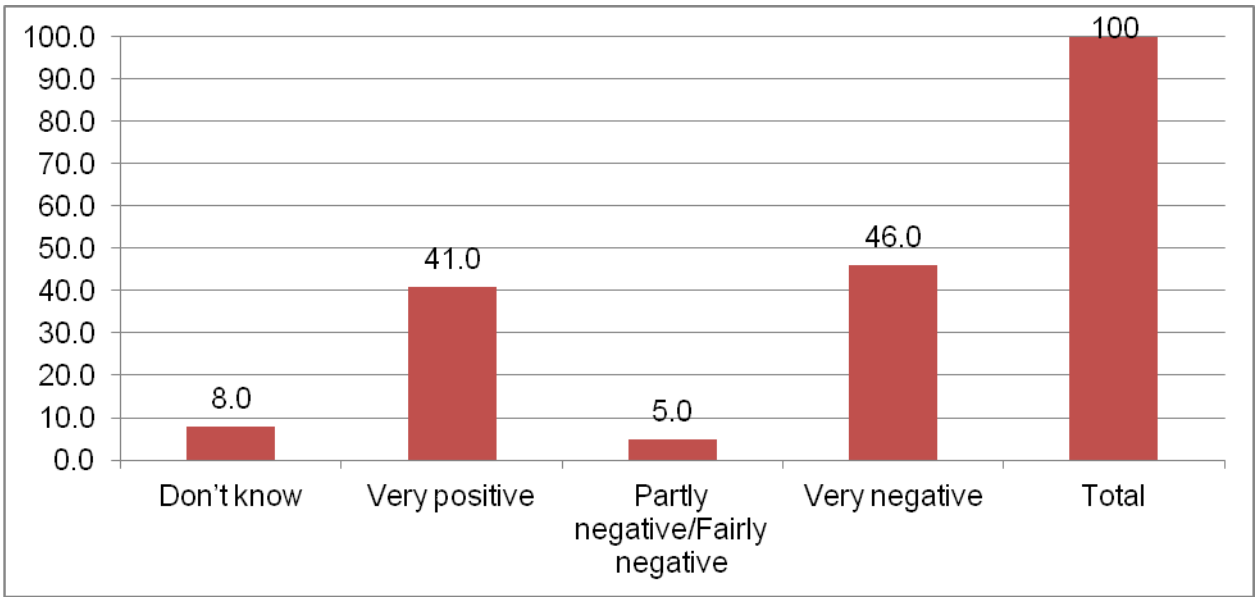
In addition, Table 5.4 above also shows that whereas 66.1% teachers strongly agreed or agreed that that the curriculum framework provides teachers with guidelines on how they should communicate students' achievement within the school environment, 33.9% strongly disagreed or disagreed. This table also shows that 72.4% of the teachers in the current study strongly agreed or agreed that the national curriculum provides guidelines on how teachers should report students' achievements to parents/guardians. On the contrary, 27.6% strongly disagreed or disagreed. Furthermore, the table above illustrates that whereas 69.3% of the teachers strongly agreed or agreed that the national curriculum describes how teachers should meet the needs of Namibian students, 30.7% strongly disagreed or disagreed. Overall, there were no (0.0%) responses for don’t know.

The results in Table 5.4 seem to contradict the findings displayed in Figures 5.8, 5.9, 5.10 and Table 5.3. For instance, while in the latter charts teachers' declarative knowledge and understanding of the intended curriculum was found to be low, Table 5.4 shows results to the contrary.

It was argued in this study that the knowledge of teachers about the curriculum innovation may have an effect on their attitudes towards the implemented secondary school curriculum policy. Figure 5.12 below displays the results of the question on teachers' attitudes towards the implemented secondary school curriculum.

5.3.2 Teachers' attitudes

Two questions were used to determine teachers' attitudes toward the implemented secondary curriculum. The dataset (see Question 17) that had five items (Don't Know, Very Negative, Fairly Negative, Partly Negative, Very Positive) was collapsed to form four (Don't Know, Very Negative, Fairly Negative/Partly Negative, Very Positive) response categories (see Figure 5.12).



(n=260)

Figure 5.12: Teachers' attitudes toward the implemented secondary school curriculum

Figure 5.12 above shows that about 46.0% of teachers in the current study have a very negative attitude towards the 2010 implemented secondary school curriculum. Also from this chart, we can see that about 5.0% of teachers surveyed are partly/fairly negative towards the curriculum. On the contrary, Figure 5.12 above also shows that 41.0% of the teachers have a very positive attitude towards the implemented curriculum. Only 8.0% of the respondents indicated don't know.

In reference to the data in the chart above, it seems that more than half of the teachers in the current study have negative attitudes towards the implementation of the intended secondary school curriculum.

Two important points may help to explain these results. One interpretation is that teachers have negative attitudes towards the intended secondary school curriculum because they do not have adequate knowledge about the secondary school curriculum as shown in Table 5.3. Or it may mean that if teachers have knowledge of the curriculum policy, they might simply not like the more process-oriented interpretative curriculum compared to the traditional product-based curriculum (Morris, 1988).

To learn more about respondents' attitudes towards the intended secondary school curriculum, teachers were presented with a list of ten statements on which they gauged themselves, their school management and parents' attitudes towards the secondary school curriculum. Compared to data outputs in Figure 5.12, a different picture emerged from the results provided in Table 5.5 below.

Table 5.5: Description of teachers' attitudes toward the National Curriculum Framework (n=260)

Statement	Response in %	
	Yes	No
I am satisfied with the current secondary school curriculum	73.5	26.5
The current secondary school curriculum has improved students' learning	60.0	40.0
The school management is pleased with the current curriculum	48.1	51.9
Parents of the learners in my class are pleased with the current secondary school curriculum	45.4	54.6
The current curriculum is too demanding in terms of my time, energy & skills spent on planning and teaching	81.5	18.5
I am insecure about how to implement the current secondary school curriculum	18.5	81.5
As a professional teacher I have nothing to learn from the current secondary school curriculum	16.2	83.8
I find the current secondary school curriculum confusing	21.2	78.8
I am not committed in teaching the current curriculum	16.5	83.5
The current secondary school curriculum clearly explains my expectations in the classroom situation	79.6	20.4

As displayed in Table 5.5 above, whereas nearly three quarters (73.5%) of teachers indicated that they were satisfied with the current implemented secondary school curriculum, 26.5% were not satisfied with the intended secondary school curriculum.

Also from this table, 60.0% of teachers replied that the current secondary school curriculum has improved students' learning. On the contrary, 40.0% of teachers stated that the 2010 secondary school curriculum has not improved students' learning.

Also as can see from Table 5.5 above, whereas 48.1% of teachers indicated that the school management was pleased with the current secondary school curriculum, 51.9% of the teachers replied that the school management is not pleased with the current curriculum.

Moreover, this table illustrates that 54.6% of the teachers indicated that parents of the learners in the sampled schools are not pleased with the current secondary school curriculum. Only about 45.4% of the teachers concurred that parents of the learners in the sampled schools were pleased with the intended secondary school curriculum.

Table 5.5 above also indicates that whereas 81.5% of teachers complained that the current curriculum is too demanding in terms of their time, energy and skills they spend on planning and teaching; only 18.5% stated to the contrary. Furthermore, as can be seen in this table, the majority (81.5%) of teachers indicated that they are not insecure about how to implement the current secondary school curriculum; only 18.5% responded to the contrary.

In addition, we can also note from the table above that the majority (83. 8%) of teachers in the current study indicated that they have nothing to learn from the 2010 secondary school curriculum, with only 16.2% stating that they have something to learn from the intended secondary curriculum. Further, whereas 78.8% of the teachers in the current study indicated that they did not find the current secondary school curriculum confusing, 21.2% responded that they find the current curriculum confusing.

From Table 5.5 above we can also see that the majority (83.5%) of teachers responded that they are committed in teaching the 2010 curriculum. Less than a fifth (16.5%) of teachers were contrary to the statement. Finally, Table 5.5 also shows that 79.6% of teachers indicated that the current secondary school curriculum clearly explains teachers' expectations in the classroom situation. Only 20.4% stated to the contrary.

Therefore, if these figures represent what teachers were willing to report about their own attitudes, it can be concluded that due to the demanding nature of the implemented curriculum the majority of teachers in this study have negative attitudes toward the 2010 secondary school curriculum. It is important to note that though slightly over half of the teachers indicated that the school management and parents are not pleased with the 2010 secondary school curriculum, much can still be done by policy makers to determine the reasons for the reported unhappiness among these key education role players, given their influence and interests in the country's education system (see 3.5.3.3 and 3.5.4.1.1).

It is interesting also to note that despite nearly three quarters of respondents reporting that they are satisfied with the 2010 secondary school curriculum, most teachers seem to doubt their own abilities to implement the curriculum.

These findings support literature reviewed (Kennedy & Kennedy, 1996; Young & Lee 1984:184), which indicate that attitude as an individual's affective and evaluative response to something is a crucial variable in implementing a curriculum innovation and without effecting a change in teachers' attitudes any systemic innovation in the curriculum will not have a significant effect on what goes on elsewhere (see 3.5.2.2). Ramsay *et al.,* (1999) concur and state further that it is important that the high attitudinal levels are not only maintained but also efforts should be taken to improve the attitudes of the school management and parents so as to facilitate the successful implementation of the secondary school in the classroom.

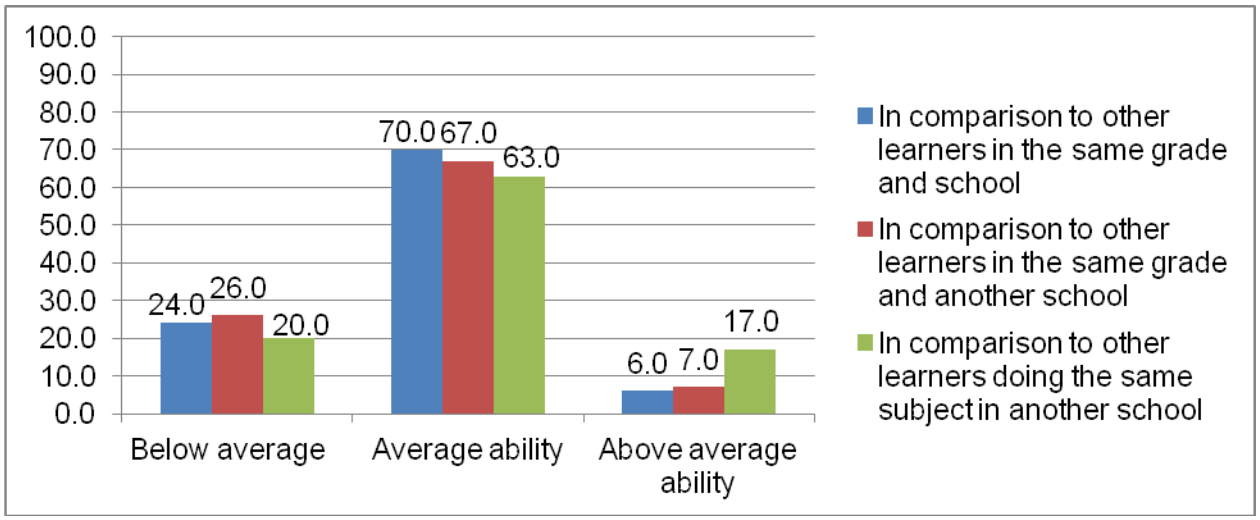
It was noted in section *3.5.2.3* that despite the differences that exist between attitudes and beliefs the two concepts are connected and thus critical in understanding, for instance, how they influence teachers' decisions to implement a new curriculum innovation.

To understand how these concepts might influence curriculum implementation, Figure 5.13 below presents results of the teachers' beliefs about their students ability in

comparison to other students in the same grade and school; and students in the same grade in another school.

5.3.3 Teachers' beliefs

Two questions were used to gauge teachers' beliefs about students' ability and their future prospects after completing the current secondary school curriculum.



(n=260)

Figure 5.13: Teachers' beliefs about the abilities of their students compared to students of other schools completing the implemented secondary school curriculum

The graph above shows that 24.0% of teachers believe that compared to other learners in the same grade and school, their learners are below average, whereas 26.0% believe that in comparison to other learners in the same grade but in another school were equally below average. Twenty percent (20.0%) of teachers believe that in comparison to other learners doing the same subjects their learners were below average.

Moreover, as can be seen from this graph, whereas 70.0% of the teachers surveyed in the current study indicated that in comparison to other learners in the same grade and school their learners' were of average ability, just over two thirds (67.0%) believed that in comparison to other learners in the same grade in another school were of average ability.

Nearly two thirds (63.0%) of teachers indicated that in comparison to other learners doing the same subjects in another school, their learners are of average ability.

Furthermore, Figure 5.13 also shows that only 6.0% of teachers believed that in comparison to other learners in the same grade and school their learners are above average. Only about 7.0% of teachers indicated that in comparison to other learners in the same grade but in another school, their learners were above average ability. Finally, the chart also shows that 17.0% of teachers believed that in comparison to other learners doing the same subjects but in another school, their learners are above average.

From these results it is clear that the majority of teachers in this study do not believe that their learners compared to other learners in the same grade and school, another school and doing the same subjects, cannot academically perform better than their current average performance. There are many possible explanations that can be attributed to these findings.

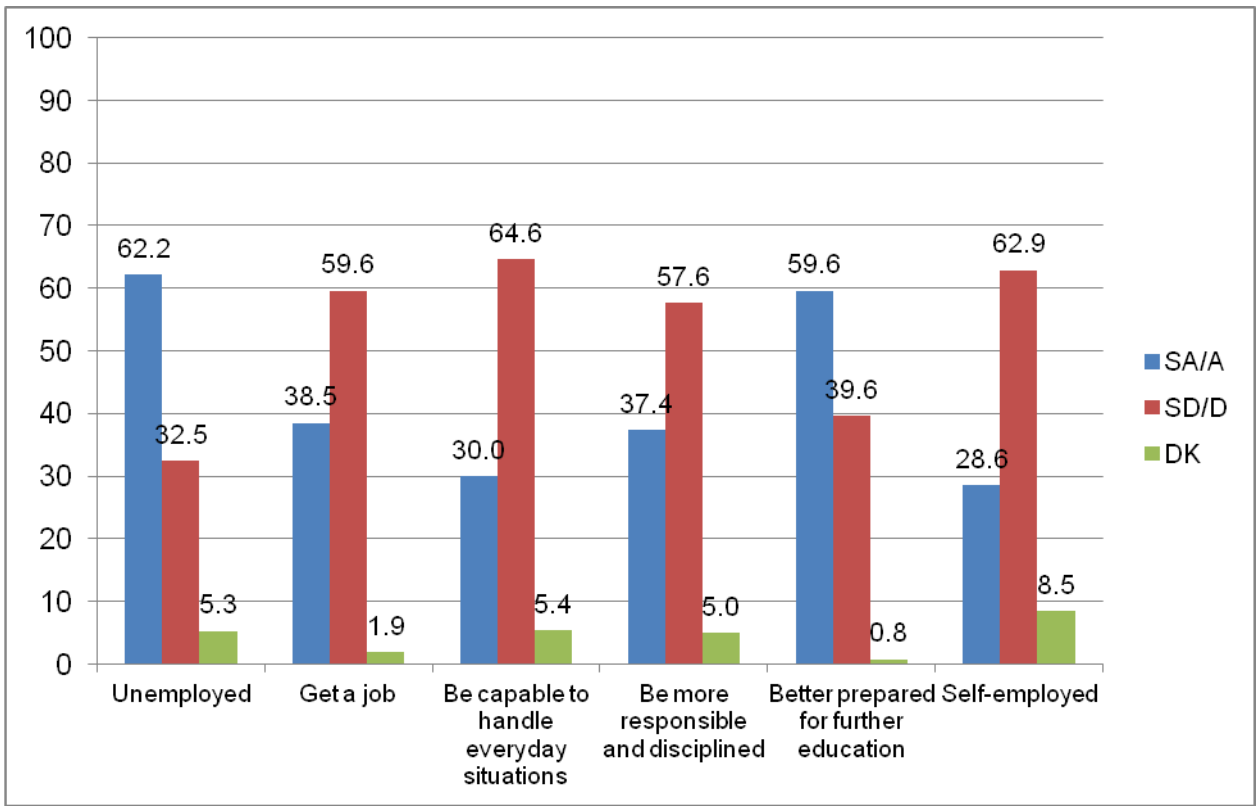
One possible explanation is that (see 3.5.2.3), teachers in this study may hold numerous implicit assumptions about curriculum, schooling, students, teaching and learning and knowledge (Blake & Monahan, 2007), which makes them believe that most of their students are average learners.

Second, it may as well be concluded from these results that most teachers in this study do not believe in the "zone of proximal learning", a social aspect of learning introduced by Vygotsky (1978) which actually forms part of social constructivism. In other words, teachers in this study seem to suggest that the students' academic performance have not improve beyond their actual developmental level despite the support and guidance from their teachers and from more capable peers (see 3.4.5).

These results have implications on how teachers interpret and implement Namibia's learner-centred curriculum in the classroom situation (see section 3.4.6). For instance, there is a commonly held assumption that how teachers communicate their expectations and beliefs about teaching and learning through both actions and words may in turn influence how learners behave and perform in their school work (Moore & Hansen, 2012:28-29).

Based on these self-reported results, it may as well be suggested that teachers in this study communicate low expectations, perhaps through their actions and words to learners, which in turn accept mediocre work and failure from their learners (see 3.5.2.3).

Whereas Figure 5.13 above presents teachers' beliefs about abilities of students completing the implemented secondary school curriculum, Figure 5.14 below displays results of teacher beliefs about the future of students completing the implemented secondary school curriculum. As shown in Appendix 1, Question 20 had five items (SA = Strongly Agree, A = Agree, SD = Strongly Disagree, D = Disagree, DK = Don't Know which was collapsed to form three (SA/A = Strongly Agree/Agree, SD/D = Strongly Disagree/Disagree, DN = Don't Know) response categories (see Figure 5.14).



(n=260)

Figure 5.14: Teachers' beliefs about the future of students completing the implemented secondary school curriculum

The chart above shows that 62.2% of teachers strongly agreed or agreed that students completing the current secondary school curriculum will be unemployed. While 32.5% of the teachers strongly disagreed or disagreed; 5.3% of the teachers indicated "don't know" to this statement. Whereas 38.5% of the teachers surveyed in the current study strongly agreed or agreed that students completing the current secondary school will get a job, 59.6% strongly disagreed or disagreed with the statement. Around 1.9% of the respondents indicated "don't know" to this question.

The chart above also shows that 64.6% of teachers strongly disagreed or disagreed that students completing the current secondary school curriculum will be capable of handling their everyday life situations. Whereas 30.0% strongly agreed or agreed that students completing the current secondary school curriculum will be capable of handling their everyday life situations; only 5.4% of respondents indicated the "don't know" response to this statement.

As can also be seen from Figure 5.14 above, whereas 37.4% of teachers strongly agreed or agreed that students completing the current secondary school curriculum will be more responsible and disciplined citizens, 57.6% strongly disagreed or disagreed with the statement and 5.0% replied don't know.

However, the chart above also shows that 59.6% of teachers strongly agreed or agreed that students completing the current secondary school curriculum will be better prepared for further education. On the contrary 39.6% strongly disagreed or disagreed with the same statement. 0.8% of respondents indicated a "don't know" response to the same statement.

Figure 5.14. also shows that whereas 28.6% of the respondents in the current study strongly agreed or agreed that the students completing the current secondary school curriculum will be self-employed, 62.9% strongly disagreed or disagreed and 8.5% of the teachers responded don't know to the statement.

As stated in section 3.4.5 of this thesis the secondary school curriculum was designed to prepare learners for adult life, tertiary studies or direct entry to employment. In the Namibian context, curriculum outcomes give direction of where the education system aspires to be and reflect value judgements. In other words, outcomes provide teachers and curriculum decision makers a philosophical base and a long-term framework for what is desired of learners as a result of experiencing the curriculum (Ornstein & Hunkins, 2004).

It is clearly stated in 3.5.2.3 that if an implemented curriculum is a set of beliefs put into action, then curriculum policy-makers may do well to look in depth at teachers' beliefs (Short & Burke 1996). As can be seen in Figure 5.14 the majority of teachers seem to indicate beliefs contrary to the philosophical base of the implemented secondary school curriculum. Based on teachers' self-reported responses, most respondents seem to believe that despite the good intentions articulated in the secondary school curriculum,

such desired goals may be difficult to achieve. These results are compatible with Short and Burke (1996) who state that if teachers' beliefs are not congruent with the beliefs underpinning an educational reform, then the aftermath of such a mismatch can affect the teachers' willingness to implement the innovation. Whereas, if teachers hold beliefs compatible with the innovation then acceptance will be more likely to occur.

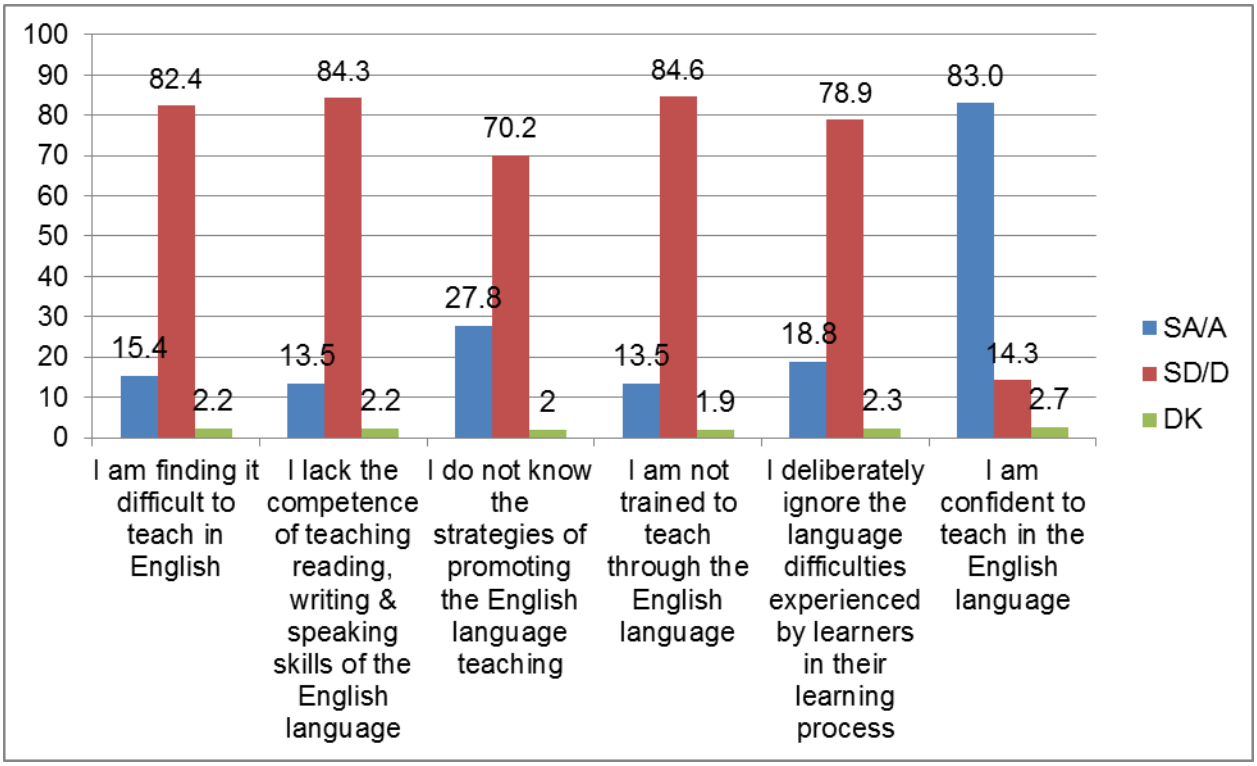
Therefore, with most teachers reporting negative beliefs towards the outcomes of the secondary school curriculum, it could be concluded that the "crippled" nature of the education system in Namibia may be caused by teachers' negative beliefs as reported in this study (see 3.5.2.3).

After obtaining information regarding whether or not teachers' knowledge, attitudes and beliefs can inhibit or support the implementation of the intended secondary school curriculum, questions gauging teachers' self-efficacy were presented to all research respondents in the current study. Figure 5.15 illustrates teachers' self-efficacy about implementing the intended secondary school curriculum.

5.3.4 Self-efficacy/behaviour

To understand teachers' level of self confidence in implementing the intended secondary school curriculum five questions ranging from their personal experiences about the curriculum, confidence in using English as medium of instruction and types of actual activities implemented in the classroom situation were used to collect data related to self-efficacy.

As shown in Appendix 1, Question 20 had five items (SA = Strongly Agree, A = Agree, SD = Strongly Disagree, D = Disagree, DK = Don't Know which was collapsed to form three (SA/A = Strongly Agree/Agree, SD/D = Strongly Disagree/Disagree, DN = Don't Know) response categories (see Figure 5.14).



(n=260)

Figure 5.15: Teachers' self-efficacy about implementing the intended secondary school curriculum

As can be seen in Figure 5.15 above, 82.4% of respondents strongly disagreed or disagreed that they are finding it difficult to teach in English. However, only 15.4% of teachers who participated in this study strongly agreed or agreed that they are finding it difficult to teach in English. Just 2.2% of teachers indicated don't know.

Also in the chart above we can see that whereas the majority (84.3%) of the teachers strongly disagreed or disagreed that they lack competence of teaching reading, writing and speaking skills of the English language, about 13.5% strongly agreed or agreed and 2.2% of the teachers in the current study replied don't know.

Figure 5.15 also illustrates that seven of ten (70.2%) teachers strongly disagreed or disagreed that they do not know the strategies of promoting the English language teaching. Contrary to this claim, 27.8% strongly agreed or agreed and 2% replied don't know.

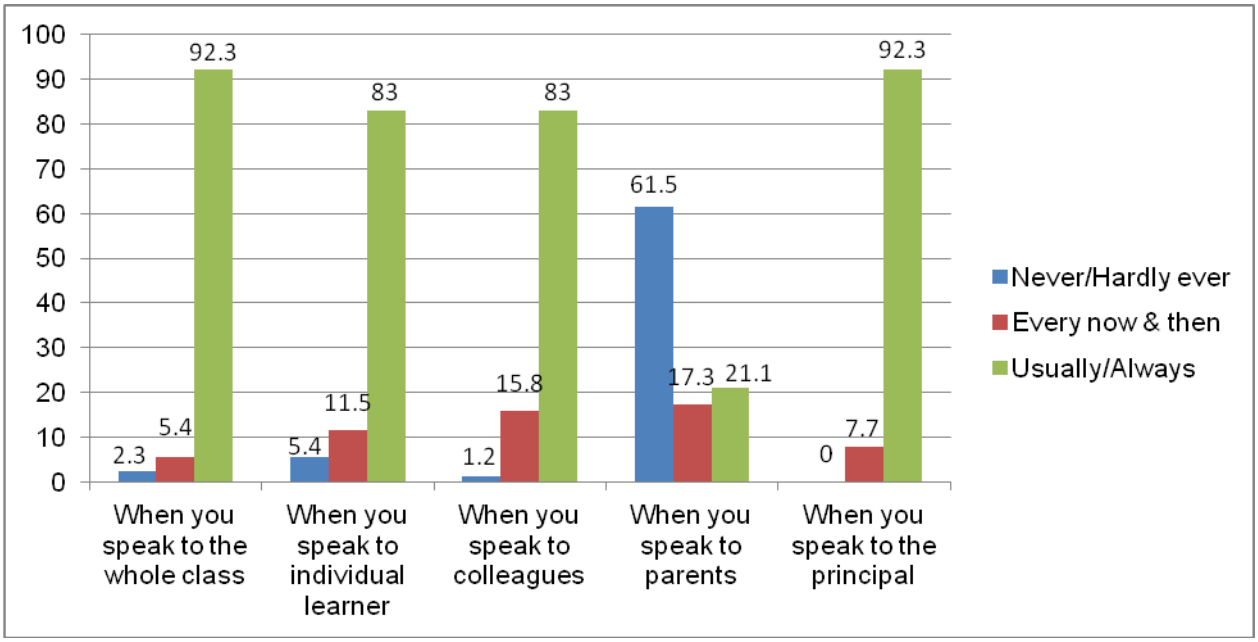
In the chart above we can also see that the majority (84.6%) of teachers surveyed for the current study strongly disagreed or disagreed that they were trained to teach through the English language, 13.5% strongly agreed or agreed and 1.9% replied don't know.

Furthermore, as can be seen from Figure 5.15, 78.9% of the respondents strongly disagreed or disagreed that they deliberately ignore the language difficulties experienced by learners in their learning process. Whereas 18.8% strongly agreed or agreed with this statement, only 2.3% of teachers responded don't know.

Finally, Figure 5.15 above also shows that 83.0% of the respondents in the current study strongly agreed or agreed that they are confident to teach in the English language. 14.3% of the teachers strongly disagreed or disagreed with the statement; whereas 2.7% of the respondents replied don't know.

Data in Figure 5.15 suggest that despite a commonly held belief that teachers in Namibia are not proficient in English (see 3.3), the majority of respondents in this study replied to the contrary.

The lack of confidence in the efficient use English at the school level by teachers has dominated educational discourse in Namibia. Therefore, a question on how frequent teachers used English in the school situation was provided to determine teachers' confidence. The results to the question are displayed in Figure 5.16 below. The dataset (see Question 22) that had five items (N = Never, HE = Hardly Ever, ENT = Every Now and Then, U = Usually, A = Always) was collapsed to form three (Never/Hardly Ever, Every Now and Then, Usually/Always) response categories (see Figure 5.16).



(n=260)

Figure 5.16: Frequency of the use of English by teachers

Figure 5.16 above shows that the majority (92.3%) of teachers usually/always speak in English when they address learners in their classrooms. Whereas just 5.4% of the respondents reported that they used English every now and then when they speak to their learners, 2.3% indicated that they never/hardly ever speak English when they speak to the whole of class of learners.

Also as displayed in the chart above 83% of teachers in this study reported that they use English when they speak to individual learners. However, 11.5% of teachers indicated that they use English every now and then when they speak to individual learners, whereas 5.4% never/hardly ever used English when they speak to individual learners.

As may be seen in the chart above, 61.5% of the teachers reported that they never/hardly ever use English when they speak to parents, whereas 21.1% indicated that they usually/always use English when they speak to parents. Just 17.3% of the teachers responded that they use English every now and then when they speak to parents.

The chart also shows that whereas just over nine out of ten (92.3%) of teachers usually/always speak in English when they speak to the principal, just 7.7% of respondents reported that they every now and then speak to the principal in English. However, the majority (83%) of teachers reported that they use English when they speak with their colleagues. About 15.8% of the teachers, however, responded that they used English every time and then when they speak to their colleagues, whereas just 1.2% said they never/hardly ever.

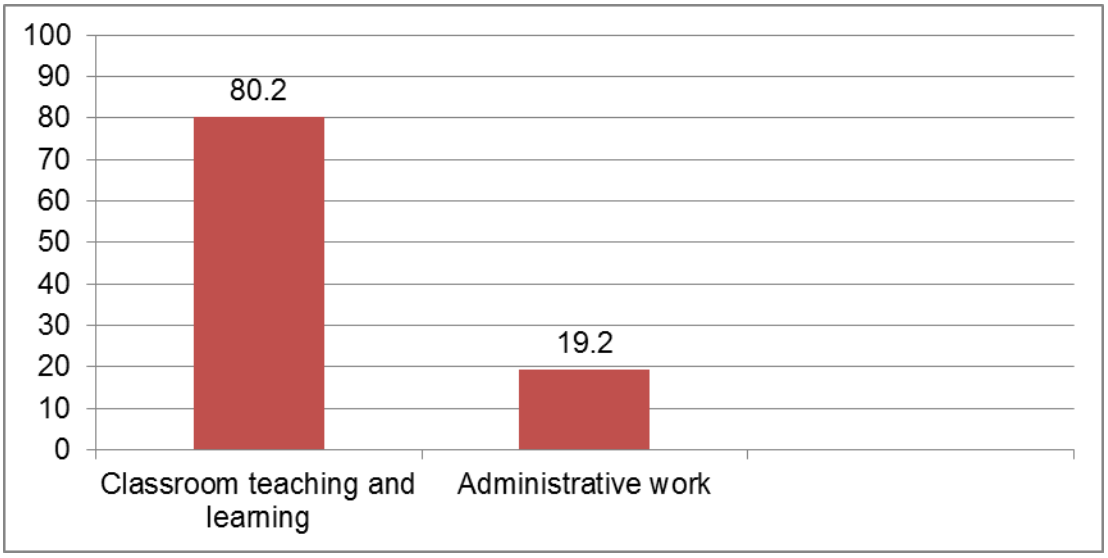
From these results, it appears that within the school environment 80% and more of the teachers indicated that they usually or always use English when they speak to the whole class, individual learners, colleagues and the principal, whereas if they communicate to parents (outside the school) six out of ten teachers indicated that they never or hardly ever used English.

With reference to teachers not addressing parents in English, different interpretations are possible. One plausible interpretation is that as explained in 3.2, the fact that Afrikaans was a lingua franca in pre-independent Namibia in 1990, may suggest that the language is still widely used as a means of official communication by teachers and parents particularly in urban school settings. So for this reason, it may not be surprising that more than half of the teachers in this study indicated that they never or hardly ever use English when they speak to parents.

These results are also consistent with what is known about the language configurations in Namibia. As shown in Figure 5.2, the majority of participants in the current study are located in rural areas, and as stated in section 3.5.3.1, Namibia has 13 recognised national languages, including 10 indigenous African languages spoken by 87.8% of the population.

Therefore, irrespective of what the language policy recommends, the use of English between teachers and parents will reflect the indigenous contexts of the school and classroom environment (Brock-Utne & Holmarsdottir, 2001; Pütz, 1995).

After gauging the frequency with which teachers used in English the school and classroom situation, teachers were asked to indicate their main responsibilities in the school and classroom situation. Figure 5.17 below displays results obtain from the question on the teachers responsibilities in the classroom situation.



(n=260)

Figure 5.17: Teachers' responsibilities in the classroom situation

Figure 5.17 shows that the majority (80.2%) of the teachers in the current study spend a large amount of their school time on teaching and learning, just about two in ten (19.2%) of teachers reported that they spend some of their time on administrative work.

The fact that around 80.2% of teachers spend their school time on classroom activities means two things. First, the results show that teachers are very important in the academic lives of children and thus help us to appreciate the fact that in order to achieve the envisaged curriculum aims and objectives (see 1.3) teachers must spend most of their 40-hour working week on classroom teaching (MoE, 2010:37).

Secondly and in contrast to the first argument, it might be argued that despite teachers' claims that they spend most of their time on classroom teaching and learning, their efforts do not seem to yield value-for-money insofar as the achievement of learning outcomes are concerned. There is evidence to suggest that in relation to time and theories of learning (see 3.4.5), teachers are not efficiently using the 40 hours teaching time to promote in-depth learning among students. If this is indeed the case, it could be concluded that most teachers in this study are not qualified to teach at the secondary school phase (see 5.3).

The dataset (see Question 24) had five items (SA = Strongly Agree, A = Agree, SD = Strongly Disagree, D = Disagree, DK = Don't know was collapsed to form three (SA/A = Strongly Agree/Agree, SD/D = Strongly Disagree/Disagree, DK = Don't Know) response categories (see Table 5.6).

Table 5. 6: Teachers' personal experiences of implementing the curriculum

(n=260)

Teachers' personal experiences	Responses in %		
	SA/A	SD/D	DK
Learners in my class care about their own learning	69.5	30.2	0.3
Learners are late for classes most of the time	48.0	53.9	0.0
Learners do not do their homework	30.8	69.2	0.0
Learners are noisy most of the time in classroom	48.1	51.9	0.0

SA= Strongly Agree, A= Agree, SD= Strongly Disagree, D= Disagree, DK= Don't Know

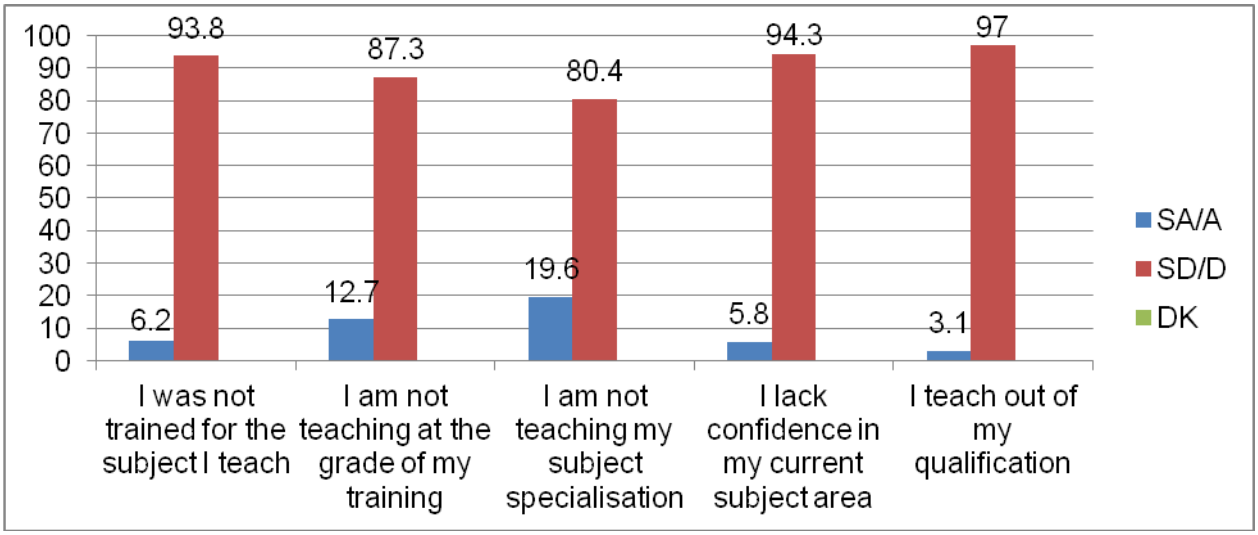
The chart above shows that although 69.5% of teachers strongly agreed or agreed that learners in their care about their own learning just more than three out of ten (30.2%) strongly disagreed or disagreed, whereas 0.3% replied don't know. Whereas just over half (53.9%) of surveyed teachers strongly disagreed or disagreed that learners come late for classes most of the time, 48% strongly agreed or agreed.

The table above also shows that whereas just over two thirds (69.2%) of the teachers strongly disagreed or disagreed that learners do not do their homework, 30.8% strongly agreed or agreed. 48.1% of surveyed teachers strongly or agreed that learners are noisy most of the time in classroom, whereas just over half (51.9%) strongly disagreed or disagreed.

From these data it is clear that a number of factors influence the implementation of the implementation of the secondary school curriculum. Data seem to suggest that some teachers believe that learners are not committed to the implementation of the intended secondary school curriculum. For instance, teachers claimed that learners do not do their homework. However, if the finding that parents cannot speak English because of their low formal education, then one may as well conclude that parents may not be able to assist their children due to their lack of formal education (see Figure 5.16).

The fact that some teachers indicated that learners make noise in class appear to contradict the notion of learner centred teaching and learning (see 2.6.2 & 3.4.6). A number of studies in this thesis describe learning as a process in which students interact with each other, communicate and make meaning of different phenomena (see 2.4). The question therefore is: “Do learners make noise ‘off-task” or “on-task”? The answer to this question has serious classroom implications on how teachers in the current study define teaching and learning within the learner-centred paradigm (see 2.6.2).

Literature reviewed for this study shows that teachers’ self-confidence may influence teachers to implement a curriculum innovation. The chart below presents results of the teachers’ confidence regarding teachers’ classroom practice. The dataset (see Question 25) had five items (SA = Strongly Agree, A = Agree, SD = Strongly Disagree, D = Disagree, DK = Don’t know was collapsed to form two (SA/A = Strongly Agree/Agree, SD/D = Strongly Disagree/Disagree) response categories. There were no responses for DK = Don’t know (Figure 5.18).



(n=260)

Figure 5.18: Teachers' self-confidence

Figure 5.18 above shows that the majority (93.8%) of teachers who participated in the current study strongly disagreed or disagreed that they were not trained in the subjects they are teaching. A small number (6.2%) of teachers strongly disagreed or disagreed. Whereas about eight in ten (87.3%) of teachers strongly disagreed or disagreed that they are not teaching at the grade out of their training, just 12.7% strongly agreed or agreed.

The chart above also shows that the majority (80.4%) of teachers surveyed strongly disagreed or disagreed that they are not teaching their subject of specialisation; 19.6% strongly agreed or agreed. The chart also shows that whereas almost all (94.3%) teachers strongly disagreed or disagreed that they lack confidence in their current subject, just 5.8% strongly agreed or agreed. Moreover, the graph shows that whereas almost all (97%) teachers strongly disagreed or disagreed that they are teaching out of the school phase for which they were qualified in, just 3.1% strongly agreed or agreed. There were no responses for "do not know" category.

Data in Figure 5.18 are noteworthy for a number of possible reasons. First, the results seem to suggest that teachers in the current study acknowledge the relationship between teachers' training, qualification, competence in subject knowledge, phase of teaching and the cumulative effect that these variables have on not only the teachers'

ability to conduct an effective classroom discourse but also on stimulating the teachers' confidence to enhance students' learning outcomes.

Alternatively, the results show that although the data presented did not measure teachers' skills, they demonstrate teachers' belief that it is through their own self-confidence that they will be able to conduct effective lessons even under difficulty school circumstances (Bandura, 1997).

The findings therefore are consistent with the literature reviewed in the current study. Bandura (1977), for instance, once stated that teacher self-efficacy beliefs describe their sense of whether or not they, on a personal level have the skills and abilities necessary to enhance student learning (see 3.5.2.4).

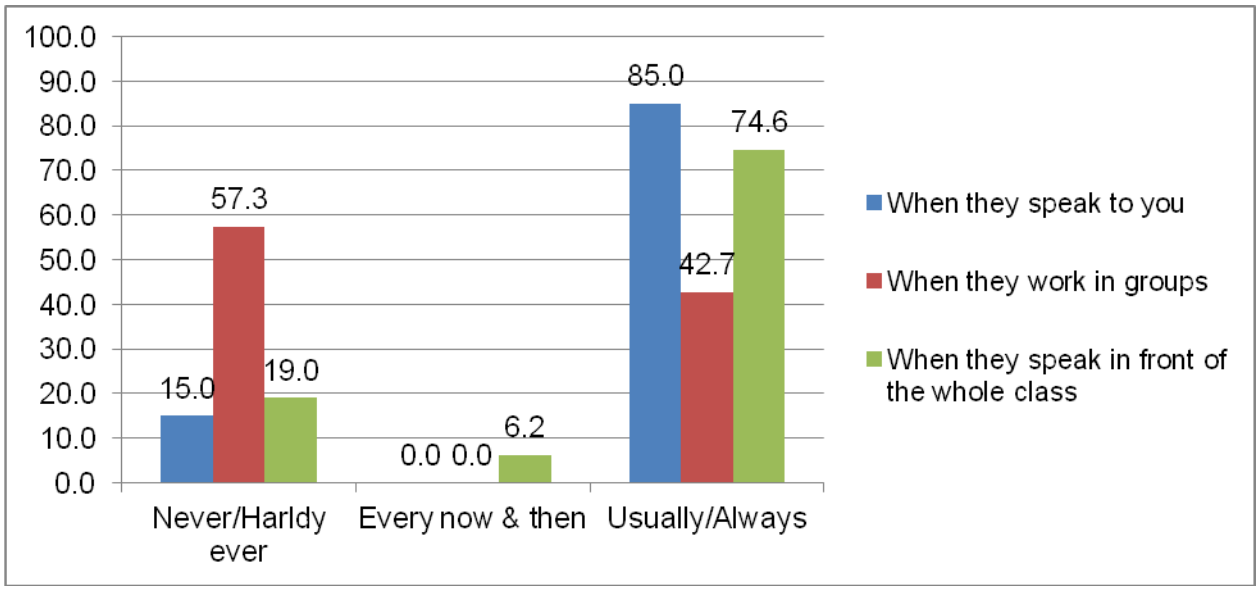
In addition to results of teachers' epistemological characteristics presented above, this study solicited information from respondents about internal school factors that support or hinder the implementation of the intended curriculum in the classroom teaching and learning situation. The questions covered variables such as learners' characteristics, professional development and school leadership. The next section presents the results of the internal school support factors in terms of their inhibitory and facilitator role in the implementation of the intended secondary school curriculum.

5.4 Internal school support factors

Eight questions related to learner factors, teachers' involvement in professional development programmes and their involvement in the curriculum development process were designed and used to obtain teachers' views about the implemented secondary school curriculum. Figure 5.19 presents results of learners' use of the English language in the classroom situation.

5.4.1 Learners' use of English

The dataset (see Question 26) that had five items (Never, Hardly ever, Every now and then, Usually, Always) was collapsed to form three (Never/Hardly Ever, Every Now and Then, Usually/Always) response categories (see Figure 5.19).



(n=260)

Figure 5.19: Learners' use of the English language

Figure 5.19 shows that more than half (57.3%) of the teachers stated that learners never/hardly ever speak in English during groupwork. 15.0% of the teachers reported that learners never/hardly ever speak in English when they speak to their teachers; while 19.0% indicated that learners never/hardly ever use English when they speak in front of the whole class. Only 6.2% of teachers surveyed replied that learners use

English every now and then when they speak in front of the whole class. In addition, the chart above also shows that they majority (85.0%) of the teachers in this study reported that learners usually/always use English when they speak to their teachers, while 42.7% stating that learners use English when they work in groups. About three quarters (74.6%) of the teachers indicated that learners use English when they speak in front of the whole class. The were no responses for learners' use of the English language when they work in groups (0.0%) and when they speak to you (0.0%).

The question on learners' use of the English in the classroom situation aimed to understand from teachers how learners use the official language of instruction in the teaching and learning process. As stated above (see 3.5.3.1) the language of classroom instruction is a key factor that may have a direct bearing on how the curriculum is implemented in the classroom situation.

Clearly the results in Figure 5.19 convey three different messages. The first possible message is that because for most learners English is not their first, or even their second language (see 3.5.3.1), it could be assumed that the learners' lack of English proficiency discourages them from using it when they work in groups.

A second possible explanation is that the reason learners always use English when they speak to their teachers and in front of the class just to show their teachers that they are able to adhere to the stipulations of the language policy.

A third possible explanation may be that although the language policy is strict about the use of English as the official language of instruction (MoE, 2010:24), the question can be asked whether teachers regard mother tongue as an essential tool for learning and therefore allow learners to use it in the classroom situation?

5.4.2 Professional development

Based on the literature reviewed (see 3.5.3.2) in this thesis questions on teachers' professional development were prepared and presented to solicit responses from research respondents. Question 27 (see Appendix 1) specifically asked respondents to indicate the extent to which they participated in professional development programmes (see Table 5.7) in the past 12 months prior to the current study.

5.4.2.1 Teacher participation in professional development activities in the past 12 months

Table 5.7: Teacher participation in professional development activities in the past 12 months

(n=260)

Professional development area	**Response in %**		
	Yes	No	No response
Courses on teaching methods	38.0	61.0	1.0
Observation visits to other schools	0.8	31.0	68.2
Education conferences	0.8	27.0	72.2
Use of computers in classrooms	0.8	20.0	79.2
School-community co-operation	0.8	33.1	66.1
English communication skills	0.8	37.3	61.9
Practicing continuous assessment	0.4	54.2	45.4
Subject knowledge upgrading	0.4	54.2	45.4
Preparing learners for exams	0.4	62.0	37.6
Mentoring/peer observation & coaching	0.8	42.0	57.2

Table 5.7 above shows that whereas just over a third (38.0%) of teachers in this study attended training on teaching methods, less than 1.0% reported that they participated in the other nine professional development programmes listed in the table above. It is therefore evident from Table 5.7 above that most of the surveyed teachers did not in the

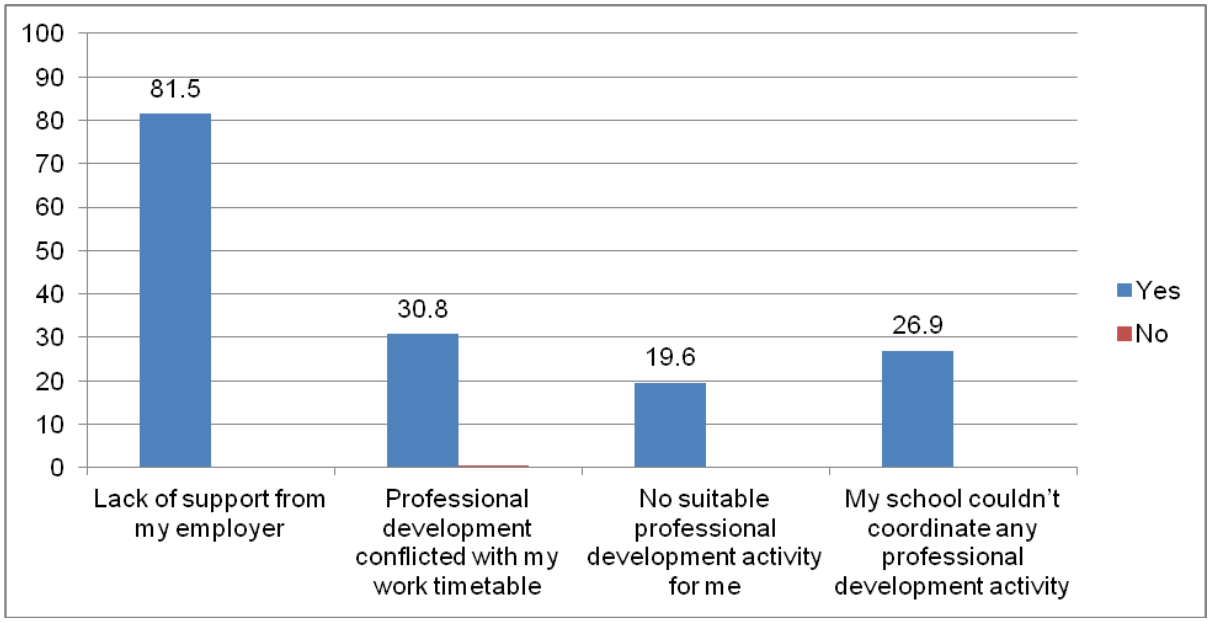
12 months prior to the current study participate in any of the other nine listed staff development programmes. For instance, 61.0% of the teachers reported that they did not participate in a professional development programme on teaching methods, observation visits to other schools (31.0%), education conferences (27.0%), use of computers in classrooms (20.0%), and school-community cooperation (33.1%). Moreover, as may be seen from the table above, teachers also reported that they did not participate in professional development activities on English communication skills (37.3%), practicing continuous assessment (54.2%), subject knowledge upgrading (54.2%), preparing learners for examinations (62.0%) and mentoring/peer observation and coaching (42.0%).

As stated in section 3.5.3.2 of this study, continuing professional development or also commonly known as staff development training is critical to the success of any education change. In view of this assumption ten areas for possible professional development (see Table 5.7) were presented to the respondents to determine whether or not in the 12 months prior to the current study they participated in any of the activities.

Data show that slightly over a third of teachers took part in trainings on teaching methods 12 months prior to the current study. On the other hand, data also illustrate that less than 1% of teachers surveyed in the current study participated in one or more of the other nine professional development programmes listed in Table 5.7.

5.4.2.2 Reasons that prevented teachers from participating in professional development activities in the past 12 months

Question 28 (see Appendix 1) aimed to ask teachers the reasons that prevented them from participating in professional development activities in the past 12 months before the current study. Figure 5.20 below presents teachers' responses to this question.



(n=260)

Figure 5.20: Reasons preventing teachers from participating in professional development activities

The results of Table 5.7 read together with Figure 5.20 below show that teachers had limited opportunities to participate in professional development programmes for various reasons. It is interesting to note that the single most determining factor that restricted teachers from attending any of the staff development programmes listed in Figure 5.20 was lack of support from their employers (81.5%). The second reason was teachers' work time was in conflict with planned professional development programmes (30.8%). The third reason was that schools did not coordinate any professional development activity (26.9%). Lastly, teachers reported that there were no suitable professional development programmes for them to attend (19.6%).

These results, however, contradict the Ministry of Education's assertion that if teachers are not conversant with and/or are not competent in how to teach according to the learner-centred approach and have difficulty in implementing the LC approach, continuous professional development support must be provided (MoE, 2010:37).

Approached from a different perspective, two other explanations can help to understand these results. First, by stating that professional development programmes take place during school time, teachers seem to imply that they cannot attend any staff development programme scheduled during school hours when they are supposed to carry out their main responsibility of teaching (see Figure 5.17).

Second, teachers in this study seem to argue that they could not attend most of the designed professional development programmes because they did not meet their personal and professional development needs and that staff development programmes were organised by someone else outside their school environment.

This conclusion concurs with literature reviewed for the current study. For instance, numerous research studies (see 3.5.3.2) argue that professional development programmes can only be effective if they are planned as integral part of the school's instructional development programme (Carl, 2009:215) and if the professional aspects are related to teachers' classroom practice (McGee 1997:294) rather than being imposed upon teachers (ibid).

5.4.2.3 Impact of professional development programmes on teachers

In addition to Questions 27 and 28 respondents were asked to indicate the perceived impact of the professional development activities on teachers' classroom practice (see Appendix 1: Question 29).

The results of Question 29 are presented in Table 5.8 below. After cleaning data for analysis, it emerged that there were too many numbers which made it hard to make any meaningful interpretation of the data. As a result the dataset (see Question 29) that had five items (N/A = Not Applicable, NI = No Impact, SI = Small Impact, MI = Moderate Impact, LI = Large Impact) was collapsed to form three (Not Applicable, No/Small Impact, Moderate/Large Impact) response categories (see Table 5.8).

Table 5.8: Impact of professional development programmes on teachers

(n=260)

Professional development area	Response in %		
	N/A	No/Small Impact	Moderate/Large Impact
Courses on teaching methods	43.8	8.2	48.0
Observation visits to other schools	51.9	24.6	23.5
Education conferences	51.5	27.0	21.5
Use of computers in classrooms	54.2	33.5	12.3
School-community co-operation	49.2	27.7	23.1
English communication skills	51.2	25.4	23.4
Practicing continuous assessment	35.4	23.9	40.7
Subject knowledge upgrading	34.6	24.6	40.8
Preparing learners for exams	28.5	20.8	50.7
Mentoring/peer observation & coaching	51.2	21.6	27.2

N/A= not applicable

Table 5.8 above shows that for most of the teachers who took part in the current study, the listed staff development programmes were not applicable to their individual situations. However, 8.2% of teachers who attended training on teaching methods indicated that such training had no/small impact on their knowledge, whereas 48.0%

stated that it had moderate/large impact. About 24.6% of teachers who participated in the observation visits to other schools indicated that such visits had no/small impact, and 23.5% said observation visits had a moderate to large effect.

As may be seen in the table above, 27.0% of teachers who attended education conferences reported a no/small impact, whereas 21.5% stated moderate/large impact. With regard to professional development on the use of computers in classrooms, 33.5% and 12.3% of surveyed teachers reported no/small and moderate/large impact, respectively. About 27.7% of the teachers who attended the training on school-community co-operation noted that it had no/small impact on them, 23.1% said it had moderate/large impact.

Teachers were split on the impact of training in English communication skills. Whereas 25.4% of teachers indicated that the training had no/small impact, another 23.4% stated that the impact of the training was moderate/large. 23.9% of respondents indicated that their training in continuous assessment had no/small impact, with 40.7% reporting that the training had moderate/large impact.

With regard to training in subject knowledge upgrading, 24.6% of the teachers said it had no/small impact, but 40.8% stated that it had moderate/large impact. On the training for preparing learners for examinations, about 20.8% of the teachers in the current study indicated that it had no/small impact, whereas about half (50.7%) reported that it had moderate to large impact. Lastly, 21.6% of respondents indicated that the training on mentoring/peer observation and coaching had no to small impact on them, whereas 27.2% said such had moderate to large effect.

To reiterate, the results in Table 5.8 above show that less than 50% of teachers surveyed in the current study reported that the specific workshops they attended had a moderate to large impact on their classroom practice. However, in only one of the ten professional development areas about half (50%) of the teachers in the current study

indicated that the workshop on preparing learners for examinations had a moderate to large impact on their subsequent classroom practice.

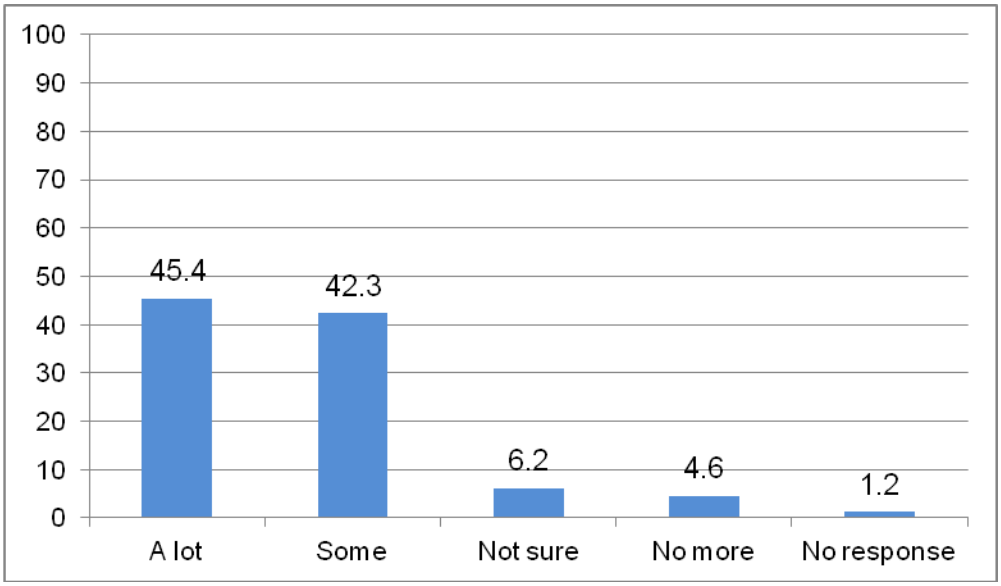
There are three possible interpretations for these results. First, we may speculate that the professional development programmes that teachers participated in 12 months before this study did not have clear goals that were focused to achieve individualised learning needs of teachers.

Secondly, it may also be assumed that the professional development programmes that were implemented 12 months to this study did not employ transformative training strategies, such as peer and instructional coaching which were related to personal needs and interests of the teachers.

Third, one may as well speculate that because the implemented professional development programmes were not based on teachers' individualised goals and were not conducted on the principles of transformative learning, thus the workshops could not yield a lasting effect on teachers' classroom practices. These explanations are consistent with Knoff and Batsche (1995) and McGee's (1997:294) findings (see 3.5.3.2).

5.4.2.4 Further professional development required by teachers

In relation to the question of the impact of professional development programmes on teachers' classroom practices (see Question 29), research participants were also asked to indicate whether or not they required further professional development programme (see Appendix 1: Question 30), which would help them to improve their classroom practices. The results of this question are displayed in Figure 5.21 below.



(n=260)

Figure 5.21: Further professional development required by teachers

As displayed in Figure 5.21 about 45.4% of teachers expressed the desire for a lot more staff development programmes. Approximately an equal percentage (42.3%) of teachers reported that they need some staff development trainings in various curriculum areas. Whereas 6.2% of the teachers indicated that they are not sure if they need further training; 4.6% stated that they no more. Just 1.2% of the respondents did not respond to this statement.

It is evident from the chart above that the majority (87.7%) of teachers in this study indicated that they required a lot or some professional development programmes to participate in. On the basis of what we saw in Table 5.7 above there is no surprise that

the majority of teachers in this study indicated their desire to participate in a lot or in some form of professional development programmes.

Another possible explanation is that as we can see in Table 5.3 above, the fact that teachers have low knowledge of the intended secondary school curriculum, may suggest that the majority of teachers need more training for their own personal growth and professional development (Carl, 2009:3-4).

Also it appears that the majority of teachers surveyed in this study accept that they are not qualified enough (see Figure 5.3) to teach at the secondary phase and therefore hope that by participating in professional development programmes, might help them to compensate for their lack of skills and competencies to effectively implement the intended secondary school curriculum.

5.4.2.5 Type of professional development required by teachers

In relation to the above question (Question 30), teachers were also asked (see Appendix 1: Question 31) to indicate what type of professional development programme, if any, they wanted to participate in, which would potentially help them to improve their classroom practice. The dataset for Question 31 (see Appendix 1) had four items (NAA = Not At All, LLN = Low Level Need, MLN = Moderate Level Need, HN = High Need*),* was collapsed to form two (NAA = Not At All/LLN = Low Level Need and MLN = Moderate Level Need/HN = High Need) response categories (see Table 5.9). The results of this question are displayed in Table 5.9 below.

Table 5.9: Type of professional development programmes required

(n=260)

Staff development programmes in which further training is required	Response in %	
	No or low need	Moderate or high need
Student assessment practices	39.6	60.4
Subject area training	40.8	59.2
Student discipline/behaviour problems	33.1	66.9
Teaching methods	31.9	68.1
Use of ICTs in teaching & learning	70.8	29.2
Teaching in multicultural settings	46.5	53.5
Student guidance & counselling	49.9	51.1
Teaching learners with special needs	64.2	35.8
Classroom management	36.1	63.9
School management	38.1	61.9
School-community cooperation	46.6	53.4

In Table 5.9 displayed above about 60.4% of teachers surveyed indicated a moderate to high need of training in assessment practices. About 59.2% of the respondents stated that there is a moderate to high need training in subject area training.

Further, as may be seen in the table above, teachers indicated moderate or high need for training in the student discipline/behaviour problems (66.9%), teaching methods (68.1%), use of ICTs in teaching and learning (29.2%), teaching in multicultural settings (53.5%), student guidance and counselling (51.1%), teaching learners with special needs (35.8%), classroom management (63.9%), school management (61.9%) and school-community cooperation (53.4%). These data suggest that most teachers in the current study indicated the need for training in all professional development areas listed in Table 5.9 above.

A critical look at the data in Table 5.9 above shows that most teachers in this study need professional development programmes in order to meet the demands of the latest

changes in education in Namibia (see 2.7). For example, some teachers in the current study appear to suggest that if they spend time on guidance and counselling such efforts may improve student academic achievements (Figure 5.17).

The majority of teachers' unwillingness to participate in ICT professional development programmes supports the literature reviewed in the current study (see 3.5.3.1). For instance, McGee (1997) argues that one issue to consider when every teacher development initiative is designed is to include professional aspects which are related to teachers' classroom practice.

5.4.3 School leadership

Question 32 (see Appendix 1) was about school leadership and aimed at soliciting data on the type and nature of leadership exercised in the sampled schools that took part in the current study. In order to make a meaningful interpretation of the data, the dataset of Question 32 that had five items (SA = Strongly Agree, A = Agree, SD = Strongly Disagree, D = Disagree, DK = Don't Know) was collapsed to form three (SA/A = Strongly Agree/Agree, SD/D = Strongly Disagree/Disagree, DK = Don't Know) response categories (see Table 5.10). The results of this question are displayed in Table 5.10 below.

Table 5.10: School leadership

(n=260)

Statement	Response in %		
	SA/A	SD/D	DK
School leadership supports teachers' efforts to maintain discipline in their classrooms	78.8	19.6	1.5
School leadership supports teachers with resources required for teaching and learning	70.7	22.3	6.9
School leadership provides feedback that help teachers improve their teaching	81.2	14.6	4.2
School leadership identifies staff development needs	66.9	24.3	8.5
School leadership promotes teamwork among teachers	53.8	33.5	12.7
School leadership promotes open communication between staff and community members	64.3	26.9	8.8
School leadership communicates school vision & goals to staff and community members	77.7	18.1	4.2

Table 5.10 above shows that about 78.8% of teachers strongly agreed or agreed that their school leadership supported teachers in maintaining discipline in their classrooms, whereas 19.6% strongly disagreed or disagreed. About 1.5% said they don't know. The

table above also shows that 70.7% of the teachers surveyed strongly agreed or agreed that the school leadership supports teachers with resources required for teaching and learning.

Around 22.3% of the teachers surveyed strongly disagreed or disagreed and 6.9% stated that they don't know. Furthermore, Table 5.10 shows that the majority (81.2%) of teachers strongly agreed or agreed that their school leadership provides them with feedback that helps them to improve teaching and learning. Just around 14.6% strongly disagreed or disagreed. About 4.2% of the teachers stated don't know.

Moreover, it is evident from the table above that 66.9% of teachers strongly agree or agree that the school leadership identifies staff development needs, 24.3% strongly disagreed or disagreed, whereas 8.5% said they don't know. Just more than half (53.9%) of the teachers strongly agreed/agreed that the school's leadership promotes teamwork among teachers, 33.5% strongly disagreed or disagreed, whereas 12.7% replied don't know.

From this table, it can also be seen that 64.3% of the teachers surveyed strongly agreed or agreed that the school leadership promotes open communication between staff and community members, 26.9% strongly disagreed or disagreed, whereas 8.8% stated that they didn't know.

More than three quarters (77.7%) of the teachers strongly agreed or agreed that the school leadership communicates the school vision and goals to staff and community members, 18.1% strongly disagreed or disagreed, whereas 4.2% stated don't know.

These findings support the literature reviewed in 3.5.3.2 on the role and responsibilities of school leadership in influencing the implementation of the intended secondary school curriculum.

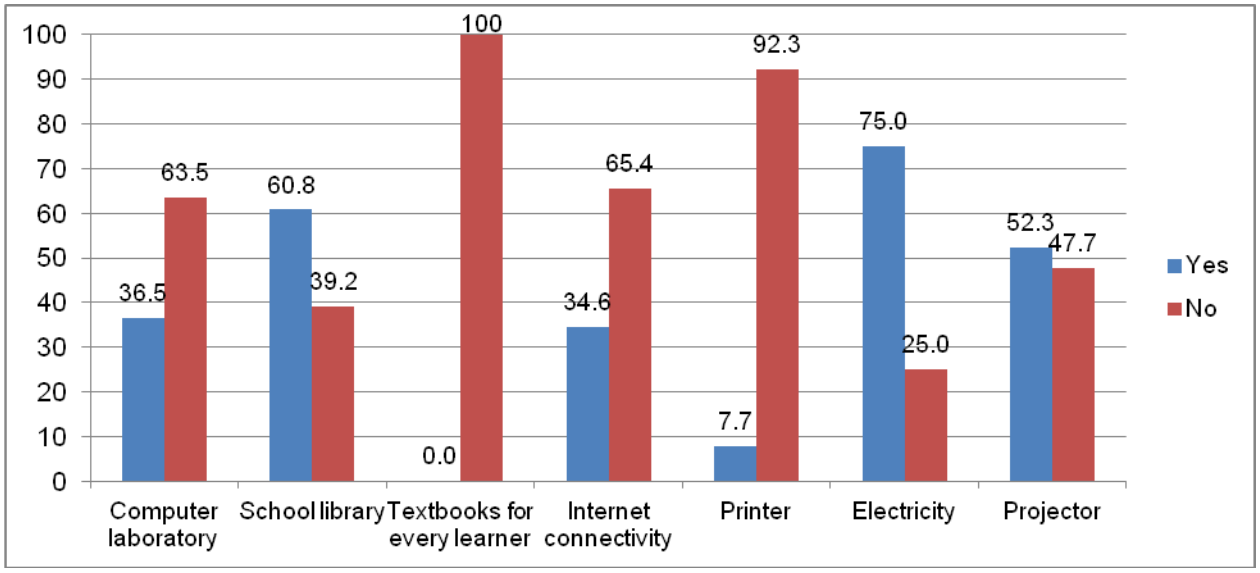
The next section presents the results of how external support factors influence the implementation of the intended secondary school curriculum.

5.5 External support factors

Nine questions were used to solicit responses from research respondents regarding the influence of external support on the implementation of the intended secondary school curriculum. The results of each of the variables are displayed in the following nine charts (see Figures 5.22–26 and Tables 5.11 – 5.17).

5.5.1 Resources

Question 33 (see Appendix 1) aimed to determine the availability of resources in the sampled schools for the current study. Figure 5.22 below presents responses to this question.



(n=260)

Figure 5.22: Resources

Figure 5.22 highlights the current situation of selected resources in the sampled schools. From this chart we can observe that 63.5% of the teachers surveyed do not have a computer laboratory and 36.5% indicated that they have a computer laboratory in their schools. From chart 5.22, we also see that whereas 60.8% of the respondents in

this study reported that they have a school library, 39.2% stated that they do not have a school library.

With respect to the availability of textbooks for every learner, all (100%) teachers in the current study confirmed that they have not achieved the 1:1 textbook to learner ratio policy in their schools. From the same chart we can also note that whereas two thirds (65.4%) of teachers reported that they do not have internet connectivity in their schools, 34.6% said they have internet connectivity; 92.3% of teachers stated that they do not have a printer while only 7.7% indicated that they have a printer.

Further, it can also be seen from this chart that three quarters (75.0%) of teachers indicated that they have electricity in their schools, compared to 25.0% who said they do not have electricity. Finally, Figure 5.22 displays data that shows that whereas 52.3% of teachers indicated that they have a projector in their schools, 47.7% responded that they do not have a projector.

Taken together, the results show two contrasting scenarios. For instance, while the majority of teachers reported that they have libraries (60.8%) and electricity (75.0%) in their schools; computer laboratories (63.5%) and internet connectivity (65.4%) remain a challenge in most schools. The most disturbing result is that all (100%) teachers in this study reported that 1:1 textbook to learner ratio has not been achieved in schools.

These findings corroborate with the OECD (2008) report, which suggested that the shortage of learning materials such as textbooks could be one of the main barriers to the successful implementation of the intended secondary school curriculum (see 1.3).

5.5.2 Stakeholders' support

Question 34 (see Appendix 1) was asked to determine the extent to which different stakeholders in the education sector in sampled regions and schools were involved in the development process of the 2010 intended secondary school curriculum. As discussed in 3.5.4.1, primary stakeholders (Ministry of Education, regional directorate of education, parents, school boards, teachers and learners) and secondary stakeholders (regional legislators, teacher unions, business owners and institutions of higher learning), are interconnected and play a pivotal role in the improvement of the quality of teaching and learning in schools in Namibia.

In order to make a meaningful interpretation of the analysed data, the dataset for Question 34 that had five items (NAA = Not At All, VLI = Very Little Input, SLI = Some Little Input, HI = Heavily Involved, NS = Not Sure) was collapsed to form four (Not At All, Very Little Input/Some Little Input, Heavily Involved & Not Sure) response categories (see Table 5.11). The results of the role of each of the stakeholder are displayed in Tables 5.11 – 5.17 below.

Table 5.11: The extent of stakeholder participation in the 2010 national curriculum development process

(n=260)

Statement	Response in %			
	Not at all	Very/some little input	Heavily involved	Not sure
Regional councillors	13.8	18.4	60.7	7.1
Business representatives	16.2	13.6	63.6	6.6
Teacher union representatives	13.0	30.7	54.3	2.0
Director of Education	2.0	56.3	41.7	0.0
Deputy Director of Education	2.0	55.4	42.6	0.0
Inspector of Education	8.7	48.6	42.7	0.0
Principals	13.2	32.3	52.5	2.0
Deputy principals	17.1	28.8	52.2	1.9
Heads of Departments	12.5	34.8	47.4	5.3
Teachers	17.4	29.7	47.1	5.8
Parents	13.8	20.2	53.0	13.0
Students	12.3	21.0	52.6	13.0
Consultants	8.9	21.0	65.7	4.4
Other	0.0	1.2	1.9	96.9

Table 5.11 shows a picture of the extent to which various primary and secondary stakeholders participated in the curriculum development process of the 2010 National Curriculum for Basic Education in Namibia as reported by teachers surveyed in the current study.

As this table shows, about two thirds (65.7%) of the teachers that participated in the current study indicated that consultants were heavily involved in the development process of the 2010 National Curriculum for Basic Education. Just 21.0% of the teachers indicated that consultants had very to some little inputs, whereas 8.9% said consultants were not involved at all and 4.4% indicated that they were not sure if consultants were involved in the curriculum development process.

As can also be seen from this table, 63.6% of teachers indicated that business representatives were heavily involved in the development process of the 2010 national curriculum; whereas 13.6% indicated that they had very to some little involvement in the curriculum development process. Only 16.2% of the teachers believed that business

representatives were not at all involved during the development process of the curriculum and 6.6% responded that they were not sure if business representative were involved.

As this table shows other stakeholders that were heavily involved in the development of the 2010 curriculum were regional councillors (60.7%). With 18.4% of the teachers indicating that regional councillors had very or some little input to the curriculum, 13.8% indicated they were not at all involved, and 7.1% stating that they were not sure.

We also can see from this table that 54.3% of teachers in this study believed that teacher union representatives were heavily involved in the development of the curriculum, whereas 30.7% indicated that teacher union representatives had very little or some little inputs and 13.0% replied that they were not involved at all. Just 2.0% of the teachers indicated that they were not sure of the involvement of the teacher union representatives in the development process of the 2010 curriculum.

It is also clear from Table 5.11 above that 53.0% of teachers in this research study replied that parents were heavily involved in the development process of the 2010 national curriculum, whereas, 20.2% indicated that parents had very little or some little involvement in the development process. Data show that teachers are split on whether parents were not involved at all and those teachers who are not sure, with 13.8% indicating that parents were not involved at all and 13.0% are not sure.

As displayed in the table above, 52.5%, 52.2% and 52.6% of the teachers believed that principals, deputy principals and students, respectively were other stakeholders that were heavily involved in the development of the 2010 national curriculum. However, 32.3%, 13.2%, 2.0% of teachers indicated that principals had very little or some little inputs were not involved at all and replied not sure, respectively. Data in Table 5.11 also show that 28.8% of teachers indicated that deputy principals played a very little or some little role in the development of the curriculum, whereas 17.1% stated that they did not play a role at all and 1.9% was not sure. Moreover, with 21.0% of teachers reporting

that students had very little to some little input in the curriculum process, 12.3% indicated that students were not involved at all and 13.0% were not sure.

As illustrated in Table 5.11, 47.4% of respondents in the current study indicated that head of departments (HoDs) were also heavily involved in developing the national curriculum, 34.8% stating that HoDs had very little or some little input and 12.5% saying they were not involved at all. 5.3% responded not sure.

Furthermore, this table shows that 47.1% of the respondents believe that teachers were heavily involved in the development process of the 2010 national curriculum; 29.7% indicated that teachers had very little or some little inputs, whereas 17.4% stated that teachers were not involved at all and 5.8% were not sure.

In addition and as we can observe from this table, whereas 42.7% of the teachers that indicated that inspectors of education were heavily involved in the development of the curriculum, 48.6% said that inspectors of education had very little or at least some little inputs, and 8.7% replied that they were not involved at all.

Whereas 42.6% of teachers surveyed believed that deputy directors of education were heavily involved in the curriculum development process, 55.4% of teachers indicated that deputy directors of education had very or some little input in the curriculum development process. Only 2.0% of teachers surveyed in this study stated that deputy directors of education were not at all involved in the curriculum development process; with 0.0% not sure.

Finally, Table 5.11 shows that 41.7% of the teachers surveyed indicated that directors of education were heavily involved during the development process of the 2010 curriculum, whereas 56.3% indicated that they had very little or some little involvement. Just 2.0% of the teachers stated that directors of education were not involved in the curriculum development process at all.

If these results represent what teachers intended to portray, they may be interpreted in several ways.

First, the fact that three fifth of teachers reported that regional councillors and business representatives were heavily involved in the curriculum development process implies that the 2010 national curriculum is driven by both political and economic interests (see 2.7.1 and 2.7.5). In other words, it might be concluded that most teachers in the current study are aware that within the rhetoric of nationhood and unitary state, politicians have tightly controlled what is included in the curriculum, how and when it is taught, and how it is evaluated and disseminated (Hoadley & Jansen, 2001:77).

Similarly, teachers in this study seem to believe that due to concerns of skill shortages and high youth unemployment (see 2.7.5), the business community has had a strong influence on the current national curriculum in an attempt to steer the direction of economic growth and development. For instance, as shown in Figure 5.14 above one of the aims of secondary education in Namibia is to prepare learners for employment in the labour market. In an attempt to achieve this aim, the business community might argue that the purpose of schooling is to teach learners to acquire relevant workplace and transferable skills, attitudes, values and motives required for building a modern Namibian industrialised economy (see 2.7.5) spelt out in Vision 2030 (see 1.3).

Secondly, the results corroborate with Rogan and Grayson's (2003) assertion that various organisations with their different agendas, all vying for and/or collaborating with one another play a significant influence on how an innovation is developed.

In the context of the results in Table 5.11, teachers seem to suggest that the intended secondary school curriculum considered the interests of both primary and secondary stakeholders in education (see 3.5.4.1). This conclusion refutes the idea that curriculum as espoused from a technical interest is a value-free enterprise (Cornbleth, 1990:14) (see 2.4.1).

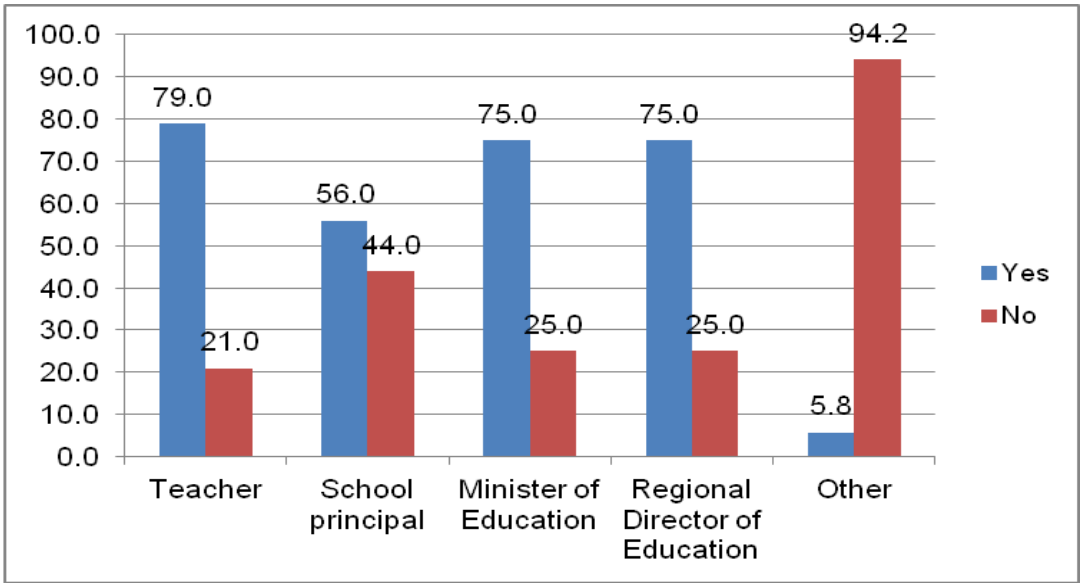
The results displayed in Table 5.11 above also show that less than 50% of teachers reported that directors and deputy directors of education, inspectors of education, HoDs and teachers were involved in the secondary school curriculum development process. Interestingly, whereas 52.5% of teachers indicated that principals were involved in the curriculum development process, another half (52.2%) of the teachers stated that deputy principals were involved in the development of the 2010 national curriculum.

These data may be explained in two ways. First, if the results on teachers in Table 5.11 are read together with those in Figure 5.23 below, it could be concluded that whereas more than three quarters of teachers in this study regarded themselves as key implementers of the intended secondary school curriculum, only about 40% of teachers participated in the development process of the 2010 national curriculum.

Second, it can also be concluded that most teachers in this study need further professional development in various curriculum areas (see Table 5.9) because the majority of them did not take part in the development process of the 2010 intended secondary school curriculum (see Figure 5.21).

5.5.2.1 Governance of curriculum implementation

Although implementing a curriculum involves all levels in the education system (see 2.2), the extent to which the "macro", "meso" and "micro" levels are involved in the implementation process varies and depends chiefly on existing structural and organisational contexts (see 1.9). Within this context teachers in this study were asked the question of curriculum management and governance at all three levels in Namibia's education system. Figure 5.23 below presents teachers' responses to this question.



(n=260)

Figure 5.23: Management and governance of the secondary school curriculum

The chart above shows that the majority (79.0%) of respondents regard teachers as the main implementers of the secondary school curriculum, whereas 21.0% of teachers surveyed indicated that the secondary school curriculum is managed elsewhere. While more than half (56.0%) of respondents said school principals manages the curriculum policy, 44.0% stated to the contrary. However, three quarters (75.0%) of the teachers indicated that the minister of education manages and controls the curriculum, whereas 25.0% indicated that the minister of education is not.

While 75.0% of teachers replied that regional directors of education manage and control the curriculum at the meso level, a quarter (25.0%) stated “no” to the question. The chart above also shows that whereas the majority (94.2%) of teachers surveyed indicated that there are no other stakeholders who manage and influence curriculum implementation, just a small percentage (5.8%) of teachers believe there are other stakeholders that influence curriculum implementation other than the ones referred to in Figure 5.23.

The findings in Figure 5.23 suggest three possible explanations. First, it appears that most respondents in this study accept the fact that teachers, the minister of education, regional directors of education, and school principals, play an important role in the implementation of the curriculum innovation. For instance, within the conceptual definitions adopted in this study (see 1.9 & 2.5), whereas the minister and the directors of education guide the implementation of the philosophy, goals and objectives of the intended curriculum at the macro-level of the education system, school principals and teachers are responsible for the institutionalisation of the intended curriculum at the micro level (see 1.9 & 2.5).

Secondly, it is likely that the minority of teachers who indicated that principals do not influence curriculum implementation believe that their headmasters are not effective instructional leaders (see Barth 1991:72).

Another possible explanation may be embedded in the teachers’ perceived control function of the Minister of Education (MBESC, 2004:7). According to Oliva and Gordon, (2013:39–41) in decentralised systems the ministry of education plays a unique blend of control through authority and persuasion. Based on this assumption, teachers in this study seem to imply that because the ministry of education at the macro level facilitates the distribution of financial resources to support the implemented (meso) and attained (micro) curriculum, the minister and directors of education, therefore, may be exerting a potent influence on the implementation of the curriculum at the classroom level.

Among alternative explanations, some scholars have found that when teachers perceive policy makers at macro-level as attempting to micro-manage school level affairs; they eventually blame them for intending to implement the curriculum at the micro-level. According to Al-Qahtani (1995), this blame game may degenerate into the ‘cycle of recrimination’, which may have negative effects on teachers’ willingness to implement the intended curriculum (see 3.5.4.2.2). Qualitative findings of this study (see 5.14.2) are consistent with this explanation.

5.5.2.2 Parents

As stated in Section 3.5.4.2.5 parent-school relations influence not only student achievement but also the success of the implemented school educational change programmes (Epstein, 1995). Based on this premise, teachers were asked to indicate how parents in the sampled regions support school-related activities (see Appendix 1: Question 36). Table 5.12 below displays results of the support of parents in the implementation of the intended secondary school curriculum.

Table 5.12: Support from parents

(n=260)

Statement	Response in %				
	Never	Seldom	Sometimes	Often	Almost always
Parents in my school are eager to obtain information about their children's educational progress	17.3	13.1	45.4	19.2	5.0
My school shares information about the curriculum with parents	3.1	4.2	20.8	40.8	31.2
Parents /guardians volunteer to do work in school	15.8	15.8	31.2	24.2	13.1
Parents support their children at home	14.2	26.5	34.2	16.2	8.8
Parents take part in the school decision making process	7.3	8.8	30.4	33.1	20.4

From this table, we can observe that about 45.4% of teachers reported that parents in their schools sometimes showed the willingness to obtain information about their children's progress in their academic work, 19.2% said often, 17.3% stated never, whereas 13.1% indicated seldom, with 5.0% of the teachers responding almost always.

From Table 5.12, we also see that whereas 40.8% of teachers indicated that their schools often shared information about the curriculum with parents, another 31.2% of teachers reported that their schools almost always shared information about the curriculum with parents, whereas 20.8% indicated sometimes, 4.2% seldom and 3.1%

never. Further, 31.2% of the surveyed teachers in this study indicated that parents/guardians sometimes volunteer to do work in school, whereas 24.2% replied often. Whereas 15.8% of teachers indicated seldom, another 15.8% responded never. 13.1% replied almost always. The table also shows that whereas 34.2% of respondents indicated that parents sometimes support their children at home, 26.5% replied seldom, 16.2% often, 14.2% never and 8.8% almost always. Finally, table 5.12 shows that 33.1% of the teachers stated that parents take part in the school decision making process, whereas 30.4% indicated sometimes, 20.4% almost always, 8.8% seldom and 7.3% never.

The results in Table 5.12 indicate that generally, parents in the sampled schools are rarely involved in school activities. One explanation for this is that most parents especially in rural areas are not well educated to meet the complexities of the school work of their children. As was mentioned earlier (see 3.5.4.2.5), parents may resent to assist children with their school work if they find the curriculum content confusing. In addition, the use of English as a medium of instruction in Namibia's classrooms goes beyond most parents' ability to be meaningfully involved in their children's academic work (see 3.5.3.2).

The current study also asked a question about how community members support curriculum implementation and the results for this question are presented in Table 5.13 below.

5.5.2.3 Community members

In line with the pivotal role accorded to individual parents regarding the effective running of schools, the Ministry of Education in Namibia also believes that "Schools can meet the needs of communities only if there is a genuine and working partnership between the government and the community" (MEC, 1993:179-180) (see 3.5.4.2.5). In this thesis therefore, teachers were asked to indicate in which school activities affecting children's learning did community members participate (see Appendix 1: Question 37).

In order to improve the meaningful interpretation of the collected data, the dataset of Question 37 that had five items (N = Never, S = Seldom, O = Often, SO = Sometimes, AA = Almost Always) was collapsed to form four (Never, Seldom, Often/Sometimes, Almost Always) response categories and the results are depicted in Table 5.13 below.

Table 5.13: Support from community members

(n=260)

Statement	Responses in %			
	Never	Seldom	Often/Sometimes	Almost always
Coordination of resources	28.1	20.0	48.9	3.1
Maintenance of infrastructure	23.5	22.7	45.4	8.5
Building of school infrastructure	25.4	16.9	43.1	14.6
Building sense of community	26.5	18.1	45.3	10.0
School governance	16.5	19.6	53.9	10.0
Advocacy activities	32.8	16.2	46.6	4.2
Cultural activities	20.0	16.5	48.4	15.0
Sports activities	26.2	20.0	43.0	10.8
School meetings	3.5	6.9	66.2	23.5
Homework for their children	24.2	18.8	45.3	11.5

From this table, we can observe that about close to half (48.9%) of the teachers in the current study indicated that community members often or sometimes support schools in the coordination of resources, whereas 28.1% said never, 20.0% seldom and 3.1% almost always. We can also see from table 5.13 that 45.4% of respondents responded

that community members never supported schools in the maintenance of infrastructure, 23.5% stated never, 22.7% seldom, whereas 8.5% said almost always.

As can also be seen from this table 43.1% of the teachers indicated that community members often or sometimes support the building of the infrastructure of their schools, 16.9% said seldom, 25.5% replied never and 14.6% stated almost always. Table 5.13 also shows that 45.3% of teachers indicated that community members often or sometimes support the school in developing a sense of community, whereas 18.1% stated seldom, 26.5% never and 10.0% almost always.

As may also be seen in the table above, 53.9% of the teachers surveyed reported that community members support schools in the governance of their school. Whereas 19.6% of the respondents indicated that community members seldom support schools in the governance of their schools, 16.5% said never and 10.0% almost always. In this table we can also note that 46.6% of the teachers in the current study indicated that community members often or sometimes provide support to schools through advocacy activities, whereas, 16.2% stated seldom, 32.8% said never and 4.2% almost always.

Furthermore, as we can see from the data displayed in this table, 48.4% of the teachers indicated that community members often or sometimes provide support to cultural activities conducted by schools, 20.0% replied never, 16.5% seldom and 15.0% almost always.

Moreover, the table above also illustrates that 43.0% of the teachers indicated that community members often or sometimes support schools during sports activities, 26.2% stated never, whereas 20.0% responded seldom and 10.8% said almost always. With respect to school meetings, two thirds (66.2%) of teachers stated that community members often or sometimes support schools by attending meetings, whereas 23.5% indicated that almost always community members attended school meetings. Around 6.9% of the teacher surveyed indicated that community members seldom attended schools, 3.5% said never.

In the case of support in homework for their children, this table illustrates that 45.3% of the teachers replied that community members support school efforts by assisting their children with their homework. On the other hand, 18.8% of respondents stated that community members seldom assist children with their homework, whereas 24.2% indicated never. Just about 11.5% of the teachers responded that community members almost always supported schools by assisting children to complete their homework.

The findings in Table 5.13 show that community members' support to school was high in school governance (53.9%) and attending school meetings (66.2%). A plausible explanation for this may be that teachers believe that community-school partnerships have been strengthened in which schools and existing community bodies such as the School Board Committee, might have helped the partners to define their respective roles and responsibilities to each other.

Another explanation might be that teachers believe that if schools disregard communities around them, community members might in all probability reciprocate to the gesture to the detriment of the successful implementation of the curriculum.

5.5.2.4 Institutions of higher learning

There are several institutions of higher learning in Namibia with each of the institutions expected to play a role in the development and the implementation of the curriculum policy at school and classroom levels. As stated in Section 3.5.4.2.6, Namibia has two public institutions (University of Namibia and Polytechnic of Namibia) of higher learning, each represented by satellite campuses in the sampled regions of this study. In Caprivi region, for instance, the University of Namibia's Katima Mulilo Campus is located approximately 2 kilometers from Katima Mulilo, the commercial center of the region.

Similarly, in Kavango region, the University of Namibia's Rundu Campus is situated at about 2.5 kilometers from Rundu Township, the region's main business center. On the

other hand, two University of Namibia satellite campuses serve the four northern regions of Oshana, Ohangwena, Omusati and Oshikoto.

For instance, although the University of Namibia's Oshakati Campus is located in Oshana region, this institution is situated approximately 25 kilometers from the regional education headquarters of Oshikoto region. In addition, the University of Namibia runs the Hifikepunye Pohamba Campus, which is located in the Ongwediva Township less than 20 kilometers from the Oshikoto education office (University of Namibia, 2013).

The Polytechnic of Namibia, on the other hand, runs among others, the Centre for Open Life Long Learning in the three regions sampled in this study. In Caprivi region, for example, the regional centre is situated about 2 kilometers from Katima Mulilo Township at the Zambezi Vocational Training Centre. In the case of Kavango region, the regional centre is located in the town of Rundu at the centre of Namibia College for Open Learning (NAMCOL). With regard to Oshikoto region, the Polytechnic of Namibia's regional Centre for Open Life Long Learning is situated at the Motor Vehicle Accident (MVA) Fund Service Centre, about 20 kilometers from the main office of Oshikoto education region (Polytechnic of Namibia, 2014).

Both regional campuses and centres of the University of Namibia and the Polytechnic of Namibia, offer research and capacity development programmes, study facilities, library resources, internet access and provide face-to-face lectures and tutorials to their students (Polytechnic of Namibia, 2014; University of Namibia, 2013).

Based on the above background information, Question 38 was asked (see Appendix 1) to understand how the two public institutions of higher learning have contributed towards the development and the implementation of the intended secondary school curriculum in sampled regions and schools in terms of sharing laboratory, library facilities and professional expertise.

To minimise respondents' ambiguities obtained after data analysis percentages for Question 38 (see Appendix 1) that had five items (SA = Strongly Agree, A = Agree, SD = Strongly Disagree, D = Disagree, DK = Don't Know) were added across response categories to form three categories (SA/A = Strongly Agree/Agree, SD/D = Strongly Disagree/Disagree, DK = Don't Know) (see Table 5.14).

The results of Question 38 are displayed in Table 5.14 below.

Table 5.14: Support from institutions of higher learning

(n=260)

Statement	Responses in %		
	SA/A	SD/D	DK
Avails laboratory & library facilities to learners	33.1	57.0	10.0
University lecturers are used as guest teachers for some lessons	20.4	68.2	11.4
University lecturers participate in schools holiday lessons	15.0	78.1	6.9
University full-time post-graduate students carry out research on learners in my school	32.7	56.5	10.8
University provides professional development to teachers in my school	36.0	54.6	10.4

SA-strongly agree, A-agree, SD-strongly disagree, D-disagree, DK-don't know

As shown in Table 5.14, 33.1% of the teachers surveyed in the current study, strongly agreed or agreed that institutions of higher learning avail laboratory and library facilities to their learners. Whereas more than half (57.0%) of the teachers strongly disagreed or disagreed, 10.0% replied don't know.

Also illustrated in this table is the fact whereas 20.4% of the teachers strongly agreed or agreed with the fact that university lecturers are used as guest teachers for some lessons in the schools covered by the current study, 68.2% strongly disagreed or disagreed. About 11.4% indicated don't know. It also follows from Table 5.14 above that 15.0% of the respondents strongly agreed or agreed that university lecturers participate in schools' holiday lessons. On the contrary, 78.1% strongly disagreed or disagreed;

whereas 6.9% of the teachers replied don't know. Furthermore, from this table it can also be seen that whereas 32.7% strongly agreed or agreed that university full-time post-graduate students carry out research on learners in schools covered by this study, 56.5% strongly disagreed or disagreed. Around 10.8% indicated don't know to this question. Finally, it can also be seen in this table that whereas 36.0% of the teachers strongly agreed or agreed that universities provide professional development to teachers in the schools covered by the current study, 54.6% strongly disagreed or disagreed and around 10.4% indicated don't know.

The findings in Table 5.14 above provide various possible explanations. One possible explanation is that most teachers in this study seem to suggest that institutions of higher learning are not as supportive of the implementation of the intended secondary school as they are expected to do. This finding contradicts what is known about the role of institutions of higher learning stated by Hoadley and Jansen (2009:139) and MEC (1993:109-116) (see 3.5.4.2.6).

5.5.2.5 Teachers' unions

According to (Hoadley & Jansen 2009:319) teacher unions play a powerful role in the society. In Namibia teacher unions have moved beyond issues concerned only with narrow workplace and salary concerns and are involved in teachers' professional issues including "conducting research in the field of education, identifying and conducting in-service trainings and other professional development programmes for teachers, and analysing the implementation of educational policies" (see 3.5.4.2.7).

Following from the above understanding, teachers were asked a question (see Appendix 1: Question 39) to provide responses to the type of services teacher union representatives provided to improve teaching and learning in the sampled schools 12 months prior to the current study. To make a meaningful interpretation of the data, the dataset for Question 39 that had five items (N = Never, S = Seldom, O = Often, SO =

Sometimes, AA = Almost always) were collapsed to three (Never/Seldom, Often/Sometimes, Almost always) response categories (see Table 5.15).

Table 5.15 below summarises the results of teacher unions' support to the curriculum implementation process, 12 months before the current study was conducted.

Table 5.15: Support from teachers' unions

(n=260)

Statement	Response in %		
	Never/Seldom	Often/Sometimes	Almost always
Advise & provide information on curriculum policy	69.2	28.4	2.3
Advise on teaching & learning strategies	66.1	28.1	5.8
Advise on teacher appointments	59.2	35.4	5.4
Inform teachers on their conditions of service	47.3	40.3	12.3

Table 5.15 illustrates that about seven of ten (69.2%) teachers in the current study reported that in the past 12 months prior to this research study, teachers' union representatives never or seldom advised or provided schools with information on curriculum policy, slightly more than a quarter (28.5%) indicated often or sometimes, whereas 2.3% replied almost always. From this table it can also be seen that whereas 66.1% of the teachers indicated that teachers' union representatives never or seldom advise teachers on teaching and learning strategies, 28.1% replied often or seldom and just 5.8% said almost always.

Moreover, it can also be seen from the table above that 59.2% of the respondents indicated that teachers' union representatives never or seldom advise teachers on appointments, 35.4% stated often or sometimes, whereas 5.4% replied almost always. Lastly, 47.3% of the teachers in this study indicated that union representatives never or sometimes inform teachers about their conditions of service, 40.3% often or sometimes and 12.3% stated almost always.

On a closer scrutiny of these results, two interpretations can be made. First, most teachers in the current study believe that in the 12 months prior to this study, representatives of the two main Namibian teachers' unions did not carry out any of the four activities (see Table 5.15), at least in their schools.

Secondly, teachers seem to argue that if teachers' unions did not carry out these activities in the 12 months prior to this study because the activities are outside the unions' mandate, why is it then that less than half of the teachers surveyed indicated that during the same period union representatives never or seldom (47.3%) informed teachers of their conditions of service.

The conclusion therefore is that most teachers believe that teachers' unions role in supporting curriculum implementation is generally low. Also it appears that teachers' unions did not only take part in curriculum related issues in the sampled school, but specifically they did not endeavour to promote workers' rights, which is their traditional responsibility (see 3.5.4.2).

5.5.2.6 Regional councillors

In the context of Namibia's decentralisation policy, Regional Councils are the closet political institutions to the country's citizens and their aspirations (Hopwood, 2005), and thus have the potential to influence the implementation of the central government's intended policy initiatives at both meso and micro levels (see 2.2; 3.5.4.2.8). Teachers were therefore asked a question (see Appendix 1: Question 40) on how regional councillors have supported the implementation of the intended secondary school curriculum in their respective regions, 12 months prior to the collection of data for the current study.

After cleaning the raw data for inconsistencies the dataset for Question 40 (see Appendix 1) that had five items (N = Never, S = Seldom, SO = Sometimes, O = Often,

AA = Almost always) were collapsed to form three (Never/Seldom, Sometimes/Often, Almost always) response categories (see Table 5.16). Table 5.16 below presents results of Question 40.

Table 5.16: Support from regional councillors

(n=260)

Statement	Responses in %		
	Never/Seldom	Sometimes/Often	Almost always
Officiate on school celebrations	62.7	32.3	5.0
Settle disputes between school authorities & community members	74.6	20.7	4.6
Participate in fund raising activities	79.6	16.2	4.2
Hand over resources supplied by the national government	46.9	46.2	6.9
Give motivational speeches to raise learners' morale	66.1	26.9	6.9

Table 5.16 shows that the majority of teachers (79.6%) reported that regional councillors never or seldom participate in fund raising activities for schools, whereas 16.2% indicated sometimes or often and 4.2% said almost always. Whereas 74.6% of the teachers surveyed indicated that regional councillors never or seldom participate in settling disputes between school authorities and community members, 20.7% stated sometimes or often and 4.6% almost always.

From the table we can also see that 66.1% of the teachers indicated that regional councillors never or seldom give motivational speeches to raise learners' morale, 26.9% replied sometimes or often and 6.9% almost always. Further, as it may be seen from the table above, 62.7% of the respondents reported that regional councillors never or seldom officiate on school celebrations, 32.3% said sometimes or often, whereas 5.0% replied almost always.

Lastly, Table 5.17 also shows that 46.9% of the teachers said that regional councillors never or seldom hand over to schools resources supplied by the national government, whereas 46.2% indicated sometimes or often and 6.9% stated almost always.

Contrary to the literature reviewed for this study (see 3.5.4.1) results show that most of the teachers who responded to this question believe that regional councillors in Caprivi, Kavango and Oshikoto regions did not in the 12 months leading to this study contribute to the implementation of the secondary school curriculum in terms of the four responsibilities (see Table 5.16) listed above.

Teachers may believe that despite being the closest to the country's citizens and their aspirations (Hopwood, 2005), regional councillors, have however, not proven that they have the charismatic political personality to influence the successful implementation of education policies for two reasons. Teachers may hold that perhaps regional councillors lack the confidence to partake in education related matters because of their low level of formal education.

However, the only result which is compatible with the literature reviewed for this study is that in the 12 months before this study was conducted, regional councillors sometimes/often (46.3%) handed out resources supplied by the national government.

5.5.2.7 Business owners

According to reviewed literature for the current study (see 3.5.4.2.4), business owners play an important role in both the development of the curriculum and in its implementation thereof. Given this understanding, teachers were asked a question (see Appendix 1: Question 41) about whether or not business owners are helping sampled schools to implement the intended secondary school curriculum. Upon the preliminary analysis of the raw data, the dataset for Question 41, which had five items (SA = Strongly Agree, A = Agree, SD = Strongly Disagree, D = Disagree, DK = Don't Know) was collapsed to form three (SA/A = Strongly Agree/Agree, SD/D = Strongly

Disagree/Disagree, DK = Don't Know) response categories in order to make a meaningful interpretation of the analysed data (see Table 5.17).

Table 5.17 below displays results of the question (Question 41) on the type of support that business owners provided to sampled schools in the 12 months leading to the current study.

Table 5.17: Support from business owners

(n=260)

Statement	**Responses in %**		
	SA/A	SD/D	DK
Provide financial support to my school	28.9	61.2	10.0
Offer on-the-job training to learners in my school	19.6	67.3	13.1
Provide career education/advise	24.6	62.3	13.1
Distribute food parcels & clothes to vulnerable learners in my school	22.3	71.2	6.5
Participate in curriculum development in my school	22.7	61.1	16.2

As can be seen from Table 5.17 above, whereas about 28.9% of the respondents strongly agreed or agreed that business owners provide financial support to schools sampled for this research study, six of ten (61.2%) teachers strongly disagreed or disagreed and 10.0% replied don't know. Also from this table, we can see that 19.6% of the teachers strongly agreed or agreed that business owners offer on-the-job training to learners in their schools, whereas about two thirds (67.3%) strongly disagreed or disagreed and 13.1% stating don't know.

With respect to the provision of career education/advise to learners, only 24.6% teachers in the current study strongly agreed or agreed that business owners provided career education to schools, whereas, 62.3% strongly disagreed or disagreed. Around 13.1% indicated don't know.

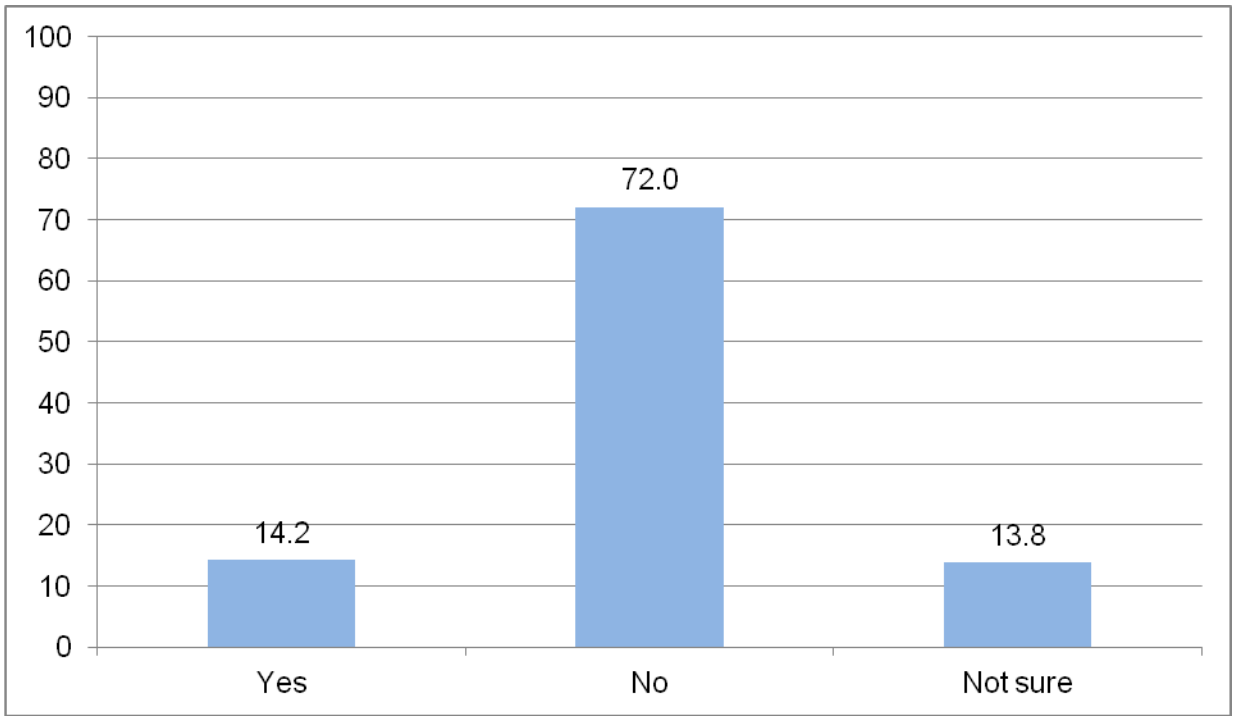
We can also note from this table that whereas 22.3% of the teachers strongly agreed or agreed that business owners distribute food parcels and clothes to vulnerable learners in sampled schools, nearly three quarters (71.2%) strongly disagreed of disagreed and 6.5% indicated did not know. From this table we can also see that 22.7% of the teachers strongly agreed or agreed that business owners participated in curriculum development process; whereas just over six in ten (61.1%) teachers strongly disagreed or disagreed and 16.2% replied don't know.

Following from the results presented in the table above, one plausible explanation can be suggested. These findings show that 12 months prior to this study business owners may not have supported schools and teachers in their efforts to implement the intended secondary school curriculum. This is despite the fact that they were highly involved in the curriculum development process according to the respondents (see Figure 5.11).This finding contradicts Ornstein, Pajak and Ornstein's (2011) and Van der Westhuizen's (2011:385-386) assertion that because business owners are concerned with the negative effects of economic forces such as unemployment, they would therefore be involved not only in curriculum development but also in its implementation.

One possible explanation for this contradiction might be that the business community in the sampled regions may have not clearly defined their social responsibility and how to implement such responsibilities at school level.

5.5.3 Teachers' involvement in curriculum development

A question (see Appendix 1: Question 42) was asked to determine and understand whether or not teachers in the current study were involved in the development process of the 2010 national curriculum. Figure 5.24 below displays the results of question 42.



(n=260)

Figure 5.24: Teachers' involvement in the curriculum development process

Figure 5.23 above shows that nearly three quarters (72.0%) of teachers in the current study did not participate in the development of the 2010 implemented secondary school curriculum. A closely equivalent proportion, however, reported that they participated (14.2%) and 13.8% were not sure.

The findings show that although most of the teachers surveyed in this study regard themselves as key implementers of the intended secondary school curriculum (see Figure 5.23), three quarters of the teachers who responded to the question of whether

or not they participated in the development process of the national curriculum stated to the contrary.

The results therefore illustrate that perhaps the efforts to provide professional development programmes should be stepped up to empower teachers with the necessary knowledge, skills and attitudes required for the effective implementation of the intended secondary school curriculum.

The last question (Question 43) was an open-ended question, and was asked to identify any comments that research participants might have had beyond the responses to the closed-ended questions. Responses of the open-ended questions were analysed by overlapping themes; interpreted and are presented in Table 5.26 of this study (Creswell, 2012:220).

In the foregoing section results of descriptive statistics were presented in tables and graphs portraying and focussing on summarising and describing data with respect to the sample in the current study (McMillan & Schumacher, 2010:149).

The current study also explored the possible relationship between teachers' demographic characteristics, epistemological, internal school support and external support factors and the implementation of the intended secondary school curriculum. The next section presents findings of the correlation analysis.

5.6 Results of the correlation analysis

Pearson product-moment correlations (r) were computed between five demographic variables (age, gender, number of subjects taught, professional qualifications and teaching experience); four teachers' epistemologies variables (knowledge, attitudes, beliefs and self-efficacy or behaviours); three internal school factors (learners' characteristics, professional development, school leadership); and three external support factors (resources, stakeholder support and teacher involvement) and their relationship to the implementation of the intended secondary school curriculum represented by grade 10 mean examination results used in the outcome analyses (see Table 4.2).

In the present study the Pearson correlations (*r*) were interpreted according to Calder and Sapsford (2006:226); Pallant (2007:132) and Pietersen and Maree's (2007:236) work (see Table 4.5).

Table 5.18 presents the results of teachers' demographic characteristics, whereas Table 5.19 displays teachers' epistemological factors. Results of internal school support factors are displayed in Table 5.20, while Table 5.21 illustrates results of the external support factors and their relationships to the implemented secondary school curriculum.

5.6.1 Teachers' demographic characteristics

Table 5.18: Correlations between teachers' demographic characteristics and the implementation of the secondary school curriculum

Independent variables	Curriculum implementation Pearson Correlation (*r*)	Sig (2-tailed)
Teachers' demographic characteristics		
Age	0.018	0.77
Teaching experience in current school	0.110	0.08
	n	260

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

From the values in table 5.18, it can be deduced that there is a weak and positive correlation between the 2 independent variables and curriculum implementation. None of these relations is statistically significant on the 0.05 level (2-tailed). Age which was found to have a weak positive correlation implies that although young and older teachers may influence the implementation of the secondary school curriculum, the age of the teachers alone does not guarantee that the curriculum will be implemented as desired. Similarly, the number of years that a teacher teaches in a given school may not influence the implementation of the school curriculum.

5.6.2 Teachers' epistemological characteristics

Table 5.19: Correlations between teachers' epistemological characteristics and the implementation of the secondary school curriculum

Independent variables	Curriculum implementation Pearson Correlation (*r*)	Sig (2-tailed)
Teachers' epistemological factors		
Knowledge	-0.144	0.02
Attitude	0.114	0.07
Belief Index	-0.054	0.39
Self-efficacy /behaviour	-0.002	0.98
	n	260

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 5.19 shows that there is a weak negative correlation between 3 independent variables and curriculum implementation. Attitude has a weak positive correlation. Only knowledge shows a statistically significant correlation on the 0.05 scale (2-tailed).

5.6.3 Internal school support factors

Table 5.20: Correlations between internal school support factors and the implementation of the secondary school curriculum

Independent variables	Curriculum implementation Pearson Correlation (*r*)	Sig (2-tailed)
Internal School Support Factors		
Learners' characteristics	.186**	.003
Professional development	.008	.902
School leadership	.402**	.000
	n	260

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

The values in table 5.20 show that there is a weak positive correlation between learners' characteristics and professional development and curriculum implementation, except for school leadership, which has a medium positive correlation. Both learners' characteristics and school leadership were statistically significant on the 0.05 level (2-tailed). School leadership is also statistically significant on the 0.01 level (2-tailed). Only professional development is not statistically significant on the 0.05 level (2-tailed).

5.6.4 External support factors

Table 5.21: Correlations between external support factors and the implementation of the secondary school curriculum

Independent variables	Curriculum implementation Pearson Correlation (*r*)	Sig (2-tailed)
External School Support Factors		
Resources	-.270**	.000
Stakeholder support	.406**	.000
Teacher involvement	.404**	.000
	n	260

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 5.21 indicates that there is a weak negative correlation between resources and curriculum implementation, which is significant on the 0.01 (thus also on the 0.05) level (2-tailed). The table also shows that both stakeholder support and teacher involvement are medium positive correlations, which are statistically significant on the 0.01 (thus also the 0.05) level (2-tailed).

The foregoing section presented the findings and a summary of the correlation analysis conducted for this study. The next section displays the results of the logistic regression analyses. In addition, the findings of each of the hypotheses are tested, rejected or accepted.

5.7 Results of the logistic regression analysis

In the section above results of the Pearson product moment correlation analyses were presented.

The following subsection presents the results of the regression analyses that were performed to determine whether or not independent variables influenced the implementation of the intended secondary school curriculum (see Table 4.2). The regression analyses were performed on 260 respondents that took part in this study.

The present study used Cohen's (*d*) criteria effect sizes to determine the statistical significance of the results on the outcomes (see Table 4.6).

The hypothesis test (H_0) and (H_1) of the current study was set at a 95% confidence interval, and a significance level of 0.05; which suggest that if the $p<0.05$, the null hypothesis would be reject; but if the $p>0.05$, the null hypothesis will be accepted (see 4.6).

Tables 5.22-25 below present the results of the logistic regression analysis and each corresponding null hypothesis and alternative hypothesis is reiterated, accepted or rejected.

5.7.1 Teachers' demographic characteristics

There are five independent variables and for each of these a null and alternative hypothesis was formulated.

Table 5.22: Logistic regression analysis for demographic characteristics influencing the implementation of the secondary school curriculum

Independent variables	Curriculum implementation					
Step 1	**β**	S.E.	Wald	df	Sig (2-tailed)	Exp**(β)**
Teacher's demographic characteristics						
Age	-.149	.057	6.929	1	.008	.861
Gender	-.028	.351	.006	1	.936	.972
Number of subjects qualified to teach	-.062	.172	.131	1	.717	.940
Professional qualification	.650	.532	1.494	1	.222	1.916
Teaching experience	.306	.084	13.419	1	.000	1.358
Constant	2.206	1.504	2.151	1	.142	9.084

a. Variable(s) entered on step 1:age, sex, number of subjects, professional qualification, teaching experience

1. Hypothesis number one

- Hypothesis number one is reiterated as follows: H_0(d1): The age of teachers does not have an influence on the implementation of the secondary school curriculum
- H_1(d1): The age of teachers does have an influence on the implementation of the secondary school curriculum

First, as shown in Table 5.22 the independent variable 'age' has a negative effect (β = -0.149) on the implementation of the intended secondary school curriculum, and that it is statistically significant (Sig 2-tailed = 0.008), which indicates that it is less than the *p*-value of 0.05.

Because the Sig (2-tailed) is less than the chosen *p*-value of 0.05, the decision is to reject the null hypothesis and conclude that the teachers' age does influence the implementation of the intended secondary school curriculum.

2. Hypothesis number two

Hypothesis number two is reiterated as follows:

- H_0(d2): The gender of teachers does not have an influence on the implementation of the secondary school curriculum
- H_1(d2): The gender of teachers does have an influence on the implementation of the secondary school curriculum

The results in Table 5.22 also indicate that the independent variable 'gender' has a negative effect (β = -.028) on the implementation of the secondary school curriculum, but that it is statistically not significant (Sig 2-tailed = .936), which indicates that it is greater than the *p*-value of 0.05.

Thus, the decision is to accept the null hypothesis and conclude that gender does not influence the implementation of the intended secondary school curriculum.

3. Hypothesis number three

Hypothesis number three is reiterated as follows:

- H_0(d3): The number of subjects that teachers teach does not have an influence on the implementation of the secondary school curriculum
- H_1(d3): The number of subjects that teachers teach does have an influence on the implementation of the secondary school curriculum

Third, Table 5.22 shows that the independent variable 'number of subjects taught' (β = -.062), has a small effect on the implementation of the secondary school curriculum, and was statistically not significant at (Sig 2-tailed = .717), which indicates that it is greater than the *p*-value of 0.05.

Therefore, the decision is to accept the null hypothesis and conclude that the number of subjects taught do not influence the implementation of the intended secondary school curriculum.

4. Hypothesis number four

Hypothesis number four is reiterated as follows:

- H_0(d4): The professional qualifications of teachers do not have an influence on the implementation of the secondary school curriculum
- H_1(d4): The professional qualifications of teachers do have an influence on the implementation of the secondary school curriculum

Furthermore, the Table 5.22 above shows that the independent variable 'professional qualification' (β = .650) has a medium effect on the implementation of the secondary school curriculum, and statistically not significant (Sig 2-tailed = .222), which indicates that it is greater than the *p*-value of 0.05.

Therefore, the decision is to accept the null hypothesis which states that teachers' professional qualifications do not influence the implementation of the implemented secondary school curriculum.

5. Hypothesis number five

Hypothesis number five is reiterated as follows:

- H_0(d5): The teaching experience of teachers does not have an influence on the implementation of the secondary school curriculum
- H_1(d5): The teaching experience of teachers does have an influence on the implementation of the secondary school curriculum

Moreover, the results of the logistic regression analysis between teaching experience and implementation of the secondary school curriculum are presented in Table 5.22 above. As we can see in this table the independent variable 'years of teaching experience' (β =.306) has a small effect on the implementation of the intended secondary school curriculum, and is statistically significant (Sig 2-tailed = 0.000), which indicates that it is lesser than the *p*-value of 0.05.

Thus, the decision is to reject the null hypothesis and conclude that teaching experience has an influence on teachers' ability to implement the intended secondary school curriculum.

5.7.2 Teachers' epistemological characteristics

This section has four independent variables (see Table 5.23 below), each with a null and alternative hypothesis.

Table 5.23: Logistic regression analysis for epistemological characteristics influencing the implementation of the secondary school curriculum

Independent variable	Curriculum implementation					
Step 1	**β**	S.E.	Wald	df	Sig (2-tailed)	Exp(**β**)
Teachers' epistemological characteristics						
Knowledge	-.630	.345	3.334	1	.068	.533
Attitude	.534	.370	2.083	1	.149	1.705
Belief	.551	.353	2.437	1	.119	1.735
Self-efficacy	-.370	.359	1.061	1	.303	.691
Constant	2.206	1.504	2.151	1	.142	9.084

Variable(s) entered on step 1: knowledge, attitude, belief, self-efficacy

Four null (H_0) and alternative (H_1) hypotheses were formulated for teachers' epistemological (e) characteristics.

1. Hypothesis number one

- H_0(e1): The knowledge of teachers does not have an influence on the implementation of the secondary school curriculum.
- H_1(e1): The knowledge of teachers does have an influence on the implementation of the secondary school curriculum.

Table 5.23 shows the independent variable 'knowledge' (β = -.630) has a negative medium effect on the implementation of the secondary school curriculum, and is statistically not significant (Sig 2-tailed = .07), which indicates that it is greater than the *p*-value of 0.05.

Therefore, the decision is to retain the null hypothesis and conclude that knowledge does not influence the implementation of the secondary school curriculum.

2. Hypothesis number two

- H_0(e2): The attitudes of teachers do not have an influence on the implementation of secondary school curriculum.
- H_1(e2): The attitudes of teachers do have an influence on the implementation of the secondary school curriculum.

In Table 5.23 above the independent variable 'attitude' (β = .534) has a medium effect on the implementation of the secondary school curriculum, and that it is statistically not significant (Sig 2-tailed = .149), which indicates that it is greater than the *p*-value of 0.05.

Therefore, the decision is to retain the null hypothesis and conclude that teachers' attitudes do not influence the implementation of the intended secondary school curriculum.

3. Hypothesis number three

- H_0(e3): The beliefs of teachers do not have an influence on the implementation of the secondary school curriculum.
- H_1(e3): The beliefs of teachers do have an influence on the implementation of the secondary school curriculum.

Further, as we can see in Table 5.23 above the independent variable 'beliefs' (β = .551) has a medium effect on the implementation of the secondary school curriculum, and that it is statistically not significant (Sig 2-tailed = .12), which indicates that it is greater than the *p*-value of 0.05.

Thus, the decision is to retain the null hypothesis and conclude that teachers' beliefs do not influence the implementation of the intended secondary school curriculum.

4. Hypothesis number four

- H_0(e4): The self-efficacy of teachers' does not have an influence on the implementation of secondary school curriculum.
- H_1(e4): The self-efficacy of teachers' does have an influence on the implementation of secondary school curriculum.

In addition, we can see in this table that the independent variable 'self-efficacy' (β = -.370) has a negative small effect on the implementation of the secondary school curriculum, and that it is statistically not significant (Sig 2-tailed = .30), because it is greater than the *p*-value of 0.05.

The decision is therefore, to retain the null hypothesis and conclude that teachers' self-efficacy does not influence the implementation of the secondary school curriculum.

5.7.3 Internal school support factors

This section has three independent variables, each with a null and alternative hypothesis.

Table 5.24: Logistic regression analysis for internal school support factors influencing the implementation of the secondary school curriculum

Independent variable		Curriculum implementation					
		β	S.E.	Wald	df	Sig (2-tailed)	Exp(**β**)
Step 1	Learner's characteristics	1.209	.777	2.418	1	.120	3.349
	Professional development	.402	.644	.389	1	.533	1.494
	School leadership	2.325	.808	8.286	1	.004	10.228
	Constant	2.206	1.504	2.151	1	.142	9.084

Variable(s) entered on step 1: learners' characteristics, professional development, school leadership

Three null (H_0) and alternative (H_1) hypotheses were formulated for the internal (i) school support factors.

1. Hypothesis number one

- H_0(i1): The characteristics of learners do not have an influence on the implementation of the secondary school curriculum.
- H_1(i1): The characteristics of learners do have an influence on the implementation of the secondary school curriculum.

Table 5.24 above shows that the independent variable 'learners' characteristics' (β = 1.209) has a large effect on the implementation of the secondary school curriculum, and that it is statistically not significant (Sig 2-tailed = .120), which indicates that it is greater than the *p*-value of 0.05.

Therefore, the decision is to retain the null hypothesis and conclude that learners' characteristics do not influence the implementation of the intended secondary school curriculum.

2. Hypothesis number two

- H_0(i2): The professional development of teachers does not have an influence on the implementation of the secondary school curriculum.
- H_1(i2): The professional development of teachers does have an influence on the implementation of the secondary school curriculum.

As we can see in Table 5.24 the independent variable 'professional development' (β = .402) has a medium effect on the implementation of the secondary school curriculum, and that it is statistically not significant (Sig 2-tailed = .533), which indicates that it is greater to the *p*-value of 0.05.

Thus, the decision is to accept the null hypothesis and conclude that professional development does not influence the implementation of the secondary school curriculum.

3. Hypothesis number three

- H_0(i3): The leadership of the school does not have an influence on the implementation of the secondary school curriculum.
- H_1(i3): The leadership of the school does have an influence on the implementation of the secondary school curriculum.

As can be seen in Table 5.24 the independent variable 'school leadership' (β = 2.325) has a large effect on the implementation of the secondary school curriculum, and that it is statistically significant (Sig 2-tailed = .004), which indicates that it is less than the *p*-value of 0.05.

Therefore, the decision is to reject the null hypothesis and conclude that school leadership has an influence on the implementation of the intended secondary school curriculum.

The results in Table 5.24 show that an effective school leadership may likely influence the implementation of the intended secondary school curriculum.

5.7.4 External support factors

Three null (H_0) and alternative (H_1) hypotheses were formulated for the external (x) school factors.

Table 5.25: Logistic regression analysis for external support factors influencing the implementation of the secondary school curriculum

Independent variable		Curriculum implementation					
		β	S.E.	Wald	df	Sig (2tailed)	Exp(**β**)
Step 1	Resources	-1.086	.534	4.141	1	.042	.338
	Stakeholder support	1.793	.570	9.901	1	.002	6.006
	Teacher involvement	1.792	.570	9.902	1	.001	6.005
	Constant	2.206	1.504	2.151	1	.142	9.084

Variable(s) entered on step 1: resources, stakeholder support, teacher involvement.

1. Hypothesis number one

- H_0(x1): The resources of the school do not have an influence on the implementation of the secondary school curriculum.
- H_1(x1): The resources of the school do have an influence on the implementation of the secondary school curriculum.

Table 5.25 shows that the independent variable ‘resources’ (β = -1.086) has a large negative effect on the implementation of the secondary school curriculum, and that it is statistically significant (Sig 2-tailed = .042), which indicates that it is less than the *p*-value of 0.05.

Thus, the decision is reject the null hypothesis and conclude that resources influence the implementation of the intended secondary school curriculum.

2. Hypothesis number two

- H_0(x2): The support of stakeholders to the school does not have an influence on the implementation of the secondary school curriculum.
- H_1(x2): The support of stakeholders to the school does have an influence on the implementation of the secondary school curriculum.

Table 5.25 also shows that the independent variable ‘stakeholder support’ (β = 1.793) has a large effect on the implementation of the secondary school curriculum, and that it is statistically significant (Sig 2-tailed = .002), which indicates that it is less than the *p*-value of 0.05.

Therefore, the decision is to reject the null hypothesis and conclude that stakeholder support does influence the implementation of the intended secondary school curriculum.

3. Hypothesis number three

- H_0(x3): The involvement of teachers in curriculum development does not have an influence on the implementation of the secondary school curriculum.
- H_1(x3): The involvement of teachers in curriculum development does have an influence on the implementation of the secondary school curriculum.

This table shows that the independent variable ‘teacher involvement’ (β = 1.792) has a large effect on the implementation of the secondary school curriculum, and that it is statistically significant (Sig 2-tailed = .001), which indicates that it is less than the *p*-value of 0.05.

Therefore, the decision is to reject the null hypothesis and conclude that teacher involvement in curriculum development does influence to the implementation of the intended secondary school curriculum.

In summary, results from the logistics regression analysis using Cohen’s (*d*) criteria show that for the first set of analyses, the effects of gender, professional qualification, and the number of subjects taught were statistically not significant.

The effect sizes of teachers’ knowledge, attitudes, beliefs and self-efficacy were found statistically not significant.

With regard to the analyses of the internal school support factors, the effect sizes for learners’ characteristics and professional development are statistically not significant. The variable for school leadership was statistically significant (Sig 2-tailed = .004), which indicates that it is less than the *p*-value of 0.05.

Regarding the variables for external support factors all were statistically significant; resources (Sig 2-tailed = .042), stakeholder support (Sig 2-tailed = .002) and teacher involvement (Sig 2-tailed = .001). This indicates that the variables for external support factors are less than the *p*-value of 0.05.

5.7.5 Summary

Up to this point Chapter 5 presented the results of the descriptive, correlations and logistic regression of the present study. The descriptive statistics were used to summarise, organise, and reduce, portray results of the sample data. The descriptive statistics were presented in means, median, mode and largely in percentages and are graphically presented through tables and bar graphs (see 5.2).

In addition, results of correlations using the Pearson product-moment correlation technique (*r*) were analysed and presented to determine whether or not there is a relationship between independent and dependent variables chosen for this study. Moreover, the results of the logistic regression were also presented and fifteen hypotheses were tested and each hypothesis accepted or rejected.

Based on the research design delineated in Chapter 4 of this study, the next section presents the results of the qualitative analysis.

5.8 Results of the qualitative data analysis

5.8.1 Introduction

This study aimed at evaluating the factors that hinder or support the implementation of the intended secondary school curriculum at the classroom level. The idea that there is a mismatch between policy theory and practice is legitimated in the literature (see Chapter Two). In order to achieve the principal purpose of this study, teachers' knowledge, attitudes, beliefs and self-efficacy/behaviour characteristics were examined. In addition, internal school support factors (learners' characteristics, professional development and school leadership) and external support factors (resources, stakeholder support and teacher involvement) were also examined.

This section presents the results of the interview as a data collection device that was used to collect qualitative data for the current study. The discussion focuses on the qualitative narratives of the 15 interviewed (see Table 4.1) participants that took part in the current study. In order to provide a context for the qualitative results of the current study, if first present the biographical and contextual factors of the research participants.

5.8.2 Biographical data and contextual factors

5.8.2.1 School Background and Context

As explained in Chapter 4 of this study interviews were conducted with teachers in urban and rural schools across the three regions of Caprivi, Kavango and Oshikoto situated in the north and north eastern Namibia. In addition to the sample guidelines discussed in sections 1.9.5 and 4.8, teachers in this study were interviewed on the basis of their agreement and willingness to be interviewed within a set time frame and by the ease of access to their school by the researcher. All interviews with teachers took place in their respective staff rooms, but interviews with principals took place in their offices.

While combined and secondary schools (see Table 4.1) which participated in the current study across the three regions were located within the 75 kilometres radius from their respective commercial towns, urban schools were located within 2 kilometres of their commercial towns.

Rural schools were surrounded by traditional settlements with subsistence farming as the main economic activity. On the other hand, urban schools were situated in working to middle class areas.

5.8.2.2 Teachers' profile

As discussed in Chapter 4, 15 teachers (5 females and 10 males) were interviewed for this study. Across the three regions, 10 teachers were teaching in rural schools, while 5 taught in urban schools. In order to maintain the anonymity of the research participants interviewees are denoted as Teacher 1 to Teacher 15 (see Table 4.1).

5.9 Teachers' responses to interviews

Interviews were secured by means of phone calls, during which time, date and location for the interviews were set. The interview schedule contained 28 items, with subsections for probing. These questions were designed to seek data on the areas identified as strongly linked to the implementation of the intended secondary school curriculum in line with quantitative data and literature reviewed for the current study.

Demographic and background data (see Section A of Appendix 2) was used as an ice breaking exercise that gave some time to establish rapport with participants before discussing key research topics.

Section B (questions 2-14) was used to gather data on teachers' epistemological factors (knowledge, attitude, beliefs and self-efficacy). Section C (questions 15-23) was used to collect data on internal school support factors of learners' characteristics, professional development and school leadership.

The last section, Section D (questions 24-27); collected data related to external support factors of resources, stakeholders' support and teacher involvement in the curriculum development process.

The last question (question 28) was designed as a safety net and allowed participants to contribute any comments that they needed to be included in the discussion.

I began the discussion by introducing myself, explained the purpose of the research and assured the interviewees that the discussion will be treated as confidential. At this point I then asked the interviewees if I could be allowed to tape record the discussion.

5.10 Teachers' demographic characteristics

As part of the conceptual framework of the current study (see 3.5.1), demographic characteristics can influence whether or not teachers implement the curriculum policy in their classroom situations. The results of this study show that an overwhelming majority of teachers interviewed indicated that age, teaching experience and professional qualification somewhat influenced teachers' ability and decision on whether or not to implement the curriculum policy as designed by developers. As Teacher 1 put it:

> "*...I think they go hand in hand except that young teachers with good qualifications do not have many years of teaching. But with their qualifications, I think they have a better understanding of the educational issues in our education system. So I think older teachers, with low qualifications can implement the curriculum as well as other teachers because of their many years of teaching experience*".

Some teachers however, do not believe that age, teaching experience and professional qualification positively influence the teachers' decision whether or not to implement the curriculum in their classrooms. For instance, Teacher 2 argued as follows:

> *"Not really, age has nothing to do with it. ....there are many teachers with many years of teaching and some with good qualifications. But we know that some of them are not performing in their subjects. Why are so many kids failing while we have teachers with such good certificates and many years of teaching"?*

Principals were ambivalent when commenting on the question of whether age, teaching experience and professional qualification influence teachers to implement the curriculum. The following comment reflects the principals' response:

> *"Well, that is a difficult question, maybe I should say, it is a tricky one. I think it can be both ways. Some teachers even with say just certificates can do a good job compared to those with degrees or many years of teaching. I don't think age plays a major role at all".* (Teacher 14)

When probed further to explain what determines whether or not teachers implement the intended curriculum in their classrooms, the school principal responded that:

> *"It depends on individual teachers' level of commitment, which differs from person to person*".

In summary, the results of the demographic factors reveal that for the majority of teachers interviewed, age, teaching experience and professional qualification taken together might influence the implementation of the secondary school curriculum.

However, some interviewees were of the opinion that neither age, teaching experience or teachers' professional qualification influence whether or not teachers implement the curriculum innovation. Some research participants therefore suggested that teacher commitment is the main factor that influence the implementation of an intended curriculum policy innovation in their classrooms (see 5.10).

Based on Stenhouse (1975) and Kemmis and Fitzclarence's (1986) work (see 2.4.2) these findings suggest that if a communicative approach was adopted to curriculum implementation in Namibia, teacher commitment cannot result from teacher direction; rather should aim at promoting teacher judgement.

In other words, to ensure that in future teachers are committed in implementing the intended secondary school curriculum, they should be educated to become researchers, so that they are able to study their own teaching and test their theories and

practices (Kemmis & Fitzclarence, 1986), reflect on their actions or practices and together with their students interpret and make meaning of the curriculum policy in an environment of communication, trust and mutual respect (see 2.4.2).

5.11 Teachers' epistemological factors

5.11.1 Knowledge, understanding and awareness of the curriculum framework

Also as part of the literature reviewed for this study (see 3.5.2) it was discussed that teachers' epistemological system of knowledge, understanding and awareness, attitudes, beliefs and self-efficacy may have an effect on how they implement the policy as designed by the policy makers. As part of this research study, it was necessary to understand whether teachers were aware of the curriculum framework from which they are teaching; whether they understood the goals and objectives of their curriculum and whether they had knowledge of the key curriculum areas. It was therefore necessary to ask specific questions pertaining to their epistemological beliefs about the curriculum framework.

In response to the question about how much they knew about the 2010 National Curriculum Framework, almost all teachers replied that they knew a lot and were aware of the curriculum framework, which guided teaching and learning processes in their schools. The following statements illustrate the views of most of the participants in this study:

> *"I am sure I have heard of the national curriculum. ....if you are talking about the one that was developed a few years ago, yes, I think I am aware of it"* (Teacher 2).

> "*I know that there is a new curriculum that was changed from the Cambridge system to the Namibian education system"* (Teacher 3).

Contrary to most teachers' responses highlighted above Teacher 15 revealed that:

> *"I was recently appointed as a teacher in this school and I don't think I have enough knowledge of the National Curriculum Framework".*

When participants were asked whether they received copies of the National Curriculum Framework, the majority of teachers claimed that their schools received copies of the National Curriculum Framework. However, Teacher 4 complained that:

> *"Some of the teachers do not until now have the national curriculum document".*

When research participants were asked: "Do you think awareness of the curriculum is enough for teachers to be able to implement it as designed by policy-makers?" some teachers explained that awareness of the curriculum is important for effective curriculum implementation. However, some teachers disagreed and indicated that awareness alone is not sufficient for teachers to implement the curriculum as designed by policy-makers. The following quotations relate to this finding:

> *"Although it is important for teachers to be aware of the curriculum, I strongly believe that teachers should know the government's national curriculum policy by heart"* (Teacher 5).

> *"One may be aware of something, in this case the curriculum, but if you don't have it, your efforts are useless"* (Teacher 6).

> *"In order for teachers to facilitate the reform process and implement the curriculum policy as expected by policy makers, teachers must have access to the curriculum" (*Teacher 7).

When probed further about why participants think teachers should know the curriculum by heart, some teachers claimed that knowledge and understanding of the curriculum can enhance its implementation, as suggested in the following quotations:

> "*Good knowledge of the curriculum helps teachers to have a good understanding of what they are supposed to do when they teach"* (Teacher 6).

> "*It makes it easier for teachers to implement the curriculum if they understand the context and content of the curriculum policy document"* (Teacher 5).

In sum the above statements confirm that the majority of teachers interviewed in the present study were aware of the 2010 National Curriculum for Basic Education and that they or their schools received the curriculum policy document. Some teachers, however, confirmed that despite their easy access to the curriculum document policy they have little knowledge of the intended secondary school curriculum innovation (see 5.11.1).

5.11.2 Teacher's attitudes

Another issue of teachers' epistemological beliefs was to understand whether or not teachers' attitudes influenced curriculum implementation (see 3.5.2). Participants were asked about their attitudes toward the National Curriculum Framework. Specifically teachers were asked the question: "How do you feel about the National Curriculum for Basic education?" In response, some teachers replied that the National Curriculum Framework was "just fine" as expressed here by Teacher 8:

> *"I think the curriculum is fine".*

When probed further to explain what they meant by “fine”, participants provided divergent views. For instance, both Teacher 4 and 9 stated that the secondary school curriculum should not be changed. Teacher 9 for example explained that:

> “*There is no need to change the current secondary school curriculum*”.

However, the majority of the teachers responded that *“few amendments must be done”.* The words of Teacher 10 portray this finding:

> *“The curriculum should be revised over and over again”.*

When teachers were further asked about their views about why the current national curriculum should be amended or revised, an overwhelming majority of teachers replied that there is a need to change the 2010 intended secondary school curriculum for many reasons. The following quotation represents the majority of teachers’ views interviewed in the present study:

> “*To introduce vocational training subjects in the current secondary school curriculum”* (Teacher 1).

Some teachers were of the opinion that it is necessary to continuously revise the 2010 secondary school curriculum so that it changes with time. Teacher 1, for instance, indicated that the continuous revision of the secondary school curriculum will ensure that

> *“It meets the local needs of the people and changing times”.*

Teacher 14, on the other hand, stressed that:

> “*Change is necessary because the current curriculum emphasises more on theoretical subjects at the expense of practical skills-oriented subjects.”*

Both teachers 10 ad 11 were, however, of the opinion that the national curriculum contains some unnecessary topics. The following example provides evidence of this claim as expressed by Teacher 11:

> "*Astronomical Geography which is only taught in grades 8 and 9, and does not proceed to further grades. Why do we teach topics which may not have any benefit to our learners in the future? It is a waste of time to teach unnecessary topics*" (Teacher 11).

The results of the teachers' attitudes (see 5.11.2) towards the implemented intended secondary school curriculum provide two competing views. First, some of the teachers interviewed in the current study stated that they were satisfied with the curriculum policy. Second, while some teachers were satisfied with the curriculum, they were however, of the opinion that the current curriculum policy should be revised to include vocational school subjects.

This finding corresponds with the findings of quantitative data discussed in Section 5.3.2, which found that although the majority of teachers had positive attitudes towards the implemented curriculum, some teachers complained that it was too demanding in terms of their time, energy and skills spent on planning and teaching.

Therefore, from the literature reviewed, similar conclusions as those made in Section 5.3.2 can be implied here. Young and Lee (1984:184), Kennedy and Kennedy (1996) and Ramsay *et al.* (1999) stress that while attitudes are important affective and evaluative responses that can influence the implementation of an innovation, it is significant that they are not only maintained at high levels among teachers, but also efforts should be made to improve the attitudes of other stakeholders (school managers and parents) (see 3.5.2.2).

5.11.3 Teachers' beliefs

As was discussed in section 3.5.2.3 a teacher's belief system may affect classroom practices (Parajes, 1992; Thompson, 1985) as they are the basis on which the teacher interprets and acts once confronted with new knowledge (Artzt & Armour-Thomas, 1996; Lovat & Smith, 1995). Literature (Short & Burke, 1996), therefore suggests that if an implemented curriculum is a set of beliefs to be put into action, then curriculum policy-makers may do well to look in depth at teachers' beliefs. Therefore, questions were asked to understand teachers' beliefs with regard to the implementation of the intended learner centred secondary school curriculum in Namibia's classroom situation.

In order to solicit information on the belief system of teachers with regard to the implemented secondary school curriculum, all participants were asked the following question: "Do you believe that you are implementing the current secondary school curriculum based on its guiding philosophy of Learner Centred Education?" In response to this question, most teachers said that it was difficult to teach in the learner centred manner. The following statement confirms this finding:

> "*It is difficult to conduct learner centred education at secondary level"* (Teacher 7).

When participants were asked why they found it difficult to teach according to learner centred principles, the majority of the teachers replied by suggesting that learners centred education was only applicable at the lower primary phase. This view of the majority of the teachers interviewed in this study is expressed in the following statements:

> *"Learner centred education can only be used at lower primary phase"* (Teacher 7).
>
> "*There is still a significant degree of confusion among many teachers about the notion of Learner Centred Education"* (Teacher 1).

Based on these concerns, Teachers 11, 12 and 13 were of the opinion that the government should introduce a different education approach that is suitable for the secondary school phase. Teacher 12 expressed this idea as follows:

> "*Government should look for something else for the secondary school phase".*

On the other hand, this study found that teachers' belief systems that affected their ability to implement the secondary school curriculum were embedded in the current assessment and promotion policies adopted by the government. Teachers 1, 2 and 3 explained that the current assessment and promotion strategies used in schools compromise the implementation of the secondary school curriculum. The following statement supports and illustrates some teachers' views about the effects of assessment and promotion strategies on the implementation of the intended secondary school curriculum:

> *"I am trying to implement the curriculum but some assessment and promotion aspects in the current curriculum make it difficult for us teachers at the secondary phase to achieve the goals and objectives of the secondary school curriculum"* (Teacher 2).

Participants were then probed to describe some of those assessment and promotion aspects which they regarded difficult to implement in their classrooms. Teachers 1, 2, 3 and 7 singled out the automatic promotion of learners at primary school phase as one of the main drawbacks to learners' acquisition of competencies in later grades. The following quotation from Teacher 7 reinforces this finding:

> *"Automatic promotion of learners at the primary school phase means that most of our learners at the secondary school phase proceed through the school system without having acquired the necessary competencies. This makes it difficult for teachers at the secondary phase to help such learners to acquire the skills outlined in the secondary school curriculum...".*

The results of the teachers' beliefs (see 5.11.3) show that most teachers are in conflict with the principles of the learner centred education. The majority of teachers interviewed in the current study hold beliefs that learner centred education is only appropriate for

lower primary phase; and at the same time claiming that many teachers are still confused about the learner centred education. The results of the qualitative analysis also found that the majority of teachers interviewed in this study complained about how assessment and promotion are conducted within the learner centred education system in Namibia. It can thus be deduced from these findings that if teachers have negative sentiments towards a curriculum innovation, such views may inhibit their ability to implement the learner centred curriculum (see 3.4.6) and corroborates with the quantitative results in Section 5.3.3. This result finds support from the studies of Moore and Hansen (2012:28-29), who assert that how teachers communicate their expectations and beliefs about teaching and learning influences how learners behave and perform in their school work.

5.11.4 Self-efficacy/behaviour

Literature discussed in section 3.5.2.4 defines self-efficacy as one's belief in his or her effectiveness to complete a task or goal (Bandura, 1997). In Bandura's (1977) words "efficacy expectation" is a "conviction that individuals hold that they can successfully execute the behaviour required to produce the outcomes". One of the goals of learner centred education, as alluded to in Chapter 3 (see 3.3) is for teachers to promote an active learning process, critical or reflective thinking among learners and teachers (MEC, 1993:20-21; 120–130).

A question on self-efficacy was therefore necessary to understand whether or not teachers were able to apply the principles of learner centred philosophy at a personal level within their classroom situations. In response to the question of "How would you describe your ability to teach in a learner centre manner?", almost all teachers interviewed in this study were of the opinion that too many subjects and learners stifle their ability to teach. The following statements illustrate almost all the participants' views about their ability to teach learner centred education:

> *"The nine subjects that are taught at grades 8-10 are too many for learners. Also the number* of *learners per teacher is still too high"* (Teacher 7).

On the same question some participants complained that their efforts to implement the curriculum were hampered by some learners who did not have the requisite competencies in Mathematics. Teacher 7 stated:

> *"Despite our efforts to organise successful lessons in Mathematics, some grade 10 learners who did not achieve a good grade in Mathematics are making it difficult for other learners and teachers to achieve the expected curriculum goals and objectives"* (Teacher 7)*.*

When probed further, to explain how the number of subjects contained in the curriculum and the teacher-learner ratio impacted on the implementation of the intended curriculum, the majority of teachers replied that the two factors are contributing to the poor performance of learners.

In a further response to the question of their ability to implement the curriculum, some teachers indicated that although they are able to implement the curriculum as specified by policy-makers, most teachers are overloaded with clerical work.

The findings regarding self-efficacy indicate that most teachers interviewed in this study were confident in their efforts to implement the secondary school curriculum. This view confirms the findings presented in Section 5.3.4 of this study. However, although most teachers stated that they confidently implemented the secondary school curriculum, results of this study also found that some teachers taught more than two subjects and had more than 40 learners per class (see 5.11.4).

Despite that the findings of the number of subjects and high teacher-learner ratio cannot be found in the literature reviewed, it can be observed that in addition to the results reported in Section 5.3.4, factors such as the number of subjects taught and teacher-learner ratio have the potential to inhibit the implementation of intended secondary school curriculum. The results of work overload reported by teachers in this study corroborates the findings alluded to in Section 5.3.4 (see Figure 5.17). Further, Bexley, James and Arkoudis, (2011) support this finding and using the results of their study,

they found that 53.4% of educators undertook an unreasonable amount of administrative work, which resulted in less time to conduct teaching (see 3.5.4.3).

5.12 Internal school support factors

5.12.1 School leadership

Research literature (see 3.5.3) reviewed for the current study noted that factors within the school environment such as leadership (Berman & McLaughlin, 1977; Fullan, 1991 and Hall & Hord, 1987), professional development (Knoff & Batsche, 1995) and learners' characteristics (Osher *et al.,* 2006) have the potential to influence whether or not the teachers implement an educational change. Based on this assumption questions were asked on each of the three factors (learners' characteristics, professional development and school leadership) to determine whether or not these factors affect the implementation of intended secondary school at the classroom level.

In response to the question about the role of the school leadership in implementing the secondary school curriculum, some participants stated that principals play an important role in implementing the intended secondary school curriculum. The following views represent Teachers 1 and 4's opinions about the role of the school management in curriculum implementation:

> *"I believe that school principals are responsible for implementing the curriculum at school and classroom levels, but unfortunately we are not able to implement the curriculum as planned".*
>
> *"When teachers experience problems they turn to their principals for help; but assistance is not always forthcoming"* (Teacher 14).

When school principals were asked to explain why teachers are not implementing the curriculum as expected, Teacher 1 responded that:

> *"Because teachers are never involved in its development".*

A further question was posed to participants to understand the reasons why according to teachers' assertions principals are not able to provide teachers with adequate assistance in their teaching. In response, Teachers 11 and 13 were of the opinion that principals do not understand and know the curriculum and what is supposed to be done to our problems.

Responding to the same question, a teacher asked the following question:

> *"If principals don't fully understand and know the secondary curriculum, how can they facilitate its implementation at the classroom level?* (Teacher 11)

At this point, the researcher posed the following question: "If principals do not understand and know the current curriculum, who is responsible for supervising and monitoring its implementation?" In response, some teachers emphasised that curriculum supervision and monitoring have received less attention in Namibia's education system. The following assertion illustrates some teachers' opinion:

> *"The supervision and monitoring of the implementation of the national curriculum has not been up to standard in our schools"* (Teacher 13).

Based on these teachers' narratives, a question was asked about how decisions are made in schools. In response, Teacher 5 said that:

> *"The power lies only with the headmaster. If something has to happen in the school, the headmaster is the only one person who is expected to act and react".*

Teachers 4, 9 and 11 had similar views.

Teachers were probed further to provide examples of cases in which they felt the school leadership took decisions without involving other staff members. In response teachers stated:

> *"For us teachers in a hostel school, for example, no one was given the responsibility to supervise learners. So that means that if something bad happens at the hostel, I cannot be expected to go and attend to that problem because it is not my responsibility"* (Teacher 15).

As a follow-up, a further question was posed to participants: "So what does that mean to you in terms of how decisions are made and implemented in your school?" Teacher 2 replied:

> *"As a teacher, I have no powers over students".*

Teachers 6 and 15 expressed similar views.

5.12.2 Professional development

The teacher's ability to assume responsibility for their own growth and for decisions about their work and practice depends on their level of empowerment as explained by Short and Rinehart (1992) and Carl (2009:3-4) (see 3.5.3). As a process teacher empowerment can be achieved through various strategies embedded within the notion of professional development, which is also commonly known as staff development (see 3.5.3). Therefore, questions were asked to determine whether or not teachers, 12 months prior to the current study, underwent any professional development programme as an empowerment tool to enable them to implement the curriculum with greater efficiency and effectiveness.

When teachers were asked whether they received training on how to effectively implement the curriculum change, a common response among most teachers was that they were not trained on strategies of how to implement the national curriculum. The following statement illustrates most teachers' responses interviewed in this study:

> *"One area of concern with our curriculum is that teachers were not trained enough on how to implement" (*Teacher 1).

Similarly, most teachers stated that during their many years of teaching they could not recall attending a considerable number of professional development programmes. The following comments represent the general view of most of the teachers in this study:

> *"Since I started teaching science subjects, I have only attended one workshop in 6 years"* (Teacher 3)*.*

> *"I was never invited to any of their workshops or meetings"* (Teacher 5).

When participants were asked to explain the reasons why they have not been involved in staff professional development programmes, the majority of teachers interviewed blamed their subject advisors for not participating in professional development programmes as illustrated in the following statements:

> *"Because our subject advisors can only organise such events if they are remunerated" (*Teacher 3).

Teacher 3 further claimed that:

> *"Subject advisors are only interested in getting money but not to improve teachers' skills and knowledge or the education system of the country".*

In addition, some teachers expressed disappointment about the absence of face-to-face services in their regions which can improve teachers' confidence to deal with various classroom related situations. As a result teachers interviewed in this study expressed a clear need for the provision of mentoring and coaching services in their schools. Research participants in the present study overwhelmingly described the current situation in their schools as follows:

> *"There are no avenues for mentoring and coaching in our schools. There are no people to assist in the subject content areas"* (Teacher 8).

When probed further to explain what strategies teachers have taken to ensure that in the absence of professional mentoring and coaching services, they continue to implement the intended curriculum as expected, most participants replied that:

> *"... teachers are trying to do what they are able to do and leave out what they cannot do*"(Teacher 11).

At this stage, the researcher asked the participants why they need further professional development when they are already professionally qualified teachers in their respective subject areas? In response, the following statements representing the majority of teachers' responses were noted:

> "*Teacher training programmes do not...prepare teachers of what is expected of them in the Namibian schools"* (Teacher 9)*.*

> *"Involving teachers in further professional development helps them to understand assessment procedures that are needed in their specific subject areas"* (Teacher 2).

Teachers 5 and 8 had similar opinions expressed as follows:

> *"Well, I want to attend various subject related workshops to enhance my subject content knowledge and assessment procedures"* (Teacher 8).

> *"As a teacher I did not attend any workshop to orientate me on the new curriculum. Therefore, workshops which aim to orientate me of the new curriculum are very important"* (Teacher 5).

When participants were asked to state the curriculum areas in which they need further professional development, most teachers mentioned subject specific assessment strategies, training in subject specific topics and orientation/induction seminars related to the implementation of the new curriculum.

5.12.3 Learners' characteristics

Learner characteristics such as their attitudes towards learning, social background (Osher *et al.,* 2006) and the language of classroom instruction (MoE, 2010:27) (see 3.5.3) have been found to influence teachers' success in implementing a curriculum innovation at the classroom level. It was therefore found necessary to ask questions to determine if these factors play a role in implementing the intended secondary school curriculum in Namibia's classroom environment.

When participants were asked whether in their opinion there are learner related factors that affect the implementation of the secondary school curriculum, all interviewees affirmed that teachers are facing many challenges related to their learners.

The following statement confirms the views of the majority of teachers interviewed in this study:

> "....*learners are not scared of us teachers, ...learners do all they want to do; they can decide to misbehave or do bad things"* (Teacher 8).

Teachers were asked a follow-up question: “Whom then are learners scared of?” In response to this question almost all teachers in the current study implied that learners only respected principals and heads of departments and not any other member of the teaching staff.

The following quotation supports this finding as expressed by the majority of teachers interviewed:

> *“They respect only the Head of Department and the principal”* (Teacher 5).

In the response to a further probe of “Why learners do not respect their teachers?”, Teacher 9 stated that:

> *“....ordinary teachers do not mean a lot to learners. Only HoDs and principals have the power and authority to punish learners”.*

In addition, Teacher 5 remarked that one of the reasons why learners do not respect their teachers is because

> *“...the teaching profession has lost its value”*.

Teacher 9 also expressed similar sentiments.

Further, in response to the question of learner related factors that inhibit teachers to implement the secondary school curriculum, some teachers believe that the effects of learner related factors differ in rural and urban schools. The following statement portrays some teachers’ views about this question:

> *“In general terms it is difficult for teachers in rural schools to achieve the goals and objectives of the current curriculum”* (Teacher 14).

When asked to explain how learners' school location influence curriculum implementation, the majority of rural school teachers in this study provided the following general statement:

> *"Here, I am sure it is the case in all rural schools, we have a problem of learners who cannot communicate properly in English",* said Teacher 3*.*

Teacher 3 further commented:

> *"As you know the level of understanding for the learners in remote areas is very low".*

This prompted the researcher to ask the following question: "Are you suggesting that the problem of inadequate communication in English affects only learners?" In response to this question some participants revealed that teachers were also struggling to teach in English as the medium of instruction. The following quotations represent some teachers' opinions:

> *"It is not only learners; some teachers also are struggling with the English language"* (Teacher 12)*.*

Teachers 3, 5 and 7 also reflected similar opinions based on their school specific experiences.

> "*Teachers do not still properly implement curriculum because of the difficulties related to teaching in the English language"* (Teacher 4).

> *"Most teachers in our schools still deliver lessons in their mother tongue, and this makes it hard for me as an English teacher to help my learners to acquire the necessary English communicative skills"* (Teacher 5).

> *".....most of the teachers teaching other subjects other than English still teach in mother tongue"* (Teacher 7*).*

At this point, the researcher probed further to determine whether or not the learners' parents can communicate in English? The majority of teachers' responses can be summed up in the following statement:

> *"Not all parents can speak English. In urban areas may be some parents can speak English, but in most remote areas parents can hardly speak English. In urban areas, most parents who can speak English may even prefer to speak in a local indigenous language"* (Teacher 14).

From the teachers' responses expressed above, the following findings can be made. First, research participants interviewed in this study indicated that the non-participation of principals in the curriculum development process and ineffective instructional leadership role in the school environment inhibited the effective implementation of the intended secondary school curriculum. The results also show that almost all teachers interviewed shared the view that their principals were not monitoring and supervising the curriculum implementation process at the classroom level (see 5.12.1). These findings are corroborated by Oliva and Gordon (2013:70) who state that the presence or absence of a competent leadership has an impact on all other individuals who take part in the curriculum implementation process (see 3.5.4.3).

Second, the findings also found that although most teachers have the desire to improve their teaching skills, the regional advisory services did not avail opportunities for teachers to participate in needs-based professional development programmes (see 5.12.2). This view is contrary to Carl's (2009:215) notion that schools can create valuable in-service opportunities by establishing a subject group approach which can be linked up with inspectors and subject advisors to influence the process of training (see 3.5.3.2). Studies state that when the 'cycle of recrimination' is the norm (Al-Qahtani, 1995) with a highly confrontational environment (Schweisfurth, 2011), between teachers and the regional administrators, the successful implementation of any curriculum policy may not be realised (see 3.5.4.2.2).

This study also found that interviewed teachers attributed indiscipline among learners as a factor that inhibits curriculum implementation at the classroom level. This result is

consistent with the findings of Osher, Dwyer and Jimerson (2006). Osher, *et al.* (2006) pointed out that because students' attitudes towards their learning influence teachers' success in implementing the school curriculum, the learning process can be more difficult in classrooms where student discipline is a problem (see 3.5.3.1).

Moreover, the results of this study also found that some teachers interviewed regard the inability of most learners and parents; and some teachers to communicate in the English language, especially in rural areas as one of the key inhibitory factors to the implementation of the intended secondary school curriculum (see 5.12.3). Although this finding contradicts the quantitative results discussed in Section 5.3.4 (see Figures 5.15 and 5.16), the results of the qualitative analysis may be expected due to the fact that a mere 0.8% of the Namibia population are native speakers of the English language (Brock-Utne & Holmarsdottir, 2001; Pütz, 1995) (see 3.5.3.1).

5.13 External support factors

Research consulted for the current study (see 3.5.4) argued that an educational change will have a positive impact on the school if there is sustained interest, financial and structural support from various stakeholders outside the school environment. For example, studies in the United States of America, report that stakeholders outside the school system (regional offices of education, business leaders, regional legislators, teacher unions, institutions of higher learning and community members) directly affect through material or non-material support how a curriculum policy is implemented in the classroom situation (AASA, 2009; Ornstein, Pajak & Ornstein, 2011:44-45; Rogan & Grayson, 2003).

The current study therefore found it necessary to ask questions about whether or not resource and stakeholder support and teacher involvement in curriculum development played a role on the implementation of intended secondary school curriculum.

5.13.1 Resources

As discussed in section 3.5.4 of this study, the availability or scarcity of resources such as study materials, instructional and learning aids, equipment, physical accommodation and other non-material resources enhance or inhibit the implementation of a curriculum innovation (Carl, 2009:143). In other words, poor resources can limit the performance of even the best of teachers and undermine learners' efforts to focus on learning. To determine if the availability or scarcity of resources influence the implementation of the intended secondary school curriculum, the researcher asked the following question: "What factors outside your school system have an influence on whether or not you implement the intended secondary curriculum in your classroom environment?

In response to this question, almost all participants in this study were of the opinion that lack of adequate teaching and learning resources/materials hampers the successful implementation of the intended secondary school curriculum. The following statements confirm this finding:

> "*We have nothing here. Unlike those teachers in urban schools, we don't have books for our learners"* (Teacher 9).

> *".....we need internet here in our school"* (Teacher 7).

> *"In my subject we believe in touching and seeing. Rural schools face a big problem...of ...lack of materials such as laboratory, apparatus and chemicals"* (Teacher 3).

> *"Without resources it is difficult for teachers to fully implement the curriculum in a learner centred approach"* (Teacher 14).

In the words of Teacher 3 the lack of resources

> *"....forces us to teach science subjects as theory subjects without practical activities....."*.

Participants also mentioned the importance of time and how it may inhibit the implementation of the intended secondary school curriculum. To support this finding some teachers indicated that:

> *"We need more time to spend on teaching so that we can assist the children to concentrate on their school. At the moment we are spending too much time doing clerical work"* (Teacher 2).

When participants were further probed to explain “Why there were inadequate textbooks in their schools”, most teachers blamed the late delivery of textbooks to schools as the main reason for the unavailability of textbooks in their schools. Some teachers mainly in rural schools were of the opinion that the procurement and distribution of teaching and learning materials including textbooks favoured urban schools. The following statements represent the common views that emerged from most participants in this study:

> *“Teaching and learning materials are distributed unequally between urban and rural schools”* (Teacher 6).

> *“It takes a long time before remote schools receive prescribed textbooks or any other necessary resources...”* (Teacher 5).

Based on the above responses, the researcher probed further and asked participants the following question: “What do you suggest should be done and by whom to improve the availability of teaching and learning resources?” The view of the overwhelming majority of participants in this study was that the government should provide relevant materials that support the curriculum. Some of the participants expressed it this way:

> *“...provide all the necessary materials which go hand in hand with the curriculum”* (Teacher 6).

> *“...government should provide the right materials which support the curriculum both in rural and urban schools”* (Teacher 2).

These words were similar to those expressed by Teachers 4 and 12.

5.13.2 Stakeholders' support

Given the assertions by several authors (see 3.5.4), regarding the role of national government and government directorates, parents, teacher unions, business owners, regional councillors and institutions of higher learning in curriculum implementation, an important question was asked to determine whether stakeholders in Namibia are supporting the implementation of the intended secondary school curriculum.

The following comment describes the view of most participants in this study:

> *"The government is not monitoring the progress of the curriculum and that there is no proper evaluation system for the curriculum policy being implemented. ...the State must monitor all stakeholders involved in curriculum implementation to ensure that each plays their specific roles...."* (Teacher 6).

In response to the question of whether stakeholders in Namibia are supporting the implementation of the intended secondary school curriculum, several participants in this study commented unfavourably on their relationship with some of their national executives. One of the participants summed up the prevailing view as follows:

> *"Senior executives...at national level have stripped principals and teachers of their professional responsibilities"* (Teacher 8).

Furthermore, Teachers 1 and 14 described their frustrations and complained that senior officials are micro managing their school affairs by being too involved in their school and classroom issues.

Regarding government support to regional directorates to the implement the intended secondary school curriculum, most participants in this study indicated that:

> *".....teachers face difficulties when implementing the curriculum because our .... regional officials of education leave much to be desired"* (Teacher 11).

Further, some participants complained that they are subjected to humiliation by executives, parents and learners. This perspective is illustrated several participants who explained it this way:

> *"Everyone blames teachers for everything...that goes wrong in the school. But nowadays teachers don't...make decisions..."* (Teacher 11).

> *"...executives, parents and learners no longer respect teachers. They call us names, insult and scorn us...."* (Teacher 5).

> *"During meetings with senior regional office staff all you get are warnings about ...your so-called lack of performance"* (Teacher 12).

> "*They...do not appreciate...that I am trying and doing the best under the prevailing school and classroom circumstances"* (Teacher 10).

> *"...the...system does not....listen to teachers: their feelings, suggestions and aspirations"* (Teacher 8).

A follow-up question was asked to gauge the feelings of the participants in this study regarding what their experiences meant to them. In response to this question the following quotations represent the perceptions of the majority of the participants in this study:

> *"How can we implement what is expected of us if we are not respected by the system?"* (Teacher 5)

> *"You can't work well...in fear or in a state of uncertainty"* (Teacher 11).

> *"...is this the right way to help me improve my skills and knowledge about what I am supposed to teach?" Sometimes I ask myself if I understand what this person is talking about?"* (Teacher 2).

A further question was posed to find out what participants in this study have done about their experiences. In response to this question, the following statements sum up the views of the majority of the participants:

> *"I have...adopted a 'wait and see' attitude"* (Teacher 5).

> *"...you simply do what you are able to do and wait for your retirement day to come"* (Teacher 7). "*You ask yourself too many questions...."* (Teacher 2).

5.13.3 Teachers' involvement in the curriculum development process

Literature shows that teacher involvement is a key factor in the success of an educational change process. Sarason (1995) (see 3.5.3) for instance, found that if teachers do not participate in the decision-making process linked to the development of a new programme, teachers will resist such change and will ultimately lead to its failure. The current study therefore tried to determine the extent to which teachers were involved in the development of the intended secondary school curriculum. As a result questions were asked regarding teachers' involvement in the curriculum development process. Also teachers were asked questions with regard to whether other stakeholders in their regions took part in the curriculum development process.

In response to the question of whether participants in this study were involved in the development process of the implemented secondary school curriculum, an overwhelming majority of participants replied "No" to this question as illustrated in the statements below.

> "*Most teachers in my region did not participate in the development of the curriculum...."* (Teacher 11).

> "*Many of us teachers were not part of the curriculum development process"* (Teacher 13).

In response to the follow-up question of “If you were not involved, who then took part in the development of the current curriculum?” most of the participants in this study represented by Teacher 3’s statement replied that:

> *‘’... only a few teachers in my region participated in the curriculum development process”.*

In addition, some participants in the present study claimed that more teachers from urban than rural schools participated in the development process of the 2010 secondary school curriculum. One of the participants expressed this finding as follows:

> *“The government selected only experienced teachers from urban schools, for example, Windhoek schools and many other teachers from other regions were left out”* (Teacher 5).

Further, some participants indicated that international consultants were among the most dominant group of stakeholders who were involved in the curriculum development process. Participants in this study therefore complained that local education consultants were not given an opportunity to take part in the development process of the 2010 secondary school curriculum. This sentiment, which was repeated by many participants in the current study, was expressed as follows by one of the participants:

> “*Consultants from other countries were involved in the development of our curriculum instead of using our own people”* (Teacher 7).

At this point in the discussion, the researcher asked a follow-up question: “Why should teachers be involved in developing the curriculum?” Participants in this study provided various responses to this question.

From the opinions of most participants in this study it appears that teacher involvement in curriculum development may be one of the main factors that determine the successful implementation of the intended secondary school curriculum. Most of the participants in this study argued that teachers should be involved in developing the curriculum because of the pivotal role they play in the education of learners.

This perspective was expressed by the majority of participants as reflected in the following statements:

> *"Teachers....are directly involved with the day-to-day learning process of the learners. ...teachers have a better understanding of...learners' needs and how to develop their minds"* (Teacher 2).

Teacher 1, 5 and 14 held strong opinions stating that teachers are the main implementers of the curriculum both at school and classroom levels.

In the words of Teacher 4

> *"Teachers put the curriculum into work. ...because we know what is wrong and right in the subject areas...teachers can decide whether to adopt or adapt some components of the curriculum policy".* Teachers 3 and 8 shared similar view points.

In light of the above views, the researcher asked participants in this study to reflect on their experiences and explain what should have been happening in order to facilitate the implementation of the intended secondary school curriculum. An overwhelming majority of participants in the present study suggested that all stakeholders that are involved in implementing the 2010 secondary school curriculum should be monitored. Also the majority of participants interviewed in the current study were of the opinion that the national curriculum should have been piloted in order to iron out problem areas before its actual implementation.

In addition, Teacher 8 suggested that the government must *"consult"* stakeholders from various sectors of the economy to establish the gaps in our education system and thereafter:

> *"define each stakeholder's role in the process of implementing the secondary school curriculum".*

Finally, the researcher asked participants in this study to provide “Any comments” that may not have been discussed in the preceding questions. The majority of participants suggested that Namibia’s education system should be benchmarked against other countries’ education systems based on data gathered through comparative studies.

Responses regarding the open-ended question of the questionnaire (Appendix 1: Question 43) were analysed and results are presented in Table 5.26 below.

Table 5.26: Qualitative responses to Question 43 of the questionnaire

(n=57)

Statement	Frequency	Percent
I need textbooks for learners	20	35.1
I need electricity in our school	16	28.1
Teachers are overworked	13	22.8
There is a need to monitor how the curriculum is being implemented	8	14.0
Total	57	100.0

Only 57 of the 260 teachers who participated in the quantitative research responded to question 43 (Appendix 2). Table 5.18 shows that 35.1% of the teachers who responded to question 43 indicated that they need textbooks for their leaners; 28.1% need electricity in their schools; and 22.8% complained that they are overworked. Fourteen (14.0%) of teachers indicated that there is a need to monitor how the curriculum is being implemented. Overall, the results seem to suggest that the working conditions of some schools may not be conducive for effective teaching and learning to take place due in part to organisational challenges which teachers are experiencing.

In summary, the results of this study seem to suggest that lack of resources such as textbooks, laboratories, apparatus and chemicals, especially in remote schools influence curriculum implementation at the classroom level. This view confirms the quantitative findings discussed earlier in Figure 5.22. In fact, the findings also

corroborate with Carl's (2009:143) assertion that the implemented curriculum may be enhanced or inhibited by the availability or scarcity of resources such as study materials, instructional and learning aids, equipment,...and other facilities (see 3.5.4.1 and Table 5.26).

In addition, it does appear from the qualitative data of this study that inadequate time to teach, acrimonious relationships between education officers and teachers, the absence of a national curriculum monitoring system, the non-pretesting of the curriculum and limited curriculum research, all hamper the delivery of the curriculum at the classroom level.

However, the findings of the absence of curriculum monitoring system and non-pretesting of the curriculum as potential factors that can inhibit curriculum implementation could not be located in the literature reviewed for this study. Irrespective of this challenge, it is evident from the responses of the majority participants in this study of the extent to which these factors may affect the implementation of the intended secondary school curriculum (Table 5.26).

The findings on the acrimonious relationships between education officers and teachers supports Datnow and Stringfield's (2000) contention that positive relationship between strong regional-level support and the degree of change being implemented among schools implementing educational change programmes is of utmost importance. In addition, Conley (1993:71) supports the notion that in decentralised settings regional offices of education are supposed to play the role of service providers or support agencies; whereas Fullan (2007:7) warns that without a school-wide administrative support of an initiative by the regional directorate of education, any change sought at national level will likely not progress. In their studies both Al-Qahtani (1995) and Schweisfurth (2011) arrived at the same conclusions (see 3.5.4.2.2).

5.15 Summary

The preceding section presented the results of the qualitative analysis solicited from 15 teachers interviewed from sampled schools in Caprivi, Kavango and Oshikoto regions of Namibia. To evaluate the factors that influence the implementation of the intended secondary school curriculum, 28 questions based on the conceptual framework (Chapter 3) of the current study were developed and used to obtain information from research participants.

The results of the demographical characteristics show that for the overwhelming majority of participants interviewed in this study, age, teaching experience and professional qualification, taken together, might influence the implementation of the intended secondary school curriculum. On the contrary, some participants in this study suggested that teacher commitment is the main factor that may influence the implementation of a curriculum policy innovation (see 5.11).

With regard to the findings of the epistemological factors, it appears that most participants in the present study received copies of the curriculum policy, and were therefore aware of the 2010 National Curriculum for Basic Education. The results also seem to suggest that some participants in this study, despite accessible to the curriculum document policy have little knowledge of the curriculum policy (see 5.11.1).

The findings of the participants' attitudes towards the implemented secondary school curriculum were divided between satisfactory and unsatisfactory, with the latter group of teachers suggesting for the revision of the curriculum policy to include vocational school subjects (see 5.11.2).

The results of the majority of participants in this study were found to have negative and conflicting beliefs (see 5.11.3) regarding the principles of the learner centred education. In other words, most of the participants in the current study held beliefs that learner centred education is only appropriate for lower primary phase. At the same time from

the interviews, it was found that the majority of participants were frustrated with learner centred education assessment practices.

In addition, from the interviews it was also found that some participants were frustrated by large classrooms accompanied with work overload (see 5.11.4).

The results of the role of internal school support factors (see 5.12) in curriculum implementation found that the majority of participants in the current study regard their lack of participation in the curriculum development process, ineffective principal instructional leadership styles and the lack of monitoring and supervision systems as the main factors inhibiting the implementation of the intended secondary school curriculum at the classroom level (see 5.12.1).

On a positive side, the results of the interviews found that the majority of participants in this study are willing to engage in life-long learning in order to hone their skills and knowledge about latest classroom practices. On the negative side, the results show that most of the participants in this study despite their enthusiasm to learn further, had limited opportunities to participate in professional development programmes. The results of the interviews found that most participants spoke unfavourably about their regional advisory services for the absence of professional development programmes in their regions (see 5.12.2).

Furthermore, the results of this study found that the majority of participants interviewed attributed learners' indiscipline, weak relationships between learners, teachers, school leadership and parents and language barriers as some of the factors inhibiting curriculum implementation at the classroom level (see 5.12.3).

Moreover, the results of the effect of external school factors on curriculum implementation found that almost all participants in this study regard the lack of resources (textbooks, laboratories, apparatus and chemicals), as key factors inhibiting curriculum implementation, especially in rural schools. In addition, most participants in

this study mentioned that inadequate time (see 5.12.1), external interference (see 5.12.2) and the absence curriculum research (see 5.12.3) hamper the effective delivery of the curriculum at the classroom level.

Lastly, the results of the interviews found that an overwhelming majority of participants in the current study regard the non-involvement of teachers in the curriculum development process as a major factor that impedes the implementation of the intended secondary school curriculum at the classroom (see 5.12.3).

The next chapter of this thesis discusses, interprets and discovers the meaning of the raw data by integrating results of the reviewed literature, quantitative and qualitative analyses so that conclusions can be drawn regarding the factors that inhibit or facilitate the implementation of the intended secondary school curriculum in Namibian classrooms.

CHAPTER 6
FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

The previous chapter presented the results of this thesis based on the research design and research objectives and hypotheses. This last chapter discusses, interprets and discovers the meaning of the raw data so that conclusions can be drawn regarding the factors that influence the implementation of the intended secondary school curriculum in Namibian classrooms.

Furthermore, the discussion links the results to the literature review discussed in Chapters 2 and 3. Moreover, this chapter discusses practical implications for the possible implementation of the findings of the research study. Also the limitations of the current study and suggestions for future research in the area of curriculum evaluation and implementation are outlined. Recommendations emerging from the current study are also presented and discussed. Lastly, the chapter provides the main conclusions of the study.

6.2 Discussion

The present study was designed to evaluate the factors that influence the implementation of the intended secondary school curriculum in Namibia's classroom milieu. To achieve the main objective of this study five research objectives (see 1.4.2) based on the researcher's professional experiences and reviewed literature were formulated. These five underlying research objectives were used to collect quantitative data from 260 teachers in 12 randomly selected schools from the three regions of Caprivi, Kavango and Oshikoto. Also qualitative data were obtained from 15 purposively

selected teachers from the same regions of Caprivi, Kavango and Oshikoto. Quantitative data were analysed and presented through descriptive, correlation and inferential statistics (see 5.2.1, 5.6 & 5.7), whereas qualitative data were subjected to qualitative analysis procedures (see 4.20).

6.2.1 Findings and conclusions on objective 1

The first objective (see 1.4.2) of the current study was to explore and analyse various interpretations of the concept of curriculum and their implications on classroom teaching and learning. Literature reviewed (see Chapter 2) revealed that the term curriculum 'remains contentious in terms of definition and delineation' (Schubert, 1986:26) among curriculum theorists. It was noted that this lack of a shared understanding has the potential to impact on the development and implementation of the curriculum change. It was also found from reviewed literature that 'the absence of a serious debate about curriculum per se, has resulted in the development and implementation of a narrow conception of curriculum' (Barnett & Coate, 2005:24) (see 2.5). The current study also found that although the conceptions of curriculum vary substantially, they have considerable overlap as they often intend to reach similar goals (Schubert, 1986 cited in Anderson, 2004).

A further analysis of the literature led the current study to re-conceptualise the concept of curriculum into three categories based on Habermas's knowledge-constitutive interests (technical, practical and emancipatory interests) (see 2.4). Through the re-conceptualisation process it was decided that Schubert's (1986) images of curriculum (content or subject matter, programme of planned activities, intended learning outcomes, cultural reproduction and as discrete tasks) (see 2.3.1-2.3.8) display a technical interest.

A second re-conceptualisation of curriculum that emerged from the literature reviewed (Schubert, 1986:30) for this study was that curriculum as experiences (see 2.3.6) exhibit tenets of a practical or communicative interest of curriculum.

Furthermore, in the researcher's quest to decipher more conceptions about curriculum, the current study explored the emancipatory or praxis interpretation of the curriculum. This third interpretation of curriculum found that an interrelationship exists between the emancipatory interest and the curriculum whose agenda is social reconstruction and the concept of curriculum as "curere" (see 2.3.7 and 2.3.8). A further analysis of the three curriculum conceptions revealed that each category has unique epistemological and ontological focus which influences its use in the classroom teaching and learning situation (see 1.7 and 4.3).

Taken together and reflecting on each of the three curriculum interpretations the following conclusions can be made.

First, as alluded to in sections 1.7 and 3.4.5 of this study, the Namibian intended secondary school curriculum was founded on the emancipatory or praxis interest, which is closely aligned to the learner centred paradigm.

The present study, however, concludes that contrary to public policy on the use of learner centred pedagogy in the classroom situation, the principles of curriculum praxis and critical pedagogy have, for many reasons not been translated into the actual Namibian classroom environment.

This conclusion is supported by teachers in this study who claimed that lack of resources force them to teach science subjects theoretically without practical activities (see 5.13.1). This comment appear to support the assertion that teachers in this study regard limited resources not only a key factor that inhibits the implementation of the intended secondary school curriculum, but also an important issue that stifles the use of learner centred strategies in the classroom situation. Thus, based on the interpretive-critical view adopted in this study, it may be concluded that the 2010 intended secondary school curriculum is being implemented with much focus on the technical interpretation of the curriculum policy.

Second, from empirical data obtained in this study most teachers expressed negative sentiments about how the 2010 National Curriculum was developed. For example, the majority of teachers in the current study reported that (see Figure 5.24 & section 5.13.3) that they were not involved in the development process of the 2010 secondary school curriculum. These teachers' comments imply that the intended secondary school curriculum followed a technicist's view of curriculum design, confirming a common belief that often teachers perceive a curriculum as a document that is developed "elsewhere" which they are expected to apply correctly based on the intentions of its designers (Carl, 2009:193; Grundy, 1987:47) (see 2.8, 3.5.4.3).

This study therefore contends that because teachers ultimately decide the fate of any educational enterprise, policy makers should ensure that teachers take part at every level of the curriculum development process (Carl, 2009:193) (see 3.5.4.3).

Third, the fact that there is a strong emphasis on examination outputs and less on learning outcomes, appear to suggest that the 2010 intended secondary school curriculum is a tool for transmitting objective knowledge (see 3.4.9).

6.2.2 Findings and conclusions on objective 2

The second objective underlying the current study was to determine whether teachers' demographical variables of age, gender, professional qualification, number of subjects taught and teaching experience influence the implementation of the intended secondary school curriculum.

In more specific terms, the findings of the descriptive analysis showed a range of data demonstrating different attributes of teachers in relation to their region, gender, age, school location, highest professional qualification, teaching experience, teacher position, class taught and class size (see 5.2).

The large number of teachers in this study with less than three years of teacher training was found as an issue of major concern (see Figure 5.3). It can be concluded that this situation may have a negative influence on the implementation of intended secondary school curriculum (see 3.5.1 and 5.2). Measures are therefore required to improve the recruitment and deployment of qualified teachers to teach at the secondary school phase.

The results of the correlation analysis on teachers' demographic characteristics found that independent variables (age and teaching experience) have weak positive relationships with the implementation of the intended secondary school curriculum. These findings appear to contradict most previous research findings on similar variables, which found that teachers' demographic factors have an influence on the implementation of a curriculum innovation (see 3.5.1). In the context of Namibia more studies are needed to understand further whether or not these factors are associated to the implementation of a curriculum innovation at the classroom environment.

With regards to logistic regression analysis, results of teachers' age, gender and number of subjects taught revealed a small negative effect on the implementation of the intended secondary school curriculum. While findings of the professional development showed a large positive effect, teachers' teaching experience revealed a medium positive effect on the implementation of the intended secondary school curriculum.

These findings corroborate with previous studies suggesting that continuous professional development has an effect on the extent to which teachers implement a curriculum innovation at the classroom level (see 3.5.3.2). It could thus be concluded from the findings of this study that relevant and specific professional development programmes aimed at empowering teachers with skills and knowledge might positively affect the implementation of the intended secondary school curriculum in Namibian classrooms.

6.2.3 Findings and conclusions on objective 3

The third objective raised by the researcher was to ascertain whether teachers' epistemological variables of knowledge, attitudes, beliefs and self-efficacy influence the implementation of intended secondary school curriculum. The results of the teachers' epistemological data found that while the majority of the teachers in the current study received a copy of the National Curriculum for Basic Education (see Figure 5.8), their knowledge, understanding and awareness of the curriculum aims were generally low (see Figures 5.9 – 5.11 and Tables 5.3 and 5.4).

These findings suggest that teachers in this study may not be clear of curriculum goals resulting in the unsuccessful implementation of the intended secondary school curriculum. This contention supports previous literature, which contends that if teachers lack clarity of the goals at least the initial implementation phase of an innovation, they are likely interpret the curriculum in their own way and continue to use familiar strategies which they are comfortable with Payne (2008) (see 3.5.2.1).

The implications of teachers' knowledge on the implementation of a curriculum innovation were discussed in 3.5.2.1. It is therefore most likely that teacher buy-in as an important factor when implementing an educational change can be achieved through goal clarity by involving teachers in the writing of curricular goals and objectives at the school level (3.5 and 3.5.4.3).

Further, it might be concluded that because knowledge can be interpreted from various perspectives depending on how it is used, teachers in the present study may need declarative knowledge to help them to know the factual information regarding concepts and their interrelationships, while procedural knowledge may assist them to understand how to perform or apply the available curriculum information (see 3.5.2.1).

With regards to attitudes (see Figure 5.12), the results show that overall teachers in this study have less favourable attitudes towards the implemented secondary school

curriculum. However, when teachers were asked specific questions to gauge themselves, their school management and parents' attitudes towards the intended curriculum, their attitudes were more positive on 7 of 10 items. In other words, on seven statements, teachers supported the intentions of the implemented secondary school curriculum (see Table 5.5).

Among others, two instances of unfavourable teacher attitudes were noticeable. First, teachers revealed that the school management and parents are not pleased with the implemented secondary school curriculum. Second, teachers also reported that they find the 2010 secondary school curriculum too demanding in terms of time, energy and skills they spend on planning and teaching (see Table 5.5).

Therefore, if the figures in Table 5.5 represent what teachers were willing to report about their own attitudes, it can be concluded that due to the demanding nature of the implemented curriculum the majority of teachers in this study have negative attitudes towards the 2010 secondary school curriculum.

The issue of teachers' attitudes and their potential influence on the implementation of the intended curriculum is well documented in this thesis (see 3.5.2.2). Because attitudes are regarded as individual's affective and evaluative response to something, it is the view of the researcher that perhaps efforts to provide professional development programmes should be stepped up to empower teachers with the necessary knowledge, skills and attitudes required for the effective implementation of the intended secondary school curriculum.

The findings of teachers' self-efficacy showed that despite the majority of teachers reporting that they were not trained in English; most teachers indicated that they are confident to implement the intended secondary school curriculum using English as a medium of instruction. Of noteworthy though is the finding that although teachers' were confident in using English in the classroom situation and for communicating with colleagues, teachers at the same time stated that they never spoke with parents in

English (see Figure 5.15). Overall though, the majority of teachers reported high confidence levels in implementing the intended secondary curriculum (see Figure 5.18). The qualitative data presented in section 5.3.4 of this study confirmed these findings. However, despite the reported high self confidence level among most teachers, results show that too many subjects, high teacher-learner ratio and work overload (see 5.12.4) continue to prevent most teachers from the unsuccessful implementation of the intended secondary school curriculum.

It is imperative therefore to ensure that based on these findings school authorities observe the curriculum guidelines on subject allocation (3.4.3), teacher-learner ratio (3.4.8) at the secondary phase and the amount of workload (5.3.4) allowed for secondary school teachers.

Another important finding of this study was that of learners' academic achievements on the 2010 secondary school curriculum (see Figure 5.13). Results show that the majority of teachers believe that their learners are below or average achievers (see Figure 5.13). Data also show that most teachers in this study believe that students completing the 2010 curriculum will either be unemployed or may get an opportunity for further education (see Figure 5.14).

It may therefore be concluded from these findings that teachers' erroneous beliefs about the abilities of their learners alluded to in 3.5.2.3 may have negative effects on their efforts to implement the intended secondary school curriculum. It is thus important that policy makers should introduce programmes that can strengthen teachers' beliefs about the rationale of the curriculum and how educators can assist learners to achieve the learning outcomes.

In addition, the findings of this study showed that a number of teachers spend time on administrative work, rather than on teaching and learning. Results in Table 5.26, also confirm this finding in which some teachers complained of overworked school conditions. Data regarding learners' behaviours in the classroom situation revealed that

while learners care about their own learning, some teachers stated that a number of learners do not do their homework (see Table 5.6). These findings have negative effects on the effective implementation of the curriculum in the classroom situation.

As stated in section 3.5.3.1 students' negative attitudes towards their learning caused by social forces may lead to teacher low self-efficacy and in turn result in a dull classroom learning experience. A conducive learning environment is therefore required to ensure that teaching and learning is exciting and takes place unhindered.

The findings of the correlation analysis for teachers' knowledge, belief and self-efficacy showed a weak negative relationship with the implementation of the intended secondary school curriculum. In contrast, teachers' attitudes revealed a weak positive correlation to the implementation of the intended secondary school curriculum.

These findings indicate that teachers in this study might not be familiar with the intended secondary school curriculum. This therefore, means that teachers need more information about the curriculum so that they can positively influence its implementation in the classroom situation.

The data obtained from logistic regression analysis found that knowledge has a medium negative effect, whereas self-efficacy has a small negative effect on the implementation of the intended secondary school curriculum. The findings of attitude and belief showed a medium positive effect on the implementation of the intended secondary school curriculum.

One conclusion that can be drawn from these findings is that although the variables showed small to medium effects, for a curriculum innovation to be effectively implemented teachers will need adequate knowledge of the curriculum policy to increase their self-efficacy and positively raise their attitudes towards the curriculum, which will in turn motivate teachers to implement the intended secondary school

curriculum with confidence. A number of studies in this thesis arrived at similar conclusions (see 3.5.2.2 and 3.5.2.4).

6.2.4 Findings and conclusions on objective 4

The fourth objective posed by the researcher was to find out whether internal school factors such as learners' characteristics, professional development and school leadership influence the implementation of the intended secondary school curriculum.

The findings of descriptive data regarding internal school support factors showed that about three quarters of teachers reported that their learners use English when they speak to their teachers and during whole class discussions. Some teachers though reported that most learners do not use English when they work in groups. The use of English as a medium of instruction in Namibia including its potential pedagogical benefits and challenges are highlighted throughout this thesis and particularly in 3.5.3.1.

The findings of teachers and learners' use of English in and outside the classroom situation are presented in Figures 5.16 and Figure 5.19, respectively. Taken together, it might be concluded from these findings that the language policy of Namibia does not adequately promote the achievement of the envisaged learning outcomes at the classroom level (see 5.4.1).

Regarding teachers' participation in professional development activities, the study found that the majority of teachers did not take part in most professional development programmes listed in Table 5.7. Data show that the main reason that prevented most teachers from participating in professional development programmes was lack of support from their employer (Figure 5.20 and 5.4.2.2).

Interestingly, of those respondents who reported that they attended one or more professional development programmes (Table 5.7), less than half of the teachers stated that their in-service training had moderate to large impact on their classroom practice. Of particular interest is the finding that only about half of the teachers who participated in the training of how to prepare learners for examination reported a moderate to large impact on their classroom practice (see 5.4.2.3).

The findings for further professional development concurred with the results of Table 5.7. For example, data show that more than two thirds of teachers in this study need training in teaching methods. Surprisingly, most teachers in this study were not keen to take part in any professional development programme related to the use of ICTs in teaching and learning (Table 5.9).

It is clear from these findings that although teachers need further training, it is only needs-based professional development programmes that can help teachers to effectively implement the intended secondary school curriculum (see 3.5.3.2).

In reference to the role of school leadership in the curriculum implementation process, the results show that although the majority of teachers concurred that school leadership accomplished each of the tasks listed in Table 5.10, around one third of the teachers in this study were concerned with the absence of team work among teachers, inadequate communication between staff and community members, absence of mechanisms to identify staff development needs and inadequate resources required for effective teaching and learning.

It can be concluded from these findings that school leadership as discussed in sections 3.5.3.3 and 5.4.3 might have a strong influence on the success of any school and on the implementation of any educational change.

With regards to correlation analysis of internal school factors, the results showed that learners' characteristics and professional development have weak positive relationships with the implementation of the intended secondary school curriculum.

However, results of school leadership showed a medium positive relationship on the implementation of the intended secondary school curriculum. It could therefore be concluded from these data that improving school managers' overall leadership practices

might improve the implementation of the intended secondary school curriculum. This conclusion supports Hall and Hord (1987) and other researchers discussed in 3.5.3.3.

Regarding findings of the logistic regression, the results revealed that learners' characteristics and school leadership have large positive effects on the implementation of the intended secondary school curriculum. Professional development, on the other hand, showed medium positive effects on curriculum implementation.

It can thus be concluded from these findings that re-organising school related factors might positively contribute to the effective implementation of the intended secondary school curriculum at the classroom level. Literature reviewed in sections 3.5.3.1 and 3.5.3.2 of this thesis supports this conclusion.

6.2.5 Findings and conclusions on objective 5

The fifth objective posed by the researcher was to find out whether external support factors such as resources, stakeholders' support and teachers' involvement in the curriculum development process influence the implementation of the intended secondary school curriculum.

Mixed results were noted regarding the descriptive data of external support factors (see 5.5). The study found that an overwhelming majority of teachers in this study reported that sampled schools do not have learning materials to adequately support the implementation of the intended secondary school curriculum.

For example, all teachers surveyed indicated that the policy of one textbook per learner has not been achieved in the Namibian classroom situation. Also results indicate that despite the availability of electricity in many schools, some schools do not have computer laboratories and are thus not connected to the internet (see Table 5.26).

On the positive side, many teachers reported that the majority of schools have libraries (see Figure 5.22 and 5.5.1). The results of the influence of resources on classroom teaching and learning are presented in 3.5.4.1 of the current study and previous studies clearly indicate how different learning materials can support the implementation of a curriculum innovation.

It might therefore be concluded that unless a sustained system of providing materials, instructional and learning aids, equipment and other physical facilities is maintained to schools, poor resource conditions will continue to undermine even the best teachers' efforts to implement the intended secondary school curriculum.

Data of the results of stakeholders' involvement in the curriculum development process show that consultants, business representatives and politicians or regional councillors played a pivotal role in the 2010 curriculum development process. The data, unfortunately note that most stakeholders have not been involved in the implementation of the intended secondary school curriculum.

Results also show that three quarters of the respondents acknowledged that teachers influence the implementation of curriculum policy at the classroom level; while directors of education and the minister of education are responsible for the governance of the curriculum at meso- and macro-levels, respectively (Figure 5.23). In contrast to this finding, data also show that less than half of the teachers surveyed were not involved in the curriculum development process of the 2010 intended secondary school curriculum (see Table 5.11).

The results of parental support to the curriculum implementation process found that most parents were willing to obtain information about the educational progress of their children. Similarly, results of the community members' support to the curriculum implementation process were reported strongest in attending school meetings and school governance. However, despite the high parental and community commitments to school affairs, results found that fewer parents and community members are able to

assist their children to complete their work outside the school environment (Tables 5.12 and 5.13).

Overall, the results of support from institutions of higher learning, teachers' unions, regional councillors and business owners show that these stakeholders have not been involved in the implementation of the secondary school curriculum (see Tables 5.14, 5.15, 5.16). These findings are in disagreement with the literature reviewed in thesis (see 3.5.4.2).

In light of these findings, it might be concluded that teachers are finding it difficult to effectively implement the intended secondary school curriculum in the absence of support from other stakeholders outside the school system.

Results of the correlation analysis showed that whereas resources have a weak negative relationship, stakeholder support and teacher involvement showed a medium positive relation with the implementation of the intended secondary school curriculum. It is evident in section 3.5.4.1 that limited resources have a negative effect on the implementation of a curriculum innovation.

Taken together, literature in this thesis provided the reasons for stakeholder support and teacher involvement in curriculum planning and implementation (see 3.5.4.2 and 3.5.4.3), which were supported by teachers' assertions expressed in 5.13.1 - 5.13.3.

One may conclude from these findings that resources, stakeholder support and teacher involvement may be related to the teachers' ability to successfully implement the intended secondary school curriculum.

The findings of the logistic regression analysis showed that resources have a large negative effect on the implementation of the intended secondary school curriculum. Both stakeholder support and teacher involvement showed a large positive effect on the implementation of the intended secondary school curriculum. It is evident from these

findings that without resources, among them those mentioned in Figure 5.22 and 5.13.1, teachers may not implement the curriculum as intended by policy makers. At the same time Figures 5.23–5.24 and empirical data in 5.5.2 seem to suggest that harnessed together, stakeholder support and teacher involvement may have an effect on the implementation of the secondary school curriculum.

Qualitative data obtained from teachers in this study concur with these findings (see 5.13.1 - 5.13.3 and Table 5.26). It can therefore be concluded that the provision of resources, the encouragement of stakeholders to support educational initiatives and teacher involvement at the planning phase of the curriculum are pivotal in ensuring that the intended curriculum is implemented at the classroom level as envisaged by designers.

6.2.6 Summary of the correlation and inferential analyses

In summary the findings of the correlation and inferential analyses of the research can be tabulated as follows:

Table 6.1: Summary of findings of correlation and inferential analyses

Independent variable	Pearson (*r*)	Effect	Interpretation	Cohen's (*d*)	Effect	Interpretation
Teacher demographic characteristics						
Age		0.018	Weak positive relationship		-.149	Negative small effect
Teaching experience		0.110	Weak positive relationship		.306	Positive small effect
Teachers' epistemological factors						
Knowledge		-0.144	Weak negative relationship		-.630	Negative medium effect
Attitude		0.114	Weak positive relationship		.534	Positive medium effect
Belief		-0.054	Weak negative relationship		.551	Negative medium effect
Self-efficacy		-0.002	Weak negative relationship		-.370	Negative small effect
Internal school support factors						
Learners' characteristics		.186**	Weak positive relationship		1.209	Positive large effect
Professional development		.008	Weak positive relationship		.402	Positive medium effect
School leadership		.402**	Medium positive relationship		2.325	Positive large effect
External support factors						
Resources		-.270**	Weak negative relationship		-1.086	Negative large effect
Stakeholders' support		.406**	Medium positive relationship		1.793	Positive large effect
Teachers' involvement		.404**	Medium positive relationship		1.792	Positive large effect

6. 2.7 Limitations and implications of the study

There were a number of limitations in this study, which might have affected the quality of data collection efforts and thus the validity of the data and the findings of the present study.

The first limitation had to do with delays in obtaining official permission from the Ministry of Education (MoE) for the researcher to conduct fieldwork in the sampled schools. Due to miscommunications between the Ministry of Education, Regional Offices of Education and the researcher, data collection was delayed by three weeks from the original plan.

The second limitation involved lost questionnaire parcels. It was discovered that in one of the three regions that took part in this study, questionnaires did not reach sampled schools on time. It emerged upon inquiry by the researcher that the mailed envelopes containing questionnaires destined to a number of sampled schools got lost along the way. Despite the fact that a new set of questionnaires were reprinted and dispatched to the field worker, the exercise itself resulted into extra costs and delays in the administration of the survey instrument.

Third, field visits to schools were delayed due to a countrywide teacher strike, which lasted from October 12 to November 15, 2012. Due to the absence of teachers from schools, the data collection process had to be delayed and extended to March 2013.

Fourth, questionnaire items used in the present study were developed based on information gleaned from existing literature. The main limitation of this study is that the results of correlation and regression analyses are too weak on observed variables of curriculum implementation. In hindsight a reformulation of questions could have delivered better results.

Furthermore, this research study concentrated only on three northern regions and this could minimise the extent to which the results of this can be generalised to the entire

country. It is therefore suggested that future research is needed involving a much large and representative sample of teachers across the country if generalisation of results becomes necessary.

Additionally, it is important to note here that most of the data in this study were obtained via teacher self-report measures. Though self-reports are commonly used methods to collect data on the implementation of an innovation, previous research has found low levels of correspondence between teacher self-reports and observed levels of implementation (Noell, Witt, Slider, Connell, Gatti & Williams, 2005; Wickstrom, Jones, LaFleur & Witt, 1998). As a result, to experience the actual classroom curriculum implementation process observation ratings could have been used together with teacher self-reports. Domitrovich *et al.*, (2008) state that observational methods are commonly used to assess programme fidelity and are often regarded the gold standard because they are less prone to self-report bias.

Similarly, O'Sullivan (2004) makes a particularly impassioned plea for classroom observation as a means for professionals of all kinds to understand what teachers actually do; as relying on what teachers say they do is not adequate when there is motivation for self-protection or when teachers lack depth of understanding of definitions and expectations.

Also there are limitations associated with interviews. In conducting in-depth interviews for this study, accuracy was mainly dependent on teachers' ability to recall events that took place months ago. It has been observed that teachers have a tendency during interviews to exclude information that they regard unnecessary or just forget information that might be useful to research findings had it been shared with the researcher. As a result these factors might have had a bias on the findings of this study.

6.2.8 Implications for future research

In this study the factors that influence the implementation of the intended secondary school curriculum were presented, analysed and discussed. Four recommendations for further research are presented below.

First, further research is needed to explore the relationship between demographic factors and the implementation of the secondary school curriculum. In this study the results did not conclusively determine the effect of age, gender, subjects taught and teaching experience on the implementation of the intended secondary school curriculum.

Second, the findings of the descriptive and qualitative data on teachers' use of English in the classroom situation were found to be contradictory. More research is needed to examine the reasons for the inconsistence of these results. This could be done by examining the validity and reliability of the instruments used in the data collection process. It is also suggested that the questionnaire used in this study could be standardised and used in future research studies in order to obtain more plausible findings.

Third, because the current study was conducted in three regions, further research could be carried out in one region on a larger population.

Fourth, this study found that one of the teachers complained that learners do not speak or use English when they work in groups. A possible area for further research will be to examine students' group dynamics with the aim of assessing how students communicate to each other in their groups to produce the work that is presented to the whole class. An analysis of the students' interactions and how they communicate to each other in a language other than English might provide a better understanding of the students' language communication patterns and how they transist from an indigenous language to English, the official medium of instruction.

6.2.9 Recommendations

The main purpose of this evaluative research study was to examine the factors that influence the implementation of the intended secondary school curriculum at the classroom level in Namibia.

Based on what has been covered in the results, discussion and conclusion sections of this study the following recommendations are provided.

First, it is evident from the findings of this study that there are knowledge gaps about the secondary school curriculum among most teachers surveyed. As a result most teachers in this study may either be teaching what they do not yet understand, or are teaching based on their personal beliefs which are not congruent with the underlying philosophy of the curriculum policy. If policy makers intend to change teachers' classroom practices, it is important at the initial implementation phase to consider the role of teachers' knowledge and beliefs.

It is therefore recommended that policy makers should undertake institutional programmes that are aimed at improving the knowledge and understanding of teachers about the curriculum, which might in turn positively change teachers' underlying attitudes, beliefs and help to enhance teachers' self-efficacy.

Second, the results of this study found that professional development programmes that most teachers attended did not have the desired effects on their knowledge and skills. Experience shows that most professional development programmes that take place in Namibia after an introduction of a new policy initiative consist usually of a once-off workshop that provides an overview of the training materials. Literature reviewed in this thesis (Chapter 3) cautioned that this approach to professional development is unacceptable when considering the support needed for the implementation of any change. Generally speaking, if any new education policy serves as a significant change for teachers to improve their approach to learning and teaching, then a transformative

programme of professional development aimed at improving instruction within the context of the new paradigm may be required.

It is therefore recommended that policy makers should introduce a paradigm shift in the manner in which professional development programmes are developed and implemented in Namibia's education system. In this context a paradigm shift entails not only the amount of time that the training programme is implemented, but also means a change in the pedagogy of the professional development programmes introduced to effect change. In other words, any reform-based change linked to curriculum should consider the knowledge and beliefs of individual teachers, the materials that teachers will use in their classrooms and the support factors for change inside and outside the school.

Third, the researcher recommends further that curriculum materials that are developed to support teaching and learning should be designed in a manner that leads to changes in teachers' classroom practices that are consistent with learner centered education approaches. In view of this recommendation, it is the researcher's contention that resources and materials that are provided to support curriculum implementation can only help to sustain learner-centered education strategies if they are designed with concrete and tangible strategies that are based on essential skills and learning areas of the intended secondary school reform and which can easily be translated in the classroom environment.

Fourth, it is recommended that those who are charged with the responsibility of curriculum development should consider the voice of teachers in the entire process of curriculum planning and design. Policy-makers should no longer assume that curriculum implementation can translate directly into the classroom reality without the involvement of teachers at the planning and design phases. Because teachers ultimately decide the fate of any educational enterprise it is therefore important that policy makers should involve teachers at every level of the curriculum development process.

Fifth, data in this study revealed that some parents and members of different school committees are not pleased with the 2010 intended secondary school curriculum. The researcher therefore recommends that school managers should assess the main source of parents and school management committees' unhappiness regarding the 2010 curriculum policy.

Sixth, many teachers in this study claimed that some senior education administrators do not adequately support schools in the implementation of the intended secondary school curriculum. It is therefore recommended that tensions that seem to inhibit successful curriculum change should be addressed through honest consultations and within a well-structured communication system in and outside the school environment involving learners, teachers, parents, school management and senior regional education officials.

Seventh, this study found that although most stakeholders played a key role in the planning and design processes of the curriculum policy, many of the stakeholders remain unsupportive of the implementation of the intended secondary school curriculum. It therefore recommended that policy makers should continue to promote the plurality of agents for the benefit of teachers and learners at the classroom level.

Eighth, it was argued in this thesis that the current curriculum is constrained by the traditional interpretations of the curriculum as opposed to the interpretive-critical meaning of the concept of curriculum. It is the researcher's conviction that based on the traditional notion of curriculum, teachers are expected to "work to the rule" in which the success or failure of their classroom practice is determined by the mere skilful application of the rules of procedure.

It is therefore recommended that to be effective classroom practitioners, teachers, will in addition to their current craftsmanship, require practical judgement or conditional knowledge so that they are able to make relevant curricular decisions about how to teach the "right" content to the "right" child at the "right" time.

Ninth, it was found in this study that schools lack resources especially textbooks for learners and that this challenge promotes inequality of learning opportunities among learners resulting in poor learning outcomes.

It is therefore recommended that the distribution of education resources between urban and rural schools should be balanced. For instance, while maintaining standards for urban schools, the capacity for rural schools should be improved through increased budget allocation on learning materials per learner and ensure that learners receive their textbooks before the commencement of the school term.

Tenth, it was highlighted in this study that school leadership play a pivotal role in ensuring that the curriculum policy is effectively implemented and its objectives are achieved. Based on the findings of this study, it is recommended that programmes developed for principals' leadership should go beyond transformative leadership to learning leadership. This means that for principals to be able to play the complex leadership roles and meet the demands of their daily responsibilities they must have the ability to encourage teachers to achieve high levels of personal and professional growth and improved practice for the benefit of the school and their learners at the classroom level.

6.2.10 Conclusions

To reiterate, this thesis employed a critical-interpretive perspective in an attempt to evaluate the factors that influence the implementation of the intended secondary school curriculum at the classroom level. This study therefore, concludes that curriculum practice in Namibia is interpreted from a technical interest perspective despite the 2010 National Curriculum for Basic Education being founded on the principles of a social constructivist paradigm or Learner Centred Education.

This theoretical curriculum confusion has a profound effect on how Namibian teachers understand and implement the curriculum at the classroom level. In the context of this study, curriculum implementation is a complex endeavour which is influenced by a myriad of interrelated factors. The findings of this study demonstrated that the main factors that influence the implementation of the intended secondary school curriculum in Namibia's classroom situation are embedded within the macro-; meso- and micro conditions of the curriculum development process.

However, it can be concluded from the data of this study that overall, the quality of school leadership and teachers could be the most significant factor that influence the implementation of the intended secondary school curriculum in Namibian classrooms.

References

Abell, S. K., & Lederman, N. G. (Eds.). (2007). Handbook of research on science education. New Jersey: Lawrence Erlbaum Associates. Inc.

Africa Review, (May 11, 2011). Fixing Namibia's cracking education model. Walvis Bay. Retrieved on 15 May 2013 from www.africareview.com/Special-Reports/-/97182/1160156/-/x5av6z/-/index.html

Ajzen, I. (1991). The theory of planned behaviour. *Organisational Behaviour and Human Decision Processes, 50*(2), 179-211.doi:1016/0749-5978(91)90020-T

Akinnaso, F. N. (1991). Toward the development of a multilingual policy in Nigeria. *Applied Linguistics,* 12, 29-61.

Al-Qahtani, S. A. (1995). Teaching thinking skills in the social sciences curriculum of Saudi Arabian secondary schools. *International Journal of Educational Development 15* (2), 155-163.

Alwan, F. H. (2006). An analysis of English language teachers' perceptions of curriculum change in the United Arab Emirates. Unpublished doctoral dissertation, The University of Exter, UK.

American Association for the Advancement of Science (AAAS), (1993). What Issues Arise with Inquiry Learning and Teaching?. Retrieved on 22 October 2009 www.aaas.org/sites/default/files/migrate/uploads/InquiryPart3.pdf

American Association of School Administrators, National Superintendent of the Year Program, (AASA) (2009): Transforming Our Schools, Arlington, VA: Retrieved on January 28, 2010 from www.aasa.org

Anderson, J. R. (1985). Cognitive psychology and its implications. (2nd ed.), New York: Freeman.

Anderson, R. D. (2004). Inquiry as organizing theme for science education. In Abell, S. K. and Lederman, N. G. (eds.). Handbook of Research on Science Education. New Jersey: Lawrence Erlbaum Associates, Inc.

Anderson, G. (1998). Fundamentals of Educational Research (2nd ed.). London: Falmer Press.

Anfara, V. A., Brown, K. M., & Mangione, T. L. (2002). Qualitative analysis on stage: making the research process more public. *Educational researcher,* 31 (7), 28-38. Retrieved on 25 June 2012, from web.utk.edu/-cdavis80/documents/qual/Anfara2002.pdf

Angula, N. (June 2011). The elusive quest for education excellence in post-independent Namibia: *The challenges of diversification and implementation*. A paper at the Namibia National Conference on Education. Windhoek. Retrieved on 28 October 2013 from www. Achive/PrimeMinisterStatements/2011/Educational_Excellence_Ecx1.pdf

Ansre, G. (1979). "Four rationalizations for maintaining European languages in Africa." *African Languages/Languages Africaines* 5(2): 10-17.

Anyon, J. J. (2005). Radical Possibilities: Public Policy, Urban Education, and a New Social Movement. New York: Routledge.

Apple, M. W. (1979, Winter). On analyzing hegemony. *Journal of Curriculum Theorizing, 1,* 10–43.

Apple, M. W., & Weis, L. (1983). Ideology and practice in schooling (Eds.). New York.

Armstrong, D. G., Henson, K. T., & Salvage, T.V. (1981). Education: An Introduction. New York: Macmillan.

Ary, D., Jacobs, L. C. & Razavieh, A. (2003). Introduction to research in education (6th ed.). Belmont, CA: Wadsworth/Thompson Learning.

Artzt, A., & Armour-Thomas, E. (April, 1996). *Evaluation of instructional practice in the secondary school mathematics classroom: A cognitive perspective.* Paper presented at the Annual Meeting of the American Educational Research Association. (ERIC Document Reproduction Service No. ED397131).

Association for the Development of Education in Africa (ADEA). (1999). Stocktaking Review: Curriculum Reform and Development in Namibia- Reflecting equity, access and quality. Retrieved on 5 December 2011 from www.adeanet.org/adeaPortal/documents_pdf/pstr99_namibia2.pdf

Avramidis, E., Bayliss, P., & Burden, R. (2000). A survey into mainstream teachers' attitudes towards the inclusion of children with special educational needs in the ordinary school in one local education authority. *Educational Psychology, 20*(2), 191-121.

Babbie, E. (2007). The Practice of Social Research. (11th ed.). Belmont: Thomson Wadsworth.

Babbie, E., & Mouton, J. (2001). The Practice of Social Research. South Africa: Oxford University Press.

Baddie, E., & Halley, F. (1995). Advantages in Social Research: Data Analysis using SPSS for Windows. The Thousand Oaks, California: Sage.

Baker, S. E., & Edwards, R. (2012). How many qualitative interviews is enough? Expert voices and early career reflections on sampling and cases in qualitative research. Retrieved on 2 April 2012 from http://methodspace.com

Baker, A. & Bruner, B. (2012). Integrating evaluative capacity into organisational practice: A Guide for Non-profit and Philanthropic Organizations and Their Stakeholders. New York: The Bruner Foundation. Retrieved 25 May 2013 from http://www.evaluativethinking.org/sub_page.php?page=eti

Barker, M. (2001). How do people learn: Understanding the learning process. *The professional practice of teaching,* 35-66. Retrieved on 2 April 2012 from www.thewiseteacher.com/uploads/1/1/6/11644857/barker_how_do_people_learn .pdf.

Barker, R. L. (2003). *The social work dictionary.* (5th ed.). Washington, DC: National Association of Social Works Press.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioural change. *Psychological Review, 84*(2), 191-215.

Bandura, A. (1997). Self-efficacy: The exercise of control. New York: W.H. Freeman & Company.

Barth, R. S. (1991). *Improving schools from within*. San Francisco: Jossey-Bass.

Barnett, R., & Coate, K. (2005). Engaging the curriculum in higher education, Maidenhead: Open University Press

Barret, A. (2008). Capturing the difference: Primary school teachers' identity in Tanzania. *International Journal of Educational Development 28,* 496-507.

Barell, J. (1996). 'Critical issue: working toward student self-direction and personal efficacy as educational goals'. Retrieved on 18 May 2012 fromhttp://www.ncrel.org/issues

Beane, J. A., Toepfer, C. E., & Alessi, S. J. (1986). *Curriculum Planning and Development.* Allyn and Bacon: Boston.

Bekalo, S., & Welford, G. (2000). Practical activity in Ethiopia physical sciences: Implications for policy and practice of the match between intended and the implemented curriculum. *Research papers in Education, 15*(2), 185 – 212.

Bell, B. (Ed.) (1993). *I know about LISP but how do I put it into practice?* Hamilton, NZ: Centre for Science, Mathematics and Technology Education Research, University of Waikato.

Belmont Report (1979). Ethical Principles and Guidelines for the Protection of Human Subjects of Research. In Cohen, L., Manion, L., & Morrison, K. (2007). Research Methods in Education. (6th ed.). London: Routledge.

Bergman, M. M. (2008). Advances in mixed methods research. London: Sage.

Berliner, D. C., & Biddle, B. J. (1995). The manufactured crisis: Myths, fraud and attack on America's public schools. New York: Addison-Wesley-Longman.

Bertaux, D. (1981). From the life-history approach to the transformation of sociological practice. In Daniel Bertaux (Ed.), *Biography and society: The life history approach in the social sciences* (pp.29-45). London: Sage.

Berman, P. & McLaughlin, M. W. (1977). Federal programs supporting educational change. Vol.VIII: Factors affecting implementation and continuation (Report No. R- 1589/7 HEW. Santa Monica, CA: The RAND Corporation.

Bernstein, B. (1990). Class, Codes and Control, Vol.VIII: The Structuring of Pedagogic *Discourse*. London: Routledge.

Bernstein, B. (1996). Pedagogy, symbolic control and identity: Theory, research, critique. London: Taylor and Francis.

Bertelsmann Stiftung's Transformation Index (BTI), (2012). Retrieved on 15 May 2013 from http://www. bertelsmann-stiftung.de/cps/rde/xchg/bst_engl/hs.xsl/publikationen_111896.htm

Bexley, E., James, R., & Arkoudis, S. (2011).The Australian Academic Profession in Transition: *Addressing the challenge of reconceptualising academic work and regenerating the academic workforce.* Melbourne: Centre for the Study of Higher Education. Retrieved on 7 February 2014 from www. Cshe.unimelb.edu.au

Birenbaum, M., Breuer, K., Cascallar, E. Dochy, F., Ridgway, J., Dori, J., & Wiesemes, R. (2005). "A learning integrated assessment system'. In R. Wiesemes and G. Nickmans (Eds.) EARI (European Association for Research on Learning and Instruction).

Birenbaum, M. (1996). Assessment 2000: Towards a pluralistic approach to assessment. In M. Birenbaum & F. J. R. C. Dochy (Eds.) *Alternatives in assessment of achievement, learning processes and prior knowledge* (pp. 3-29) Boston, MA: Kluwer.

Blake, C., & Monahan, E. C. (2007). Rethinking teacher preparation for EBD students: towards a partnership model, Volume 22, pp. 60–65.

Blenkin, G. M., Edwards, G., & Kelly A.V. (1992). *Change and the Curriculum*, London: Paul Chapman.

Blignaut, S. E. (2006). Teachers' epistemologies as frame factor in the implementation of curriculum policy. Unpublished PhD Thesis. Port Elizabeth: Faculty of Education, Nelson Mandela Metropolitan University.

Bobbitt, F. (1928). *How to Make a Curriculum*, Boston: Houghton Mifflin.

Bokamba, E. G. (Feb 2007). Are there syntactic constraints on code-mixing? World Englishes. V.8, Issues 3, 277-292. DOI: 10.1111/j.1467-971X.1989.tb00669.x

Bord, R., O'Connor, R., & Fisher, A. (2000). In what sense does the public need to understand global climate change? *Public Understanding of Science, 9,* 205-218.

Bowen, J. (2003). A History of Western Education (Vol. 111) The Modern West: Europe and the New World. London and New York: Routledge.

Boyd-Dimock, K. V. (December 2, 2009). *Systemic thinking for turning around low-performing schools.* Texas District Turnaround Institute, Austin, TX.

Brady, B., & Kennedy, K. (2003). Curriculum construction. Sydney: Pearson Education.

Brameld, T. (1940). "The Barometer of Education." *The New Republic (December).*

Bredeson, P. V. (1994). Empowered teachers-empowered principals: Principals' perceptions of leadership in schools. In N. A. Prestine & P. W. Thurston (Eds.). *Advances in Educational Administration* (Vol.3, pp.195-220). Greenwich, CT: JAI.

Broadfoot, P. (2007). An Introduction to Assessment. New York: Continuum.

Brock-Utne, B. & Holmarsdottir, H. (2001, 2004). Language policies and practices in Tanzania and South Africa: problems and challenges. *International Journal of Educational Development* 24: 67-83.

Brown, S., & McIntyre, D. (1982). Influences upon teachers' attitudes to different types of innovation: A study of Scottish Integrated Science. *Curriculum Inquiry*, 12 (1), 35± 51.

Burkhardt, H., Fraser, R., & Ridgway, J. (1990). The dynamics of curriculum change. In I. Wirszup & R. Streit (Eds.), *Development in school mathematics education around the world,* (Vol. 2, 3-29). Reston, VA: NCTM.

Buzeika, A. (1996). Teachers' beliefs and practice: The chicken or the egg? In P. C. Clarkson (Ed.), *Technology in mathematics education. Proceedings of the 19th*

Annual Conference of the Mathematics Education Research Group of Australasia (93-100). Melbourne: Mathematics Education Research Group of Australasia.

Calder, J., & Sapsford, R. J. (2006). Statistical Techniques. In Sapsford, R & Jupp, V. (Eds.). *Data Collection and Analysis.* (2nd ed.). London: Sage.

Caldwell, B. (December 6, 2007). *Rud has a Long Way to go to Become the Education Prime Minister,* Sydney Morning Herald.

Carl, A. E. (2009). *Teacher empowerment through curriculum development: Theory into practice.* (3rd ed.). Cape Town: Juta.

Carl, A. E. (2012). *Teacher empowerment through curriculum development: Theory into practice.* (4th ed.). Cape Town: Juta.

Cantoni, G. (2007) (Ed.). Stabilizing indigenous languages. Center for Excellence in Education. Northern Arizona University. Retrieved on 15 May 2013 from http://jan.ucc.nau.edu/~jar/TIL.html

Clements, M. A., & Ellerton, N. F. (1996). Mathematics Education Research: Past, Present and Future. Retrieved on 11 May 2013 from springer.com/article/10.1007%2BF03217059

Charmaz, K. (2006). Constructing grounded theory: a practical guide through qualitative analysis. London: Sage.

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

Childers, T. (1989). Evaluative Research in the Library and Information Field. *Library and Information Science Research,* 250-267

Christie, P. (2009). The right to learn: The struggle for education in South Africa. Braamfontein: South CHED/Raven.

Cohen, J. (1988). Statistical Power Analysis for the Behavioral Sciences. Hillsdale, NJ: Erlbaum.

Cohen, L., & Holliday, M. (1996). Practical Statistics for Students. London: Paul Chapman.

Cohen, L., Manion, L., & Morrison, K. (2011). Research Methods in Education. (7th ed.). New York: Routledge.

Cohen, L., Manion, L., & Morrison, K. (2007). Research Methods in Education. (6th ed.). London: Routledge.

Collins, K. M. T., Onwuegbuzie, A. J., & Jiao, Q. G. (2007). A mixed methods investigation of mixed methods sampling designs in social and health science research. *Journal of Mixed Methods Research, 1*, 267-294. Retrieved on 22 October 2009 from http: //mmr.sagepub.com

Collins, K. M. T., Onwuegbuzie, A. J., & Sutton, I. L. (2006). A model incorporating the rationale and purpose for conducting mixed methods research in special education and beyond. *Learning Disabilities: A Contemporary Journal, 4,* 67–100. Retrieved on 22 October 2009 from http://mmr.sagepub.com

Conley, D. T. (1993). Managing change in restructuring schools. *Oregon School study Council Bulletin, 36*(7), 2-32.

Connelly, F. M., & Lantz, O. C. (1991). Definitions of curriculum: An introduction. In A. Lewy (Ed.), *The international encyclopaedia of curriculum* (pp. 15-18). New York: Pergamon Press.

Coombs, P. H. (1985). The world crisis in education: The view from the Eighties. New York: Oxford University Press.

Cooper, R., Slavin, R. E., & Madden, N. A. (1998). Success for All: Improving the quality of implementation of whole-school change through the use of a national reform network. *Education and Urban Society, 30* (3), 385-408.

Cornbleth, C. (1990). *Curriculum in Context*, Basingstoke: Falmer Press.

Cornoldi, C., Terreni, A., Scruggs, T. E., & Mastropieri, M. A. (1998). Teacher Attitudes in Italy After Twenty Years of Inclusion. *Remedial and Special Education,* 19(6), 350-356.

Council on Higher Education (2001). *A New Academic Policy for Programmes and Qualifications in Higher Education*. Discussion Document. Pretoria: CHE.

Counts, G. S. (1932). Dare the school build a new social order, New York: The John Day Company.

Creswell, J. W, (1999). Mixed methods research: Introduction and application. In *Handbook for educational policy,* ed. T. Cijek, 455-472. San Diego, CA: Academic Press.

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

Creswell, J. W., Plano Clark, V. L., Gutmann, M., & Hanson, W. (2003). Advanced mixed methods research designs. In *Handbook on mixed methods in the behavioral and social sciences,* (Eds.). A. Tashakkori and C. Teddlie, 209–40. Thousand Oaks, CA: Sage.

Creswell, J. W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative approaches to research.* (2nd ed.) *Upper Saddle River,* NJ: Merrill/Pearson Education.

Creswell, J. W. & Clark, V. L. (2007). Qualitative inquiry and research design: Choosing among five approaches. (2nd ed.). Thousand Oaks, CA: Sage.

Creswell, J. W. (2012). Educational Research: Planning, conducting and evaluating quantitative and qualitative research. (Fourth ed.). Boston: Pearson.

Curriculum of Australia: Assessment and Reporting Authority. (2012). Curriculum design paper v2.0. Retrieved on 04 May 2013, from http://www.acara.edu.au/verve/_resources/Curriculum_Design_Paper_.pdf

Curtis, S., Gesler, W., Smith, G., & Washburn, S. (2000). Approaches to sampling and case selection in qualitative research: Examples in the geography of health. *Social Science and Medicine, 50*, 1001-1014.

Datnow, A. (1989). The Gender Politics of Educational Change. London: Falmer Press.

Datnow, A., & Stringfield, S. (2000). Working together for reliable school reform. *Journal of Education for Students Placed at Risk, 5*(1 & 2), 183-204.

Davis, J. E. (1998). Planning a Social Studies Program: Activities, Guidelines, Resources, Boulder, CO: Social Science Education Consortium

de la Sablonnière, R. (2009). Challenges of applying a student-centred approach to learning in the context of education in Kyrgyzstan. *International Journal of Educational Development.* Retrieved on 15 May 2013 from doi:10.1016/ijedudev.2009.01.001

Dello-Iacovo, B. (2009). Curriculum reform and 'Quality education' in China: an overview, *International Journal of Educational Development 29,* 241-249.

Denzin, N. K. (1994). The art and politics of interpretation. In N. K. & Y. S. Lincoln (Eds.), Handbook of qualitative research. Thousand Oaks, CA: Sage.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (1994). Handbook of qualitative research. Thousand Oaks, CA: Sage.

Denzin, N. K., & Lincoln, Y. S. (Eds.) (2000). *Handbook of Qualitative Research*. London: Sage.

De Vos, A. S., Strydom, H., Fouche, C. B., & Delport, C. S. L. (2011). Research at grassroots. For the social science and human services professions (Fourth ed.). Pretoria: Van Schaik.

Dewey, J. (1964). The child and the curriculum. In Ornstein, A. C., & Hunkins, F. P. (2009). Curriculum Foundations, Principles and Issues. (5th ed.), Boston: Pearson Education.

Doll, R. C. (1978). Curriculum Improvement: Decision Making and Process, (4th ed.). Boston: Allyn and Bacon Inc.

Domitrovich, C. E., Bradshaw, C. P., Poduska, J., Hoagwood, K. E., Buckley, J., & Olin, S.S. (2008). Maximizing the implementation quality of evidence-based preventive interventions in schools: A conceptual framework. *Advances in School Mental Health Promotion: Training and Practice, Research and Policy*, 1. 6-28.

Donlevey, J. (2000). The dilemma of high-stakes testing: What is school for? *International Journal of Reading Instruction, 27*(4), 331-338.

Duignan, P. (2003). Mainstreaming Evaluation or Building Evaluation Capability? Three Key Elements. New Directions for Evaluation. Wiley Periodicals Inc.: American Evaluation Association.

Dworkin, S. L. (2012). Sample Size Policy for Qualitative Studies Using In-Depth Interviews. Retrieved on 15 November 2012 from DOI 10.1007/s10508-012-0016-6

Dyer, C., Choksi, A., Awasty, V., Iyer, U., Moyade, R., Nigam, N., Purohit, N., Shah, S., & Sheth, S. (2004). Knowledge for teacher development in India: the importance of 'local knowledge' for in-service education. *International Journal of Educational Development 24,* 39–52.

Education For All (EFA) (2000). Namibia Assessment Report. Retrieved on 15 November 2011 from www.unesco.org/education/wef/countryreports/namibia/rapport_1.html

Egan, K. (2003). What is curriculum? *Journal of the Canadian Association for Curriculum Studies, 1*(1), 9-16. Retrieved on 25 November 2011 from http://www.csse.ca/CACS/JCACS/1.1/ JCACS.1.1.c.egan.1978.pdf.

Eisner, E. W. (1985). The Art of Educational Evaluation: A personal view. London: Falmer Press.

Ellsworth, J. B. (2001). *Surviving changes: a survey of Educational change models.* Syracuse, NY: ERIC Clearinghouse.

Epstein, J. (1995). School/family/community partnerships. Phi Delta Kappan, 70112.

Esland, G. M. (1971). 'Teaching and Learning as the Organization of Knowledge'. In Young, M. F. D. (ed.), *Knowledge and Control: New Directions for the Sociology of Education*, London: Collier-Macmillan, 70-115.

Etherington, K. (2006). Becoming a reflexive researcher: using ourselves in research. London: Jessica Kingsley.

Feilzer, M. Y. (2010). Doing mixed methods research pragmatically: implications for the rediscovery of pragmatism as a research paradigm. *Journal of Mixed Methods Research,* 4(1), 6-16.

Firestone, W. A. (1993). Alternative arguments for generalizing from data, as applied to qualitative research. *Educational Researcher, 22*(4), 16-23.

Forlin, C., Douglas, G., & Hattie, J. (1996). Inclusive Practices - how accepting are teachers? International Journal of Disability, Development and Education, 43(2), 119-133.

Fraser, A. & Bosanquet, A. (2006). The Curriculum? That's just a unit outline, isn't it? *Studies in Higher Education,* 31, 3, 269-284.

Freire, P. (1993). Pedagogy of the oppressed. New York: Penguin.

Freire, P. (1985). *The Politics of Education: Culture, Power, and Liberation.* Critical Studies in Education Series (Eds. Freire, P. and Giroux H.). New York: Bergin and Garvey.

Freire, P. (1972). Cultural Action for Freedom, Harmondsworth: Penguin.

Fuchs, L. S. (2003). Assessing intervention responsiveness: Conceptual and technical issues. *Learning Disabilities Research and Practice, 18*(3), 172-186.

Fuchs, D., Fuchs, L. S. & Compton, D. L. (2004). Identifying reading disabilities by responsiveness-to-instruction: Specifying measures and criteria. *Learning Disability Quarterly, 27,* 216-227.

Fullan, M. G. (2007). The New Meaning of Educational Change (4th ed.). New York: Teachers College Press.

Fullan, M. G. (2001). The New Meaning of Educational Change (3rd ed.). New York: Teachers College Press.

Fullan, M.G. (1991). *The New Meaning of Educational Change,* London: Cassell.

Fullan, M. G. & Stiegelbauer, S. (1991). *The New Meaning of Educational Change.* New York: Teachers College Press.

Garner, R. (1990). When children and students do not use learning strategies: Toward a theory of settings. *Review of Educational Research, 60,* 517-529.

Giroux, H. A. (1983). Theory and Resistance in Education: Pedagogy for the Opposition. South Hadley, MA: Bergin and Garvey.

Giroux, H. A. (1981). Ideology, culture and the process of schooling, Philadelphia: Temple University Press.

George, J. M., & Lubben, F. (2002). Facilitating teachers' professional growth through their involvement in creating context-based materials in science. International Journal of Educational Development 22, 659-672.

Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. New York: Aldine Publishing Company.

Glatthorn, A. A. (1987). Curriculum Leadership. London: Scott, Foresman & Company.

Global Competitiveness Index (GCI). (2011). Global Competitiveness Index Report 2010-2011. Retrieved on November 15, 2013 from www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2010-11.pdf

Government of the Republic of Namibia (GRN). (2004). *Namibia Vision* 2030: Prosperity, Harmony, Peace and Political Stability-Policy Framework for Long-Term National Development. Windhoek: Office of the President.

Government of the Republic of Namibia, (GRN) (December, 2001). *Education Act, No. 16 of 2001*. Windhoek: Government Gazette, no. 2673.

Government of the Republic of Namibia (GRN). (1999). Presidential Commission on Education, Culture and Training: Meeting the challenges of change. Windhoek: Government of the Republic of Namibia.

Government of the Republic of Namibia, (GRN) (1990). *The Constitution of the Republic of Namibia*. Windhoek: Ministry of Information and Broadcasting.

Graham-Brown, S. (1996). Education in the developing world: conflict and crisis. London: Longman.

Gravetter, F. J., & Forzano, L. B. (2003). Research methods for the behavioral sciences. Belmont: Wadsworth/Thomson Learning.

Green, A. (1997). "Education and the state formation in Europe and Asia." In: Kennedy, K. J. (Ed.)*, Citizenship Education and the Modern State* (pp. 9-26). London: Falmer Press.

Greene, J. C., Caracelli, V. J. & Graham. W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis 11 (3): 255–74.*

Greene, J. C., & Caracelli, V. J. (Eds.). (1997). Advances in mixed-method evaluation: The challenges and benefits of integrating diverse paradigms. In *New directions for evaluation, ed.* American Evaluation Association. San Francisco: Jossey-Bass.

Grumet, M. R. (1981). Restitution and Reconstruction of Educational Experience: An Autobiographical Method for Curriculum Theory. In L. Barton & M. Lawn (Eds.), Rethinking Curriculum Studies: A Radical Approach (p.115-130). New York: Halsted Press.

Grundy, S. (1987). *Curriculum: product or praxis*? Lewes: Falmer Press.

Guba, E. G. (1990). The paradigm dialog. California: Sage.

Guest, G., Bunce, A., & Johnson, L. (2006). "How many interviews are enough? An experiment with data saturation and variability". *Field Methods*, *18*(1), 59-82.

Gultig, J., Hoadley, U., & Jansen, J. (2002). Curriculum: From Plans to Practices-Reader. Cape Town: Oxford University Press.

Habermas, J. (1972). Knowledge and Human Interests, (2nd ed.). London: Heinemann.

Hall, G. E., & Hord, S. M. (1987). Change in Schools: Facilitating the process. Albany, NY: State University of New York Press.

Hall, G. E., & Hord, S. M. (2001). Implementing change: Patterns, principles, and potholes. Boston: Allyn and Bacon.

Handal, B., & Herrington, A. J. (2003). Mathematics Teachers' Beliefs and Curriculum Reform. *Mathematics Education Research Journal. 15* (1), 59-69.

Hansen, J., Holm, L., Frewer, L., Robinson, P., & Sandoe, P. (2003). Beyond the knowledge deficit: recent research into lay and expert attitudes to food risks, *Appetite, 41 (2),* 111-121.

Hanson, W. E., Creswell, J. W., Plano Clark, V. L., Petska, K. S. & Creswell, J. D. (2005). Mixed methods research designs in counselling psychology. *Journal of Counselling Psychology,* 52(2): 224-235.

Harkness, J. A., Fons J. A., Van de Vijver, J. R. & Mohler, P. (2003). *Cross-Cultural Survey Methods.* Hoboken, New Jersey: Wiley and Sons Inc.

Harlech-Jones, B. (1997). A New Thing? The Namibian Independence process, 1989-1990. Windhoek: Ecumenical Institute for Namibia, University of Namibia.

Harris, A. (2009). Big change question: Do politics help or hinder education change? *Journal of Educational Change, 10,* 63-67.

Harris, P. G. (December 2011). Language in school in Namibia: The missing link in educational achievement? Windhoek: The Urban Trust of Namibia.

Harvey, D. H. P. (1985). Mainstreaming: teachers attitudes when they have no choice about the matter. *Exceptional Children, 32*, 163-173.

Haskell, D. H. (2000). Building bridges between Science and Special Education. Electronic Journal of Science Education, 4(3).

Haynes, M. (1996). *Influences on practice in the mathematics classroom: An investigation into the beliefs and practices of beginning teachers.* Unpublished Masters Dissertation Massey University, NZ.

Health Communication Partnership (HCP), (2005). Introduction to Theories of Communication. Retrieved on 15 May 2013 from http://www.hcpartnership.org/Topics/Communication/theory/256,1,Slide

Heiman, T. (2001). Inclusive Schooling - Middle School Teachers' Perceptions. School Psychology International, 22(4), 451-462.

Hearne, J. D., & Cowles, R. V. (2001). Curriculum Development: A Critique of Philosophical Differences. Education. Vol. 108. No.1

Hoadley, U., & Jansen, J. (2001). Curriculum: From Plans to Practices – Learning guide. Cape Town: Oxford University Press.

Hoadley, U., & Jansen, J. (2009). Curriculum: Organizing knowledge for the classroom (2nd ed.). Cape Town: Oxford University Press.

Hodgkinson, C. (1991). Educational leadership: The moral art. Albany, New York: SUNY Press.

Hoerr, R. T. (2005). The Art of School Leadership. Association for Supervision and Curriculum Development.

Hofer, B. K., & Pintrich, P. R. (1997). The development of epistemological theories: Beliefs about knowledge and knowing and their relation to learning. *Review of Educational Research, 67*(1), 88-140.

Hopwood, G. (2005). Regional Councils and Decentralisation: At the Crossroads. Windhoek: Namibia Institute for Democracy (NID). Retrieved on 7 February 2014 from www.nid.org.na/pub_docs/no7_04.pdf

Hornby, A. S. (Ed.) (2010). Oxford Advanced Learner's Dictionary of Current English. (8th ed.). University of Oxford: Oxford University Press.

Horner, R. H., & Sugai, G. (2005). School-wide positive behavior support: An alternative approach to discipline in schools. (pp. 359-390). In L. Barbara & L. Kern (Eds.) Positive Behavior Support. New York: Guilford Press.

Huberman, A. M. (1973). Understanding change in education: An introduction. Experiments and innovations in education no. 4. ERIC Document Reproduction Service No. ED082330). Retrieved 15 March 2011 from unesdoc.unesco.org/images/0000/000033/003397eo.pdf

Huberman, M., & Miles, M. (1984). Innovation up close. New York: Plenum.

Huberman, A. M. (1989). The professional life cycle of teachers. *Teachers College Record,* 91, 1, 31-57.

Hwang, Y. H., Kim, S. L., & Jeng, J. M. (2000). Examining causal relationships among selected antecedents of responsible environmental behaviour. *The Journal of Environmental Education, 31 (4),* 19-24.

International Labour Organization (ILO). (2010). Work Country Programme 2010-2014. Windhoek: Ministry of Labour and Social Welfare.

Ivankova, N. V., Creswell, J. W., & Clark, V. L. (2007). Foundations and approaches to mixed methods research. In Maree, K. (Ed.), *First steps in research,* Pretoria: Van Schaik.

Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2006). Using Mixed-Methods Sequential Explanatory Design: From Theory to Practice. Field Methods, 18; 3. Retrieved on 22 October 2009 from http://fmx.sagepub.com/cgi/content/abstract/18/1/3

Jackson, P. W. (1968). *Life in classrooms.* New York: Holt, Rinehart & Winston.

Jackson, P. W. (1986). *The practice of teaching.* New York: Teachers College Press.

Jacobs, M., Gawe, N., & Vakalisa, N. C. G. (Eds.) (2000). Teaching-Learning Dynamics: A participative approach for OBE (2nd ed.). Johannesburg: Heinemann.

Jansen, J. (1989). Curriculum reconstruction in post-colonial Africa: a review of the literature. *International Journal of Educational Development 9*(3), 219-231.

Jette, D. J., Grover, L., & Keck, C. P. (2003). A qualitative study of clinical decision making in recommending discharge placement from the acute care setting. *Physical Therapy, 83*(3), 224-236.

Jewett, A. E., Bain, L. L., & Ennis, C. D. (1994). *The curriculum process in physical education.* Dubuque, Iowa: Brown and Benchmark.

Johnson, R. B. (2009). Toward a More Inclusive "Scientific Research in Education". Educational Researcher, Vol. 38, No. 6, pp. 449-457. DOI: 10.3102/0013189X09344429. AERA.HTTP://er.aera.net Retrieved on 15 June 2013 from www.mkoehler.educ.msu.edu/hybridphd/hybridphd_summer_2010/wp-content//uploads/2010/06/Johnson-2009pdf

Johnson, R. B. & Christensen, L. B. (2010). Educational Research: Quantitative, Qualitative, and Mixed Approaches. UK: Sage.

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed Methods Research: A Research Paradigm Whose Time Has Come. *Educational Researcher* 33(7):14-26.

Jordan, V. (1989). Curriculum development for teacher training at Cape Teacher Training Colleges. DEd thesis. University of Stellenbosch.

Judd, C. H., Smith, E. R., & Kidder, L. H. (1991). Research Methods in Social Relations, (6th ed.). New York: Harcourt Brace Jovanovich College.

Katzao, J. J. (1999). Lessons to learn: A Historical, Sociological and Economic Interpretation of Education Provision in Namibia. Windhoek: Out of Africa Publishers.

Kelly, A. V. (2005). The Curriculum: Theory and Practice, (5th ed.). London: Sage

Kelly, A.V. (1986). Knowledge and Curriculum Planning. London: Harper & Row.

Kemmis, S., & Fitzclarence, L. (1986). Curriculum theorizing: beyond reproduction theory, Waum Ponds: Deakan University.

Kennedy, M. (1979). Generalizing from single case studies. *Evaluation Quarterly, 3*, 661-678.

Kennedy, K. (1988). The policy context of curriculum reform in Australia in the 1980s, *Australian Journal of Education*, 32, pp. 357-374.

Kennedy, C., & Kennedy, J. (1996). Teacher attitudes and change implementation. Elsevier Science Ltd 24 (3) 351-360.

Kerlinger, F. N., & Lee, H. B. (2000). Foundations of behavioural research. London: Wadsworth Thomson Learning.

Kirschner, P. A., Sweller, J., & Clark, R. E. (2006). Why minimal guidance during instruction does not work: an analysis of the failure of constructivist, discovery, problem-based, experiential, and inquiry-based teaching. Educational Psychology 41 (2) 75-86.

Knight, B. A. (1999). Towards inclusion of students with special educational needs in the regular classroom. Support for Learning, 14(1), 3-7.

Knoff, H. M., & Batsche, G. M. (1995). Project ACHIEVE: Analyzing a school reform process for at-risk and underachieving students. School Psychology Review, 24(4), 579-603.

Koballa, T. R., & Crawley, F. E. (1985). The influence of attitude on science teaching and learning. *School Science and Mathematics, 85,* 222-232.

Koehler, M. S., & Grouws, D. A. (1992). Mathematics teaching practices and their effects. In D. A. Grouws (Ed.), *Handbook of research on mathematics teaching and learning* (pp. 115126).New York: Macmillan.

Kollmus, A., & Agyeman, J. (2002). Mind the gap: Why do people act environmentally and what are the barriers to pro-environmental behaviour? *International Education Research, 8,* 239-260.

Kridel, C. A. (Ed.). (2010). Encyclopaedia of Curriculum studies. Thousand Oaks. CA: Sage.

Kuester, V. M. (2000). 10 Years on: Have teacher attitudes toward the inclusion of students with disabilities changed? Paper presented at the ISEC 2000, London.

Kvale, S. (1996). Interviews: an introduction to qualitative research interviewing. Thousand Oaks, CA: Sage.

Lampropoulou, V., & Padelliadu, S. (1997). Teachers of the Deaf as compared with other groups of Teachers: Attitudes toward people with disability and inclusion. *American Annals of the Deaf, 142*(1), 2633.

Layne, A. Jules, V., Kutnick, P., & Layne, C. (2008). Academic achievement, pupil participation and integration of group work skills in secondary school classrooms in Trinidad and Barbados. *International Journal of Educational Development 28,* 176-194.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.

LeCompte, M., & Preissle, J. (1993). Ethnography and Qualitative Design in Educational research (2nd ed.). London: Academic Press.

Lee, D. T. F., Woo, J., & Mackenzie, A. E. (2002). The cultural context of adjusting to nursing home life: Chinese elders' perspectives. *The Gerontologist, 42*(5), 667-675.

Lewy, A. (1990). "Curriculum Try-out". In: Walberg, H. J. and Haertel, G. H., The International Encyclopaedia of Educational Evaluation, Oxford: Pergamon Press.

Lincoln, Y. S., & Guba, E. G. (1999). Establishing trustworthiness. In Bryman, A. & Burgess R.G. (Eds.), Qualitative research Vol III. London: Sage.

Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Beverly Hills, CA: Sage. In Denzin, N. K. & Lincoln, Y. S. (Eds.), *Handbook of qualitative research.* Thousand Oaks, CA: Sage.

Little, J. W. (1982). Norms of collegiality and experimentation: Workplace conditions of school success: *American educational Research Journal, 19,* 325-340.

Locks, S. F., & Lieberman, A. (1983). Curriculum implementation. *Association for Supervision and Curriculum Development Yearbook,* 126-141.

Lovat, T. J., & Smith, D. L. (2003). Action on reflection. Sydney, Australia: Social Science Press.

Lovat, T. J., & Smith, D. (1995). *Curriculum: Action on reflection revisited.* Australia: Social Science Press.

Luckket, K. (1995). Towards a model of curriculum development for the University of Natal's curriculum reform programme. *Academic Development* 1(2).

Lumpe, A., Haney, J., & Czerniak, C. (2000). Assessing teachers' beliefs about their science teaching context. *Journal of Research in Science Teaching, 37 (3),* 275-292.

Maree, K. (Ed.). (2007). First steps in research. Revised edition. Pretoria: Van Schaik.

Markee, N. (1997). Managing curricular innovation. Cambridge: Cambridge University Press.

Marope, M. T. (2005). *Namibia human capital and knowledge for economic growth with equity.* Washington, DC: World Bank.

Marshal, C., & Rossman, G. B. (1995). Designing qualitative research, (2nd ed.). Thousand Oaks, CA: Sage.

Mason, J. (2002). Qualitative researching, (2nd ed.). London: Sage.

Matthews, D. (1996). Is There a Public for Public Schools? Day, Ohio: Kettering Foundation Press.

Mayer, R. (2004). "Should there be a three-strike rule against pure discovery? The case for guided methods of instruction.'' *American Psychologist 59* (1): 14-19. Doi:10.1037/0003-066X.59.1.14 (http://dx.doi.org/10.1037/0003-066X.59.1.14).

Mayer, D. P. (1999). Measuring Instructional Practice: Can Policy makers trust survey data? Educational evaluation and policy analysis, 21(1): 29-45.

McCombs, B. L., & Whisler, J. S. (1997). The Learner-Centred Classroom and School: Strategies for Increasing student motivation and Achievement. San Francisco, CA: Jossey-Bass.

McGalliard, W. A. Jr. (1983). Selected factors in the conceptual systems of geometry teachers: Four case studies (Doctoral dissertation, University of Georgia, 1983). *Dissertation Abstracts International, 44,* 1364A.

McGee, C. (1997). *Teachers and Curriculum Decision-Making.* Palmerston North: Dunmore Press.

McKenna, S. (2003). Changing Discourses of Academic Development at a South African Technikon. *South African Journal of Higher Education* 17(2).

McKiernan, J. (2008). Curriculum and Innovation: Process, Theory, Pedagogy and Action Research. London: Routledge.

McKinsey & Company, (2008). How the World's Best-performing School Systems Come Out on Top, Retrieved on 2 November 2010 from *http://www.mckinsey.com/clientservice/socialsector/resources/pdf/Worlds_School_systems_Final.pdf*

McKnight, C. C., Crosswhite, F. J., Dossey, J. A. Kifer, J. O., Swafford, K. J., & Cooney, T. J. (1987). Understanding curriculum: Assessing U.S. School mathematics from an International Perspective. Champaign, IL: Stipes Publishing Company.

McMillan, J., & Schumacher, S. (2010). Research in education: Evidence-based inquiry. (7th ed.). Boston: Pearson.

Mcnabb. D. E. (2007). Research Methods for Political Science: Quantitative and Qualitative Approaches (2nd Ed.). Armonk, NY: M.E. Sharpe

McTaggart, R., & Garbutcheon-Singh, M. (1986). New directions in action research, *Curriculum Perspectives, 6(2),* 42-46

Mednick, F. (2006). *Curriculum Theories*. The Connexions Project.

Mertens, D. M. (2007). Transformative Paradigm: Mixed Methods and Social Justice. *Journal of Mixed Methods Research.* Retrieved on 9 September 2009 from http://mmr.sagepub.com.

Mezirow, J. (1991). *Transformative Dimensions of Adult Learning*, Jossey-Bass, Oxford.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: A sourcebook.* (2nd ed.), Thousand Oaks, CA: Sage.

Miller, G. I. (2011). Curricular Program Implementation in the context of Randomized Field Trials. A Dissertation submitted to the School of Education and the Committee of Graduate Studies of Stanford University in partial fulfilment of the requirements for the degree of Doctor of Philosophy. Retrieved on 25 December 2014 from http://purl.stanford.edu/hy507ps0674

Ministry of Basic Education (MBE), (2010). Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ III) Report: A study of the conditions and quality of education in Namibia. Windhoek: Ministry Basic Education.

Ministry of Basic Education and Culture (MBEC) (January, 2003). Language Policy for schools in Namibia: Discussion document. Windhoek: Ministry Basic Education and Culture.

Ministry of Basic Education, Sport and Culture (MBESC) (2004). Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) Report: A study of the conditions and quality of Primary Education in Namibia. Windhoek: Ministry of Basic Education, Sport and Culture.

Ministry of Basic Education, Sport and Culture (MBESC), (2001). ICT Policy for Education. Windhoek: Ministry of Basic Education, Sport and Culture.

Ministry of Basic Education, Sport and Culture (MBESC). (1998). *Pilot Curriculum for Formal Senior Secondary Education.* Windhoek: Ministry of Basic Education, Sport and Culture

Ministry of Education, Culture, Youth and Sport (MECYS). (1990). Change with Continuity: education reform directive. Windhoek: Ministry of Education

Ministry of Basic Education, Sport and Culture (MBESC). (n.d.). Duties and responsibilities of school principals. Windhoek: Ministry of Basic Education, Sport and Culture.

Ministry of Education (MoE), (May 21, 2013). Technical Advisor to the Ministry of Education on Textbook Utilization: General Training Module on Using textbooks in the Classroom. Windhoek: Ministry of Education.

Ministry of Education (MoE), (2012). Education Management Information System. Windhoek: Ministry of Education

Ministry of Education (MoE), (2010). The National Curriculum for Basic Education. Windhoek: Ministry of Education.

Ministry of Education (MoE), (February, 2007). *The Strategic Plan for the Education and Training Sector Improvement Programme (ETSIP): Planning for a Learning Nation, Phase 1, 2006-2011,* Windhoek: Ministry of Education.

Ministry of Education (MoE): Programmes and Quality Assurance. (2006). Circular No. 6: form ED 6/2009. *Promotion requirements for grades 1-9 and 11*: Windhoek: Ministry of Education.

Ministry of Education (MoE), (February, 2005). The Strategic Plan for the Education and Training Sector Improvement Programme. (ETSIP). 2005-2020: Planning for Learning Nation Windhoek: Ministry of Education.

Ministry of Education and Culture (MEC) (1993a). Toward Education for All: A Development Brief for Education, Culture and Training. Windhoek: Gamsberg Macmillan.

Ministry of Education, and Culture (MEC). (1993b). The Language policy for schools 1992 – 1996 and beyond. Windhoek: Longman.

Ministry of Gender and Child Welfare (MGCW) (n.d.). Draft Child care and Protection Act-Issues for Public Debate: Corporal Punishment. Windhoek: MGCW. Retrieved on 7 February 2014 from www.lac.org.na/projects/grapPdf/CCPA19-CorporalPunishment.Pdf

Moll, L. C., & González, N. (2004). Engaging life. In J. A. Banks & C. A. Banks (Eds.), *Handbook of Research on Multicultural Education* (pp. 699-715). San Francisco: Jossey-Bass, A Wiley Imprint.

Monroe, M. C. (1993). Changing environmental behaviour. *Clearing, 77,* 28-30.

Moore, K. D., & Hansen, J. (2012). Effective strategies for teaching in K-8 classrooms. London: Sage.

Morris, P. (1995). *Curriculum Development in Hong Kong*, (2nd ed.) Hong Kong: Faculty of Education, University of Hong Kong.

Morris, P. (1988). Teachers' attitudes towards a curriculum innovation: an East Asian study. *Research in Education* 40, 75-85.

Moreno, J. M. (2009). Big change question. *Journal of Educational Change, 10,* 245-248.

Morse, J. M. (2000). Determining sample size. *Qualitative Health Research, 10*(1), 3-5.

Morse, J. M. (1995). The significance of saturation. *Qualitative Health Research, 5*(3), 147-149.

Morse, J. M. (1994). Designing funded qualitative research. In Norman K. Denzin & Yvonna S. Lincoln (Eds.), Handbook of qualitative research (2nd ed.), pp.220-35). Thousand Oaks, CA: Sage.

Mostert, J. M. (1986). A model for procedures in curriculum research and development in the RSA. Project Report: Human Sciences Research Council.

Mouton, J. (2001). *How to succeed in your Master's and Doctoral studies: A South African guide and resource book.* Pretoria: Van Schaik.

Mouton, J., & Marais, H. C. (1992). *Basic concepts in the methodology of social sciences.* Pretoria: Human Sciences Research Council.

Murphy, M., & Pushor, D. (2010). Planned Curriculum. In C.A. Kridel (Ed.). Encyclopedia of Curriculum Studies. Thousand Oaks, CA: Sage 658-659. Retrieved on 26 May 2012 from Inc. doi.org/10.4135/9781295 8806.

Namibia Business and Investment Climate Survey (NamBic) (2009). Windhoek: Namibia Chamber of Commerce (NCCI)/Namibian Manufacturers Association (NMA).

Namibia Employers' Federation (NEF), (November 2010). Namibia's Skills Deficits: Cross-sectoral perceptions and experiences. Namibian Employers' Federation/Ministry of Labour and Social Welfare/NUNW and TUCNA. Windhoek: Namibian Employers' Federation (NEF).

Namibia Labour Force Survey (NLFS) (2012). Windhoek: Ministry of Labour and Social Welfare.

Namibia National Teachers' Union (NANTU) (2014). Aviral Payment System (APS). Windhoek: Namibia National Teachers' Union (NANTU).

Namibia National Teachers' Union (NANTU) Constitution. As amended at the 9th National Congress. (2009). Etosha Secondary school, Tsumeb: Oshikoto Region

Namibian Sun. (2013). Top Otjozondjupa schools to get trophies. Otjozondjupa: Otjiwarongo.

Namibian Sun. (2011a). Education system unsuccessful. Windhoek. Retrieved on 7 February 2014 from www.namibiansun.com/node/4706

Namibian Sun. (2011b). Education at the crossroads? Cambridge system failed to deliver. Windhoek. Retrieved on 7 February 2014 from www.namibiansun.com/node/13372

Namibian Sun. (2010). It's a matter of Discipline - but how? Walvis Bay: Namibian Sun. Retrieved on 7 February, 2014 from www.suncom.na/node/3937

Namibia Today (Thursday, July 2011). Education should not fail us. Proceedings of the 2011 National Conference in Education in Namibia. Windhoek: MoE.

National Planning Commission (NPC). (2006). National Planning Commission Report 2006-2012 projection. Windhoek: NPC.

National Planning Commission (NPC). (2004). Technical Assistance to the National Planning Commission (Namibia) for the updating of the human resources demand and supply model. Windhoek: NPC.

National Institute for Educational Development (NIED), (2003). Learner-Centred Education in the Namibian Context: Discussion document. Windhoek: John Meinert Printing.

National Institute for Educational Development (NIED), (2002). School Manager. Continuing professional Development Series. Module 10-School Discipline. Retrieved 7 February 2014 from wwwisis.unam.na/hivdocs/unicef/Education/NIED/Curricula%20%20school%20management/School%20Manager_Module%2010%20%20School%20Discipline%20edited.pdf. Okahandja: NIED

National Institute for Educational Development (NIED), (1998). Education Reform and Innovation in Namibia: How best can changes in Classroom Practice be Implemented and Supported? Proceedings from the 1998 NIED Educational Conference. Okahandja: NIED.

Neuman, W. L., & Kreuger, L. W. (2003). *Social work research methods: qualitative and quantitative approaches.* Boston: Allyn & Bacon.

New Era. (19 February 2010). National Planning Commission. Windhoek: New Era.

Nisbett, R., & Ross, L. (1980). Human inference: Strategies and shortcomings of social judgment. Englewood Cliffs, New Jersey: Prentice-Hall.

Noell, G. H., Witt, J. C., Slider, N. J., Connell, J. E., Gatti, S. L., & Williams, K. L. (2005). Treatment implementation following behavioural consultation in schools: A comparison of three follow-up strategies. *School Psychology Review,* 34, 87-106.

Null, W. (2011). Curriculum: From Theory to Practice. Plymouth: Rowman & Littlefield Publishers, Inc.

Oliva, P. F., & Gordon, W. (2013). Developing the Curriculum. (8th ed.). New Jersey: Pearson.

Oliver, J. S., & Koballa, T. (1992). Science educators' use of the concept of belief. *Paper presented at the annual meeting of the National Association of Research in Science Teaching.* Boston, Massachusetts.

Onwuegbuzie, A. J., & Leech, N. L. (2006). Linking research questions to mixed methods data analysis procedures. *The Qualitative Report*, *11*, 474-498. Retrieved October 22, 2009, from http://www.nova.edu/ssss/QR/QR11-3/onwuegbuzie.pdf

Onwuegbuzie, A. J., & Leech, N. L. (2005a). Taking the "Q" out of research: Teaching research methodology courses without the divide between quantitative and

qualitative paradigms. *Quality & Quantity: International Journal of Methodology, 39*, 267-296.

Oppenheim, A. N. (1992). Questionnaire designing, interviewing and attitude measurement. London: Pinter.

Organisation for Economic Cooperation and Development (OECD). (2008). Attracting, Developing and Retaining Effective Teachers (from Dolton, Walter, Denzler). 70

Organisation for Economic Cooperation and Development (OECD). (1990). *The Teacher Today*. Paris: OECD.

Ornstein, A. C., & Hunkins, F. P. (2004). Curriculum Foundations, Principles and Issues. (4th ed.), Boston: Pearson Education.

Ornstein, A. C., & Hunkins, F. P. (2009). Curriculum Foundations, Principles and Issues. (5th ed.), Boston: Pearson Education.

Ornstein, A. C., Pajak, E. F., & Ornstein, S. B. (2011). Contemporary Issues in Curriculum. 5th ed.). Upper Saddle River, New Jersey: Pearson Education.

Osher, D., Dwyer, K., & Jimerson, S. R. (2006). Save, supportive and effective schools: Promoting school success to reduce school violence. In S. R. Jimerson & M. J. Furlong (Eds.), *Handbook of school violence and school safety* (pp. 51-71). Mahwah, NJ: LEA Publishers.

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

Ottevanger, W. (2001). Teacher support materials as a catalyst for science curriculum implementation in Namibia. Amsterdam: Thesis University of Twente.

Oughton, T. J. (1999). An Evaluation of a National Curriculum Document. Chemistry in the New Zealand Curriculum. Thesis submitted in partial fulfilment of the requirements for the Degree of Master of Science Education in the University of Canterbury. New Zealand: Canterbury. Retrieved on 7 November 2010 from ir.canterbury.ac.nz/handle/10092/3640

Palincsar, A. S. (1998). Social constructivist perspectives on teaching and learning. *Annual Review of Psychology, 49*, 345-375.

Pallant, J. (2007). *SPSS survival manual: a step by step guide to data analysis using SPSS for Windows. (*3rd ed.). Maidenhead: McGraw Hill.

Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research, 62,* 307-332.

Patton, M. Q. (2002). Qualitative research and evaluation methods, (3rd ed.), Thousand Oaks, CA: Sage.

Patton, M. Q. (1990). Qualitative evaluation and research methods. (2nd ed.), Thousand Oaks, CA: Sage.

Patton, M. Q. (1997). *Utilization-focused evaluation.* (3rd ed.), Thousand Oaks, CA: Sage.

Patton, M. Q. (13-17 September, 1999). Utilisation-Focused Evaluation in Africa: Training sessions delivered to the Inaugural Conference of the African, Nairobi: Evaluation Association.

Payne, C. M. (2008). So much reform, so little change: The persistence of failure in urban schools. Cambridge: Harvard Education Press.

Pietersen, J., & Maree, K. (2007). Overview of statistical techniques. In Maree, K. (Ed.). *First steps in research.* Pretoria: Van Schaik.

Pinar, W. F. (1975). The reconceptualization of curriculum studies. *Journal of Curriculum Studies, 10*(3), 205–214.

Pelgrum, W. J., & Plomp, T. J. (Eds.) (1993). *The IEA Study of Computers in Education: implementation of an innovation in 21 education systems*. Oxford: Pergamon Press.

Peters, R. S. (1965). 'Education as initiation': In Archambault, R. D. (Ed.), *Philosophical Analysis and Education*, London: Routledge.

Phillipson, R. (1992). Linguistic Imperialism. Oxford: Oxford University Press.

Polytechnic of Namibia (2014). Retrieved on 25 June 2014 from www.polytechnic.edu.na/centres/coll/region_cent.php

Postlethwaite, T. N. (1973). General Principles of Curriculum Development. The Fundamentals of Educational Planning: Lecture – Discussion Series No. 61. UNESCO: Paris.

Pooley, J. A., Breen, L., Pike, L. T., Cohen, L., & Drew, N. M. (2008). Critiquing the school community: A qualitative study of children's conceptualization of their school. *International Journal of Qualitative Studies in Education 21*(2), 87-98.

Prawat, R., & Floden, R. (1994). Philosophical perspectives on constructivist views of learning. *Educational Psychology, 29*(1), 37-48.

Print, M. (1993). Curriculum development and design. NSW: Allen and Unwin.

Pütz, M. (1995). Discrimination through Language in Africa? Perspectives on the Namibian experience. New York: Mouton de Gruyster.

Ramsay, P., Harold, B., Hwak, K., Kaai T., Marriott, R., & Poskitt, J. (1999). *'There's no going back': Collaborative Decision-Making in Education,* Final Report: Curriculum Review Research in Schools Project, Hamilton, New Zealand: The University of Waikato.

Regehr, C. R., Marzialli, E., & Jansen, K. (1999). Qualitative analysis of strengths and vulnerabilities in sexually assaulted women. *Clinical Social Work Journal, 27*(2), 171-183.

Remenyi, D., Williams, B., Money A., & Swartz, E. (1998). Doing Research in Business and Management. An Introduction to process and method. London: Sage.

Richards, J. C., & Farrell, T. S. C. (2005). *Professional development for language teachers: Strategies for teacher learning*. Cambridge: Cambridge University Press.

Richardson, V. (1991). How and why teachers change. In S. C. Conley and B. S. Cooper (Eds.), *The School as a Work Environment: Implications for Reform* (Boston, MA: Allyn and Bacon), 66± 87.

Richardson, V., & Placier, P. (2001). Teacher change. In V. Richardson (Ed.), *Handbook of research on teacher education* (4th ed., 905-947). Washington, DC: AERA.

Ritchie, J., Lewis, J., & Elam, G. (Eds.). (2003). Qualitative Research Practice: A Guide for Social Science Students and Researchers. London: Sage.

Robitaille, D. F., & Garden, R. A. (1989). *The IEA study of Mathematics II: content and outcomes of school mathematics.* Oxford: Pergamon Press.

Rogan, J. M., & Gray, B. V. (2003). Towards a theory of curriculum implementation with particular reference to science education in developing countries. *International Journal of Science Education, vol. 25. 10, 1171 - 1204*

Rogoff, B. (2003). The cultural nature of human development. Oxford: Oxford University Press.

Rosenholtz, S. J., & Simpson, C. (1990). Workplace conditions and the rise and fall of teachers' commitment. *Sociology of Education* 63(4):241–257.

Rossi, P. H., & Freeman, H. E. (1993). Evaluation: A systematic approach. Beverly Hills, CA: Sage.

Rossi, P. H., Lipsey, M. W., & Freeman, H. E. (2004). Evaluation: A Systematic Approach, (Seventh edition), Thousand Oaks, CA: Sage.

Rossman, G. B., & Wilson, B. L. (1985). Number and words: Combining quantitative and qualitative methods in a single large-scale evaluation study. *Evaluation Review* 9 (5): 627–43.

Rowell, P. M. (1995). Perspectives on pedagogy in the teacher education: The case of Namibia. *International Journal of Educational Development 15* (1), 3-13.

Rubin, A., & Babbie, E. (2005). Research methods for social work (5th ed.), Australia: Thomson Brooks/Cole.

Rugemalira, J. M., Rubagumya, C. M., Kapinga, M. K., Lwaitama, A. F., & Tetlow, J. G. (1990). Reflections on recent developments in language policy in Tanzania. In: Rubagumya, C. M. (Ed.).

Rusk, R. R. (1954). *The Doctrines of Great Educators,* London: Macmillan.

Sahlberg, P. (2005). Curriculum change as learning: In search of better implementation. In Sahlberg P. (2005). Curriculum reform and implementation in the 21th century, June 2005. Istanbul: International Conference on Curriculum Reform and Implementation, p. 18-30. Retrieved on 02 August 2013 from http://www.sac.smm.lt/images/09%2012%2004%20%201Passi%20Sahlberg%20-%20Curriculum%20change%20learning_Anglu%20k.pdf

Salkind, N. J. (2006). *Exploring research,* (6th ed.). New Jersey: Pearson Publication.

Sarason, S. (1990). The predictable failure or educational reform. San Francisco, CA: Jossey-Bass.

Sarason, S. (1995). School change: The personal development of a point of view. New York: Teacher's College Press.

Saunders, M., Lewis, P., & Thornhill, A. (2003). Research methods for Business students (3rd Ed.). New York: Prentice Hall.

Saylor, J., Alexander, W. M., & Lewis, A. J. (1981). *Curriculum Planning for Better Teaching and Learning.* New York: Holt, Rinehart and Winston.

Schiavo, R. (2007). Health Communication: From Theory to Practice. San Francisco: Jossey-Bass.

Schön, D. (1987). Educating the reflective practitioner, San Francisco: Jossey-Bass

Schubert, W. H. (1986). Curriculum: Perspective, paradigm and possibility. New York: Macmillan.

Schweisfurth, M. (2011). Learner-centred education in developing country contexts: From solution to problem? *International Journal of Educational Development 31,* 425-432.

Shapiro, A. (2000). *Leadership for constructivist schools*. Lanham, MD: The Scarecrow Press, Inc. Technomic Books.

Shulman, L. S. (2000). Teacher development: Roles of domain expertise and pedagogical knowledge. *Journal of Applied Developmental Psychology, 21*(1), 129-135.

Short, E. C. (1991). Forms of Curriculum Inquiry. New York: State University of New York Press.

Short, K., & Burke, C. (1996). Examining our beliefs and practices through inquiry. *Language Arts, 73*(2), 97-104.

Short, P. M., & Rinehart, J. S. (1992). 'Teacher empowerment and school climate'. Paper. Annual meeting of the American Educational Research Association, 20-24 April 1992.

Skutnabb-Kangas, T., & Cummins, J. (Eds.). (1984). Minority Education: Multilingual matters.

Smith, M. K. (1996/2000). Curriculum theory and practice. In *The Encyclopaedia of Informal Education*, Retrieved on November 06, 2010 from www.infed.org/biblio/bcurric.htm

Spillane, J. P., Reiser, B. J., & Reimer, T. (2002). Policy implementation and cognition: reframing and refocusing implementation research. *Review of Educational Research, 72*(3). 387-431.

Speece, D. L., Case, L. P., & Molloy, D. E. (2003). Responsiveness to general education instruction as the first gate to learning disabilities identification. *Learning Disabilities Research and Practice, 18*(3), 147-156.

Sripakash, A. (2010). Child-centred education and the promise of democratic learning: pedagogic messages in rural India primary schools. *International Journal of Educational Development 30,* 297 – 304.

Stajkovic, A. D., & Luthans, F. (1998). Self-efficacy and work-related performance: A meta-analysis. *Psychological Bulletin, 124*(2), 240-261.

Stambach, A. (1994) '"Here in Africa, we teach; students listen": lessons about culture from Tanzania', *Journal of Curriculum and Supervision*, 9 (4), 368-385.

Stenhouse, L. (1975). An Introduction to Curriculum Research and Development, London: Heinemann.

Stoler, R. D. (1992). Perceptions of regular teachers towards inclusion of all handicapped students in their classrooms. Clearing House, 66(1), 60-62.

Sosniak, L. A., Ethington, C. A., & Varelas, M. (1991). Teaching mathematics without a coherent point of view: Findings from the IEA Second International Mathematics Study. *Journal of Curriculum Studies, 23*, 119-131.

Sowell, E. J. (1996). Curriculum: An integrative introduction. New Jersey: Merrill.

Sowell, E. J. (2010). Curriculum: An integrative introduction. Upper Saddle River, NJ: Prentice-Hall.

Suchman, E. A. (1967). Evaluative research: Principles and practice in public service and social action programs. New York: Sage.

Suter, W. N. (2006). Introduction to Educational Research: A Critical Thinking Approach. Thousand Oaks, CA: Sage

Taba, H. (1962). *Curriculum Development: Theory and practice*, New York: Harcourt Brace and World.

Tabulawa, R. (2013). Teaching and Learning in Context: Why Pedagogical Reforms Fail in Sub-Saharan Africa. DAKAR: Council for the Development of Social Science Research in Africa.

Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches. Applied Social Research Methods Series, vol. 46.* Thousand Oaks, CA: Sage.

Tashakkori, A., & Teddlie, C. (Eds). (2003). *Handbook on mixed methods in the behavioral and social sciences*. Thousand Oaks, CA: Sage.

Teachers' Union of Namibia (TUN) Database, (February 2014). Dollar Street, Khomasdal, Windhoek: Teacher's Union of Namibia.

Teddlie, C., & Yu, F. (2007). Mixed methods sampling: A typology with examples. *Journal of Mixed Methods Research, 1,* 77-100.

Teddlie, C., & Tashakkori, A. (2009). Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences. Thousand Oaks, CA: Sage.

The Namibian, (Tuesday, 28 June, 2011a). Education under spotlight – The Elephant in the kraal: Windhoek.

The Namibian, (20 June 2011b). Teachers' Union of Namibia (TUN) Paper for Education Conference. Retrieved on 7 February 2011 from allafrica.com/stories/201106201591.html

Thompson, A. G. (1985). Teachers' conceptions of mathematics and the teaching of problem solving. In E. A. Silver (Ed.), *Teaching and learning mathematical problem solving: Multiple research perspectives* (pp. 281-294). Hillsdale, NJ: Lawrence Erlbaum Associates.

Thompson, A. G. (1984). The relationship of teachers' conceptions of mathematics and mathematics teaching to instructional practice. *Educational Studies in Mathematics, 15*, 105-127.

Todd, A., & Mason, M. (2005). Enhancing learning in South African school: Beyond outcomes-based education. *International Journal of Educational Development.* 25, 221-235.

Towndrow, P. A., Silver, R. E., & Albright, J. (2009). Setting expectations for educational innovations. *Journal of Educational Change,* doi: 10.1007/s10833-009119-9.

Turnbull, B. (2002). Teacher participation and buy-in: Implications for school reform initiatives. Learning Environments Research, 5, 235-252.

Trappes-Lomax, H. R. (1990). Can a foreign language be a national medium? In: Rubagumya (Ed.).

Tyler, R. W. (1949). *Basic Principles of Curriculum and Instruction*, Chicago: University of Chicago Press.

Youngman, M. B. (1984). Designing questionnaires. In J. Bell, T. Bush, A. Fox, J. Goodey and S. Goulding (Eds.) *Conducting Small-Scale Investigations in Educational Management,* London: Harper and Row, 156-176.

United States Agency for International Development (USAID) (August 26, 2008). "Namibia Africa: Strategic Objectives: Quality Primary Education"... Retrieved on June 14, 2013 from http:/usaid.gov/na/so2.htm

United Nations Development Programme (UNDP) 1998). Namibia Income Gini-Coefficient. Retrieved 15 April 2011 from https://data.undp.org/dataset/Income-Gini-coefficient/36ku-rvrj

University of Namibia (2013). Forum Online: Government compliments UNAM for contributing to Research and Development. Retrieved 25 June 2014 from http://my.unam.na/newsletters/Edition%20113.pdf

Van der Westhuizen, P. C. (Ed.), (2011). Effective Educational Management. Cape Town: Kagiso Tertiary.

Van Slyke, R. (1998). Effects of school reform legislation. The relationship of student achievement gains and degree of restructuring on selected western Washington schools. Seattle Pacific University.

Vavrus, F., (2009). 'The cultural politics of constructivist pedagogies: teacher education reform in the United Republic of Tanzania', *International Journal of Educational Development*, 29, 303-311.

Verma, G. K., & Mallick, K. (1999). Researching Education: Perspectives and Techniques. London: Falmer.

Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. In M. Cole, V. John-Steiner, S. Scriber, & E. Souberman, (Eds.). Cambridge: Harvard University Press.

Watson, J. (2001). How to Determine a Sample Size: Tipsheet #60, University Park, PA: Penn State Cooperative Extension. Retrieved on 15 August 2012 from http://www.extension.psu.edu/evaluation/pdf/TS60.pdf

Whiting, M., & Young, J. (1995). Integration: Social justice for teachers. Paper presented at the Australian Association for Research in Education Conference., Hobart, Tasmania.

Wholey, J. S., Hatry, H. P., & Newcomer, K. E. (Eds.) (2004). Handbook of Practical Program Evaluation. Second ed. San Francisco: Jossey-Bass.

Weinbach, R. W. (2005). Evaluating social work services and programs. University of South Carolina.

Welman, C., Kruger, F. & Mitchell, B. (2005). Research methodology. (3rd ed.). Cape Town: Oxford University Press South Africa.

Welch, A. (1995). The self-efficacy of primary teachers in art education. *Issues in educational Research,* 5, 71-84.

Wickstrom, K. F., Jones, K. M., LaFleur, L. H., & Witt, J. C. (1998). An analysis of treatment integrity in school-based behavioural consultation. *School Psychology quarterly, 13,* 141-154.

Wiles, J. & Bondi. J. (2007). *Curriculum Development: A Guide to Practice*. (6th ed.). Columbus, Ohio: Merill, an imprint of Prentice Hall.

Williams, J. (2012). Research Methodology. Retrieved on 24 November from http://www.howtodo.thesishelpservice.com/what-is-research.

Wilson, N., & McLean, S. (1994). Questionnaire Design: A Practical Introduction. University of Ulster.

Yin, R. K. (1994). *Case Study Research, Design and Methods*. Thousand Oaks, CA: Sage.

Young, R. & Lee, S. (1984). EFL curriculum innovation and teachers' attitudes. In P. Judd and D. Messerschmitt (Eds.), *On TESL '84* (pp. 184-194). TESOL.

Zais, R. S. (2010). *Curriculum Principles and Foundations*. New York: Harper & Row.

APPENDICES

Appendix 1: Teachers questionnaire

I, **Godfrey M. Tubaundule**, a Ph.D. student at the Faculty of Education, University of the Free State in Bloemfontein, South Africa, under the supervision of Dr. E.R. du Toit, of the Faculty of Education, School of Mathematics, Natural Sciences and Technology Education, invites you to participate in the study entitled "**Evaluative research of the implemented secondary school curriculum in Namibia."** The purpose of my study is to examine factors affecting the implemented curriculum at the instructional/learning environment level in Namibia in order to create awareness of the obstacles of implementation so that school administrators and teachers can be prepared to deal with them when they arise and guide policymakers and researchers on how best to lead and manage the curriculum implementation process.

Your school was randomly selected to take part in the study and therefore all teachers in your school are illegible to **FILL-IN** this questionnaire. This survey is conducted in English and will take about 45-60 minutes to complete.
There are no known or foreseen risks for participating in this study. Your participation is entirely voluntary and you are free to choose to participate in the study. You may withdraw from the study without reasons at any point. You are not obliged to answer any question that you find objectionable or that makes you feel uncomfortable. However, should you decide to participate in the study, survey data that you provide will be anonymous to protect your identity. No identifying information will be included in the document. Therefore, to ensure your privacy and confidentiality of data, **DO NOT WRITE YOUR NAMES ON THE QUESTIONNAIRE.**

All data will be secured in a locked cabinet at the Faculty of Education, University of the Free State and confidentiality is absolutely guaranteed. Access to the data is strictly restricted to the researcher. Results of the study will be reported in my Ph.D. dissertation and may also be reported in publications of various types, conference presentations, journal articles, professional publications, and books. However, I will only report them as group data. Under no circumstance, will your name be released to anyone or appear in any publication created as a result of the study.

Should you have questions about this study, please contact Godfrey M. Tubaundule at mobile number 00264 85 246 7055 or at email: godfrey@iway.na; or his supervisor Dr. E.R. du Toit at phone no. 0027 (0)51 401 3211, or at email: dutoiter@ufs.ca.za

Thank you very much for your cooperation

Section A: Biographical data

1. What is your gender? Please tick only one answer a. Female___ b. Male___
2. How old were you on your last birthday? Enter your age →HERE _____years

3. What is your highest professional qualification? Please circle only your highest professional qualification
   a. 1-year teacher training certificate
   b. 2-year teacher training certificate
   c. 3-year teacher training Diploma
   d. 4-year Bachelor's degree
   e. Master's degree
   f. Other. Please specify_____

4. In what type of school are you currently teaching? Please tick all that apply

   a. Urban___ b. Rural___

5. *What is the total number of years you have been a teacher? Enter your years of experience →HERE _____years*
6. *What is the total number of years you have been a teacher in your current school? Enter the number of years you have been teaching in the school →HERE _____years*
7. *Which grade do you teach this year? Please tick all that apply.*

a.	Grade 8	1
b.	Grade 9	2
c.	Grade 10	3
d.	Grade 11	4
e.	Grade 12	5

8. *What post do you currently occupy at your school? Please tick all that apply.*

a.	Classroom teacher	1
b.	Senior teacher	2
c.	Subject teacher	3
d.	Head of Department	4
e.	Deputy Principal	5
f.	Principal	6

9. *How many subjects do you currently teach? Enter the number of subjects that you are currently teaching →HERE _____years*

10. *What is the number of learners in your <u>smallest</u>, <u>largest</u> and <u>average</u> sized class-group this year? Please write the number of learners you teach in each of the classrooms according to the categories provided below*

a.	Smallest:_____learners
b.	Largest:_____ learners
c.	Average:_____learners

Section B: Knowledge, understanding and awareness of the curriculum.

11. Did you receive a copy of the Namibian Curriculum for Basic Education? *Please circle only one choice that applies*

1	2	3
Yes	No	Not sure

12. How do you rate your own content knowledge for the curriculum statements from which you teach? *Indicate your level of knowledge by circling your response using this scale.*

1 = Not sure, 2 = I need more, 3 Satisfactory=, 4 =Good, 5 =Excellent

1	2	3	4	5
Not sure	I need more	Satisfactory	Good	Excellent

13. The National Curriculum Framework document is important for teachers in providing direction for preparing students to live and work in the 21st century? *Indicate your agreement or disagreement by circling your response using this scale.*

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree, 5=Don't Know

1	2	3	4	5
SA	D	A	SA	DK

14*. Indicate your agreement or disagreement by circling your response using this scale.*
1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 Strongly Agree, 5 = Don't Know

	I know that I emphasise the following essential skills in teaching my subject area:	SD	D	A	SA	DK
a.	Communication	1	2	3	4	5
b.	Information	1	2	3	4	5
c.	Numeracy	1	2	3	4	5
d.	Problem-solving	1	2	3	4	5
e.	Physical	1	2	3	4	5
f.	Self-management and competitive	1	2	3	4	5
g.	Social and cooperative	1	2	3	4	5
h.	Work and study skills	1	2	3	4	5

15. *I am aware that the secondary school curriculum is organised around essential learning areas. Circle only one that applies*

a.	around essential learning areas	1
b.	around essential skills	2
c.	around specific subject areas	3
d.	around all the three areas above	4

16. Indicate your agreement or disagreement to the following statements by circling your response using this scale.

    1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree, 5 = Don't Know

	I am aware the National Curriculum Framework specifies:	SD	D	A	SA	DK
a.	how I should plan my classroom teaching	1	2	3	4	5
b.	the progression of learners' knowledge, skills and attitudes	1	2	3	4	5
c.	how I should develop specific learning outcomes based on the achievements of objectives	1	2	3	4	5
d.	how I should assess students' achievement and progress	1	2	3	4	5
e.	how I should communicate students' achievement within the school	1	2	3	4	5
f.	how I should report students' achievements to parents or guardians	1	2	3	4	5
g.	how I should meet the needs of Namibian students	1	2	3	4	5

Section C: Attitude towards the curriculum.

17. What is your attitude towards the implemented secondary school curriculum? *Please circle only one choice that applies*

1	2	3	4	5
Don't know	Very negative	Fairly negative	Partly negative	Very positive

18. Which of the following statements describe your attitude towards the National curriculum for Basic Education? *Please circle only one choice that applies*

1 = Yes 2 = No

		Y	N
a.	I am satisfied with the current secondary school curriculum	1	2
b.	The current secondary school curriculum has improved students' learning	1	2
c.	The school management is pleased with the current curriculum	1	2
d.	Parents of the learners in my class are pleased with the current secondary school curriculum	1	2
e.	The current curriculum is too demanding in terms of my time, energy & skills spent on planning and teaching	1	2
f.	I am insecure about how to implement the current secondary school curriculum	1	2
g.	As a professional teacher I have nothing to learn from the current secondary school curriculum	1	2
h.	I find the current secondary school curriculum confusing	1	2
i.	I am not committed in teaching the current curriculum	1	2
j.	The current secondary school curriculum clearly explains my expectations in the classroom situation	1	2

Section D: Beliefs about the curriculum.

19. Indicate your response to the statements below by circling only one choice using this scale.

1 = below average, 2 =, 3 = average ability, 4 =, 5= above average ability

	I believe that the ability of my learners in my largest class is <u>below average</u>:	BA		AA		AAA
a.	in comparison to other learners in the same grade and school	1	2	3	4	5
b.	in comparison to other learners in the same grade and another school	1	2	3	4	5
c.	in comparison to other learners doing the same subject in another school	1	2	3	4	5

20. Indicate your agreement or disagreement to the following statements by circling your response using this scale.
1=Strongly Disagree 2=Disagree, 3=Agree, 4=Strongly Agree, 5=Don't Know

	I believe that based on the current National Curriculum Framework learners who complete the secondary school curriculum are more likely to be:	SA	D	A	SA	DK
a.	Unemployed	1	2	3	4	5
b.	to get a job	1	2	3	4	5
c.	capable of handling everyday situation	1	2	3	4	5
d.	more responsible and disciplined	1	2	3	4	5
e.	to better prepared for further education	1	2	3	4	5
f.	more likely be self-employed	1	2	3	4	5

Section E: Behaviour (self-efficacy)

21. Indicate your agreement or disagreement to the following statements by circling your response using this scale.
1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 Strongly Agree, 5 = Don't Know

	As a teacher it is my belief that the following statements describes my behaviour:	SD	D	A	SA	DK
a.	I am finding it difficult to teach in the medium of instruction	1	2	3	4	5
b.	I lack the competence of teaching reading, writing and speaking skills of the English language	1	2	3	4	5
c.	I do not know the strategies of promoting the English language teaching	1	2	3	4	5
d.	I am not trained to teach through the English language	1	2	3	4	5
e.	I deliberately ignore the language difficulties experienced by learners in their learning process	1	2	3	4	5
f.	I am confident to teach in the English language	1	2	3	4	5

22. How often do you speak English? Choose one of the following possible answers and circle one answer using this scale.
1 = Never 2 = Hardly ever 3 = Every now and then 4 = Usually 5 = Always

		N	HE	ENT	U	A
a.	When you speak to the whole class	1	2	3	4	5
b.	When you speak to individual learner	1	2	3	4	5
c.	When you speak to your colleagues	1	2	3	4	5
d.	When you speak to parents	1	2	3	4	5
e.	When you speak to the school principal	1	2	3	4	5

23. Indicate Yes or No to the following statements by circling your response using this scale.

1 = Yes 2 = No

	I spend more time on the following activities in my classroom:	Y	N
a.	Classroom teaching and learning	1	2
b.	Administrative work	1	2

24. Indicate your agreement or disagreement to the following statements by circling your response using this scale.
1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree, 5 = Don't Know

	My experience of implementing the secondary school curriculum is that:	SD	D	A	SA	DK
a.	Learners in my class care about their own learning	1	2	3	4	5
b.	Learners create a pleasant learning teaching Environment	1	2	3	4	5
c.	Learners are late for classes most of the time	1	2	3	4	5
d.	Learners do not do their homework	1	2	3	4	5
e.	Learners are noisy most of the time in Classroom	1	2	3	4	5

25. Indicate your agreement or disagreement to the following statements by circling your response using this scale.
1= Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree, 5 = Don't Know

		SD	D	A	SA	DK
a.	I was not trained for the subject I teach	1	2	3	4	5
b.	I am not teaching at the grade of my training	1	2	3	4	5
c.	I am not teaching my subject specialisation	1	2	3	4	5
d.	I lack confidence in my current subject area	1	2	3	4	5
e.	I teach out of my qualification	1	2	3	4	5

Section F: Internal school support factors

26. How often do your learners speak in English? *Choose one of the following possible answers and circle one answer using this scale.*
1=Never, 2=Hardly ever, 3=Every now and then, 4=usually, 5=Always

		N	HE	ENT	U	A
a.	When they speak to you	1	2	3	4	5
b.	when they work in groups	1	2	3	4	5
c.	When they speak in front of the whole class	1	2	3	4	5

27. *Indicate **Yes** or **No** to the following statements by circling your response using this scale.* 1 = Yes, 2 = No

During the past 12 months participated participate in the following professional development activities:		Y	N
a.	Courses on teaching methods	1	2
b.	Observation visits to other schools	1	2
c.	Education conferences	1	2
d.	Use of computers in classroom	1	2
e.	School - community co-operation	1	2
f.	English communication skills	1	2
g.	Practicing continuous assessment	1	2
h.	Subject knowledge upgrading	1	2
i.	Preparing learners for exams	1	2
j.	Mentoring or peer observation and coaching	1	2

28. *Indicate your agreement or disagreement to the following statements by circling your response using this scale.*
1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree, 5 = Don't Know

	It is my belief that the following reasons prevented me from participating in some professional development activities that were organised for teachers in my school:	SD	D	A	SA	DK
a.	there was a lack of support from my employer	1	2	3	4	5
b.	professional developments conflicted with my work timetable	1	2	3	4	5
c.	there was no suitable professional development activity for me	1	2	3	4	5
d.	my school was disorganised and couldn't coordinate any professional development activities	1	2	3	4	5

29. State the impact of the professional development programmes on you that you attended in the past 12 months. *Please circle only one row that is applicable using the following scale: 1=Not Applicable, 2=No Impact, 3=Small Impact, 4=Moderate Impact, 5=Large Impact*

	Statement	NA	NI	SM	MI	LI
a.	Courses on teaching methods	1	2	3	4	5
b.	Observation visits to other schools	1	2	3	4	5
c.	Education conferences	1	2	3	4	5
d.	Use of computers in classroom	1	2	3	4	5
e.	School - community co-operation	1	2	3	4	5
f.	English communication skills	1	2	3	4	5
g.	Practicing continuous assessment	1	2	3	4	5
h.	Subject knowledge upgrading	1	2	3	4	5
i.	Preparing learners for exams	1	2	3	4	5
j.	Mentoring or peer observation and coaching	1	2	3	4	5

30. How much further professional development programmes do you still need? C*ircle your response by using this scale.*
1 = A lot, 2 = some, 3 = Not sure, 4 = No more

1	2	3	4
A lot	Some	Not sure	No more

31. Indicate what type of professional development you need to help you improve your teaching by circling your response using this scale.
1 = Not at all, 2 = Low level need, 3 = Moderate level need, 4 = High need

	Type of professional development	NAA	LLN	MLN	HN
a.	student assessment practices	1	2	3	4
b.	knowledge and understanding of my subject area	1	2	3	4
c.	student discipline and behaviour problems	1	2	3	4
d.	knowledge and understanding of teaching methods	1	2	3	4
e.	use of ICTs in teaching and learning	1	2	3	4
f.	teaching in a multicultural setting	1	2	3	4
g.	student guidance & counselling	1	2	3	4
h.	teaching learners with special needs	1	2	3	4
i.	classroom management	1	2	3	4
j.	school management	1	2	3	4
k.	school - community co-operation	1	2	3	4

32. Indicate your level of agreement or disagreement to the following statements. *Circle your response by using the following scale.*
1 = Strongly Agree, 2 = Agree, 3 = Strongly Disagree, 4 = Disagree, 5 = Don't Know

	Statement	SA	A	SD	D	DK
a.	School leadership supports teachers' efforts to maintain discipline in their classrooms	1	2	3	4	5
b.	School leadership supports teachers with resources required for teaching and learning	1	2	3	4	5
c.	School leadership provides feedback that help teachers improve their teaching	1	2	3	4	5
d.	School leadership identifies staff development needs	1	2	3	4	5
e.	School leadership promotes teamwork among teachers	1	2	3	4	5
f.	School leadership promotes open communication between staff and community members	1	2	3	4	5
g.	School leadership communicates school vision & goals to staff and community members	1	2	3	4	5

Section G: External school factors

33. Indicate your agreement or disagreement to the following statements by circling your response using this scale.
1 = Yes, 2 = No

My school has the following facilities which aide the implementation of the curriculum:			
		Y	N
a.	computer laboratory	1	2
b.	school library	1	2
c.	textbooks for every learner	1	2
d.	internet connectivity	1	2
e.	Printer	1	2
f.	Electricity	1	2
g.	Projector	1	2

34. To what extent were the following stakeholders in your region involved in the development process of the 2010 secondary school curriculum? Circle your response by using this scale.
1=Not At All, 2=Very Little Input, 3= Some Little Input, 4=Heavily Involved, 5=Not Sure

		NAA	VLI	SLI	HI	NS
a.	Regional Councillors	1	2	3	4	5
b.	Business Representative	1	2	3	4	5
c.	Teacher Union Representative	1	2	3	4	5
d.	Director of Education	1	2	3	4	5
e.	Deputy Director of Education	1	2	3	4	5
f.	Inspector of Education	1	2	3	4	5
g.	Principals	1	2	3	4	5
h.	Deputy principals	1	2	3	4	5
i.	Heads of Departments	1	2	3	4	5
j.	Teachers	1	2	3	4	5
k.	Parents	1	2	3	4	5
l.	Students	1	2	3	4	5
m.	Consultants	1	2	3	4	5
n.	Other	1	2	3	4	5

35. Whose responsibility it to ensure that 2010 curriculum is implemented after it has been developed? *Please circle only one choice that applies.*
1 = Yes 2 = No

		Y	N
a.	The Minister of Education	1	2
b.	Regional Director of Education	1	2
c.	The school principal	1	2
d.	Teacher	1	2
e.	Other	1	2

36. Indicate your agreement or disagreement to the following statements by circling your response using this scale.
1 = Never, 2 = Seldom, 3 = Sometimes, 4 = Often, 5=Almost Always

		N	S	SO	O	AA
a.	Parents in my school are eager to obtain information about their children's educational progress	1	2	3	4	5
b.	My school shares information about with parents	1	2	3	4	5
c.	Parents/guardians volunteer to do work in school	1	2	3	4	5
d.	Parents support their children at home	1	2	3	4	5
e.	Parents take in the school decision-making process	1	2	3	4	5

37. Indicate your agreement or disagreement to the following statements by circling your response using this scale.
1 = Never, 2 = Seldom, 3 = Sometimes, 4 = Often, 5 = Almost Always

	Community members in my area participate in the following school activities which affect children's learning	N	S	SO	O	AA
a.	Coordination of resource	1	2	3	4	5
b.	Maintenance of infrastructure	1	2	3	4	5
c.	Building of school infrastructure	1	2	3	4	5
d.	Building sense of community	1	2	3	4	5
e.	School governance	1	2	3	4	5
f.	Advocacy activities	1	2	3	4	5
g.	Cultural activities	1	2	3	4	5
h.	Sports activities	1	2	3	4	5
i.	School meetings	1	2	3	4	5
j.	Homework for their children	1	2	3	4	5

38. To what extent do you agree or disagree with the following statements? Please circle one row that applies using this scale.
1 = Strongly Agree, 2 = Agree, 3 = Strongly Disagree, 4 = Disagree, 5 = Don't Know

	My school collaborates with local institutions of higher learning in the following areas:	SA	A	SD	D	DK
a.	Avails laboratory and library facilities to learners	1	2	3	4	5
b.	University lecturers are used as guest teachers for some lessons	1	2	3	4	5
c.	University lecturers participate in our winter school holiday lessons	1	2	3	4	5
d.	University full-time post-graduate students carry out research on learners in my school	1	2	3	4	5
e.	University provides professional development to teachers in my school	1	2	3	4	5

39. In the past 12 months Teacher Union representatives provided the following services with the aim of improving teaching and learning in my school. *Please circle one row that applies using this scale.*

1 = Never, 2 = Seldom, 3 = Sometimes, 4 = Often, 5 = Almost Always

		N	S	SO	O	AA
a.	Advice and information on curriculum policy related issues	1	2	3	4	5
b.	Advise on teaching and learning strategies related issues	1	2	3	4	5
c.	Advise on teacher appointments	1	2	3	4	5
d.	Inform teachers on their conditions of service	1	2	3	4	5

40. In the past 12 months Regional legislators provide the following services to your school? Please circle one row that applies using this scale.
1 = Never, 2 = Seldom, 3 = Sometimes, 4 = Often, 5 = Almost Always

		N	S	SO	O	AA
a.	Officiate on school celebrations	1	2	3	4	5
b.	Settle disputes between school authorities and community members	1	2	3	4	5
c.	Participate in fund raising activities	1	2	3	4	5
d.	Hand over resources supplied by the national government	1	2	3	4	5
e.	Give motivational speeches to raise learners' morale	1	2	3	4	5

41. Indicate your agreement or disagreement to the following statements by circling your response using this scale.
1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree, 5 = Don't Know

	Business owners in my area:	SD	D	SA	A	DK
a.	Provide financial support to my school	1	2	3	4	5
b.	Offer on-the-job training to learners in my school	1	2	3	4	5
c.	Provide career education/advise	1	2	3	4	5
d.	Distributes food parcels and clothes to vulnerable learners in my school	1	2	3	4	5
e.	Participate in curriculum development activities in my school	1	2	3	4	5

42. In your region were you involved in developing the 2010 secondary school curriculum? *Please circle only one choice that applies.*
1 = Yes 2 = No 3 = not sure

1	2	3
Yes	No	Not sure

43. *Do you have any comments regarding the national curriculum from which you are teaching your subject area? Please write your comments in the space below.*

_____
_____
_____
_____
_____

Thank you very much for your cooperation

Appendix 2: Interview guide

An evaluative study of the implementation of the secondary school curriculum in Namibia

Region _____ School name_____
Gender: Male/Female_____ Grade taught_____
Date_____Start time_____End time_____

Introductions: My name is Godfrey Tubaundule. I am currently studying with the University of the Free State in South Africa. The researcher assures the research participant of ethical issues regarding:

Informed Consent: purpose of the research, sponsors of the study research (self-sponsored study), voluntary participation (participant may withdraw if encounters a question that is uncomfortable with), confidentiality (use of pseudo-name for real names of research participant), obtain permission to tape-record interview, assure privacy from disclosure of interview discussions to the third party, and assure anonymity of the research**.**

Section A: Teachers' demographic factors

1. Now first all, would you like to tell me a little bit about yourself? Does age, teaching experience and professional qualification of teachers influence how teachers implement the curriculum? How likely do you think the place or region where you work determines whether or not you implement the curriculum?

Section B: Teacher's epistemological factors

- Teachers' knowledge

2. What then determines whether or not teachers implement the intended curriculum in their classrooms?
3. How much do you know about the current curriculum framework from which you are teaching? Probe
4. Do you have a copy of the 2010 National Curriculum Framework? Did you receive a copy of the National Curriculum Framework for 2010?
5. Do you think being aware that there is a new curriculum is enough for teachers to be able to implement it as designed by policy makers? So what should have happened in order to ensure that teachers know and implement the curriculum as designed by policy makers?
6. Why should teachers know the contents of the curriculum? What is the importance of knowing the curriculum? Or what should teachers know about the curriculum?

- Attitude

7. How do you feel about the National Curriculum for Basic Education? So if the curriculum is "just fine" do you mean that it is 100% or perfect and it doesn't require any changes or amendments in some areas? What do you mean by the curriculum

is “just fine”? What is your attitude towards the current curriculum from which you are teaching?

8. According to you why do you think the curriculum should be amended? Do you think the 2010 National Curriculum should be changed or amended or revised? In your view what should be changed in the 2010 National Curriculum Framework?

- Beliefs

9. What are your views about the learner centred philosophy which you are implementing in your classroom?
10. Do you believe that you are implementing the curriculum based on the learner centred philosophy on which it is based? What are your personal beliefs about the learner centred philosophy that you are using in conducting your teaching?
11. Why are you finding it difficult to teach according to LC principles? Are you finding it difficult to teach according to learner centred principles?

- Self-efficacy/behaviour

12. How would you describe your ability to teach in a learner centred manner?
13. On average how many learners do you teach in your largest class?
14. How does the issue of the number of subjects taught and the teacher-learner ratio impact on the curriculum implementation as you are experiencing it?

Section C: Internal school support factors

- Learner characteristics

15. I want us to talk about learners’ characteristics in your school and specifically in your classroom. Our next discussion is about the characteristics of the learners in your school and specifically in your classroom.
16. In your opinion what learner related factors play a role in whether or not you are able not able to implement the curriculum? Probe: Ok. You say learners are not scared of teachers, whom then are they scared of? Why are learners in your school not scared of their teachers?
17. How does school location of the learner affect curriculum implementation or your teaching?
18. Are you suggesting that the problem of inadequate communication in English affects learners only? In other words, what about their teachers?
19. You speak about the fact some teachers cannot speak English and that that affects the implementation of curriculum. What about the children’s parents? Do the parents of the learners in your class speak English? Probe: Tell me whether or not the parents of your learners can communicate in English.

- Professional development

20. Did you training on how to implement the curriculum change?
21. Why haven’t you been attending staff development programmes aimed at enhancing your skills and knowledge on how to implement the curriculum? Probe:

So given this situation what are you doing to improve implementation of the curriculum or the subjects that you are teaching? Do you think you require further training? In which curriculum areas do you need further professional development?

- School leadership

23. We have just discussed the role of teacher beliefs on curriculum implementation, how can you describe the leadership in your school? Probe: why are you not able to implement the curriculum as expected of you? Why is assistance not forthcoming from your principals? If according to you principals do not understand and know the curriculum, then who is responsible for the monitoring and supervision of the implementation of the curriculum?
23. How are decisions made in your school? Who makes decisions in your school? Probe: Could you please give examples of a situation or cases in which the principal or school leadership took decisions without involving teachers? Could you please give examples of a situation or cases in which you as a principal or school leadership team took decisions without involving teachers? Probe: So what does that mean on how the decisions are and implemented and to you as a teacher?

Section D: External school support factors

- Resources

24. What factors outside your school system do you think have an influence on whether or not you implement your curriculum in your classroom situation? The factors could be positive or negative or both. Probe: You are saying that your school does not have resources such as textbooks for your learners, why don't you have resources? What causes the problem of not having enough resources or textbooks? What do you suggest should happen in improving the supply of resources? Who should improve the supply of resources?

- Stakeholder support

25. In your opinion is there anything/something that the national government is not doing to enhance the implementation of the curriculum?
26. How are different stakeholders in your area supporting the implementation of the intended secondary school curriculum? What about support from government directorates? Probe: So what do you feel about your experience / situation with the lack of support from various stakeholders?

- Teacher involvement

27. Were you involved in the curriculum development process of the 2010 national curriculum? You say you were not involved, who then took part in the development of the curriculum? Probe: Why according to you should teachers be involved in the development process of the curriculum?
28. Any comments

Thank you for your time

Appendix 3: Letter of Commitment by fieldworkers

I (Name)_____hereby agree to be a field worker for the research study titled: “Evaluative study of the implementation of the secondary school in Namibia” that is being conducted in some selected schools in (name of region) region lasting from November 2012 to March 2013.

I agree to perform the tasks stipulated in this agreement. I understand that my main responsibilities will be to:

- Facilitate the distribution of the survey instrument to selected schools in my region,
- Administer where possible the survey instrument to research participants in each selected school in my region,
- Explain the purpose of the study to the research participants where possible and refer to the researcher questions (if any) that may be beyond my scope of knowledge,
- Deliver the survey instrument with the headmaster of the selected school and collect it once it has been completed,
- Receive the survey instrument from the researcher and return to him completed copies of the same survey instrument and
- Perform any other task that is within the scope of the study.

_____ _____

Name of field worker Field worker’s signature

_____

Date

_____ _____

Researcher Signature

_____

Date

Appendix 4: Request for permission to conduct research

Beijing Street
P.O. Box 80927
Olympia
NAMIBIA

Cell: +264-85 246 7055
Email: godfrey@iway.na
Citizenship: Namibian

Date: 31 August 2012

TO: Mr. Alfred Ilukena - The Permanent Secretary
Ministry of Education

RE: Request for permission to conduct research in sampled Namibian secondary schools

I **Godfrey Mwananyanda Tubaundule** intend to conduct an evaluative research study in order to collect data from teachers on the *factors that facilitate and/or hinder the effective implementation of the enacted secondary school curriculum*. Though this study aims at meeting the requirements of the PhD programme in which I am currently registered, the results of the this evaluative study, will be helpful to school administrators and classroom teachers in understanding the difficulties associated with the implementation of the enacted secondary school curriculum. Also, it is hoped that findings of the study will guide policymakers and researchers on the best ways to lead and manage the secondary school curriculum implementation process.

With this background information, I therefore, hereby submit this application to your office to seek permission to conduct the proposed evaluative study based on the following sample frame:

Region	Number of schools sampled per region	Number of questionnaires per region
Caprivi	5	95
Kavango	8	95
Oshikoto	2	180
Total	15	370

As shown in the table above 370 teachers from 15 secondary schools were sampled to participate in this study. Based on the research design, the study will be carried out in two sequential phases. During Phase 1 a questionnaire will be administered followed by interviews involving 15 teachers, who will purposively selected after the analysis of phase 1 data. The entire data collection process is envisaged to take place from 17-28 September 2012 (questionnaire administration); and 15-19 October 2012 (qualitative interviews).

Attached herewith is a Letter of Information to Teachers: Questionnaire and Interviews and the Consent Letter for Teachers' Questionnaire and Interviews. Also accompanying this application is the Ethical Clearance Letter obtained from the University of the Free State, South Africa; the university with which I am currently registered.

Your support is greatly appreciated.

Respectfully yours,

Appendix 5: Ethical Clearance Certificate

Faculty of Education
Ethics Office

Room 13
Winkie Direko Building
Faculty of Education
University of the Free State
P.O. Box 339
Bloemfontein 9300
South Africa

T: +27(0)51 401 9922
F: +27(0)51 401 2010

www.ufs.ac.za
BarclayA@ufs.ac.za

25 August 2011

ETHICAL CLEARANCE APPLICATION:

EVALUATIVE RESEARCH OF THE IMPLEMENTED SECONDARY SCHOOL CURRICULUM IN NAMIBIA.

Dear Mr G M Tubaundule

With reference to your application for ethical clearance with the Faculty of Education, I am pleased to inform you on behalf of the Ethics Board of the faculty that you have been granted ethical clearance for your research.

Your ethical clearance number, to be used in all correspondence, is:

UFS-EDU-2011-0047

This ethical clearance number is valid for research conducted for one year from issuance. Should you require more time to complete this research, please apply for an extension in writing.

We request that any changes that may take place during the course of your research project be submitted in writing to the ethics office to ensure we are kept up to date with your progress and any ethical implications that may arise. At the conclusion of your research project, please submit a project report stating how the research progressed and confirming any changes to methodology or practice that arose during the project itself. This report should be under 500 words long and should contain only a brief summary focusing primarily on ethical considerations, issues that may have arisen and steps taken to deal with them during the course of the research. Upon receipt of this report, a final ethical clearance certificate will be issued to you, which will form part of your final dissertation.

Thank you for submitting this proposal for ethical clearance and we wish you every success with your research.

Yours sincerely,

Andrew Barclay
Faculty Ethics Officer

Appendix 6: Letter of information to teachers

I, Godfrey M. Tubaundule, a Ph.D. student at the Faculty of Education, University of the Free State in Bloemfontein, South Africa, under the supervision of Dr. ER du Toit, of the Faculty of Education, School of Mathematics, Natural Sciences and Technology Education, invite you to participate in the study entitled "**Evaluative research of the implemented secondary school curriculum in Namibia."** The purpose of my study will be to examine factors affecting the implemented curriculum at the instructional/learning environment level in Namibia in order to create awareness of the obstacles of implementation so that school administrators and teachers can be prepared to deal with them when they arise and guide policymakers and researchers on how best to lead and manage the curriculum implementation process.

The survey will take place in the staff room on your school premises. It will be conducted in English and will take about 45-60 minutes. To ensure your privacy and confidentiality of data, consent forms and the completed questionnaires will be put in different envelopes. DO NOT WRITE YOUR NAMES ON THE QUESTIONNAIRES.

There are no known or foreseen risks for participating in this study. Your participation is entirely voluntary and you are free to choose to participate in the study. You may withdraw from the study without reasons at any point. You are not obliged to answer any question that you find objectionable or that makes you feel uncomfortable. Survey data that you provide will be anonymous to protect your identity. No identifying information will be included in the document.

All data will be secured in a locked cabinet at the Faculty of Education, University of the Free State and confidentiality is absolutely guaranteed. Access to the data is strictly restricted to the researcher. Results of the study will be reported in my Ph.D. dissertation and may also be reported in publications of various types, conference presentations, journal articles, professional publications, and books. However, I will only report them as group data. Under no circumstance, will your name be released to anyone or appear in any publication created as a result of the study.

Should you have questions about this study, please contact Godfrey M. Tubaundule at mobile number +264 85 246 7055 or at email: godfrey@iway.na; gt7213@gmail.com or his supervisor Dr. ER du Toit at phone # +27 (0)51 401 3211, or at email: dutoiter@ufs.ca.za

Also should you have questions, concerns, or complaints about the research ethics of this study, please contact Dr Andrew Barclay, Faculty Ethics Officer, T: +27(0)51 401 9922, University of the Free State, Bloemfontein, South Africa.

Appendix 7: Consent letter

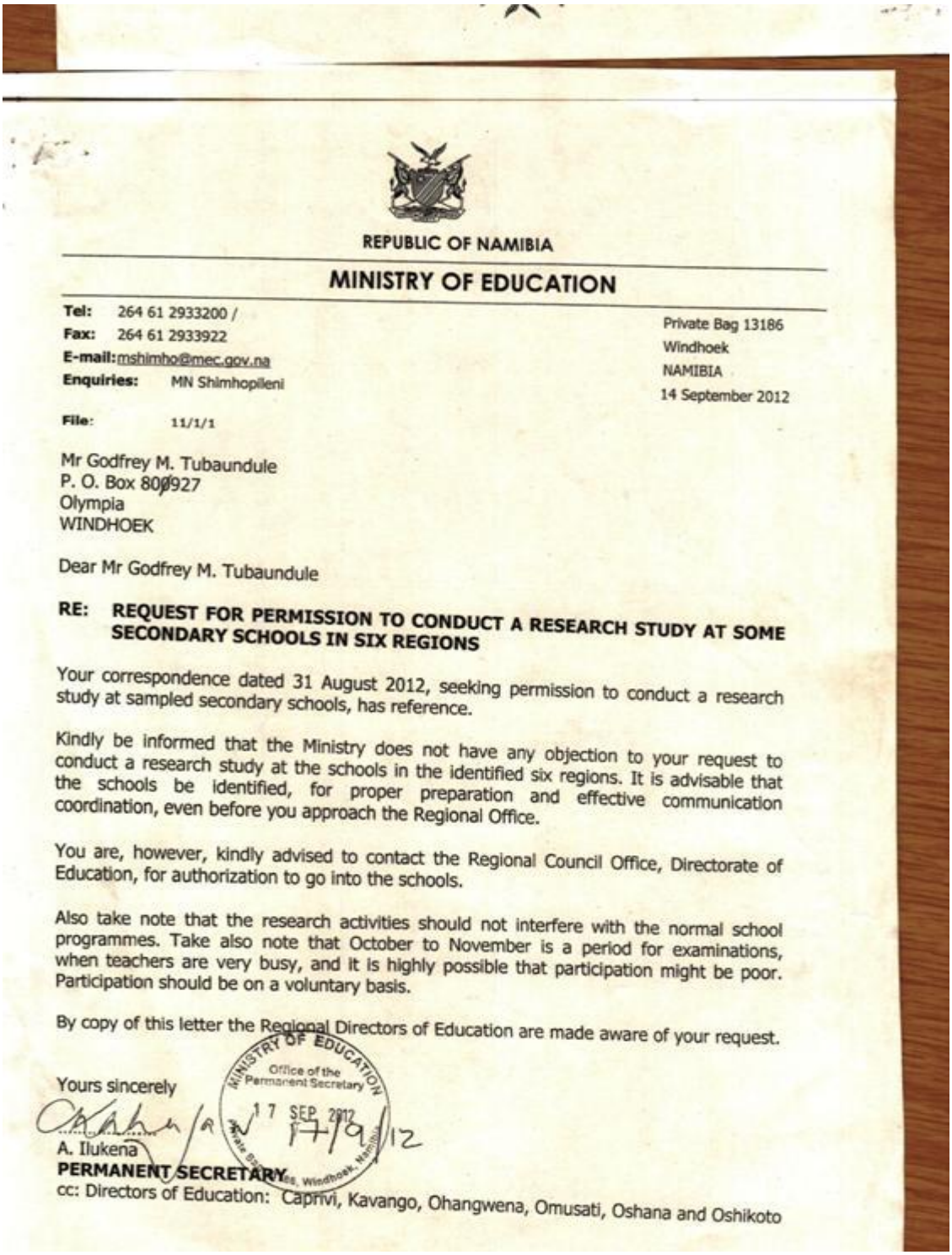
I have read and understood the conditions concerning the study "**Evaluative research of the implemented secondary school curriculum in Namibia."** This study will examine factors affecting the implemented intended and enacted curriculum at the instructional/learning environment level in Namibia in order to understand the difficulties of implementation so that school administrators and teachers can be prepared to deal with them when they arise and guide policymakers and researchers on how best to lead and manage the curriculum implementation process. I am aware that I will participate in a questionnaire/interview survey that will take about 45-60 minutes. I understand the purpose and data collection procedures of this study.

I have been notified that my participation in this study is entirely voluntary and that I may withdraw at any point during the study without any consequences to myself. I understand that I can choose not to answer any questions that I find objectionable or uncomfortable.

I have been told the steps that will be taken to ensure confidentiality of all information. If I have questions about this study, I know that I can contact Godfrey M. Tubaundule at mobile number +264 85 246 7055 or at email: godfrey@iway.na; gt7213@gmail.com or his supervisor Dr. ER du Toit at phone # +27 (0)51 401 3211, or at email: dutoiter@ufs.ca.za

Also I have been told that for questions, concerns, or complaints about the research ethics of this study, I can contact Dr Andrew Barclay, Faculty Ethics Officer, T: +27(0)51 401 9922, University of the Free State, Bloemfontein, South Africa.
Research Participant's Name: _____

Appendix 8: Permission to conduct research



REPUBLIC OF NAMIBIA

MINISTRY OF EDUCATION

Tel: 264 61 2933200 /
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E-mail: mshimho@mec.gov.na
Enquiries: MN Shimhopileni

Private Bag 13186
Windhoek
NAMIBIA

14 September 2012

File: 11/1/1

Mr Godfrey M. Tubaundule
P. O. Box 80[illegible]927
Olympia
WINDHOEK

Dear Mr Godfrey M. Tubaundule

RE: REQUEST FOR PERMISSION TO CONDUCT A RESEARCH STUDY AT SOME SECONDARY SCHOOLS IN SIX REGIONS

Your correspondence dated 31 August 2012, seeking permission to conduct a research study at sampled secondary schools, has reference.

Kindly be informed that the Ministry does not have any objection to your request to conduct a research study at the schools in the identified six regions. It is advisable that the schools be identified, for proper preparation and effective communication coordination, even before you approach the Regional Office.

You are, however, kindly advised to contact the Regional Council Office, Directorate of Education, for authorization to go into the schools.

Also take note that the research activities should not interfere with the normal school programmes. Take also note that October to November is a period for examinations, when teachers are very busy, and it is highly possible that participation might be poor. Participation should be on a voluntary basis.

By copy of this letter the Regional Directors of Education are made aware of your request.

MINISTRY OF EDUCATION
Office of the Permanent Secretary
17 SEP 2012
Private Bag 13186, Windhoek, Namibia

Yours sincerely

A. Ilukena
PERMANENT SECRETARY

cc: Directors of Education: Caprivi, Kavango, Ohangwena, Omusati, Oshana and Oshikoto