

**“THE MANAGEMENT OF EDUCATIONAL CHANGE IN FREE STATE SCHOOLS
IN TERMS OF CURRICULUM 2005 AND NATIONAL CURRICULUM
STATEMENT**

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2006

***“THE MANAGEMENT OF EDUCATIONAL CHANGE IN FREE STATE SCHOOLS IN
TERMS OF CURRICULUM 2005 AND NATIONAL CURRICULUM STATEMENT”***

by

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SEC., B.A., B.Ed., M. Ed.**

Submitted to fulfilment requirement for the degree

PHILOSOPHIAE DOCTOR

in the

**DEPARTMENT OF COMPARATIVE EDUCATION AND EDUCATION
MANAGEMENT**

at the

**UNIVERSITY OF THE FREE STATE
BLOEMFONTEIN**

PROMOTER: PROF S.M. NIEMANN

JUNE 2006

Declaration of

Originality

DECLARATION OF ORIGINALITY

I hereby declare that the following thesis entitled management of change with reference To the implementation of Curriculum 2005 and National Curriculum Statement submitted by me for the degree Philosophiae Doctor, work and has not been previously submitted for evaluation at any other university, faculty or department

M.A. KOBUE

JUNE 2006

Acknowledgement**ACKNOWLEDGEMENTS**

I wish to place on record the contributions and my sincere gratitude to:

- Prof. S.M. Niemann, my promoter, for his scholarly remarks and professional guidance of this thesis without her prompt, constructive and explicit comments in the submission made, this study would not have been completed.
- The educational managers, for their acceptance to participate in his study.
- The staff at Welkom Education Office
- Palesa, Lesale and Mr Schmidt for their technical assistance in typing this work.
- My wife, Ncithi, Motshedisi my daughter, for being there for me at all times. A huge thank you.'

I dedicate this thesis to my father and mother, without whom nothing would have been possible

AMOS KOBUE

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Chapter 1

THE MANAGEMENT OF EDUCATIONAL CHANGE IN FREE STATE SCHOOLS IN TERMS OF CURRICULUM 2005 AND NATIONAL CURRICULUM STATEMENT

ORIENTATION AND BACKGROUND TO THE STUDY

1.1 INTRODUCTION

Rapid change is a pervasive part of our lives as human beings. It is no surprise that change is also a fact of life within human systems. Contemporary organizations are immersed in a virtual cyclone of change as they strive to adapt to the ever increasing demands of domestic and global markets (Siegal 1996:54). Internationally career changes are on the increase as a result of social, political, economic and technological developments. The 1990 World Conference on "Education for All", held in Jomtien, Thailand, drew world attention to the critical importance of quality basic education. Ten years later, South Africa joined with relish in celebrating Education for All and participating fully in assessment. From 1994 South African society was characterized by change and the education and training arenas have not been left unaffected (Le Grange & Reddy 1998:1). It was felt that the previous South African system of education was too formal to cater for the needs of all citizens and that it perpetuated race, class, gender and

ethnic divisions and has emphasized separateness, rather than common citizenship and nationhood.

The National Committee on Education Support Services (1997:11) claims that it is universally recognized that the main objective of any education system in a democratic society is to provide quality education for all learners so that they will be able to reach full potential and will be able to meaningfully contribute to and participate in the society throughout their lives. The responsibility of the education system to develop and sustain such learning is premised on the recognition that education is a fundamental right which extends equally to all learners and exercising this responsibility involves ensuring that the education system creates equal opportunities for effective learning by all learners.

The political changes mentioned above led to the restructuring of the curriculum to reflect the values and principles of the new democratic society. Bergh (1994:455) states that when societies are in transformation, education is seen as the route to all things, people also expect the curriculum, especially the school curriculum, to be one of the vehicles for major change. Lulat (1982:242) and Jacobs (2005:3) also consider curriculum reform to be a major aspect of transformation. Many believe that education and curricular changes will enhance social and economic progress. It was thus essential for South Africa to improve the quality of education and training services across the board.

Presently schools are confronted with changes such as those related to their cultural character, curricular, syllabi and financial support (Niemann 1995:1). According to Carr (2000:208) and Fullan and Stiegelbauer (1982:17), the educational policy change may arise from social patterns and needs or when one or more groups in a society perceive a discrepancy between educational values and outcomes affecting themselves.

From the literature study it is evident that various definitions of the word change exist. Evans (1990:218) defines change as the substitution or succession of one thing in a place of another, substitution of other condition, variety. The elements in this definition point to a new area which is often distrusted because it is new. Havelock (1975:4) explains change as any significant alteration in the status quo and this alteration should be intended to benefit the people involved. Fitch et al. (1998:16) Meyer and Botha (2000:225) and Fullan (1982:37) explains the implementation of educational change as involving change in practice. Fullan emphasizes this notion by referring to three components or dimensions which are at stake when schools are confronted with change (Fullan 1982:37 & Tramaglini 2005:3-15):

- the possible use of new or revised materials (direct instructional resources such as curriculum materials or technology)
- the possible use of new teaching approaches (e.g. new teaching strategies or activities)
- the possible alteration of beliefs (e.g. pedagogical assumptions and theories underlying particular new policies or programmes).

These aspects are all true of the implementation of a new model of education and if the new educational goals are to be implemented and achieved, the problem is that they usually cause confusion, uncertainty and fear (Niemann 1995:1), and this could hamper the successful implementation of changes. According to Fullan (1993:46), there are two basic reasons why educational reform often fails. One is that the problems are too complex and intractable and two, the strategies that are used mostly do not focus on the things that will really make a difference.

For the purpose of this study the importance of the role of the principal in relation to change, has to be viewed as Nicholls (1983:47) points out that principals have the necessary authority to introduce changes into the school, that they are in the position to see the school as a whole and could thus identify the need for innovation. Principals are not only able to initiate changes themselves but their

support is needed by an individual or group of educators who wish to introduce an innovation. Nicholls further refers to principals as key figures and sees them as needing to have the understanding and knowledge of curriculum development in order to make appropriate choices and also to be sensitive to the tensions that invariably arise in the process of change as well as to provide for the educators a background support without dominance.

1.2 STATEMENT OF THE PROBLEM

The constitutional change mentioned in 1.1 compelled the education system in South Africa to adapt accordingly. It thus, as Niemann (1995:1) has stated, places a burden on the shoulders of the educational leader to handle those changes effectively in order to curb resistance. The manner in which these changes are handled will determine the acceptability of the changes and whether they could be successfully implemented. Effective management thus plays an important part in the process of educational change. To manage change effectively implies elements of planning, control, direction and order and it is imperative that educational managers are properly equipped for these managerial tasks as they play a strategic role in initiating change (Van der Westhuizen 1991:648). The changes in the education system necessitate the training of principals with regard to the management of change.

The Department of Education (DEHR 2000:19) emphasizes the above by saying that the most important function of the school management team in any public

school in South Africa today is to manage change. Since 1994 almost every part of education has changed. Many people welcome the changes, but change is often experienced as traumatic and stressful, but could also be challenging and rewarding. The Department of Education further affirms this by saying that change should rather be viewed as a necessity because without change there can be no growth. Implementing these changes could lead to the need for new skills (Smith & Sharp 1990:6).

Educational managers at school level are responsible for leading the implementation of changes and for the effective functioning thereof.

Fullan (1998:45) continues to stress that in order to become experts in the dynamics of change – educators and administrators alike – must become skilled agents of change. If they do become skilled change agents, educational managers could make a difference in the lives of learners from all backgrounds and by so doing help produce greater capacity in society to cope with change.

South Africa adopted a new approach to education and training to ensure that learners have access to quality lifelong education and training at all levels of the education system. This approach, referred to as Outcomes-Based Education (OBE), is learner-centred, an oriented towards results and outcomes, thus enabling learners to productively contribute to the country's socio-economic development (DE 2000(a):21). The new pedagogy associated with OBE has been developed into a curriculum framework for learning at school level, referred to as "Curriculum 2005 and National Curriculum Statement". The National Department of Education launched the new framework in April 1997, but for the purpose of this study the new approach to South African Education will be referred to as Curriculum 2005 (C2005) and National Curriculum Statement (NCS) which was agreed upon by the National Council of Ministers in July 2000 (DE 2002(a): 5-6).

Managers and leaders will in future be judged on the quality of education their schools deliver. To successfully put into practice the new education policy, management system for education institutions must change. An appropriate management system for education has to be built from the ground up, so that educators and learners could shape it according to their needs (DEHR 2000:1). Presently, if the transformation of education is to succeed, educational managers should be equipped with the necessary methods and techniques of how change should be introduced and implemented and to prepare educators, parents and learners for these reform. The problem is that numerous educational managers are not sufficiently empowered to manage and implement C2005 and NCS effectively in schools. It is imperative that school principals should be trained to facilitate and implement the imposed changes. The manner in which these changes are handled, will determine how acceptable they will be to the educators, learners and the community and whether those changes could be successfully implemented. Effective management thus plays an important part in the process of educational change.

In the light of the perceived problem, the following problem questions come to the fore:

- What does C2005 and NCS entail and (how is it organized)
- What does change entail and how does it manifest in the education setting?
- How should changes be handled in order to ensure effective implementation, especially when C2005 and NCS are at stake?
- What guidelines could be given for the training of educational managers in the management of change with regard to Curriculum 2005 and NCS?

1.3 PURPOSE OF THE STUDY

1.3.1 Goal

The aim of this study is to contribute and amplify the existing body of knowledge on the impact of educational changes with regard to the implementation of C2005 and NCS and to propose guidelines on the effective management of change.

1.3.2 Objectives

In order to accomplish the above-mentioned purpose, the following objectives should be realised by this study:

- To provide an overview of Curriculum 2005 and NCS its implementation in schools.
- To make a study of change and to provide a model for effective management of educational changes.
- To conduct both quantitative and qualitative investigations in order to determine problems experienced during implementation phase and determine the management training needs of principals with regard to C2005 and NCS.
- To provide guidelines for the training of school educational managers in the effective management of C2005 and NCS.

1.4 RESEARCH DESIGN AND METHODOLOGY

This research will include

1.4.1 Literature study

A literature study of appropriate sources containing authoritative publications, books, journal and research reports will be used to gather relevant information on Curriculum 2005 and NCS as well as management of change.

1.4.2 Empirical investigation

Because management of change is quite inevitable in South African schools, quantitative and qualitative interviews are going to be conducted in order to gather information on the topic and to raise the validity of this study. The results of both methods will then be analysed by the researcher.

1.4.2.1 Quantitative methods

Educational managers will be asked to complete a questionnaire to determine the problems they have encountered in the implementation process of Curriculum 2005 and National Curriculum Statement.

1.4.2.2 Qualitative methods

Qualitative methods would be appropriate to “get under the skin” (Duff 1992:87) of the educational managers. Personal in-depth interviews will be conducted with a number of educational managers on the issue, by using an interview guide as a guideline. The data will be analysed and once theoretical saturation has been achieved, the interviews will cease. This method is selected with the aim of finding out strategies used by principals to implement change.

1.5 DELIMITATION OF THE FIELD OF STUDY

This research will address the management of change with regard to Curriculum 2005 and NCS against the background of the new education system in South Africa. All activities will be viewed from an educational perspective as taking place within the school as an organization and as a sub-discipline of Education Management concerned with the effective running of the school as an organization.

The study will provide guidelines for empowering school managers with the necessary skills for the effective implementation and management of Curriculum 2005 and National Curriculum Statement. This study is a study in Education Management as a sub-discipline of Education.

1.6 OUTLAY OF THE STUDY

In order to provide an education management perspective on the impact of management of change with reference to the implementation of Curriculum 2005 and National Curriculum Statement in schools, the following plan of action will be followed:

CHAPTER 2

This chapter will comprise the literature study, providing a theoretical background of what Curriculum 2005 and National Curriculum Statement entails.

CHAPTER 3

Chapter 3 will focus on the study of change and provide a model for the effective management thereof.

CHAPTER 4

An overview of the research design on quantitative investigations will be given in this chapter. The data on the outcomes of a research questionnaire determining the problems experienced by educational managers who have to implement Curriculum 2005 and National Curriculum Statement will be analysed, summarised and reported on.

CHAPTER 5

The results of qualitative research will be analyzed and the findings compared with the results of the quantitative investigation.

CHAPTER 6

A synthesis of all the information from this study will be provided and then guidelines for the training of principals with regard to the implementation of Curriculum 2005 will be provided.

1.7 SUMMARY

This chapter introduced the concepts change, C2005 and NCS and outlined the political climate that brought the introduction of new curriculum in South African schools. Schools were compelled to adapt to these changes to pursue the goals of educational transformation. The focus of the study will be around the management of change regarding the implementation of C2005 and NCS. While the need for successful change management is intensively proclaimed, this study will endeavor to illustrate how educational managers feel and approach change. The next chapter will focus on the design and structure of C2005 and NCS.

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Chapter 2

OUTCOMES-BASED EDUCATION: A GROUNDING PERSPECTIVE

2.1 INTRODUCTION

Education and training are central to our society. They are of vital interest to every family, community and to the health and prosperity of our national economy. The government's policy on education and training is, therefore, a matter of national importance. In view of this, it was stated in no uncertain terms by the previous Minister of Education Professor S. Bengu, that education and training have to evolve (Department of Education (DE) 1997(b): 2).

In 1995, the South African government launched an impressive education innovation programme, Curriculum 2005 in an effort to adapt the country's education system to the post-apartheid period and to bring the system up to international standards or align it better with the needs of the new South African society (DE 1997(b): 12). The announcement was made in a series of Papers on education, the most significant being The White Papers 3 on Education and Training of 1995:1 – 24). This document was significant for a number of reasons; Firstly, it introduced the relatively new ideas of integration and competency as elements of system-wide education restructuring (Jansen 1999:7 – 9). Secondly,

it highlighted the central problem facing the South African education, system namely, that South Africa had never had a truly national system of education and training. This was due to the apartheid policy of differentiated and cultural education system based on the philosophy of Christian National Education as stipulated in the National Policy Act No.39 of 1967 (Pretorius 1998:2 – 3; DE 1997(b):8). Thirdly, along with the upgraded 1996 version, it announced that Curriculum 2005 (C2005) would be coupled to an outcomes-based approach to education and training (Jansen 1999:7 – 9).

Internationally, Outcomes-Based Education is used by developed countries in schools as a means of providing educational success for all students. South Africa has developed a new curriculum (OBE) as a model shaped according to most of the international OBE principles. For a clearer understanding of Outcomes-Based Education a grounding perspective will be provided.

2.2 OVERVIEW OF THE NEW CURRICULUM FRAMEWORK FOR SOUTH AFRICA

2.2.1 Introduction

This chapter examines the introduction, principles and implementation of Curriculum 2005 into the South African education system. The establishment and organization of the curriculum is discussed through the National Qualification Framework (NQF) and its structure. The outcomes-based approach, outcomes-based assessment and Revised National Curriculum Statement are also discussed.

2.2.2 Background

According to the Department of Education (1997(d): 3), a curriculum is a set of principles and guidelines which provide both a philosophical base and an organizational structure for curriculum development initiatives at all levels, be they nationally, provincially, community or school based. According to Clarke (1997:1), a curriculum is everything that, happens and does not happen in school. In other words, a curriculum is about how schools are managed, what is learnt and what is not, how the learning takes place, what assessment methods are used, and why. Clarke (1997:1) further explains that the curriculum also refers to both what is intended to take place and what actually takes place. The intended curriculum is usually recorded in written documents, and the actual curriculum is how these documents are interpreted and realized in classrooms in learning situations.

The vision for South Africa encompasses a prosperous, truly united, democratic and internally competitive country with literate, creative and critical citizens, leading productive, self-fulfilled lives in a country free of violence, discrimination and prejudice. The realization of this vision requires appropriate, lifelong education, training and development to empower people to participate effectively in all the processes of a democratic society and to excel in fields like human and natural resource development, human and natural science, the arts and technology. The primary task of the education policy makers is the establishment of a just and equitable education and training system, which is relevant, of high quality and is accessible to all learners. A priority for both national and provincial education departments is, therefore, the creation of a transformative, open learning system, fostering in all its users, a strong commitment to lifelong learning and development.

The National Ministry (DE 1997(b): 1 – 3) emphasized the curriculum framework that will serve as a strategic intervention designed to facilitate and guide the development of a transformed education and training system in a practicable and sustainable way. It takes a point of departure, successful modern economies and society require citizens with a strong foundation of general education, the desire and ability to continue to learn to adapt to, develop new knowledge, skills and technologies, to move flexibly between occupations, to take responsibility for personal performance, to set and achieve high standards and to work cooperatively.

2.2.3 Principles underpinning Education Transformation and Curriculum Design

The South African Constitution (Act 108 of 1996) guarantees equal access to basic education. This has necessitated the identification of values and principles which should drive national policy for the reconstruction and development of education and training. The key principles that underpin education policy development articulate both the government's political commitments to basic education provisioning and a creation of an enabling environment to enhance the transformation process.

The ultimate design of the South African curriculum (C2005) was, however, directly influenced by the principles detailed below: (Department of Education 1997(b): 3 – 6; 2000:16; 1997(c): 14).

Equity and Redress

It is essential to redress the imbalances generated through the historical inequalities in education provision, including the promotion of gender equality and the advancement of the status of women.

Access to basic education opportunities for lifelong learning

- Quality, in terms of providing learners with learning opportunities of acceptable standards.
- Efficiency, to ensure optimal value for the considerable financial and other resources, the state and the private sector must invest in education.
- Democratic participation in the governance and management of education institutions and the subsystem as a whole.
- Sustainability of development initiatives, so that they will contribute to overall transformation in the long term.
- Relevance of education to the needs of the economy and individual's vocational aspirations, as well as broader social and cultural values.

Whilst it is recognized that policy implementation is still in its early stages, a sound foundation for building an appropriate education system for the 21st century has been laid down within the current legislation and policy frameworks.

2.3 THE ESTABLISHMENT AND ORGANIZATION OF THE SOUTH AFRICAN CURRICULUM

2.3.1 Introduction

The first development was the establishment, by the Ministry and the National Department of Education, on a number of task teams and consultative committees whose brief was to develop the National Qualifications Framework (NQF) and the idea of an integrated approach to school curriculum using an outcomes-based approach. The following reports published by the National

Department of Education, most notably 'A framework for General and Further Education and Training, 'Lifelong Learning through a National Qualifications Framework, and a 'National Qualification Framework' were all definitive in placing Outcomes-Based Education and Training (OBET) firmly on the South African scenario (Kraak 1999:38 – 40).

The second development in establishing OBET was the release of the Department of Education's first official public document on Outcomes-Based Education and Training published in March 1997 and entitled Curriculum 2005: Lifelong Learning for the Twenty-first Century (DE 1997(b); Sunday Times 6 July; 8 June 1997).

Another development was the establishment of the South African Qualification Authority (SAQA) by the Ministers of Education and Labour and the SAQA Act No.58 of 1995. This section addresses the structure of the curriculum by explaining the above developments and how they relate to Outcomes-Based Education (OBE).

2.3.2 The South African Qualifications Authority (SAQA)

SAQA was established in October 1995, by the Minister of Education and Labour and the SAQA Act No.58 of 1995 which outlines the following structural elements:

- The co-coordinating structure, the South African Qualifications Authority.
- Besides registered by SAQA to set standards in particular fields of learning, generally referred to as National Standards Bodies.

Bodies accredited by SAQA to ensure that the standards set are in fact delivered. These bodies are generally referred to as Education and Training Qualification Authorities [Human Sciences Research Council (HSRC) 1995:9; Pain 2002:120].

In addition, the Act determines that the Authority shall:

- Oversee the development of the National Qualification Framework (NQF).
- Formulate and publish policies and criteria.
- Oversee the implementation of the NQF.
- Advise the Minister of Education and Labour (SAQA 1997:4).

SAQA sets the standards of education outcomes in South Africa. It is responsible for the development of level descriptors for the eight main levels on the NQF (see 2.2.4.3) and the sub-levels of the GET band levels (this includes ABET, and the school phases, including early childhood education). The descriptors briefly describe the expected levels of competence of learners at the specified levels. National standard bodies, established by SAQA, oversee the setting of standards in various fields of learning. SAQA has to approve unit standards. The SAQA board is representative of the country's major stakeholders in education and training (Van der Horst & McDonald 1997:4).

The main aim of SAQA is to provide for the development and implementation of a National Qualifications Framework which embodies all nationally recognized qualifications and credits opposed to traditional framework that intend to recognize qualifications within isolated levels, sectors or according to providers of education and training (Olivier 2001:8; Pain 2000:121).

2.3.3 The National Qualifications Framework (NQF)

The NQF is aimed at reconstructing and developing the current education system into a system that reflects an integrated approach which addresses the learners and the nations' needs. It is a system indicating an integrated national framework for achieving and maintaining quality or standards. Quality or standards refer to nationally agreed outcomes and performance/assessment criteria, which help to provide educational opportunities and to assess whether they have been achieved (DE 1997(d): 14; Van der Horst & McDonald 1997:74).

According to the Department of Education (1997©:8) the NQF recognizes the following phases of education; general education and training, further education and training, and higher education and training as descriptive terms encapsulating levels of education and training in South Africa. The main objective of the WQF is to provide for the basis of our integrated approach to education and training. According to Malan (1997:4) & HSRC (1995:93). NGF is deemed to be the standardization and portability of credits and qualifications. The premise on which standardization rests, and on which national qualifications frameworks are based, is that standards (the desired results of the education process) be nationally employed to reach those goals which are regionally, locally or even institutionally determined (Malan 1997:4).

The NQF will only function effectively if there is a change in the existing education system. It has taken a new and radical approach to teaching and learning which is outcome-based (see 2.1). An outcomes-based approach gives direction to learning by focusing on the intended learning outcomes rather than the mastering of facts. The NQF sees these outcomes as balanced and integrated national standards that encourage the holistic development of skills, values and attitudes (DE 1997(b): 6; HSRC 1995:90 – 91).

2.3.3.1 The structure of the National Qualification Framework (NQF)

The National Qualification Framework (NQF) is illustrated in Table 1.1 and 1.2 (Malan 1997:5 – 6; DE 1997©: 9; HSRC: 20). The tables show that the NQF organizes education and training into eight different levels at which learners can obtain credits. The eight levels are grouped into bands. These bands represent the three main phases of education and training, further education and training and higher education and training.

2.3.3.2 General Education and Training (GET)

The lowest qualification level of the NQF is level 1 and the GET band represents it. This band comprises pre-school education, formal school and Adult Basic Education and Training (ABET) of formal schooling, stretches over ten years of compulsory schooling, from Grade 1 to Grade 9. It is divided into three phases that represent different levels of learner competence. This first phase is the Foundation Phase (Grade R, 1, 2, and 3); the second phase is the Intermediate Phase (Grade 4, 5 and 6) and the third is the Senior Phase (Grade 7, 8, and 9). The first exit qualification of the NQF is awarded at the end to the GET level on completion of Grade 9.

ABET is also divided into four levels (Level 1 to 4). Adult learners who achieve Grade 9 (Level 4) will also qualify for the General Education and Training Certificate. In the case of ABET, private and semi-private institutions and the workplace can also be responsible for education and training (Vermeulen 2000:18; Clarke 1997: 24 – 25).

2.3.3.3 Further Education and Training (FET)

The Further Education and Training band deals with all post-compulsory, pre-tertiary learning and integrated academic, technical and commercial learning. It comprises level 2, 3 and 4 of the NQF. FET represents Grade 10, 11 and 12 of formal schooling and also non-compulsory, pre-tertiary education that can lead to and integrate with academic and education. At this stage learners should be prepared for higher education, vocational education, careers and self-employment. On completion of level 4 (Grade 12), the learner is awarded a Further Education and Training Certificate. Institutions responsible for education in this band are schools (private and government), colleges, non-governmental organizations (NGO's) such as private and industrial organizations, and the workplace (Vermeulen 2000:18; 1997:24 – 25; Clarke 1997:2; Van der Horst & McDonald 1997:74).

2.3.3.4 Higher Education and Training (HET)

The Higher Education and Training (HET) band represents all learning that takes place in institutions that award diplomas, degrees, professional, technical and occupational certificates. Qualifications in this band vary from Diplomas (Level 5), Occupational Certificates (Level 6), Higher Diplomas, First Degrees, Professional Qualifications, and Higher Degrees (Level 7) up to further Research Degrees and Diplomas (Level 8) obtained from tertiary institutions such as universities, community colleges and technical (Vermeulen 2000:19).

2.3.4 The eight learning areas

In the old education dispensation in South Africa, learners had to study discrete subjects such as Mathematics, General Science, History. The new curriculum is strong on integration and the traditional subjects have been combined together into eight learning areas, which form the basis of C2005. The eight learning areas as detailed by C2005 are as follows (Clarke 1997:1; 2000:4; DE 1997(b): 14 – 18; DE 1997(c): 19 – 20; DE2002: 4).

2.3.4.1 Language, Literacy and Communication (LLC)

Language and communication are intrinsic to human development and central to lifelong learning. Language (including sign language) and language learning empowers people to make meaning, negotiate meaning and understanding, access education, information and literacies, to name a few. The advancement of multi-lingualism as a major resource affords learners the opportunity to develop and value their home languages, cultures and literacies and a shared understanding of a common South African culture.

2.3.4.2 Mathematical Literacy, Mathematics and Mathematical Science (MLMMS)

Mathematics is the construction of knowledge that deals with qualitative and quantitative relationships of space and time. It deals with patterns, problem-solving and logical thinking, in an attempt to understand the world and make use of that understanding. The Mathematical domains provide powerful numeric, spatial, temporal, symbolic, communicative and other conceptual tools, skills, knowledge, attitudes and values to analyze, make and justify critical decisions, and taking transformative action.

2.3.4.3 Human and Social Sciences (HSS)

The Social Sciences Learning Area studies relationships between people, and between people and the environment. These relationships vary over time and space. They are also influenced by the social, political, economic and environmental context, and by people's values, attitudes and beliefs. Environmental education and human rights education are integral to this learning area.

The Social Sciences Learning Area is concerned both with what learners learn and how they learn and construct knowledge. It contributes to the development of informed, critical and responsible citizens who are able to participate constructively in culturally diverse and changing society. It also equips learners to contribute to the development of a just and democratic society. They aim to develop an awareness of how people can influence their future by confronting and challenging economic and social inequality (including racism and sexism) to build a non-racial, democratic present and future.

2.3.4.4 Natural Sciences (NS)

The Natural Sciences, comprise the physical-, life-, and earth sciences, involve the systematic study of the material universe including natural and human-made environments as a set of related systems. The teaching and learning of science involves the development of a range of process skills that may be used in everyday life, in the community and in the workplace. Learners develop the ability to think objectively and use a variety of forms of reasoning while they use process skills to investigate, reflect, analyze, synthesize and communicate.

2.3.4.5 Technology (Tech)

The Technology Learning Area will contribute towards learners' technological literacy by giving them opportunities to:

- develop and apply specific skills to solve technological problems,
- understand the concepts and knowledge used in technology and use them responsibly and purposefully, and
- appreciate the interaction between peoples' values and attitudes, technology, society and the environment.

2.3.4.6 Economic and Management Sciences (EMS)

The Economic and Management Sciences Learning Area deals with the efficient and effective use of different types of private, public or collective resources in satisfying peoples needs and wants, while reflecting critically on the impact of resource exploitation on the environment and on people.

In particular, the Economic and Management Sciences deal with:

- the nature, processes and production of goods and services;
- the South African economy and socio-economic systems in different countries;
- financial management and planning skills for private, public or collective ownership; and
- entrepreneurial skills and knowledge needed to manage self and the environment effectively.

This learning area is fundamental in preparing the citizens of South Africa to understand the critical importance of reconstruction, development and economic growth for a sustainable economic future.

2.3.4.7 Arts and Culture (AC)

This Learning Area covers a broad spectrum of South African art and cultural practices. It embraces the spiritual, material, intellectual and emotional aspects of human endeavor within society. Culture expresses itself through the Arts and through lifestyles, behavior patterns, heritage, knowledge and belief systems.

The intention of the Arts and Culture is to:

- provide exposure and experience for learners in Dance, Drama, Music, Visual Arts, Craft, Design, Media and Communication, Arts Management, Arts Technology and Heritage;
- develop creative and innovative individuals as responsible citizens, in line with the values of democracy according to the Constitution of South Africa.
- provide access to Arts and Culture education for all learners as part of redressing historical imbalances;
- develop an awareness of national culture to promote national-building;
- provide opportunities to develop usable skills, knowledge attitudes and values in Arts and Culture that can prepare learners for life, living, and lifelong learning; and
- develop an understanding of the Arts as symbolic language.

2.3.4.8 Life Orientation (LO)

The Life Orientation Area aims to empower learners to use their talent to achieve their full physical, intellectual, personal emotional and social potential. It is fundamental in empowering learners to live meaningful lives in a society that demands rapid transformation.

LO develops skills, knowledge, values and attitudes that empower learners to make informed decisions and take appropriate actions and informed decisions regarding:

- health promotion
- social development
- personal development
- physical development and movement; and
- orientation to the world of work

These five focus areas all address the human and environmental rights outlined in the South African Constitution.

All eight learning areas are not represented in each phase of compulsory schooling. In the Foundation Phase (Grade R – 3) the eight learning areas are clustered into three programmes encompassing language, mathematical literacy (numeracy) and life skills. The Intermediate Phase (Grade 4 – 6) consists of five programmes namely, language programmes (LLC), Mathematics (MLMMS), Technology and Natural Science programme (NS/Tech), a Social Studies programme (EMS/HSS) and an Arts and Culture programme incorporating elements of life orientation (AC/LO). In the Senior Phase (Grade 7 – 9) all eight learning areas are taught in a more discrete form.

2.4 THE OUTCOMES-BASED APPROACH

2.4.1 Introduction

The development of the NGF brings on an outcomes-based approach to education and training, which has as its starting point the intended outputs as opposed to the inputs of traditional curriculum driven education and training. An outcomes-based education and training system requires a shift from focusing on educator input (institutional offerings or syllabuses expressed in terms of content) to focusing on the outcomes of the learning process. According to Spady and Schlebusch (1999:29) and Spady (1994:1), Outcomes-Based Education is a method of education in which teaching/learning is clearly focused and organized around that which is essential for the learning experience. Malan (1997:10) explains that education is outcomes-based when it accepts as its premise that the definition of outcomes-based should form the basis of all educational activity, including the description of qualifications, the development of curricula, the assessment of learners, the development of educational structures and institutions, and even the planning of finances, buildings and other resources. Van der Horst and McDonald (1997:7) see OBE as an approach focusing on the desired end results of each learning process. The focus is on the instructive and learning process that will guide the learners to these end results.

This means that all decisions made about the curriculum, instruction, assessment and record keeping must be focused on the desired end-results of the learning process. Implementation of OBE must begin by identifying the knowledge, skills and values that learners must be able to demonstrate at the end of their school careers, in other words, that which they will take away with them into the adult world (Volksblad 5 August 2000). Curriculum 2005, a South African version of OBE, was designed to meet the needs of a new education system and uses outcomes-based methods to prepare learners to meet the criteria set by critical and specific outcomes (see 2.2.5.3). For the purpose of clarity, it would be useful

at this point to summarize briefly, the differences between traditional education and an outcomes-based approach.

2.4.2 Differences between traditional education and an outcomes-based approach

The following figure (Table 1.3) explains the differences between traditional approaches and an outcomes-based approach. These differences are radical and will be difficult for educators to implement. This is caused by the fact that educators are used to being the source of all the information and to shield the learners from the barrage of information to which they are exposed through modern technology.

Table 2.1 – Differences between traditional education and an outcomes-based approach

OLD	NEW
Passive learners	Active learners
Exam-driven	Continuous assessment
Rote-learning	Critical thinking, reasoning, reflection and action
Syllabus is content based and broken down into subjects	An integration of knowledge, learning is relevant and connected to real-life situations
Textbook/worksheet bound and teacher-centered	Learner-centered, teacher is facilitator, use group work and teamwork to consolidate new approach
Sees syllabus as rigid and non-negotiable	Learning programmes seen as guided, that allows teachers to be innovative and creative in designing programmes.
Teachers responsible for learning, motivation depend on the personality of teacher	Learners take responsibility for their learning, learners motivated by constant feedback and affirmation of their work
Emphasis on what the teacher hopes to achieve	Emphasis on outcomes (what the learner becomes and understands)
Content packed into rigid time-frames	Flexible time-frames allow learners to work at their own pace
Curriculum development process is not open to public comment	Comment and input from the wider community is encouraged.

(Van der Horst & McDonald 1997:27)

Vermeulen (1997:30) describes the change in the curriculum as follows: “a competence-based curriculum implies a new attitude to education where the emphasis is on learning and not on teaching, on demonstrating competence, not cramming for exams, where competence and not partial knowledge is valued,

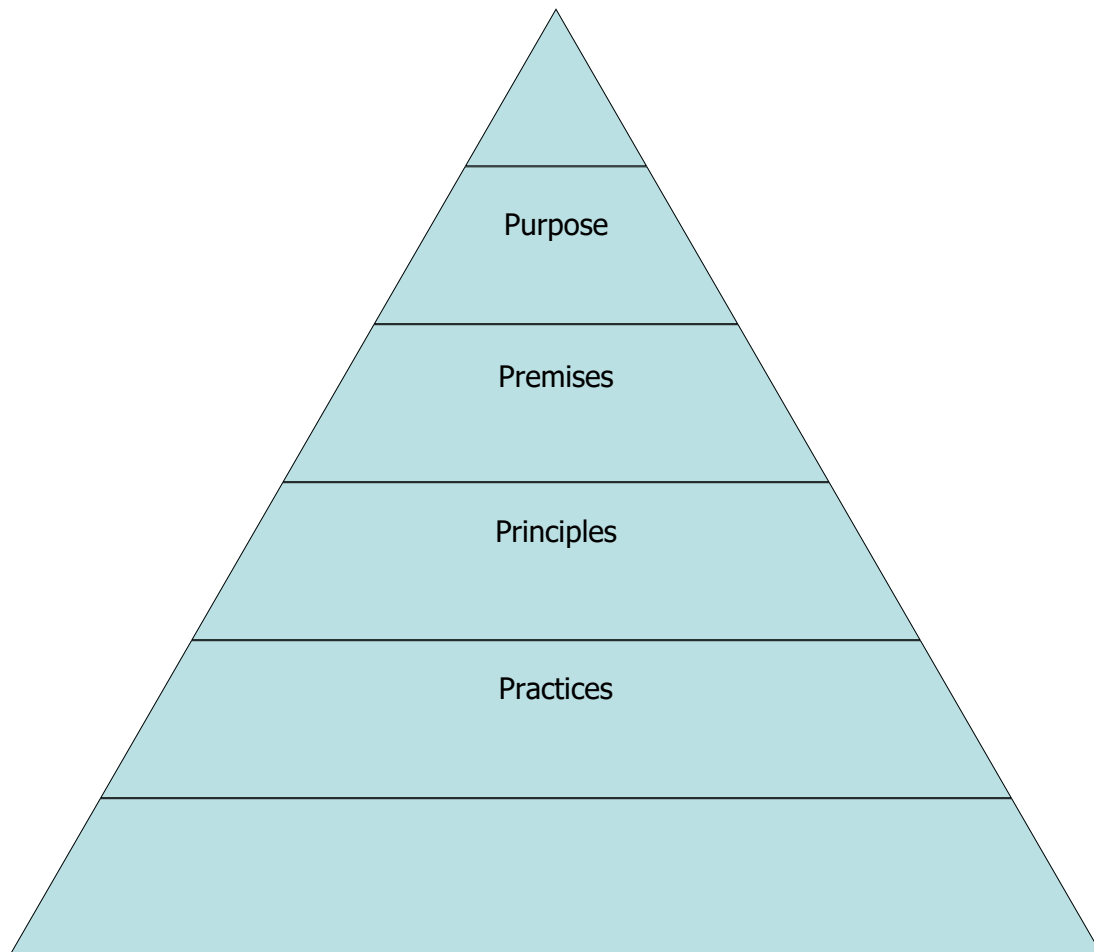
where the emphasis is on what learners are able to do, rather than what they cannot do. The system becomes outcomes-based or result-orientated rather than input-driven”

From the above OBE uses as its starting point clearly defined outcomes which are written as statements of what learners should achieve through the learning process. Niemann (1998:150) defines outcomes as follows: “Outcomes refer to the specification of what learners are able to do at the end of a learning experience.” The next section will put more emphasis on outcomes.

2.4.3 The Outcomes-Based Education Pyramid

According to diagram 2.1 the pyramid suggests that there is an overriding, operating paradigm that is composed of four principle elements which are built in steps from each preceding element, and which leads to the whole paradigm shift which man is going to have to make to cope with our changing society. The four elements will now be discussed

Diagram 2.1



2.4.3.1 The two purposes of OBE

- To ensure that all learners are equipped with the knowledge, competence and qualities needed to be successful after they exit the education system.
- To structure and operate schools so that those outcomes can be achieved and maximized for all learners.

This means that there must be a future focus on what learners need to know when they leave school and schools must be organized accordingly.

2.4.3.2 The three premises of OBE

The two purposes described above are based on three assumptions or premises. They are:

- All learners can learn and succeed, but not necessarily on the same day in the same way. The problems of having learners with different abilities and learning rates can be accommodated within a normal system.
- Successful learning promotes even more successful learning. Prior learning and achievements help to encourage and motivate learners.
- Schools control the conditions that directly affect successful school learning.

The three premises are the rationale on which the implementation of OBE actually rests and they are guided by the four principles of OBE.

2.4.3.3 The four Principles of OBE

The implementation of an OBE plan in schools requires that the two purposes and the three premises be underpinned by Spady's four principles of OBE implementation. These principles are seen as:

- Clarity of focus
- Expanded opportunity
- High expectations
- Design down

Each of these will be discussed briefly.

2.4.3.3.1 Clarity of Focus

The educators need to have a clear idea of what they want learners to achieve and must explain fully what type of demonstration is required to meet the outcome. Secondly, the success of the learners is the educator's top priority and all instructions and activities are geared and focused towards this end. Thirdly, all assessment procedures must be open and transparent and the learners must have a clear idea of what criteria are required to meet the outcome. Lastly, the educator must demonstrate competence by showing the learners what is expected of them. Continuous demonstrations by the educator are a matter of necessity. The educator and learners work together as a team to meet the outcome.

2.4.3.3.2 Expanded opportunity

What this principle means is that learners must be allowed more than one opportunity to learn work and demonstrate competence. Time-based, traditional education system does not allow for varying learner-learning rates and usually require a once-off demonstration of competence. Spady lists five dimensions of opportunity. These are:

- **Time**

In traditional education, the entire system is based on the calendar. Time is the key factor and controls all activities. The year is usually divided into terms, each having an amount of work from the syllabus that must be taught, learned and examined. According to Spady (1994:3), education cannot be based on the calendar if it is to be based on outcomes, the system gives

priority to ends, purposes, learning accomplishments and results. Time and the syllabus are less important than learners' achievements and demonstrations of competence. Spady (1994:13) maintains that learners must be given sufficient classroom learning time to complete a task and meet its outcomes.

- **Methods**

Different methods should be used to present content and skills to learners. It has been recognized that there is more intelligence than just the traditional verbal/non-verbal scale. Each subject has to be learned according to its nature and structure and learners need to master both the substantive and syntactical components of the learning areas that they are taught. Educators should be aware that learners learn in different ways and that varying the sensory input can make a significant difference to the opportunities presented to learners.

- **Operational principles**

Opportunities for learning will be maximized if educators apply the above three principles consistently, systematically and creatively (Spady 1994:14).

- **Performance standards**

Spady distinguishes between norm-referenced evaluation system and criterion-referenced system. He argues that norm-referenced evaluation system where learner performance is dependant on how they achieve compared to each other, works against learners and inhibits performance. Criterion-referenced system should rather be adopted where learner performance is measured against an external standard.

- **Curriculum access and structuring**

Learners must have the opportunity to internalize knowledge and skills through a well-designed, flexible curriculum. Opportunities must be created for learners to practice skills and be guided through increasing levels of complexity.

2.4.3.3.3 High expectations

In this context high expectations mean in essence that learners must be encouraged to lift their performance and not accept mediocrity. Learners must be challenged to produce high quality work.

2.4.3.3.4 Design down

The starting point should be the identification of which outcomes learners are expected to achieve and then design a curriculum that allows them to meet these outcomes. The design down principle compels schools to examine what is really essential to achieve learning outcomes. Curriculum 2005 allows a degree of flexibility in this regard by allowing schools to set their own learning programmes and to choose how many of the critical outcomes, specific outcomes and assessment criteria need be covered in a learning unit (Spady 1994:18 – 19).

2.4.4 Learning outcomes

Before any attempt is made to outline the framework of outcomes-based education, it is necessary to define and explain what is meant by outcomes. Outcomes are the results that learners achieve which lead to culminating demonstrations of competence (Spady & Schlebusch 1999:4; Brandt 1992:66; Pain 2000:66). Niemann (1998:46) and the Department of Education (2002:14) regards outcomes as the results of formal, informal or non-formal learning

processes and refers to the knowledge, skills, attitudes and values within a given context. It is generally agreed that in order to know if learning has taken place, learners must have acquired knowledge, skills and attitudes that they did not previously have. These end products of the learning process are called outcomes (Clarke 1997:2).

OBE uses as its starting point clearly defined outcomes which are written as statements of what learners should achieve through the learning process hence Niemann (1998:150) defines an outcome as follows: “Outcomes refer to the specification of what learners are able to do at the end of a learning experience.” What this means is that the satisfactory demonstration of an outcome is the tangible evidence that the intentions of the educational programme have been satisfied. Statements of intent or desired educational outcomes focus attention on the purpose of instruction rather than on the content or learning experience that are the vehicle for instruction. In other words, the outcomes are the priority; the content is merely the vehicle to get to the broader outcomes.

The nature of outcomes-based education requires that instruction must be designed in a specific manner. According to Niemann (1998:44) and Killen (1997:2), the design, documentation, presentation and decision-making concerning outcomes-based education should be guided by the following principles:

- Outcomes-based programmes should focus clearly on significant learning outcomes.
- These outcomes should be practical, usable and morally and ethically defensible.
- The curriculum and instructional design should be done from the set outcomes.

- The outcomes should be challenging and all learners should be expected to achieve them at high performance levels.
- Time is used as a flexible resource that allows educators to accommodate differences in learners' learning pace and aptitude.
- Learners are given more than one uniform, routine opportunity to receive instruction and to demonstrate what they have learnt.
- Assessment is integral to instruction.
- Learners are expected to assume responsibility for their own learning.

Killen regards outcomes as the priority, the curriculum is designed back from them and assessment is an integral part of the instructional programme.

Outcomes are seen as being of two kinds, namely critical cross-field outcomes and specific outcomes. These differ in the breath of the context to which they apply. Critical or essential outcomes express the intended results of education and training in a broad sense, whereas specific outcomes express the results of more narrowly defined aspects of the education process and are context-linked (DE 1997(b): 18).

2.4.4.1 Critical (essential) outcomes

Niemann (1998:46 – 47) and the Department of Education (2002:11) explains critical outcomes as generic, cross-cultural, broad outcomes that focus on the ability to apply knowledge, skills and attitudes in an integrated manner. The South African Qualification Authority (SAQA) has defined eight essential outcomes. These outcomes form the basis of learning at all levels of education

and are enshrined in the Constitution of South Africa. According to these outcomes, learners must be able to demonstrate that they:

- can accommodate effectively by using visual, symbolic and/or language skills in verbal and/or written form
- can identify problems and solve them by using creative and critical thinking
- can organize and manage themselves and their activities responsibly and effectively
- can work effectively with others' in a team, group, organization or community
- can gather, analyze, order and critically conduct themselves responsibly via the environment and others health
- regard the world as a set of rational systems by recognizing and accepting that problem solving contexts do not exist in isolation
- are aware of the importance of effective learning strategies, responsible citizenship and education and career matters and
- are sensitive to cultural questions and have entrepreneurial ability. (DE 2002:1; DE 1997g: 16).

Five additional outcomes have been defined to support development and envisage learners who are also able to

- Reflect on and explore a variety of strategies to learn more effectively.

- Participate as responsible citizens in the life of local, national, and global communities.
- Be culturally and aesthetically sensitive across a range of social contexts.
- Explore education and career opportunities.
- Develop entrepreneurial opportunities. (DE 2002:11).

Critical cross-field outcomes are generic and cross curricular. They underpin the learning process in all its facets. They are not restricted to any specific learning context, but they inform the formulation of specific outcomes in individual areas of learning for all learners at all levels on the National Qualification Framework. These outcomes are working principles, and as such they should direct teaching, training and education practices and the development of learning programmes and materials.

2.4.4.2 Specific outcomes

According to the Department of Education (1997b: 19); Clarke (1997:17) and Kobuoe (1999:16), specific outcomes are context specific. They are informed by the critical cross-field outcomes but formulated within the context in which they are to be demonstrated. They describe the competence which learners should be able to demonstrate in specific context and particularly areas of learning at certain levels. It is these outcomes therefore, which should serve as the basis for assessing the progress of learners and thus, indirectly the effectiveness of the learning process and the learning programmes.

There are eight sets of these outcomes – one for each learning area. These outcomes are fairly broad and express the intended results of studying in a

particular learning area. These outcomes should be used to guide classroom methodology and content selection, as well as enabling the learner and educator to keep in mind the broader goals to which they are working (Clarke 1997:17). The specific outcomes relate to the specific knowledge, understanding, skills, values and attitudes learners are required to demonstrate in each area of learning. Table 2.4 and 2.5 displays specific outcomes in each learning area.

Table 2.2: LEARNING AREAS

Language, Literacy and Communication	Mathematical Literacy and Mathematics	Natural Sciences	Technology
1. Make and negotiate meaning and understanding	1. Demonstrate an understanding about ways of working with numbers	1. Use process skills to investigate phenomena related to the natural sciences.	1. Understand and apply the technological process to solve problems and satisfy needs and wants.
2. Show critical awareness of language use	2. Manipulate number patterns in different ways.	2. Demonstrate the acquisition of knowledge and an understanding of concepts and principles in the natural sciences.	2. Apply a range of technological knowledge and skills ethnically and responsibly.
3. Respond to the aesthetic, affective, cultural and social values in texts.	3. Demonstrate an understanding of the historical development of mathematics in various social and cultural contexts.	3. Apply scientific knowledge and skills to problems in innovative ways.	3. Access, process and use data for technological purpose.
4. Access, process and use information from a variety of sources and situations.	4. Critically analyze how mathematical relationships are used in social, political and economic relations.	4. Demonstrate an understanding of how scientific knowledge and skills contribute to the management, development and utilization of natural and other resources.	4. Select and evaluate products and systems.

5. Understand, know and apply language structures and conventions in context.	5. Measure with competence and confidence in a variety of contexts.	5. Use scientific knowledge and skills to support responsible decision making	5. Demonstrate an understanding of how different societies create and adapt technological solutions to particular problems.
6. Use language for learning.	6. Use data from various contexts to make informed judgements.	6. Demonstrate knowledge and understanding of the relationship between science and culture.	6. Demonstrate an understanding of the impact of technology.
7. Use appropriate communication strategies for specific purposes and situations.	7. Describe and represent experiences with shape, space, time and motion using all available senses.	7. Demonstrate an understanding of the changing and contested nature of the natural sciences.	7. Demonstrate an understanding of how technology might reflect different biases and create responsible and ethical strategies to address them.
	8. Analyze natural forms, cultural products and processes as representations of shape, space and time.	8. Demonstrate knowledge and understanding of ethical issues, bias and inequities related to the natural sciences.	
	9. Use mathematical language to communicate mathematical ideas, concepts, generalisations and thought processes.	9. Demonstrate an understanding of the interaction between the natural sciences, technology and socio-economic development.	
	10. Use various logical processes to formulate tests and justify conjectures.		

Table 2.3: LEARNING AREAS

Arts and Culture	Human and Social Sciences	Life Orientation	Economic and Management Sciences
1. Apply knowledge, techniques and skills to create and be critically involved in arts and culture processes and products.	1. Demonstrate a critical understanding of how South African society has changed and developed.	1. Understanding and accept themselves as unique and worthwhile human beings.	1. Engage in entrepreneurial activities.
2. Use the creative processes of art culture to develop and apply social and interactive skills.	2. Demonstrate a critical understanding of patterns of social development.	2. Use skills and display attitudes and values that improve relationships in family group and community.	2. Demonstrate a personal role in the economic environment.
3. Reflect on and engage critically with arts experience and work.	3. Participate actively in promoting a just, democratic and equitable society.	3. Respect the rights of people to hold personal beliefs and values.	3. Demonstrate the principles of supply and demand and the practices of production.
4. Demonstrate an understanding of the origins, functions and dynamic nature of culture.	4. Make sound judgements about the development, utilization and management of resources.	4. Demonstrate value and respect for human rights as reflected in <i>ubuntu</i> and other similar philosophies.	4. Demonstrate managerial expertise and administrative proficiency.
	5. Critically understand the role of technology in social development.	5. Practice acquired life and decision making skills.	5. Critically analyze economic and financial data to make decisions.
6. Use art skills and cultural expressions to make an economic contribution to self and society.	6. Demonstrate an understanding of interrelationships between society and the natural environment.	6. Access career and other opportunities and set goals that will enable them to make the best of their potential and talents.	6. Evaluate different economic systems from various perspectives.

7. Demonstrate an ability to access creative art and cultural processes to develop self-esteem and promote healing.	7. Address social and environmental issues in order to promote development and social justice.	7. Demonstrate the values and attitudes necessary for a healthy and balanced lifestyle.	7. Demonstrate actions which advance sustained economic growth, reconstruction and development in South Africa.
8. Acknowledge, understand and promote historically marginalised arts and cultural forms and practices.	8. Analyze forms and processes of organizations.	8. Evaluate and participate in activities that demonstrate effective human movement and development.	8. Evaluate the inter-relationships between economic and other environment.
	9. Use a range of skills techniques in the human and science context		

2.4.4.3 Assessment Criteria

Each specific outcome has three to four assessment criteria. These criteria indicate what a learner must demonstrate in order to show that they have met the requirements of a specific outcome. The criteria indicate, in broad terms, the observable processes and products of learning, which serves as culminating demonstrations of the learner's achievements. The assessment criteria are explained and detailed in the performance indicators (Clarke 1997f: 18).

2.4.4.3.1 Performance indicators

These indicators provide the details of the content, concepts, skills, processes, attitudes, values that the learners must master within specific context. Performance indicators can most easily be assessed, as they are the most specific. They allow statements of the quality of achievement, that is, whether

the achievement is at the level required or whether the learner has surpassed this level (DE 1997e: 18).

2.4.4.3.2 Range statements

The range statements define the assessment criteria by indicating the scope, depth, and level of complexity that a learner must achieve at a particular phase. They include indicators of the critical areas of content, processes and parameters of achievement the learner should engage in, in order to reach an acceptable level of achievement. The range statements thus extend and explains the assessment criteria. The range statements provide guidelines but make provision for multiple learning strategies for flexibility in the choice of specific content and processes and for a variety of assessment methods. Although it is possible that assessment criteria can be the same for different grades, it is the range statement that increases the level of difficulty from grade to grade and leads the learners step by step to higher competence (DE 1997e: 19).

2.4.4.4 Expected levels of performance

These are written for each learning programme and for each grade. They are expected to inform parents, educators and learners in transparent and rigorous ways what is considered quality work, what to aim for and whether the learners' performance or products measure up to valid and credible standards nationally.

2.4.4.5 Phase organizers

The phase organizers are tools used for grouping the specific outcomes, and in this way, they are expected to aid planning and integration. They ensure that important aspects in the holistic development of learners receive adequate attention. They are broad themes or developments that provide the necessary

focus for the facilitation of planning, organizations and assessment (Vermeulen 2000:41; DE 1997c: 26).

2.4.4.6 Programme organizers

Programme organizers are sub-themes or sub-topics derived from the phase organizer. They represent themes or issues from everyday life to reflect local and social priorities. These programmes assist educators to plan a series of teaching and learning activities that will help learners in understanding the respective specific outcomes. In the Senior Phase policy document of the Free State Department of Education, the following programme organizers are suggested: housing, the world of work, living with each other and health and recreation (DE 1997(f): 18; FSDE 1999b: 139 - 143).

2.4.4.7 Learning programmes

According to Free State Department of Education learning programmes are sets of learning activities in which the learner will be involved while working towards the achievement of one or more sets of specific outcomes (FSDE 1999a: 33 – 36). They help to develop a comprehensive learning experience and enhance integration between learning programmes (Vemeulen 2000:44). These programmes include learning outcomes, guidelines for assessment, specific learning content, resource material and advice on teaching approaches (DE 1997a: 22).

2.5 Assessment in Outcomes-Based Approach

2.5.1 Introduction

Introduction or teaching is fundamentally concerned with the exchange of information and assessment related to the quality of the information retrieved. The assessment of learner performance plays a significant role in effective teaching and learning and requires the use and understanding of various techniques for measuring learner achievement. Assessment is not merely a collection of assessment gathering strategies; it is a systematic process and includes:

- The identification of learning goals and outcomes.
- The understanding of quality assessment.
- The relationship between assessment and instruction.
- The ability to grade, report, interpret and judge the extent to which goals and outcomes have been attained. (Du Toit, et al 2000:25).

The North-Western Province's Department of Education (Vermeulen 2000:75) offers the following definition of assessment "... assessment is the process of determining whether a candidate is competent, as measured against nationally agreed standards (the outcomes, assessment guidelines and range statements as defined in a unit standard) and may be seen as involving three steps:

- Generating and collecting evidence of achievement.
- Evaluating this evidence against standards.
- Recording the findings of this education ..."

The next section of this study will give a general overview of assessment, compare traditional assessment with OBE assessment, describe assessment in an outcomes-based and C2005 context and give alternative forms of assessment.

2.5.2 General features of assessment and a comparison with OBE

Assessment is defined as a process of gathering valid reliable information about the performance of the learner, on an ongoing basis, against clearly defined criteria, using a variety of methods, tools, techniques and contexts, recording the findings, reflecting a educators, parents and other stakeholders. Assessment involves the assessment of the whole learner on an ongoing basis over a period of time where cumulative judgements of the learner's abilities in specific areas are made in order to facilitate further positive learning (DE 2000b: 12). In this context, assessment is more than testing or measurement.

According to McMillan (1997:8), there are four essential components in implementing assessment, namely, purpose, measurement, evaluation and use. Purpose refers to the use of the assessment, measurement traditionally is the systematic process of assigning numbers to the results of tests, or other types of performance, and is used to measure what learners have written by reading, by watching their performances, by listening to what they say, and in general by using their senses, to gather information, in order to differentiate between various traits, characteristics or behavior patterns (Du Toit et al 2000:26; McMillan 1997:9).

An evaluation is a value judgement concerning quality. It forms a component of assessment and involves an interpretation of the results through measurement, it is a judgement about what different test score mean. Assessment is more than correctness; it is also about what is of value (McMillan 1997:10). McMillan (1997:10) identifies two determinants of quality evaluation, namely performance

standards and scoring criteria. Performance standards are used to determine whether a performance is good or bad. Scoring criteria are the specific behaviors or dimensions that are evidenced to successfully attain the standard. The final stage of assessment is how the evaluations are used. The use of test scores and other information is closely tied to the decisions educators must make to provide effective instruction and the needs of learners and parents (McMillan 1997:11).

Traditional assessment approaches have tended to follow the pattern outlined above, that is to say, the learners are told that the purpose of a test is to test certain knowledge for the purpose of promotion. These tests are measured and assigned marks (pass or fail); and the use of these test scores is the basis of the decision to promote the learner or not.

An OBE approach to teaching and learning demands a new way of looking at assessment. According to Du Toit et al (2000:41), it is required to provide new ways of assessing more complex, open-ended and problem-solving tasks in a time of curricular change. Vermeulen sees the new curriculum and its demands requiring a major shift in assessment and explains the difference between traditional assessment and OBE assessment as follows:

Outcomes-based assessment focuses mainly on what:

Learners know and can do	Not only on what they can't do
Is integral to the teaching	Not separated from learning
Happens all year through	Not only at the end of the year
Focuses on applying skills	Not only on performance isolation
Involves a range of methods	Not just tests and examinations
Is about understanding	Not comparison
Is about success	Not failure
Is about co-operation	Not competition

(Vermeulen 2000:75).

La Grange and Reddy further explain the differences as illustrated in Table 2.5

Table 2.4

Traditional Assessment	OBE Assessment
Is mainly made up of written tests and examination that takes place in formal settings.	Is made up of variety assessment methods that can be formal and informal.
Is used to decide whether or not the learner is promoted to the next grade	Is used to inform the learning process through which learning outcomes are acquired.
Takes place after learning process at dates and times previously decided on (summative).	Takes place during the learning process when it is considered necessary (formative).
Is mostly norm referenced rather than criteria referenced.	Makes more use of criterion referencing than norm referencing.
Provides isolated marks or percentages to show how learners have changed.	Provides information in context as feedback on how learners are changing.

(La Grange & Reddy 1998:11)

For the Department of Education (DE 1998:6) “ ... a dramatic paradigm shift is needed in assessment practice in South Africa, as a logical and essential part of the transformation envisaged in the new policies ... the critical characteristic ... is the move from the judgemental to the developmental role of assessment ... this reflects a changing perception world-wide of the nature of assessment, its main purpose ...” The DE further advocates that alternative strategies of assessment be implemented and should take into account continuous and formative assessment as part of the summative component (DE 1998:7).

2.5.3 Assessment categories and methods

The Continuous Assessment Model (CASS) has been proposed as an assessment method for South Africa. The practice of continuous assessment will underpin all assessment across all education and training bands and at all levels.

Thus the paradigm shift from promotion decisions based on the results of a single test or examination (summative evaluation) will be replaced by the ongoing formative assessment of the learner. This will enable educators to monitor the strengths and weaknesses of the learner's performance. Recorded evidence on the learners progressive achievement will include portfolios of the learners' work, as well as documented records of the educators appraisals, both verbal and scores on which promotion decisions will be made (DE 1997b: 20). In the context of C2005 and OBE there are three distinct but overlapping elements that form a coherent system of holistic assessment of learners. These are briefly outlined below:

- ✓ Formal summative assessment which makes sure that a learner is competent to attain a level or qualification. This type of assessment includes the award of qualifications and/or year mark, and the recording and reporting of these. This assessment is done through written, and or practical examinations and can be internal or external.

- ✓ Continuous (on-going) formal assessment creates opportunities for a learner to be assessed in a variety of ways and context over a period of time. The results of this assessment should be included with the summative results. The assessment tasks should be so structured so that they can lead to the award of marks or grades, which can be recorded and included in the summative assessment. These tasks should be authentic, that is, based on the observation of learners working in real life situations.

This assessment should be internally assessed and may be externally moderated.

- ✓ Continuous (on-going) informal formative assessment. This type of assessment is used in a developmental rather than a judgemental sense. Informal, formative assessment through the use of self-assessment, peer assessment, portfolios (see 2.2.5.5.3.7) can be extremely useful to both the learner and the educator. It provides feedback to the learner in areas of weakness and provides insight to the educator on how the learner needs to be helped to attain a particular outcome. This diagnostic type of assessment guides the educator's planning and encourages the setting of appropriately differentiated tasks. This element implies internal moderation but need to be externally moderated (Vermeulen 2000:83; Clarke 2000:4;).

An important characteristic of outcomes-based assessment, as required by the NQF, is that learners' achievements can be credited at various levels and sub-levels. In principle, learners should have access to assessment at a given level in a given area of learning, when they feel competent in that area and wish to confirm that they are ready to move on to the next. Learners' needs will be best addressed if classes are seen as a heterogeneous group of learners moving at different speeds through a series of progressively demanding activities, to develop theoretical and practical competence in relation to progressively sophisticated outcomes. The use of a variety of teaching and learning approaches will help educators to address the diverse backgrounds, learning styles and needs of their learners and will provide learners with a wide range of opportunities to demonstrate their progress. This will prepare them for the real world (DE 1996:28). The different types of assessment are briefly discussed below.

2.5.3.1 Norm-referenced assessment

A norm-referenced test indicates the learners' performance in terms of the relative position held in the specific group. It is based on comparing learners to one another: the function of each learner's grade is to indicate how the learner performed in comparison with other learners in a specific grouping. Norm-referenced assessment is necessary in quality assurance and quality control (Du Toit et al. 2000:28, Vermeulen 2000:78).

2.5.3.2 Criterion-referenced assessment

Criterion-referenced assessment relates to the specific performance that was demonstrated. It is designed to provide a measure of performance that is interpretable in terms of clearly defined external criteria (Du Toit et al. 2000:28). It determines the level of performance obtained or whether the minimum criteria have been met. Taylor (1999:193) maintains that criterion-referenced assessment attempts to capture a particular competence defined in terms of a specific standard. If a learner meets the requirements, the learner attains the outcomes; if the learner does not meet the criteria, the learner does not attain the outcome.

2.5.3.3 Summative assessment

Summative assessment is used mainly for decision-making, as it is usually a final summative evaluation judgment providing information on success and failure for selection and certification purposes. It assesses achievement at the end of the instruction in order to document learner performance after the instruction is completed. Examples are end-of-term examinations and research projects (Du Toit et al. 2000:26-27, Vermeulen 2000:79).

2.5.3.4 Formative assessment

Formative assessment monitors and informs the teaching and learning process. It provides continuous feedback to both learners and educators concerning success and failures. It influences instruction to provide corrective actions as instructions occurs to enhance learning. (Du Toit et al. 2000:27). Formative assessment informs learners; it provides feedback to learners on their performance and serves as feedback for improvement rather than for purposes of grading (Vermeulen 2000:80). For Kotze (1999:31), formative assessments involves informing learners of quality and progress rather than the major emphasis on summative assessment. Examples of formative assessment tools are portfolios, peer-assessment, self-assessment and group assessment (see 2.2.5.5.3.7 and 2.2.5.5.3.8).

2.5.3.5 Continuous assessment

Continuous assessment is used as a tool to support a learner's development and to provide feedback for teaching and learning. Continuous assessment requires a paradigm shift on the part of the educators from final, summative examinations to on-going, continuous formative assessment of learners. This is used to identify the strong and weak points of learner performance, to track learner development and to inform the teaching and learning process. The aim of continuous assessment is to shift the focus of assessment away from the memorization of reams of facts, to understanding. This, in effect, would serve the purpose of placing facts in context and thus making them more meaningful in real-life situations [(DE 1997(f): 13; 1997(b): 21; 1995(b): 33)].

2.5.3.6 Performance assessment

The main issue regarding outcomes-based assessment is that a demonstration of competence is required. Learners are expected to demonstrate their knowledge, skills, values and attitudes in some tangible way, usually in real-life context. The performance is measured according to performance standards that indicate a specific level of competence (Du Toit et al. 2000:31). For Spady and Marshall (1991:67), the culminating demonstration is of paramount importance. This involves two aspects. Firstly, the nature of the demonstration (the substance, processes and settings that are brought into play) and, secondly, the scope of learning to which it applies. The scope of these outcomes can range from relatively small segments of learning, such as lessons and units, to large areas such as entire subject areas (Vermeulen 2000:76; DE 1998(b): 36; Spady & Marshall 1991:67).

The role of the educator is to assess this performance so that the necessary credit may be given, and in order to do this, direct and systematic observation of learner performance is required. This can be done by observation of, amongst other things, orals, written reports, creative writing, graphic communication, extended projects, models, essays and so on (Vermeulen 2000:84; DE 1998 c: 38).

2.5.3.7 Self-assessment, peer assessment and parent assessment

The policy document on assessment for the GET phase states that the educator has the overall responsibility of assessment. The decision, however, of who should be involved, will be determined by the actual form of the assessment undertaken. It can involve a partnership between educator, learner and parents and other school support services such as occupational therapists, counsellors, psychologists and others. The main beneficiary of assessment must be the individual learner, and therefore the main purpose must be for growth and

development. It is necessary therefore that the educator makes provision for assessment to take place by the learner himself, by peers or by the parents. (DE 1998 a: iv, 14).

2.5.3.8 Portfolios, journals, observation sheets

The Free State Department of Education sees a portfolio as a collection of the learner's work "... between two covers.". It shows evidence of the learner's knowledge, abilities and growth, and represents sustained effort over time. The educator and the learner negotiate how pieces of work making up the portfolio should be selected. It can be a deliberate, strategic and specific collection of learner work that demonstrates that learning has occurred. A portfolio must have clear intent and purpose that is limited to the learning programme outcomes. The portfolio should also include written observation by the educator, as well as self and peer assessment [(Vermeulen 2000:84; FSDE 2000(a): 5)].

In journals learners could be asked to reflect on their learning and clarify meaning of the learning experience. Journals are most effective when learners are engaged in the learning experience and have a clear understanding of the intended learning outcomes and how they will be assessed (DE 1997(d): 35). Observation sheets are to be used by educators and learners to record the achievement of specific skills, behaviors and evidence of achievement and progress over a learning period. The specific skills, behaviors and achievements being monitored must be linked to the learning programme outcomes and must be readily observable. The most common observation sheets are individual learner check lists and whole class grids. These checklists can form part of the portfolio and facilitate self and peer assessment [(DE 1997(d): 35)].

2.5.4 Summary

Outcomes-Based Education has changed many aspects of curriculum practice, including assessment. A whole new approach to assessment is being implemented with OBE, namely continuous assessment. OBE provides the framework for educators to implement continuous assessment in their classrooms. Given this new curriculum framework, assessment should also be outcomes-based, that is to say, learners must be given many opportunities to show educators what they know and what they can do (Marneweck & Renhani 1996:279).

An outcomes-based approach to learning and teaching requires that the focus of assessment must be on assessing learning outcomes and learning inputs. A core function of assessment in an outcomes-based approach to teaching and learning is to determine whether or not learning outcomes have been attained.

Assessment in this sense has a two-way function, namely to develop learning and to monitor teaching and learning. It is through assessment that the efficiency of the teaching/learning process can be evaluated.

The most common points of departure for educational assessment are norm-referring and criterion-referring. Two more concepts are added to describe assessment in outcomes-based and C2005 education system, namely formative and summative. It is the role of the individual leader to monitor and control the various assessment strategies used by the educators in order to maintain standards that will ensure quality teaching and learning and meet the complex assessment requirements of C2005.

2.6 National Curriculum Statement Grade R – 9 (NCS)

2.6.1 Introduction

The previous Minister of Education, Kader Asmal, set up the Chisholm Commission of Inquiry in response to criticism to investigate the whole issue of C2005 (The Teacher January 2001, Sunday Times, 11 March 2001; 24 December 2000; 20 August 2000, 2 July 2000; 4 June 2000).

The Review Committee recommended that strengthening the curriculum required streamlining its design features and simplifying its language through the production of an amended National Curriculum Statement. It further recommended that the Revised National Curriculum Statement should reduce the curriculum design features from eight to three critical and developmental outcomes learning outcomes and assessment standards. It should also align curriculum to assessment. In addition, it recommended that implementation should be strengthened by improving educator orientation and training, learning support materials and provincial support. It also recommended the relaxation of the time-frames for implementation (DE 2002:5).

In June 2000, the Council of Education Ministers accepted the curriculum recommendations of the Review Committee. In July 2000, Cabinet resolved that: The development of a National Curriculum Statement, which must deal in clear and simple language with what the curriculum requirements are at various levels and phases, must begin immediately. Such a statement must also address the concerns around curriculum skills, values and attitudes – that are expected at the end of the GET band (DE 2002: 5-6).

The revision of Curriculum 2005 resulted in a Draft Revised National Curriculum Statement for Grade R – 9. It was subsequently revised in the light of public comment during 2001/2002. The revised National Curriculum Statement is thus

not a new curriculum but a streamlining and strengthening of curriculum 2005. It keeps intact the principles, purposes and thrust of C2005 and affirms the commitment to outcome-based education.

2.6.2 Background

During the implementation phase of Curriculum 2005 many problems were experienced. Despite enormous political will and effort, social demands were seemingly not matched to scheduled time (Paine, 2002: 183; Chisholm, 2000: 3).

The National Department of Education envisaged the following dates for the implementation of the new curriculum (DE 1997(e): 18):

Table 2.5: The planned phasing in of OBE/C2005 in South Africa.

GRADE	YEAR OF IMPLEMENTATION
1 and 7	1998
2 and 8	1999
3 and 9	2000
4 and 10	2001
5 and 11	2002
6 and 12	2003

The above time frame was not adhered to and C2005 was eventually introduced into GET band of South African schools in 2000. Initially, pilot programmes were run from Grades 1 to 3 and 7 to 9 in the second half of 1997, with as preparation for full-scale implementation starting in 1998 and running till 2001. As implementation began in 1997, provincial protests led to a scaling down of the scope of the implementation to grade 1. In August 1998, the implementation of C2005 in the senior phase was postponed from 1999 to 2000. Pilots in grade 3 and 7 were begun in 1999, as these were due for implementation in 2000. In

2000 C2005 was implemented in grade 3 and 7 and the Minister requested advice on the implementation in grade 4 and 8 in 2001 (Chisholm 2000:3).

Many of the difficulties of implementation were limited to the post-election social change and the policy formulation in which C2005 emerged. Enormous stress and strain were placed on already over-burdened educators and schools. The new curriculum policy OBE also came under attack from academics such as Jansen & Christie (Chisholm 2000:3). According to Jansen (1999:8), the introduction of C2005 and OBE initially sparked an overwhelming critical response, mainly due to the suddenness of OBE's emergence in policy documentation and the fact that the classroom implementers had little or no say in its formulation and introduction. The National Department, through Tirisano, the mobilization plan for education and training acknowledged these stresses and eventually C2005 itself came under review.

A Ministerial Project Committee to streamline and strengthen Curriculum 2005 was established and the process of revision was begun in January 2001 with approximately 150 curriculum developers drawn from the educational community. The revised National Curriculum Statement is the result of that process (DE 2002:2). Table 2.8 describes how NCS was to be implemented in South African schools:

Table 2.6 Training and Implementation Schedule

Training of Educators		Implementation	
Year	Grades	Year	Grades
2003	1, 2, 3	2004	1, 2, 3
2004	4, 5, 6	2005	4, 5, 6
2005	7	2006	7
2006	8 and 9	2007	8 and 9

The next section will briefly discuss the structure of the RNCS, its principles and concepts used in the learning area statements.

2.6.3 Structure of the NCS

The National Curriculum Statement consists of the overview document and eight learning Area statements.

There are still eight Learning Areas in the National Curriculum Statement. A Learning Area is a field of knowledge, skills and values, which has unique features as well as connections with other fields of knowledge and Learning areas (see 2.2.4.3.2).

The relationship between human rights, a healthy environment & social justice is addressed in each Learning Area Statement (see 2.2.5.6.4). The learning Area Statements provide a guideline of requirements and expectations from grade R to 9 for schools in the General Education and Training band (DE 2002 – 10).

2.6.4 Principles of the National Curriculum Statement

The NCS grades R – 9 (schools) builds on the vision and values of the Constitution and Curriculum 2005. These principles include: social justice, a healthy environment, human rights and inclusivity.

The curriculum can play a vital role in creating awareness of the relationship between human rights, a healthy environment, social justice and inclusivity. The NCS ensured that all Learning Area Statements reflect the principles and human rights as defined in the constitution. The curriculum attempts to be sensitive to issues of poverty, inequity, race, gender, age, disability, and challenges such as HIV / AIDS (DE 2002:10).

The NCS adopts an inclusive approach by specifying minimum requirements for all learners. The special educational, social, emotional and physical needs of learners will be addressed in the design and development of appropriate Learning programme.

2.6.5 Structure and concepts used in the Learning Area Statements

2.6.5.1 Structure

Each Learning Area Statement consists of three sections namely, an introduction: this section introduces the National Curriculum Statement and the particular Learning Area, its goals and unique features. The second section on learning outcomes and assessment standards: these express the requirements and expectations of learners by grade at the Foundation (Grades R – 3), Intermediate (Grades 4 – 6) and senior (Grades 7 – 9) Phases. The Foundation Phase focuses on the primary skills, knowledge and values to ensure the development of further learning. The learning outcome and assessment standards should be seen as minimum or essential knowledge, values and skills to be covered but should not be all that is taught. They indicate what is essential for progression through the system and are designed in relation to the grade 9 requirements (DE 2002: 13 – 14).

The third section deals with assessment (DE 2002: 14). This section outlines principles and guidelines for assessment

2.6.5.2 Definition of concepts

- Learning Outcome

According to department of Education (2002: 14), a learning outcome is desired from the critical and developmental outcomes. It describes knowledge; skills and values learners should know, demonstrate and be able to do at the end of the General Education and Training band. Learning outcomes do not prescribe content or method.

- Assessment Standard

Assessment standard is a description of the level of which learners should demonstrate their achievement of the learning outcome(s) and ways (depth and breadth) of demonstrating their achievement. They embody the knowledge, skills and values required to achieve learning outcomes. The difference between Outcome and Assessment Standard is that learning outcome describes what learners should know and be able to do while assessment standards describe the minimum level, depth and breadth of what is to be learnt. In essence this means that learning outcome can and will, in most cases, remain the same from grade to grade while assessment standards range from grade to grade (DE 2002:14).

2.6.6 Learning Areas and Programmes

The revised National Curriculum Statement R – 9 will be implemented in schools by means of learning programmes. The table below shows the new curriculum which was to be introduced as adopted by cabinet in March 2002 in schools (DE 2002: 15).

Table 2.7: Implementing the revised NCS Grades R – 9 (Schools)

Phase / Grade	Year	Certificate
Foundation Phase	2004	General Education and Training Certificate (GETC)
Senior Phase	2005	
Grade7	2006	
Grade8	2007	
Grade9	2008	

Free State department and Education (2003: 3)

Learning Programmes are structured and systematic arrangements of activities that promote the attainment of learning outcomes and assessment standards for the phase (DE 2002:15). Learning Programme specifies the scope of learning and assessment activities for the phase. Learning Programmes also contain work schedules that provide the pace and sequencing of these activities each year as well as exemplars of lesson plans to be implemented in any given period. The underlying principles and values of the Revised National Curriculum Statement also underpin Learning Programmes (DE 2005:15) – (see section 2.2.4.3.2 & 2.2.5.4.7)

Assessment is a comprehensive term, which can be defined as the collection, interpretation and use of information to assist educators to make better decisions. Traditionally, assessment referred to systematic a process of assigning numbers to the results of tests, or other types of performance, and was used to measure what learners have written by reading, by watching their performance, by listening to what they say, and in general by using their senses to gather information between various traits, characteristics or behavior patterns (Du Toit et al. 2002: 26, Mc Millan 1997:9).

Curriculum 2005s approach to teaching and learning demands a new way of looking at assessment. For Du Toit et al. (2000: 41) it is required to provide new ways of assessing more complex, open-ended and problem-solving tasks in a time of curricular change. Vermeulan sees the new curriculum and its demands requiring a major shift in assessment. For a detailed explanation assessment, see (2.2.5.5).

2.6.7 Learning Areas: Outcomes

A discussion already took place in paragraph 2.2.5.4 and table 2.7 gives a layout of outcomes in each learning area.

Everything at a school including curriculum design, instructional delivery, assessment and reporting is organized around these outcomes.

2.7 Summary

An overview of the new curriculum framework for South Africa was discussed in this chapter. A brief background relating to curriculum development was discussed as a basis for the formation of SAQA and NQF. Principles underpinning education transformation and curricular design were also discussed.

Differences between traditional education and an outcomes-based approach were shown in Table 1.3. The roles of outcomes and assessment as a continuous, formative were discussed. An indication was given that OBE approach provides the framework for educators to implement continuous assessment in their classrooms, given this new framework, assessment should also be outcomes-based.

A discussion ensued on the NCS and the reasons why it was revised were given. The structure of NCS was given and the implementation schedule was given in table 2.6. NCS should be seen as the simplification of the Curriculum 2005.

The next chapter of this study will discuss change management and model for change management will be given.

Chapter 3

CHANGE MANAGEMENT

3.1 INTRODUCTION

This chapter will focus on the effective management of change. The changes set out in chapter two have to be managed effectively so that they can be successfully implemented in schools. Unless principals are fully equipped with skills and how to manage and implement these changes, the objectives of Outcomes-Based Education will not be achieved.

At this stage in the early twenty-first century schools across the world face imposed and unprecedented change. Schools are uncertain about what they have to do, feel anxious about their ability to cope within tight time scales or find it difficult to allocate enough time to manage these problems effectively. At the same time expectations about the sophistication with which change will be

managed and carried out have never been higher. Alongside this, incredibly competent professional school leaders and managers are developing their own visions in relation to the education they want to see children receiving or in what form of a learning culture they wish this to occur. Change in such very real circumstances can be stressful and can easily lack proper personal support for the people involved. Feelings are regularly hurt and some individuals sustain damage through efforts towards change. Change can be both exhilarating and painful (Newton and Tarrant 1992:1).

Too many organisations' change efforts result in frustrated leaders (Jacobs 1994:ix). The educational manager will have to handle these changes effectively to curb resistance as the way in which these changes are approached will determine how acceptable they would be to the staff, learners and community and whether those changes could be implemented successfully (Niemann 1995:93).

According to Jacobs (1994:3), most people consider fundamental, far-reaching and fast-paced organizational change to be a contradiction of status quo and basically impossible to happen. Their past experience in a variety of change efforts reinforces this belief. Yet fundamental, far-reaching and fast-paced change is something that most organizations would benefit from and many need to achieve. Siegal (1996:54) further explains the above by saying that not everyone sees or understands the benefits of the changes or innovations the executives want to make. Every organization has a certain amount of inertia, a built-in set of resisting forces, that act in opposition to any significant disturbance to the status quo. Some changes meet with ready acceptance, but many meet with a kind of passive resistance on the part of people when they do not align with their comfortable habit patterns.

Effective management in the Department of Education as an organization plays an important part in the process of change. Niemann (1995:1) and Carnall (1993:viii) stated that all managers should realize that change is going to be a constant feature of their working lives and that skills in being an effective change agent are at the core of the management competencies needed for the twenty-first century.

3.2 DEFINITION OF CONCEPTS

3.2.1 Change

Fitch et al (1998:16) defines change as making a difference, transferring, giving a different position, course or direction, or making a shift from one process to another and according to Meyer and Botha (2000:225), change is about the movement of people from a current state to a desired future state through a set of planned and integrated interventions. Change therefore implies making either an essential difference, often leading to a loss of original identity or a substitution of one thing for another. Earlier Hellriegel et al. (2004:383) described change as any significant alteration in the status quo, that is, an alteration which is intended to benefit the people involved, According to this definition, change implies those attempts in an educational system which is consciously or purposefully directed with the aim of improving the current system. Change is all around us and the capacity to manage change effectively is the crucial attribute of the successful manager in today's organizations. Mampane (2001:224) states that in such a world, the problem facing educational leaders is how to maintain stability in the organization as well as to provide creative adaptation to societal demands and the culture of the education system itself.

3.2.2 Change management

The first important consideration to keep in mind is the difference between change which appears to be inevitable and change that is managed. Change is something that happens to an organization, a group or an individual. Managed change, on the other hand, involves the active participation of the organization, group or individual in making things happen that are in the best interest of both the individual and the organization, Meyer and Botha (2000:224) see change management as the process of mobilizing resources through planning, coordination and implementation of activities and initiatives to bring about the desired change. Ubben, Hughes and Norris (2001:13) purport that managing means taking into control and shaping the direction, then influencing in some way the outcome of changes. This implies that in order for principals to be effective managers they should be able to utilize all available resources for the implementation of educational change. They should be able to demonstrate an understanding of current trends in the school curriculum, know the attributes of quality teaching and providing effective feedback to educators about the changes in education (Johnson and Schulz 1990:5).

Outcomes-Based Education is a new education curriculum that is driving the process of education transformation. It is fundamentally different from the previous school curriculum, which was divided into discrete subject areas and was largely content based and educator driven. Principals are faced with the task of managing this curriculum change and according to Mehl (1994: 11) educational change will only be possible if the people most intimately involved in education are entrusted with its reconstruction.

Because the above mentioned definition is specifically directed at the management of change, it will be used as the basis for the ensuing discussion. The principles and approaches to change will be discussed before models of change can be given.

3.2.3 Managing the process of organizational change

There are a number of theoretical perspectives from which managers and consultants draw their knowledge about the process of change in organizations (Siegal 1996:56). According to Burke (1994:54), change as a process has been viewed using techniques grounded in theories from the behavioural sciences. Perspectives such as process-oriented change models, critical theory and the management of change in organizations and transformational change were used.

Saka (2003:480) distinguishes between two views seen advocated by recipe-givers who ascribe to the large consulting firm model of change advocating the rational-linear view of organizational change, while the model-builders are perceived as supporting the systemic-multivariate view of organizational change. It is commonly observed among advocates of the rational-linear view of organizational change that there is an optimum solution for organizational labour, raw material and capital and for adopting new organizational practices. Within this view, the focus has been primarily on the contingencies necessary for the success and effectiveness of implementing organizational change. In line with the classic argument on environmental determinism, change in organizations is perceived by internal change agents and being controlled by environmental conditions such as competitive pressures, legislation, environmental and safety regulations, world-wide economic threats, key stakeholders and leadership preferences and technological advancements. Unity in goals and full participation in change efforts, are seen as desirable conditions for effective implementation of organizational change (Senior 1997:167).

Contrary to the rational-linear view is the extent to which internal change agent displays a systemic-multivariate perspective in coming to terms with the reality of change. Members acknowledge the heterogeneity of interests, importance of stakeholders and networking efforts, bounded rationality of actors in decision making and the exercise of symbolic or indirect control through the use of language. Intuition is widely used in decision making. Organisational members do not have the capacity or the resources to account for every possible complication, one cannot collect all the information available in the environment. This finding is in accordance with Dawson's (1996:241) finding that organizations accommodate irrational, creative and intuitive aspects of cognitive behaviour. According to Saka (2003:490) change can also incorporate symbolic manifestations. Discourse is a potential tool that can be used for initiating change. Organizational change constitutes discourses that establish a set of rules and procedures about what is legitimate to say and do in a specific context.

The differences in perceptions of what change management means and how it happens are likely to be important in influencing behaviour. Where a change agent adopts a rational, planned view, he or she is likely to limit considerable freedom to particular individuals and follow an orderly linear approach to change management. However, as the systemic-multivariate accounts of change management indicate that organizations are not simply driven to incorporate practices and procedures defined by prevailing rationalized concepts of organized work (Saka 2003:493).

Carr (2000:208) views management of change from the critical theoretical point of view. According to him the term critical theory refers to a school of thought and it also refers to self-conscious critique that is aimed at change and emancipation through enlightenment and does not cling dogmatically to its own doctrinal assumptions. Critical theory aims to produce a particular form of knowledge that seeks to realize an emancipatory interest, specifically through a critique of consciousness and ideology. It separates itself from both functionalist/objective

and interpretive/practical sciences through a critical epistemology that rejects the self-evident nature of reality and acknowledges the various ways in which reality is distorted. Critical theory defends the primacy of neither matter (materialism) nor consciousness (idealism), arguing that both epistemologies distort reality to the benefit of some small groups. In this approach, what critical theory attempts to do is to place itself outside of philosophical strictures and the confines of existing structures. Carr emphasizes the fact that critical theory presupposes, and is imbued with, a dialectical vision. This theory sees the relationship between totality and its moments as reciprocal. All cultural phenomena are to be viewed as mediated through the social totality.

In conclusion critical theory is an approach that offers guides to human action that aim to produce enlightenment and are inherently emancipatory. It also offers a form of knowledge that is multidimensional, avoiding the reduction of knowledge to linear, quantitative-empirical perspectives. It is also reflective; opening the doors to new possibilities by exploring unexamined assumptions and comparing these with the resonance of lived experience. According to Carr critical theory has much to offer those seeking to understand where reform in an organization is possible and makes them sensitive to the tyranny of the confining nature of some forms of logic.

Freeman (2006:88) refers to continuous improvement as one of the major concepts in modern management. Continuous management has been incorporated into the quality field where it is generally known as “continuous quality management.” Continuous operational improvement is vital to business survival. It is recognized as a key to competitive advantage. A number of approaches to continuous improvements have been proffered. One of the most usable of these is the Theory of Constraints (TOC). As a change management method, the TOC attempts to answer the question of what should be changed and how to accomplish the change.

The theory of constraints revolves around the organization's constraints. A constrain is anything that works to prevent accomplishment of goal. Constraints can be physical or non-physical. An example of a physical constraint would be the size of your office. Commonly encountered non-physical constraints are burdensome policies and procedures that thwart progress. Another straint may simply be inertia, or the reluctance to modify the status quo.

TOC is divided into the so called Focusing Steps which are: (1) identifying the constraints of a system, (2) deciding how to exploit the system's constraints, (3) subordinate everything to the decision in step 2, (4) elevating the system's constraints, and (5) once a constraint is broken, going back to step 1. The above steps imply that it is counter productive to flood the system with resources in excess of the level the constraints will allow. The ability to increase "throughput", or the rate at which the system can create a production or service, is dependent upon elevating the current system constraint to the point where it is no longer a limiting factor. In some circumstances, this will involve shifting resources from one step of the system to another. Once the current constraint is overcome, attention is then given to the resource that represents the new constraint. The approach facilitates decision making by those closest to the process i.e. the workers and managers responsible for a specific area. Those closest to the process should consciously attempt to increase throughput and decrease operating expense where possible. Another perspective from TOC looks at an existing situation in terms of a Core Conflict and its resultant undesirable effects. The Core Conflict is the difficulty within the system which allows the constraints to persist. This theory has been successfully used throughout the world (Freeman 2006:88).

Irrespective of the different, views or perspectives on change management, the emphasis of these theories is about transformation. Ideally, change from within an organization may be seen as sufficient to initiate change in the mindsets.

However, in practice, internal change agents, require discontinuous changes evoked by an external stimulus to initiate change in the mindsets. Although change in itself means uncertainty, managers are expected to generate clear and adequate formulation of what the problem is and where they would like the organization to be. In other words, they are expected to create a coherent structure from a set of incoherent and disorderly events. The need for change has been applied throughout these theories. According to Robbins et al. (2001:426) the real world is turbulent, requiring organizations and their members to undergo changes if they are to perform at competitive levels. Managers are the primary change agents in most organizations. Management decisions and policies will determine the degree to which the organization learns and adapts to changing environmental factors. It is crucial for change agents (educational managers) to be aware of different theories regarding change management.

3.2.4 Preparing for organizational change: Guidelines for Managers

Effective managers ensure that the organization has been prepared for change in advance. Hellriegel, Jackson, Slocum, Staude, Amos, Klopper, Louw and Oosthuizen (2004:393) are of the opinion that change is a complex undertaking. For the process to lead to desired outcomes, certain steps must be completed satisfactorily, even if the order of the steps is different from that shown below. Table 3.1 describes several actions that managers should take in order to create an organization that is in a continual state of readiness for change.

Most people, whether they are students, employees, managers, or consultants, are involved with organizations that need to change. To be effective, organizations and their managers must learn how to deal creatively with the day-to-day conditions that require adaptation (Hellriegel et. al. 2003:383). If an organization is to survive, it must respond to changes in its environment. Efforts to stimulate innovations, empower employees and introduce work teams are examples of planned change activities directed at responding to the changes in

the environment. Table 3.1 provides guidelines for preparing organizations for successful changes.

Table 3.1 Preparing for organizational change

Develop a Pro-Learning Orientation Among Employees	
Provide frequent opportunities for the staff to take responsibility for problem identification and problem solving.	Do everything to keep employees informed of customer/clients preferences and the evaluation of services offered by the organization.
Develop open communication channels and ensure that they are used frequently to inform employees about successes and failures.	Encourage small-scale experimentation to produce solutions to emerging problems before large scale solutions are needed.
Develop a resilient workforce	
Train employees to understand the symptoms and causes of resistance and cynicism, and managers should be trained in effective means for reducing resistance and cynicism.	Educate the workforce about the fundamentals of organizational change processes.
Celebrate successful change efforts irrespective of size, to build confidence in the organisation's capacity for change.	Use resilience- to-change as a basis for the staff.
Build the Architecture to Support Change Initiatives.	
Develop a means for recording lessons learned from change efforts and ensuring these lessons are used to guide future change efforts.	Create opportunities for employees to work in cross-functional teams as a means of developing the teamwork and communication competencies often needed for large-scale change efforts.
Train managers in structured approaches to change rather than allowing them to rely on their intuition and instincts.	Identify key measures that can be used to assess organizational performance regularly.

Managers will be able to prepare their organizations for successful organizational change by following these guidelines.

3.3 PRINCIPLES AND APPROACHES TO CHANGE MANAGEMENT

3.3.1 Principles of change management

Since change can be managed and, indeed, must be managed if the school is to be competent, it is necessary to understand some principles of change. These principles of change must be taken into consideration in attempting to change the attitudes and behaviours of an individual or a group of individuals in an organizational setting. The principles can be divided into three, that is factors increasing resistance to change; consequences of resistance to change and factors decreasing resistance to change.

3.3.1.1 Factors increasing resistance to change

Resistance plays a very important role in the implementation of change. Some people may change easily, while others are more careful and do not want to change. Often there are people who will reject any form of change (Schaffer and Thompson 1992). Van der Westhuizen (1993:87) maintains that all forms of change or no change are concomitant with some degree of resistance.

Numerous factors can induce resistance to change. After research of the reasons/factors stated by several writers to be the cause of resistance, Van der Westhuizen (1993: 83) summarized it as follows:

- Loss of familiarity and conversancy
- Loss of personal choices and morals
- Possible loss of power
- Inapprehension of the reasons for change

- Meaningless change
- Fear of change
- Competition
- Low tolerance to change
- Differing perceptions regarding change
- Not being involved
- Work pressure
- Habits and dependence
- Insufficient feedback
- Lack of proficiency
- Lack of infrastructural support and communication

An attempt must be made to decrease this resistance, whatever the cause. It is important to do so because change will only be accepted when those involved experience a need for it (Paton and McCalman 2000:197).

3.3.1.2 Consequences of resistance to change

According to West & Farr (1990: 128) organizations adopt changes to maintain or improve their performance levels, thus innovation is a means towards an end; the overall performance or effectiveness of the organization. The rate of adoption of change, therefore, is a predictor of a more ultimate dependent variable, consequences of change.

Consequences are the changes that occur to an organization as a result of the adoption (or non-adoption) of change (Siegal 1996: 57). Consequences may be indirect and anticipated. Therefore a direct change introduced in a part of an organization as a result of the adoption of change may produce changes in other parts of an organization. The consequences of the change would be desirable if the organization as a whole can cope with and benefit from these changes. Moreover, not all consequences of change are anticipated by the adopters,

instead, there are often unanticipated consequences that are consequences that are neither intended nor recognized (West & Farr 1990: 128). Unanticipated consequences are due to a lack of understanding of the internal and external forces at work on the adopting unit, and its relationship with the larger social system (Marcuse 1993:445).

West & Farr (1990: 128) further explains that perceived change effectiveness must likely represent direct, desirable and anticipated consequences, because information on these categories of consequences is more readily available to the decision makers. On the other hand, the impact of change adoption on the organizational performance would be a result of both desirable and undesirable, direct and indirect, and anticipated and unanticipated consequences.

Robbins (2001: 545) cites some indications of oppositions that may not be clearly evident at all, for example, reduced organizational loyalty, decreased work motivation, decreased productivity, decreased employee satisfaction, and increased absenteeism due to sickness.

3.3.1.3 Factors decreasing resistance to change

According to Robins et al. (2003:409) and Niemann (1994: 64) it is crucial that special attention is given to resistance that might arise so that it can be successfully implemented. During the change process it is necessary that:

- The needs, attitudes and opinions of those involved should be considered. People will be more willing to participate in the process of change when they believe that will result in personal gain.
- The facilitator should be held in high repute by the group. It gives the facilitator more authority and thus he/she can have more influence on the persons involved.

- Sufficient information should be given to the group as such. This information should be applicable to the school's unique circumstances.
- Consensus regarding the desired change should be achieved as far as possible. It will promote involvement in the envisaged change.
- The group itself should be involved in the process of change by letting the persons in the group share in the process of collecting and analysing information as well as in the planning process.
- A feeling of unity between those involved should prevail. The person who wishes to promote change as well as those implementing the changes, should feel that it was a joint attempt.
- The parties should stay involved throughout the whole process of change. The facilitator as well as the group should continuously provide feedback and should be involved in the evaluation and follow-up process.
- All planning and information should continuously be passed on to the group. It will promote communication and will give direction to the whole process.
- Those involved should be supported. This support should be facilitated as well as continuous in nature.

Although literature mostly suggests that resistance should be prevented, Van der Westhuizen (1993:92) maintains that resistance to change can be valuable in some circumstances and that the correct management of resistance is crucial. The crux of the matter is that teaching authorities should be aware of the resistance against change that might develop. They should also be tuned to

decreasing or conciliating the factors that might cause resistance by means of effective management.

3.3.2 Approaches to change management

The elements that make up a school climate are complex, ranging from the quality of interactions to ones outside the school and this compels the principal to work co-operatively with a number of people from different walks of life Everard and Morris (1990:41). The principal should understand the way in which changes are brought to his organization either through his immediate supervisor, the district, provincial or the national level. It is imperative that the principal should know the different approaches to change management.

Jacobs (1994:7) categorizes peoples' experience regarding approaches to change into four common approaches.

3.3.2.1 Top-down strategies

The first of these generic approaches is what would be referred to as a top-down strategy in which an organization is top-level leadership (national, provincial or district) decides which changes are needed . In most organizations using this approach, brief large group meetings are held in which leaders explain why new ways of doing things are needed and what will be required from people in the organization to successfully bring about this particular set of change. Other organizations following this strategy issue substantial business change through, the publication and distribution of strategy plans as well as task force reports and executive memos. In top-down organizations the desired changes are rarely crystal clear to everyone, even those prepared to listen, the commitment and collaboration required for effective implementation are also often missing. Like wise, a key to putting those changes into practice – people feeling personal ownership for making them successful – is lacking because most of the people

who need to do things differently have neither been consulted nor involved in the process of deciding which changes need to be made. (Jacobs 1994:7-8).

The Department of Education (DE 1997(b):1) uses this strategy to implement Outcomes-Based Education in schools. The Principals' task will be to set the tone for the implementation of the new curriculum. The principal plays the strategic role in initiating change. According to Van der Westhuizen (1991:648) the staff members are inclined to accept programs of change more readily if the school principal actively supports them in implementing the change.

3.3.2.2 Bottom-up strategies

According to Jacobs (1994:8), bottom-up strategies are other avenues for organizations to follow in bringing about change. In these scenarios, individual teams of front-line workers are accountable for making changes in the way they themselves do business. Teams using this approach largely end up working independently of each other, crafting innovative solutions to their own most pressing problems. This approach usually results in a satisfying short-run experience with major improvements being made and good results achieved by many of the individual teams, however the gain for one team is often at the expense of another and the long-term headaches for the entire enterprise usually remain. Commitment is much higher with this approach than a top-down strategy. However lacking an overall context and without collaboration across the entire system, success with good solutions is limited to those problems which exist exclusively within separate functions, areas, or levels.

3.3.2.3 Representative cross-section strategies

A third generic approach to change according to Jacobs (1994:9) involves recruiting representative cross-section of the actual people ultimately affected by the proposed changes to help to decide which changes are necessary and how

they can most effectively be implemented. This collection of people is often covered by consultants and has become known by names such as task forces, working groups, diagonal slice groups, sub-committees and by other special names in different organizations. These groups gain an extensive understanding in the overall context of the change effort, develop a deep and genuine commitment to this cause, and provide a model of collaboration with representatives from other parts of the organization.

3.3.2.4 Pilot strategies

According to Jacobs (1994:10), a fourth common method is to identify a specific part of the total organization as the flagship or leader for change. Sometimes referred to as pilots, these change efforts benefit from being a well-defined task, the attention and support of organization leaders, and the allocation of resources required to ensure success. The people within the part of the organization selected to participate in the pilot project become involved closely in the planning and implementation of change.

To conclude the principles and approaches to management of change means that the first task of a school principal is one of advising and giving psychological support in the process of change. The principals should encourage those involved to implement their conceptual plans, to collaborate and experiment with the changes. The school principal's support role gives some prestige to the changes taking place in the organization and engenders a feeling of dedication among the participants in the process of change. Knowledge of the above will assist the principal to curb resistance at an early stage.

3.4 MODELS FOR MANAGEMENT OF CHANGE

From the literature study, various models of change are given and for the purpose of this chapter, few of them will be briefly discussed. All models are aimed at producing lasting change and also overlap in that they emphasize the application of behavioural scientific knowledge.

3.4.1 Harshman and Phillips model of change management

Harshman and Phillips (1994:129–133) understand change activities as progressing through five phases: planning and preparation, implementation, adaptation, renewal, and maturity. These phases are for the most part linear, but they often overlap without clear boundaries. Moreover, although the phases offer a great model for understanding the evolution of the change process, at some point the phases may no longer be accurate.

Phase One: Planning and Preparation Phase

At this stage an organizational steering committee sketches out what they want to achieve in the change process, hire help, and plan the strategy and structure of the process. Next, the organization is introduced to the process through orientation and awareness sessions.

Activities that occur during the planning and preparation phase include creation of the mission, vision, and value statements, a diagnostic process and feedback sessions; workforce orientation, and awareness session. The change management emphasis in the initial planning and preparation stage includes getting plans made, involving as many people as possible, choosing coordinator(s), completing the diagnostic and feedback process, and helping to start up, orienting and organizing adjunct committees.

Phase Two: Implementation Phase

The planning of phase one is put into place. The participation team strategy involving team orientation and team training should be started. The leadership development process should be started, which means monthly or bi-weekly leadership development sessions. Finally, any task forces or adjunct committees to deal with special issues or constituencies should be started.

This phase is characterized as activity based – the business unit and level steering committees will be formed; trainers will be selected and training will be started, adjunct committees will be formed, members selected, plans made, the communication process will take some form and people will be attending more and more meetings and team events.

Phase Three: Organizational Adaptation

The change management emphasis in Phase Three is more complex than in any of the previous phases. The organization has tremendous opportunities; however, the opportunity is veiled in complaints and unrest. People complain about shifts in power and resources, about the injustice and the human resource systems, about having to do things differently, and about the whole change process taking too long with few, if any, results. These complaints mean that the organization has opened up and is now ready to start to do things differently.

The problem is that people do not know what to do. The steering committee, the business unit – level steering committees, and co-ordinator(s) have to view the complaints as opportunities; they must help and empower people to try new things.

Phase Four: Renewal

The change management emphasis is critical in this phase. Often the only thing wrong with the process is that the original goals of implementation have been reached and people lack the clear direction. Then this leads to the time for renewal. Renewal can be characterized through assessment, alignment and adjustment. “How far have we come?” is a great question to this time. This is the right time to revisit the vision and see what activities now seem appropriate to implement. It is also an appropriate time to revisit the whole infrastructure. Are the committees/teams focused and doing that which will match the new direction?

Phase Five: Organizational Maturity and Performance

This phase occurs when the new organization becomes the status quo. In this phase the change process will be winding down and will either evolve into the next generation of change or will come to an end.

3.4.2 Stoner and Freeman’s process of change

Stoner and Freeman (1992:412-413) identify the following three major steps:

Unfreezing

Unfreezing means spelling out the need for change sufficiently clear for the individuals and groups within the organization to accept the change willingly.

Appointment of a change agent

An external change agent can be appointed to act as a change agent to guide the individuals, groups and the organization as a whole through the process of change. During this process, new values, attitudes and behaviour are fostered by the process of identification and internalization. This change agent can be an individual or a team from an organization which specializes in facilitating change.

Refreezing

Refreezing means the establishment or entrenchment of new values, attitudes and patterns of behaviour in the organization by means of support or reinforcing mechanisms.

3.4.3 The four box change model of Sonja Swart

Sonja Swart (Meyer and Botha 2000:226 – 227) identifies four steps in managing change namely:

Creating a shared vision with meaning (future)

The vision describes the end state of what change will achieve. It is inspirational and creates enough enthusiasm to outweigh the cost or pain of having to change. It describes in clear, concise terms the “why” of the change. During this step the change leader is able to influence and inspire people to share the vision and embark on the road to the achievement of the vision.

Analyse the current reality (now)

The key to successful implementation of a change is the establishment of an appropriate structures to manage the change, the development of an effective

plan and involves key process owners in the development of the plan. The change should consist of a set of integrated drivers, initiatives or interventions that will bring about the desired movement towards the vision.

Plans into action-implementing the change plan (do it)

Delivering the change is always complex, emotional and not entirely predictable. Careful measurement and monitoring of delivery against the plan is essential throughout the change process.

3.4.4 The Managing Change Model

This model is mainly focused on three important process-oriented perspectives, which exemplify significantly different conceptualizations of how change affects organizations (Burke et al., 1991, 1993):

Process-oriented perspectives of this model is:

- That change is typified by certain patterns that affect organizations similarly.
- That organizations are challenged to maintain their entities and identities through a transition.
- That change affects the individuals within an organization more fundamentally than it does the organization as a whole.

The Managing Change model offers just such a perspective (figure 3.1). This framework intergrates the strength of the theoretical perspectives presented above and incorporates important issues involved in evaluating the overall effectiveness of the change process. The model consisits of the following dimensions:

- Individual response to change: concerning the nature, prevalence, and utility of resistance to change.
- The general nature of change: concerning whether effective large system change is evolutionary or revolutionary in nature and the characteristic patterns that typify change efforts in organizations.
- Planning change: concerning the causes of change in organizations, articulation of the vision, how to get from the present to the future, and barriers to effective transitions.
- Managing the people side of change: concerning how, when and much to communicate about change within the organization, and psychological issues related to transition.
- Managing the organizational side of change: concerning the design and structural issues of systemic and long-term change efforts.
- Evaluating the change effort: concerning indicators of a change effort's effectiveness

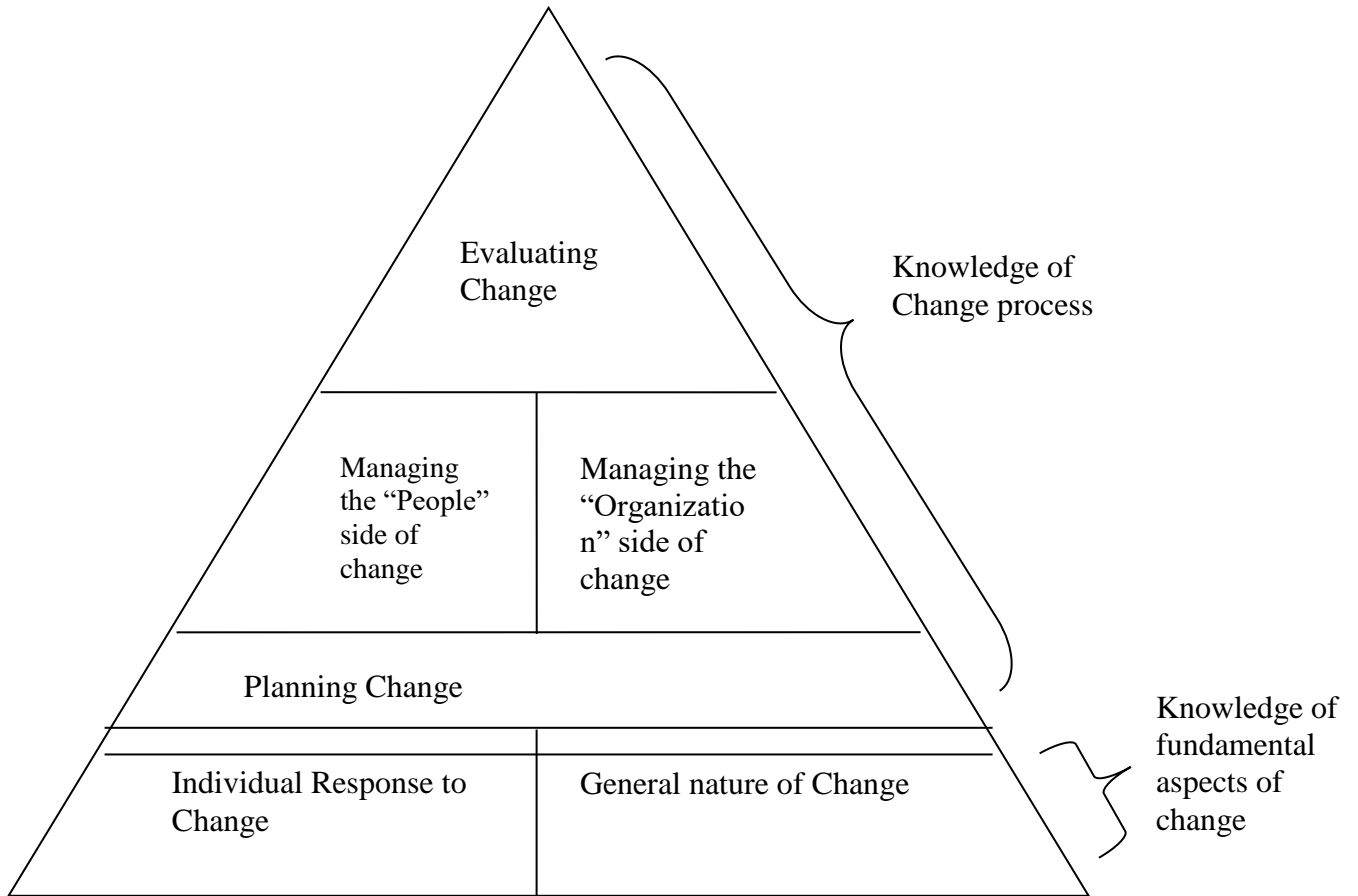


Figure 3.1 The Managing Change model

According to Rossouw (1990:306), this model functions on its best when there is:

- financial assistance so that external sources of information can be established,
- a cosmopolitan orientation among the personnel,
- opportunities for travel, attendance of congresses and the purchase of subject journals.

- Time for sufficient interaction amongst personnel,
- a need for status, acknowledgement and influence in each of the personnel,
- sufficient funding for the purchase of resources, and
- sufficient ingenuity for the creation of new ideas.

Principals who want to apply this model efficiently, should have sufficient time as well as social proficiencies, at their disposal to establish individual contact.

3.4.5 The change model of Niemann

Niemann came up with a model laying down guidelines for the effective management of change and for the purpose of this study the model of Niemann (1995:1 – 11) will be followed.

3.5 MANAGEMENT OF CHANGE

Kurt Lewin emphasizes that successful change in organizations should follow three steps: unfreezing the status quo, movement to a new state, and refreezing the new change to make it permanent (Robbins 2001:551). Niemann's model has the same features as entailed in Lewin's model and consists of three phases:

- Defreeze
- Change and
- Refreeze

Each of the above phases , includes a variety of management actions that have to be taken in order to move through those phases effectively (Niemann 1995:2). Each step will be used as a point of departure in order to determine which management actions will be handled.

The following diagram will show how educational change and the management thereof will be handled in this discussion (Niemann 1995:2).

PHASE	MANAGEMENT ACT
Defreeze	Analyse Introduce Select Plan
Change	Determine readiness for change Orientate Train Set a time schedule Implement
Refreeze	Evaluate Feed back and corrective measures Integrate

Niemann’s model of change will be selected for the purpose of a provisional model for the effective implementation of Outcomes-Based Education.

3.5.1 Defreeze

Defreeze or unfreeze as referred to by Lewin, (Robbins 2001:551) refers to the replacement of old ideas and practices by the new ones. The value of this phase

can be seen in the example when the education department decided to fundamentally transform the South African education system, a paradigm shift from an educator content driven curriculum to an outcomes-based and learners centred curriculum (Mda & Mothata 2000:22). Buchanan and Badham (1999:610) states that all learning, whether it is the organization of skills, knowledge, or changed attitude, depends on the learner's willingness to learn. He further claims that when attitudes are being changed, it is necessary to eliminate, or unfreeze, the present attitudes so that a vacuum can be created for new ones, and if employees can be made to see that the change relates to their own needs, they will obviously be more receptive.

Niemann's (1995:3) stage of defreeze refers to the following management tasks: situational analysis, introducing changes to the participants, identification of alternatives and the most suitable one to be selected. Thereafter plans are developed for the effective implementation of those changes.

3.5.1.1 Situational analysis

In relation to organizational change it is crucial that before planning your next step forward, to be clear about where you are coming from and where you are at present (Newton & Tarrant 1992:29). Niemann stresses this by saying that in order to analyse the present situation questions such as: Where are we now? and What needs attention? should be asked.

According to Newton et al (1992:34) and Gorton (1984:297), it is important that, before embarking upon a substantial analysis exercise, one is very clear as to what needs to be analysed.

- What areas do you need to be most clear about before you plan change?
- What areas of the school are you most concerned about?

- Which areas are likely to be open to some degree of change in the near future?
- Which areas of change may be the easiest to implement?
- Do you need to carry out a wide-ranging review of your organization?
- Have you gained agreement for the evaluation process from other key persons in the organization?
- What time scale are you operating on?
- What resources do you have at your disposal?
- How much time will be needed from key personnel to complete the analysis?
- What technologies have you available for managing time?

Having clarified the answers to the above questions, it is likely that analysis will begin by seeking information from within the school or organization, both quantitatively as well as qualitatively. The diagnostic process provides an understanding, or picture, of the organization from multiple perspectives through in-depth interviews, surveys, observations, existing data, individual case studies, opinion polls, advisory councils, staff discussions, parents, communities and outside agencies [Niemann 1995:3, Newton and Tarrant 1992:39 – 47, Harsman and Phillips 1994:32].

According to Carnall (1993:7), focus on analysis should be on the key functional elements of the organization, namely people (staff), finance, operations or service and other activities of the school. According to Meyer and Botha (2000:227), when change leaders do not analyse the starting conditions or are unable to stay in touch with the current reality as the change progresses, the change plans will be unrealistic and will consequently not be implemented.

3.5.1.2 Introducing the changes

Assuming that the need for change has been adequately validated, there is little doubt that the involvement and co-operation of many people will be necessary for successful implementation of change. Problems that have been identified during the situation analysis necessitate changes and that information should be passed on to the staff as soon as possible. This introduction session is of the utmost importance for the implementation of the changes, as the attitude and the future participation of the staff is largely dependent on their first actual acquaintance with the possible changes (Niemann 1995:3).

According to Van der Westhuizen (1991:656), this phase is the one in which special attention should be given to the people who act as the facilitators of change. The manner of the facilitator and educators concerned is of particular importance. The facilitators should strive to establish a style which is characterized as friendly and supportive while at the same time it should initiate power and action.

Niemann (1995:3) points to the following when change is introduced.

- When changes are introduced to the staff for the first time, it should not take place without prior warning.
- Detailed explanations of the reasons for the changes must be given.
- The educational leaders themselves should also be convinced of the desirability of the change.
- The advantages of the change must be indicated.
- Enough time should be spent on communication regarding the changes.
- Open communication channels should be established.
- The educational leaders should approach their staff with sensitivity.

This stage seems to be the most complex as far as understanding the change process and special caution is required.

Harshman and Phillips (1994:97), see this step as a communication effort. The facilitator, steering committee or the school manager informs the entire organization about the process – what it is, why it is being done, what people can expect to happen, and what their roles are in the process.

3.5.1.3 Selecting the best alternative.

Once the need for change has been validated, the facilitator in co-operation with relevant others should attempt to develop or evaluate and select from various alternatives, a new approach or system which would replace or modify the current program or practice. The challenge for school practitioners is to select those challenges which show potential for significantly improving education in the school.

Hellriegel et al. (2004:387-392) states that when the change agent and client have several potential solutions before them, they can begin the task of choosing; in earnest choosing means testing and comparing, applying criteria, eliminating some possibilities, accepting some and modifying others on the basis of comparative judgments. According to Havelock, choosing should respond to the following questions: Will the potential solution really do a lot of good if it works? Will the potential solution really work regardless of how much good it is supposed to do? Will the solution be accepted by the client system regardless of benefit and workability?

Niemann (1995:4) stresses the fact that it is important for the staff to be part of the decision making process, otherwise they would be reluctant to take responsibility for their action.

3.5.1.4 Planning

Van der Westhuizen (1991:137) sees planning as the management task concerned with deliberately reflecting on the objectives of the organization, the resources, as well as the activities involved, and drawing up the most suitable plan for effectively achieving the objectives. Van der Westhuizen (1991:137) further explains planning as the work the manager does to master the future. According to Schlechty (2000:182-201) planning is concerned primarily with the question of how an objective is to be achieved or a decision implemented.

According to Niemann's (1995:4) model certain management actions should be taken during this phase namely:

- The planning of action steps through which the set objectives can be achieved.
- The anticipation of the possible result of each action step.
- The identification of equipment, facilities and resources needed to reach the goal.
- The drawing up of the organizational plan, together with all the rules and procedures.
- The drawing up of the budget.
- The design of the means by which sound interpersonal relations of a healthy school climate could be established so that circumstances will be conducive to change.
- Obtain enough information about the subject (OBE).
- The integration of all information available.
- The description of the roles of the participants as well as the distribution of work.
- The drawing up of a time schedule and planning according to policy.

Van der Westhuizen (1991:143) stresses the fact that how well the management actions will be carried out will depend to a great extent on the quality of planning. During planning the best use should be made of the knowledge, experience and capabilities of staff to achieve the desired results. All those concerned with planning should be well-informed and the situation should be clear cut. Briefly, a well conceived plan for implementing change will go far toward avoiding problems and will increase the possibility that the innovation will be successfully implemented (Schlechty 2000:182).

In conclusion, if this phase of de-freezing has been managed effectively, a sound basis for the implementation of the changes will have been laid.

3.5.2 Change

Burnes (1992:6) confirms that as soon as the situation has been defreezed, the educational leader has to work on the establishment of new patterns and attitudes to the above by saying that it is essential for the change process to be fully integrated into the day-to-day activities of the people in the organization, because as long as the change process is seen as something extra, something to do over and above the day-to-day real work, it will remain on the back burner and will not be entrenched as part of the culture of the organization. It is in this stage that, that which has been planned previously, has to be implemented.

Niemann (1995:6) continues to stress that before any changes could be implemented, the educational leader has to determine whether the participants are ready for those changes so that orientation and training can take place and the time schedule can be finalized.

3.5.2.1 Determine readiness for change

Rossouw (Smith and Morgan 1996:312) sees the culture within the organization and the way in which change took place in the past as two factors that will determine the receptivity to and level of readiness for change. Readiness involves the school's practical and conceptual capacity to initiate, develop or adopt a given innovation (Fullan 1990:63).

Niemann (1995:6) and Carnall (1993:36) suggest that the educational leader has to determine whether the staff views the proposed change as:

- a way of solving the existing problems,
- potentially effective,
- advantageous,
- clear to every body,
- compatible to their values,
- technically teasible,
- more in the right direction, and
- achievable because they have enough support and know they will get necessary training.

Initially, evaluation has to take place in order to determine that defreezing has been completed (Niemann 1995:6).

3.5.2.2 Staff orientation

According to Harshman and Phillips (1994:97), an orientation process has a minimum of three important purposes, namely: it is fundamentally a communication effort, it is an opportunity for the organization leaders to plant a symbolic stake representing their commitment to change through a team-based strategy and it is a time to set a tone for the future, it is an occasion of excitement

and challenge for the future. The moment the staff became involved, the idea of renewal was introduced. Effective orientation is of the utmost importance in the process of acceptance of identification with the change that has to take place (Niemann 1995:7).

Harshman and Phillips (1994:98) give the following guiding principles for the orientation process:

- The orientation should be conducted face to face. A written document should not be the only tool used to announce and explain the effort. A letter from the leadership might be a way to announce the process and to invite employees to attend an orientation when it is held, but it is not a substitute for the real thing.
- The content and tone of the presentation should be honest and straightforward. It is important for employees to get the information first hand not a commercial for a new programme.
- The orientation should spell out realistic expectations. It is better to be on the conservative side about what to expect than to overstate what one will do.
- Leaders of the transformation process should conduct as many orientations as needed to involve everyone in the organization.

3.5.2.3 Staff training

Effective training is one of the most useful ways of moving an organization towards an agreed vision or to a specific objective. Through training, new skills, confidence, knowledge, performance and attitudes of existing staff members can be developed (Newton & Tarrant 1992:136).

According to Fullan (1990:85) and Niemann (1995:7), the educational leader has to start with pre-implementation training in order to equip staff with the skills and knowledge required to accomplish changes. It may be valuable to make use of

experts and also to apply strategies such as work relations, support positions, committee work and external experience to train the staff (Harshman & Phillips 1994:106 – 112). Training seeks to increase the effectiveness of groups as they set out to accomplish specific tasks (Kobuoe 1999:35).

The provision of supportive services after effective training is one of the necessary programmes to be implemented. Among a wide range of supportive services offered are measures to create a climate conducive to training, encouraging collaboration among participants, educators, parents and learners and enhancing the appeal for general training (Nel & Haasbroek 1998:433).

Niemann (1995:7) further mentions the importance of the educational leader in preparing parents and the learners for the changes that are to take place.

3.5.2.4 Set a time schedule

Evans (1990:231), Niemann (1995:7) and Swart (Meyer and Botha 2000:235) stress that people are prepared to accept changes on condition that they do not introduce too many changes at the same time. On the other hand, it is also important that none of the phases should take up too much time as the staff may then lose their enthusiasm and commitment to the programme.

3.5.2.5 Implementation

The implementation of the change is dependent on two conditions, namely timing and scope. Timing refers to the correct time to institute change, while scope refers to the size or sphere of influence of the change – in other words, where the change is going to have an influence (Smith & Morgan 1996:308). It is during this stage that change must be implemented as planned. The implementation plan should be drawn up. According to Niemann (1990:8), this plan should include aspects such as:

- the tasks that should be executed,
- the division of work according to ability,
- the resources needed to implement the change,
- a time schedule within which the tasks should be completed,
- a descthe resources needed to implement the change,
- a time schedule within which the tasks should be completed,
- a description of the quality of the work,
- an exposition of the communication lines,
- who will act as co-ordinator and
- the control mechanisms

While the change is being implemented, constant monitoring is important (Smith & Morgan 1996:308).

3.5.3 Refreezing

This phase of refreezing can start as soon as the changes have been implemented successfully. According to Burnes (1992:165), and Niemann (1995:8) this phase is called refreezing, because it is a period during which the final acceptance, integration and stabilization of the change take place and new patterns of behaviours and attitudes are permanently established. In order to establish or reinforce the new patterns of behaviour, it is vital to evaluate, give feedback, take corrective measures and allow integration to take place.

3.5.3.1 Evaluation

According to Van der Westhuizen (1991:221), evaluation as one of the management actions takes place continuously. It is that task, which has as its purpose the identification of the merits and deficiencies and it is an integrative part of the control task.

To ensure effective implementation and follow-up, frequent evaluations must be conducted in order to prevent stagnation and encourage effective implementation of the change. The evaluation process should include opportunities for revisiting the implementation strategy in order to affect amendments and improvements (Meyer & Botha (a) 2000:268).

Evaluation at this stage takes place mainly after the work has been completed (Niemann 1995:9). Gorton (1983:74 – 450) and Niemann (1995:9), state that to evaluate effectively, the educational leader should appoint evaluators. By means of a participatory decision-making, and evaluation criteria and methods should also be decided upon. The evaluation committee should then identify the merit, as well as the deficiencies of the changes and the process taking place. In order to identify those aspects, the evaluators should collect as much information as possible, analyse the results, draw conclusions, make recommendations and finally compile a report.

The educational leaders should see to it that recommendations are carried out because to evaluate is of no use if corrective steps are not taken when deviations are noticed (Van der Westhuizen 1991:222).

3.5.3.2 Feedback and corrective measures

According to Van der Westhuizen (1991:221) there should be feedback on the work done so that actual performance may be compared with the set standards. Feedback will have to be given on whether only measures are required or whether further changes or planning should take place. Feedback to the staff must be made in writing as well as in a verbal form, otherwise the consultation exercise is clearly and rightly seen as superficial and cynical (Newton and Tarrant 1992:100).

Robbins (1980:360) and Niemann (1995:9) stress the value of feedback as lying in the strengthening of the communication process because the results of the evaluation are fed back to those who have been part of the change process. Giving feedback should take place in such a way that the staff will be able to interpret the information in terms of strong and weak points. The feedback will indicate whether:

- the changes are effective,
- the staff could handle the changes,
- other alternatives should be done,
- the staff needs more support, and whether,
- retraining or only training in certain actions is necessary.

The purpose of feedback and corrective action can thus be seen as those steps which an educational leader should take to deal with potential or real deviations. It also ensures that the execution of the plan is carried out smoothly (Van der Westhuizen 1991:222).

3.5.3.3 Integration

After successful implementation of the changes it is expected that the participants should decide whether to adopt or reject the innovation, and in this matter the educational leader should be prepared to provide support, further training and encouragement in order to nurture integration of the new skills or materials into the day-to-day behaviour of the participants (Kobuoe 1999:38).

According to Niemann (1995:10), it seldom happens that changes function effectively the first time. The participants put new circumstances to test and try to find ways in which the changes could be handled. This process can bring about frustration, which does not necessarily imply resistance, but is a natural result of finding new ways to let the system function effectively.

The participants have a new system, process and new organization. New relationships between people and processes have been tried, modified and accepted. The new behaviour becomes part of normal behaviour (Carnall 1993:98). In this way the change process is completed.

3.6 PROVISIONAL MODEL FOR THE EFFECTIVE IMPLEMENTATION OF OUTCOMES-BASED EDUCATION.

This provisional model aims at equipping principals with knowledge and skills on how to identify the management actions and the applicability of these actions to the implementation of Outcomes-Based Education.

PHASES OF CHANGE	MANAGEMENT ACTIONS REQUIRED	APPLICABILITY OF THE IMPLEMENTATION OF OBE
1. Unfreezing	<ul style="list-style-type: none"> • Situational Analysis • Introducing the intended change, programme or innovation. 	<ul style="list-style-type: none"> - Gather information - People matters - Educators' attitude towards formal system of schooling. - Efficiency of training in teaching according to OBE. - Parents and learners. - Infrastructure: Financial matters, lesson material, facilities. - Time scale. - Problems identified during analysis phase are discussed with the staff (strong & weak points). - Facilitations, steering committee. - Opening of communication channels.
	<ul style="list-style-type: none"> • Selecting the best alternative • Planning 	<ul style="list-style-type: none"> - Participants develop or evaluate and select from various alternatives a new approach or system. - The best solution for a particular school should be chosen. - Setting of objectives on how to implement OBE. - Identification of equipment, facilities and resources needed. - Drawing up of the organizational plan, description of the roles of all participants and distribution of work.

Chapter 4

MANAGING THE IMPLEMENTATION OF CURRICULUM 2005 AND NATIONAL CURRICULUM STATEMENT: QUANTITATIVE INVESTIGATION

4.1 INTRODUCTION

The previous chapter provided the literature review on change management focusing on the management of change in the implementation of C2005 and NCS. A provisional change model for the effective implementation of C2005 and Revised National Curriculum Statement was also discussed.

In this chapter the quantitative procedures used in this study will be discussed. A theoretical introspection of quantitative as well as qualitative research methods and the reason for using it are discussed. This will be followed by the analysis and interpretation of data gathered from the questionnaire.

4.2 RESEARCH DESIGN

There are many historical, socio-cultural, mental-behavioral and physical factors that could impact on the implementation of curriculum 2005. A variety of research methods have therefore been employed to gather and compare data of questionnaires, interviews and to establish possible links with literature study in chapter two and three, in order to enhance the validity of the research. According

to Bak (2004:24) and Kerlinger (1986:279) a research design is a plan, strategy and structure of investigation so conceived as to obtain answers to research questions or problems. It is a complete scheme or programme of the research. Process the design describes the procedure for conducting the study, including when, from whom and under what conditions data were obtained and what the researcher hopes to achieve (Bak 2004:25).

The researcher usually makes a choice between quantitative and/or qualitative research design. A quantitative research design adopts a positivist philosophy of knowing the emphasized objectivity by using numbers and statistical analysis to quantify and understand the phenomena (Ary, Jacobs & Razavieh 2002:22; Mcmillan & Schumacher 1993:32). Qualitative research is a post-positivistic inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem (Husen 1999:157), where the researcher builds a complex, holistic picture, analyses words, reports detailed views of informants and rather “correcting guesses” than “giving the truth” (Creswell 1998:15, Lather 1991:51).

4.2.1 Selecting the Methodology

In social science, the researcher often has a choice with regard to the method of research and this choice is normally between the quantitative and qualitative methods (Niemann 1994: 153). A profound literature study for the theoretical exposition and the grounding perspective of the issue at stake was undertaken in chapter two and three. The empirical investigation for the purpose of this study consists of a quantitative and a qualitative investigation in order to increase the validity of the study. The use of multiple methodologies enhances the value of the investigation as data emerges from different angles.

When exercising a choice with regard to the method, researchers have to decide between quantitative and qualitative methods. The choice is influenced by many

factors. In this case the two research approaches were selected: quantitative research questionnaire to collect a broad scope of data on the implementation of outcomes-based education in schools and unstructured qualitative interviews to provide more clarity on understanding of the quantitative findings.

4.2.1.1 The Difference between Quantitative and Qualitative Research.

Quantitative and qualitative research methods are two different sets of research techniques, each with their own potential benefits and deficiencies.

Quantitative techniques involve experiments, testing theories, research surveys, quasi experiments, and among others the use of questionnaires (Ary, Jacobs & Razavieh 2002:22). These approaches allow social scientists to carry out large-scale comparative analysis, establishing facts and to make assumptions. Sampling is done according to a sampling frame which includes a variety of rules and samples are usually large, representative and precise.

Qualitative methods, on the other hand involve more open-ended, free-response questions based on informal, loosely-structured interviews, observations or diaries (Pain 2002:258). The relationship with the participants includes empathy, trust, contact between the researcher and the researched and the participants are usually seen as co-researchers assisting to close the gaps of knowledge (. Qualitative investigations are time consuming, involve a small number of participants and is often used with subjective experience and social meaning (Griffen 1985;100). Data is collected in the form of words with rich description and gives a feel for social settings (Neuman 1994:317).

Table below summarises the difference between quantitative and qualitative research :

Table 4.1: Differences between Quantitative and Qualitative Research

Quantitative Research	Qualitative Research
Test hypothesis that the researcher begins with.	Capture and discover meaning once the researcher is immersed in the data.
Concepts are in the form of distinct variables.	Concepts are in the form of themes, motifs, generalizations, taxonomies.
Measures are systematically created before data collection and are standardized.	Measures are created in an ad hoc manner and are often specific to the individual setting or researcher.
Data is in the form of numbers from measurement.	Data is often in the form of words from documents, observations, transcripts.
Theory is largely causal and is deductive.	Theory can be causal or non-causal and is often inductive.
Procedures are standard, and replication is assumed.	Research procedures are particular, and replication is very rare.
Analysis proceeds by using statistics, tables, or charts and discussing how this data relates to hypothesis.	Analysis proceeds by extracting themes or generalizations from evidence and organizing data to present a coherent, consistent picture.

(Neuman 1994:317 and Kruger 1997:100)

The following discussion will focus on the quantitative research method and the reason why this method was *inter alia* selected for this study.

4.2.1.2 The Quantitative Investigation

Quantitative research involves measuring of things, usually numerical quantities or in numbers (Reaves 1992: 16). This method involves the description and data collection process, research designs and statistical procedures that enable research in amongst others social sciences to parallel closely the work of natural

science researchers. This research follows the scientific method as far as possible in as much as it attempts to accurately and objectively research social factors (Vockell 1995: 192). Quantitative research tends to adopt a structured approach, in which all the issues to be focused upon are decided on in advance (Bryman 1996: 99). According to Neumann (1994: 282), information presented in numbers is, therefore, understandable and usable where investigations are conducted by means of a questionnaire. Basically, quantitative research uses the survey method, thus the researcher used a survey to collect data from selected educational managers at school level. Rasool (2000:130) opines that the survey method is effective if the intention is to obtain information, using questionnaires. Nesbary (2000: 10) states that survey is a process of collecting representative data from a larger population with the intention of generalizing the results to the population of interest. In view of this, it can be argued that the use of a survey is economical in terms of time and resources involved, because it covers a larger population within a short time.

Gorard (2003:57) contends that even though it may be preferable to use the entire population under study, using a carefully selected sample in a study is as good as using the entire population and even better than using an 'inaccurate set of figures' for a population. Besides, Nesbary (2000:13) argues that the use of the entire target population may be infeasible in some situations; for instance, collection of data from a large population covering a wide area may be somewhat difficult. Nation (1997:57) emphasizes whereas it is usually difficult to accomplish a task with an entire population. In light of the above, a sample will be used for this study.

4.2.1.3 Reliability and Validity

According to Lankshear and Knobel (2004:161), researchers in quantitative studies should endeavour to use instruments that are not only reliable but also valid.

(a) Reliability

Scholars, such as Lankshear and Knobel (2004) perceive reliability as the stability of responses to a data collection tool irrespective of the number of times the data are administered to the same respondents. In other words, an instrument is considered reliable if it produces the same or similar result each time it is administered to the same respondents. Researchers at the Colorado State University (2005:7) describes reliability as the 'extent to which a measure, procedure or instrument yields the same result on repeated trials. However, Punch (2003:42) contends that reliability of an instrument depends on whether the question can be steadily and sincerely responded to, using scales and options given and the respondents' attitudes while responding to the instrument, implying that an instrument may not be absolutely reliable. Even when participants' responses can be predicted each time the instrument is administered, it may still be influenced by respondents' disposition.

Thorndike and Thorndike (1997:775) refer to the reliability as the accuracy with which the sample represents the accuracy of the broader universe of responses and according to De Vos and Fouche' (1998:85), this also refers to the precision with which the measuring instrument measures. The reliability of the self-constructed questionnaire the researcher used to collect data on the changes related to the implementation of outcomes-based education from educational managers at school level is therefore of importance to the value attached to the outcomes of the investigation. The data from the respondents were analysed by means of binominal probability and the Likert scales. For the purpose of this study, it was a necessary to determine the reliability of the research data by means of the alpha coefficient. The Cronbach Alpha coefficient has been uniformly high on the data accumulated for this project revealing a reliability coefficient of 0,9908.

(b) Validity

A measuring instrument is valid if it measures what it is supposed to measure (Zeller 1997:822-823; De Vos and Fouche 1998:83). The measuring instrument must therefore do what it is supposed to do, as it then supposes that the measuring instrument must measure the concept under investigation and that this measurement be accurate (De Vos and Fouche' 1998:83). It is thus understandable that Lankshear and Knobel (2004:161) describes validity as the 'meaningfulness of the result'. Punch (2003:43), however, claims that validity also deals with how a respondent can candidly and meticulously respond to questions, which he believes partly depends on the respondents' attitude and his/her state of mind.

Punch (2003:43) further refers to the relation between validity and the respondents' ability to answer the question asked in the instrument. The latter appeals to the content validity of the measuring instrument which should include items that provide adequate coverage of the issues under investigation. Cooper and Schindler (2003:232) particularly claims that the inclusion of the "relevant items under study" is a prerequisite for content validity. To ensure valid results, it is imperative that the content of the data-gathering instrument be representative of the body of knowledge of the scientific field that it covers (Huysamen 1993:120). When these principles are applied to the questionnaire used in this survey, it simply means that the contents covered by the questionnaire must be representative of the different aspects of the implementation of C2005 and NCS in the Free State Province schools.

In order to enhance the content validity of the questionnaire, the researcher based the questions upon a sound theoretical base concerning the implementation of C2005 and NCS and the management thereof as discussed in Chapter 2 and 3. By availing the questionnaire to the scrutiny of pilot testing, the

researcher further contributed to its validity. Particular care has been taken of the pilot testing stage by being careful about the choice of questions and their formulation in view of ensuring clarity and relevance. By pilot testing the data collection instrument before its actual administration the researcher allowed for modification and so enhanced its validity.

In the last instance, validity was enhanced by including a large sample of respondents which were selected randomly to be representative of the total population, was used to ensure valid results. The 143 usable questionnaires returned, represented 71,5% of the sample. Accordingly the results of the quantitative research have the potential to be generalized (see probability scores) .

4.2.1.4 The questionnaire as research instrument in this study

A questionnaire was used in this study to obtain information from educational managers in the Free State Province regarding the implementation of C2005 and NCS. Wolf (1997: 422) describes a questionnaire as a self-reporting instrument that can be used to gather specific information with regard to variables that interest the researcher. He refers to a questionnaire as a written, self-administered interview. Through the years much critique has been leveled at the questionnaire as a method of obtaining information particularly if misused (Hopkins, 1980: 296), so that at a certain point Best (1981:168) called it a lazy man's way of gaining information. Cooper and Schindler (2003:364) and MacMillan and Schumacher (1989:41) maintain that the questionnaire remains a good, general technique to obtain information in the field of academic research.

According to Wolf (1997: 422), a questionnaire consists of a number of questions or items on paper that respondents read and answer and so information is gathered and converted into data.

The use of the questionnaire as a measurement instrument is based on the following three requirements:

- the respondent must be able to read and understand the questions;
- the respondent must be equipped with the required knowledge to answer the questions;
- the respondent will answer the questions or respond to the items honestly (Wolf, 1988:479).

The questionnaire for this study was designed for the particular purpose of investigating the way the changes related to the implementation of outcomes-based education and with the selected sample (Johnson, 1977: 151) in mind. The questionnaire in this study was distributed to educational managers in the Free State Province based on the assumption that the educational managers constituting the sample would want to truly make a contribution towards research with regard to the implementation of C2005 and NCS.

4.3 DEVELOPMENT OF THE QUESTIONNAIRE AND THE INTERVIEW SCHEDULE

4.3.1 Development of the Implementation of C2005 and RCS Management of Change Questionnaire (ICMCQ) for the quantitative investigation

A questionnaire (ICMCQ) was designed by the researcher and administered to educational managers at school level in the Free State Province. The structure and choice of items as part of the questionnaire will be discussed.

4.3.1.1 Structure of the Questionnaire

The format of the questionnaire is very important because the structure of the questionnaire may:

- require more space;

- make the questionnaire look longer
- cause some respondents to refuse to participate, and
- may influence responses (Motseke 2000: 96).

It is therefore important that the structure of the questionnaire invites its respondents to complete it. The researcher thus ensured that, for the purpose of this study:

- short and precise questions were asked,
- alternative answers were provided,
- the questionnaire was divided into 8 sections (see Appendix A)

Section A: Biographic data (4 items)

Section B: Educator observation (14 items)

Section C: Factors facilitating / contributing to success of C2005 and NCS (25 items)

Section D: Factors inhibiting the success of C2005 and NCS (20 items)

Section E: Educator opinion (3 items)

Section F: Management of change related to C2005 and NCS (14 items)

Section G: Educator opinion on NCS (11 items)

Section H: Major aspects to consider regarding success of the implementation of C2005 and NCS (5 items)

4.3.1.2 Choice and evaluation of items

It is generally believed that

- the aim or purpose of study should determine the nature of items to be included in the questionnaire,
- existing questionnaires should be used to compile a list of items or the item pool; and
- a manageable number of items should be selected for the final questionnaire (Motseke 2000:126-128).

For the purpose of this questionnaire (ICMCQ) items were therefore

- selected with due reference to the literature study and that
- the majority of items were formulated in such a manner as to ensure relevance to the research study.

After compiling the items, it was important to evaluate and reconsider each one's inclusion in the questionnaire. Olivier (1989: 106) proposed a checklist that can serve as a yardstick to determine whether items comply with all the relevant guidelines and criteria. This checklist contains the following questions:

- Is the question necessary?
- Is the question clear and unambiguous?
- Will the respondent be able to answer the question?
- Will the respondent be willing to answer the question?
- Have unambiguous question been eliminated or revised?
- Is the item as short as possible and yet clearly stated?
- Could the answer be readily influenced by the social predisposition of the respondent? If so, can the question be reformulated to eliminate prejudice or partiality?
- Are sufficient options given?

The researcher used this checklist to evaluate the inclusion of the various items in the ICMCQ.

4.3.2 Administering the Questionnaire

4.3.2.1 Administering the ICMCQ

Some of the important steps or procedures followed in administering this questionnaire are discussed below.

4.3.2.1.1 Experimental Application

During the compilation of the questionnaire, a number of educators, principals, school management developers and learning facilitators were consulted regularly for information on among others the

- availability of facilities and resources,
- school and staff enrolment,
- guidelines regarding the implementation of C2005 and NCS,
- problems encountered in the practical situation, and
- feelings and purpose of learners about C2005 and NCS approaches.

Some of the learning facilitators issued the researcher with books, handouts, policies and educator handbooks used for the implementation of C2005 in schools.

The researcher also attended workshops dealing with the following topics:

- Curriculum 2005
- Assessment and assessment tools
- Outcomes
- The Revised Curriculum Statement

The workshops enabled the researcher to get first-hand information on how departmental officials trained educators, the type of questions asked by the educators and facilitators' response to those questions. It also enabled the researcher to have an idea of the problems experienced by educators in the practical school or classroom situation.

4.3 .2.2 Determining the research sample size

It appears there is no conventional way of determining a sample size that is representative of the target population as there are diverse views on this issue.

According to Bless and Higson-Smith (2000:86), a representative sample must have the same properties as the population from which it is drawn. Moreover, these authors suggest that 'correct' and 'complete' sampling frame should be used to ensure representativeness of the sample. That is to say that the representative sample will reflect characteristics of the target population if the sample is carefully chosen.

Sowell (2001:43) defines a target population as a group of people that share common characteristics from which the researcher aims to generalize his/her results. She stresses the need for the researcher to describe an accessible population within the target population from which a sample is taken. Fraenkel and Wallen (2006:93) also concur that a sample should be taken from the accessible population rather than using the target population. They assert that while the target population is 'ideal' in research, the accessible population is 'realistic'. Based on the afore-mentioned point, the researcher drew the sample for this study from the accessible population.

Gay and Airasian (2003:104) state that the first thing to do in the sample selection process is to 'identify' and 'define' the target population. According to these scholars, the target population is the interest group the researcher intends to study and to which the research result will be generalized. Bless and Higson-Smith (2000:85) emphasise the need to clearly define and describe the target population to make the compilation of the list of people in the population possible and more importantly, to ensure that the sample is selected among those who belong to the target population only.

Leedy and Ormod (2005:207) stress the importance of obtaining a sample that is representative of the target population from which inferences are to be drawn. They argue that it would not be a worthwhile exercise if by the end of the day survey results cannot be accurately generalized to the target population due to the under representativeness of the sample. In other words, a sample that is too

small can make the generalizability of the study almost impossible and meaningless, this may be used to explain why some scholars, for example, Cohen et al. (2001:94) believe that the ‘larger the sample, the better;.

However, Gay and Airasian (2003:111) assert that it is most likely to obtain a representative sample if the random sampling technique is used. In addition, the same authors (2003:111) state that the sample of 10% to 20% of the target population is often used in descriptive research. However, these authors claim that the sample size of 400 is sufficient when the population size is about 5000 units or more. **In this particular investigation the universum of secondary school education managers in the Free State is, and a sample of 200 respondents thus comprises 100 % of the population – quite in line with the views of Gay and Airasian above.** Krejcie and Morgan (in Hill 1998:6) used the United States Office of Education formula to produce a table, which indicates a sample size of a given population. According to Hill (1998:6), the table can be used as long as the definite population size is known. For the purpose of this study the following sample was used:

Table 4.2: Free State Department of Education: questionnaires per district

Education District	Number of questionnaires
Lejweleputswa	40
Motheo	40
Xhariep	40
Thabo Mofutsanyana	40
Fezile Dabi	40
Total	200

4.3.2.3 Response rate

One of the biggest problems with a questionnaire, according to Borg (1981:86) and Ary, et al. (1990:432), is to get sufficient response rate, because a large non-response rate is rather characteristics of research conducted by means of questionnaires. Consequently, 200 questionnaires were delivered to 5 education districts in the Free State. In each districts 40 questionnaires were distributed to 40 schools. Of the 200 questionnaires, 143 were completed by education managers and received back by the researcher. This implies a response rate of 71.5%. According to Martins (1998: 131), a response rate of 70% is generally acceptable and therefore a response rate of 71.5% can be regarded as delivering valid data.

The questionnaires were handed to educational managers ranging from principals, deputy principal to heads of department. The purpose of the questionnaire was made clear to the respondents and how they were expected to complete the questionnaire. An attempt was made to keep instructions as concise and simple as possible.

The following information was also given to the respondents

- the approval letter from FS DoE to conduct research in the Free State Province;
- that the respondents' honest opinions were required- there could be no right or wrong answer;
- the assurance that confidentiality will be maintained;
- the expectation that all questions had to be answered;
- that their participation and co-operation were appreciated;
- that the completed questionnaires would be collected after eight school days and
- that the completion of the questionnaire is voluntary.

After eight days the questionnaires were collected after the completion had been established. Some questionnaires were collected by the researcher personally while others were received by mail.

The table below indicates response rate per districts.

Table 4.3: District, schools and respondents visited

District	No. of respondents	Percentage of the 200 questionnaires distributed
Lejweleputswa	35	87,5%
Northern Free State	31	77,7%
Thabo Mofutsanyane	26	65%
Motheo	30	75%
Xhariep	21	52,5%
Total	143	71,5%

4.3.2.4 Procedure for Data analysis

Data from the quantitative research was analyzed as follows:

4.3.2.4.1 Principles and Practices for Data Analysis

The most important steps in analyzing data is efficient data management (Dey 1993: 74). This implies that data collected must be of high quality and must be fully and accurately recorded.

The following principles and practices are also of utmost importance in the analysis and interpretation of data:

- the analysis process must be systematic and comprehensive, but not rigid
- reading all the data and dividing the data into smaller and more meaningful units or categories (Motseke 2000: 114).

4.3 .2.4.2 Techniques used in analysing the data for ICMCQ

The following procedures were used in analyzing data collected by means of ICMCQ:

- the headings used in the questionnaire were also used in the analysis of data,
- the various alternatives were presented in table form;
- the data were statistically analysed by means of the STATA analysis programme to provide insight into the significance value of the responses
- the number of responses for alternatives was also percentiled, in order to determine which alternative had the most response,
- data for each heading or category was analyzed, and its implications for the implementation of C2005 and NCS are discussed , and
- the findings, recommendation and conclusions are discussed in chapter 5.

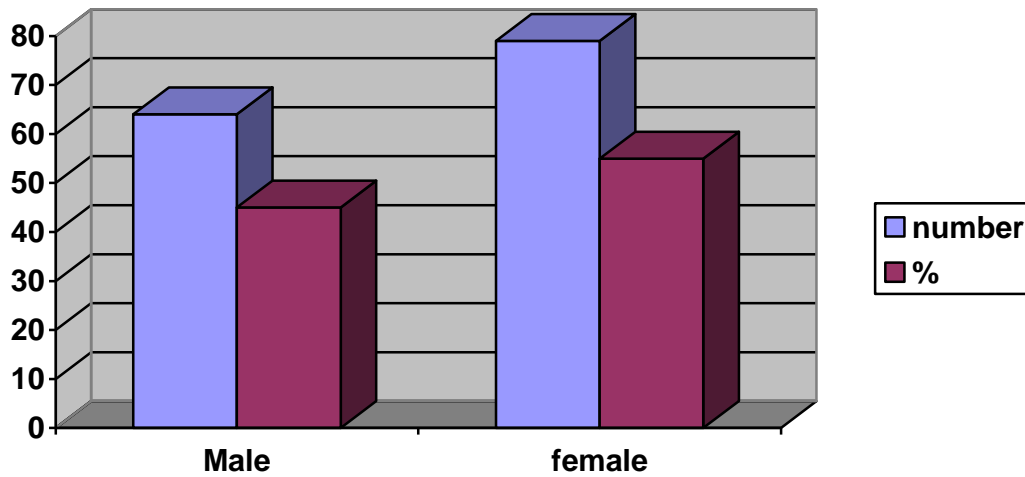
4.4 REPORT ON DATA COLLECTED DURING THE QUANTITATIVE INVESTIGATION

4.4.1 SECTION A: BIOGRAPHIC DATA

In this section attention will be given to the following aspects gender, age, teaching experience and current position

Question 4.1: Gender

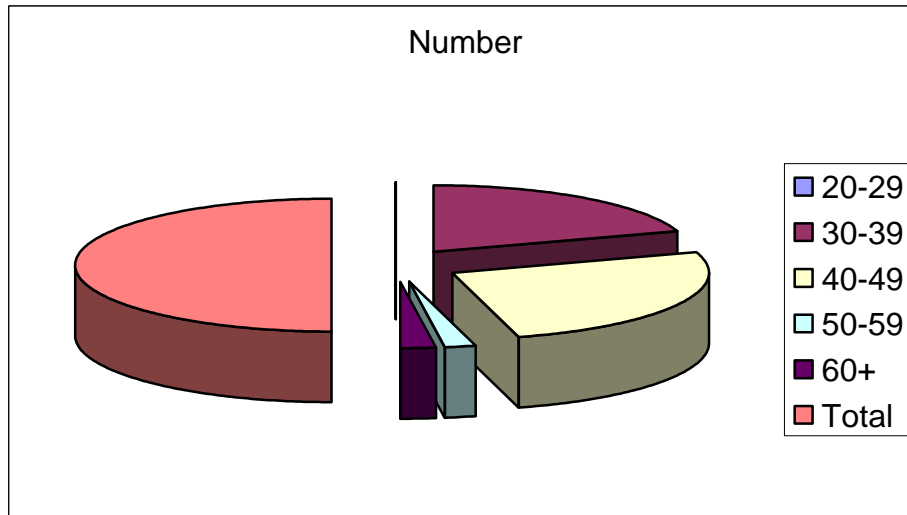
Figure 4.1: Gender



Of the 143 educators who responded to this question, only 64 (45%) were male while the rest (79 or 55%) were female. The majority of the respondents, were therefore female, which is in accordance with the fact that the majority of the teaching corpse is females. At a later stage in this report the difference in the male-female responses will be discussed as that may have an implication for training and possible approaches.

Question 4.2: Age

Figure 4.2: Age

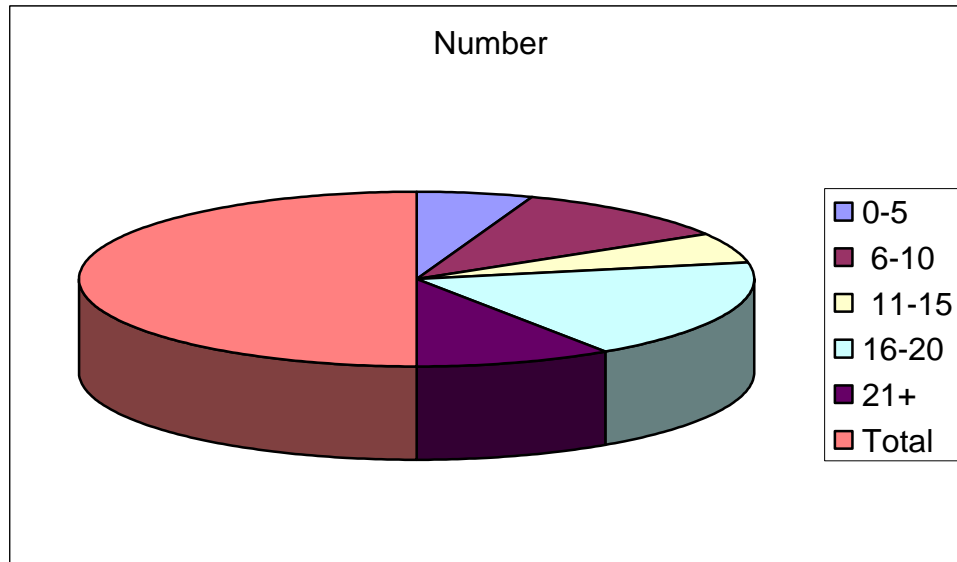


Of the 143 educators who answered to this item 57 (40%) were between 30-39 years old, 74 (52%) between 40 and 49 years old, 6 (4%) between 50 And 59 years old, 6 (4%) and were 60 years and older.

The majority of respondents (74 or 52%) were between 40 and 49 years old. The advantage of this is that the education managers targeted were mostly (cf. 4.4.1.2.) matured and may have a great deal of experience. However, learning new things at that age may not be easy. The management of change may pose a challenge for these educational managers.

Question 4.3: Teaching experience

Figure 4.3: Teaching experience

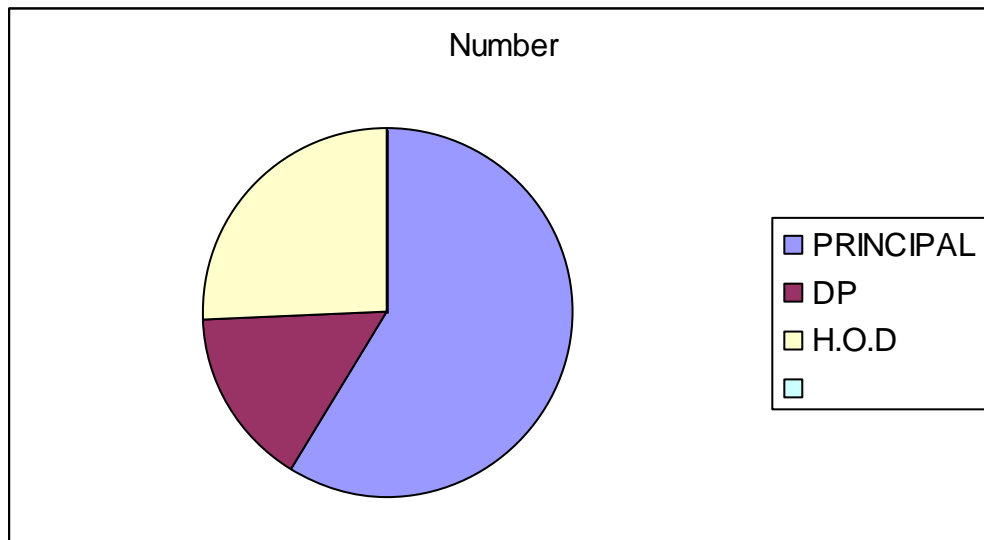


Of the 143 educational managers who responded to this item, 16 (11%) had 5 years of teaching experience, 31 (22%) 6 to 10 years, 16 (11%) 11 to 15 years, 53 (37%) had 16 to 20 and 27 (19%) had more than 20 years of teaching experience.

Except for the 16 (11%) educational managers who have teaching experience of 5 years or less, the rest had a great deal of teaching experience. These managers may have established and implemented teaching methods which they have applied successfully over the years. Therefore, having to suddenly change from their old approaches to C2005 and NCS methods could be stressful to them.

Question 4.4: Present post

Figure 4.4: Present post



Of the 143 who answered this question 84 (59%) were principals, 22 (5%) were deputy principals and 37 (26%) occupied head of department posts.

The majority of the respondents (84 or 59%) were principals who were expected to implement departmental policies and the new teaching approaches in schools. This group may have already acquired some skills on how to implement changes in schools they are running, and would thus be able to make valuable contributions to this investigation

4.4.2 SECTION B

The primary aim of this section was to establish how educational managers experienced the introduction of C2005 and NCS in their schools. The table below shows the results of each item (14 items) on the binomial probability scale:

Table 4.4: Standardised mean of Questions X - XX

DIMENSION	YES FACTOR	NO FACTOR
Curriculum communication	0.662	0.338
Curriculum terminology	0.587	0.412
Support structure	0.671	0.328
Curriculum introduction	0.699	0.300
Training programme	0.699	0.300
Curriculum material	0.559	0.440
Parents' understanding	0.671	0.328
Different bodies	0.664	0.335
Curriculum budget	0.699	0.300
Basic three R's	0.741	0.258
Curriculum change	0.517	0.482
Supplied material	0.587	0.412
Teaching experience	0.517	0.482

The value of the above probability scale is that it indicates the possible generalisability of each of the obtained responses to the universum of education managers in the Free State.

Each of the above categories will now be discussed in more detail.

Question 4.5: Has Curriculum 2005, as an approach, been effectively communicated?

Table 4.5. Communicating C2005 and NCS

	YES	NO	Total
Number	51	92	143
%	36%	64%	100%

Of the 143 educational managers who responded to this item 51 (36%) said C2005 and NCS was effectively communicated while 92 (64%) said it was not effectively communicated.

The indication here is that the majority of respondents 84 (59%) believe that curriculum 2005 was not effectively communicated before it was implemented. If the total population of educational managers at school level in the Free State had been part of the investigation, the probability is 0.662 (66,2%), that the majority would say that C2005 & NCS has been ineffectively communicated.

Question 4.6: Did you understand C2005 and NCS terminology easily?

Table 4.6: Comprehension of terminology

	YES	NO	TOTAL
Number	47	96	143
%	33	57	100

Of the 143 who responded to this question, 47 (33%) understood C2005 and NCS terminology easily, while 96 (67%) did not easily understand it.

The indication here is that the majority of educational managers do not easily understand C2005 and NCS terminology. It may be extremely difficult for them to implement C2005 and NCS correctly if they do not understand its terminology. The probability regarding the understanding of C2005 & NCS terminology is 0,58741, which means that the probability is 58,74% that the population have a problem with the terminology.

Question 4.7: Has C2005 and NCS been ushered in with a strong support structure (SMD's, learning facilitators, consultants, etc).

Table 4.7: C2005 and NCS support structures

	YES	NO	TOTAL
Number	47	96	143
%	33	67	10

Of the 143 who responded to this question 47 (33%) answered yes and 96 (67%) answered no.

The above data indicates clearly that the majority of educational managers were not supported by departmental officials or facilitators. The implication here is that assistance is not readily available when educational managers experience problems. Regarding strong support during the implementation, the probability is 0.67133 (67,13%) that insufficient support will be available. Should all educational managers in the Free State Province respond to this item, the general feeling would be that the majority of the sample would say that the introduction of C2005 and NCS lacked a strong support structure.

Question 4.8: Were officials from the Department able to help you with C2005 and NCS problem?

Table 4.8: Official assistance

	YES	NO	TOTAL
Number	59	84	143
%	41	59	100

Of the 143 educational managers who responded to this item 59 (41%) answered yes while 84 (59%) answered no.

The indication of the above data is that only 59 (41%) were assisted by departmental officials while 84 (59%) were not helped by the same officials. The implication is that the majority of the respondents had to implement C2005 and RNCS with little assistance from the departmental officials. The majority of respondents were of the opinion that the Departmental Officials were not of assistance during the implementation of C2005 & NCS. The probability is 0.67133 (67,133%), meaning that the majority of educational managers will probably support the findings of this item.

Question 4.9: Do you think C2005 and NCS was introduced too soon/hastily?

Table 4.9: C2005 and NCS Introduction

	YES	NO	TOTAL
Number	100	43	143
%	70	30%	100

A whopping 100 (70%) believed that C2005 and NCS was introduced too soon while 43 (30%) believed that C2005 and NCS was introduced at the right time. The fact that the majority of the respondents (100 or 70%) believed that C2005 and NCS was introduced too soon may imply that educational managers were generally not ready for the implementation of C2005 and NCS. Should all

educational managers at school level in the Free State Province respond to this item, the probability is that 0.69930 (69,93) would have felt that C2005 & NCS were introduced too soon or hastily.

Question 4.10: Did the educator training programme you followed at college/community prepare you for C2005 and NCS?

Table 4.10: Training Programme

	YES	NO	TOTAL
Number	43	100	143
%	30	70	100

All 143 respondents answered this question. Only 43 (30%) felt that the training programme prepared them for C2005 and NCS, while 100 (70%) felt that their training programme did not prepare them for C2005 and NCS.

The data indicates that the majority of educational managers received training before 1999 and that did not prepare them for C2005 and NCS teaching. Failure to embark on an intensive C2005 and NCS training programme prior to the implementation may have lead to the introduction of C2005 and NCS as a blow. Regarding training followed at college or university the probability is 0.6993 (69,93%) that all education managers in the Free State would have felt that it did not prepare the educators for the implementation of C2005 & NCS.

Question 4.11: Do you receive C2005 and NCS material from education department before the first day of the school year?

Table 4.11: First day material

	YES	NO	TOTAL
Number	63	80	143
%	44	56	100

Of the 143 respondents 83 (44%) answered yes, and 80 (56%) answered no.

The data implies that problems such as the complex nature of C2005 and NCS and the inadequacy of educator training were further complicated by the lack of C2005 and NCS material in the first day of the school year for the majority of schools. This situation may lead to confusion and uncertainty, which may be stressful for educational managers. Should all educational managers in the Free State respond to this item, the probability is 0.55944 (59,94%) that the majority of respondents would probably have held the view that lack of timeous delivery of material is one of the problems experienced.

Question 4.12: Do parents understand the new C2005 & NCS report cards?

Table 4.12: C2005 and NCS cards

	YES	NO	TOTAL
Number	47	96	143
%	33	67	100

Of the 143 educational managers who responded to this question, 47 (33%) answered yes and 96 (67%) answered no.

The implication here is that the majority of the respondents dealt with parents who did not understand the new report cards. This implies that this can lead to poor parental involvement and a need for information sessions with the parents. According to the sample parents do not understand the new C2005 & NCS report cards and the probability is that 67,133% (0.67133) of the general response would be lack of parental understanding in terms of report cards.

Question 4.13: Do you know the different bodies such as National Standard Bodies (NSB'S), Standards Generating Bodies (SGB'S), South African Qualification Authority (SAQA) and National Qualification Framework (NQF)?

Table 4.13: Different Bodies

	NO	YES	TOTAL
Number	84	59	143
%	59%	41%	100

Of the 143 respondents 59 (41%) answered yes and 84 (59%) answered no.

The indication here is that only 59 (41%) of the respondents knew the above mentioned bodies, while as many as 84 (59%) of the respondents did not know them. The above data implies that the majority of education managers lack adequate knowledge of C2005 and NCS and how the programme is run. The probability is that only 33,57% (0.33566) would have felt that they know different bodies regarding education set-up.

Question 4.14: Do you think the Government has the resources to finance C2005 and NCS?

Table 4.14: C2005 and NCS and Finance

	NO	YES	TOTAL
Number	100	43	143
%	70	30	100

All 143 respondents answered this question. Only 43 or 30% answered yes, while 100 or 70% answered no.

The majority of respondents (100 or 70%) would see that the government was not able to finance C2005 and NCS. The shortage of material, facilities and equipment and the lack of adequate in-service training may be perceived as an indication of the government's failure or inability to finance C2005 and NCS. With regard to budget allocation or financing C2005 & NCS the probability is 0.6993. Should all educational managers respond to this item, the probability is

69,9% that the general feeling among the majority of respondents would be that the Government is unable finance C2005 & NCS.

Questions 4.15: Does C2005 and NCS provide for the teaching of basic reading, writing & mathematics?

Table 4.15: Basic reading, writing and mathematics

	YES	NO	TOTAL
Number	106	37	143
%	74	26	100

Of the 143 respondents 106 (74%) answered yes and 37 (26%) answered no. The majority of the respondents believed that C2005 and NCS provides for the teaching of basic reading, writing and mathematics. The implication is that the majority of the respondents may be pleased with teaching that includes or emphasizes basic reading, writing and mathematics but lack of training and material hampers progress in this matter. According to the majority of respondents C2005 & NCS does not provide for the teaching of basic skills with a probability figure of 74,12% (0.74126). Should all answer the general conclusion would be C2005 & NCS does not provide for the teaching of basic skills.

Questions 4.16: Do you think C2005 and NCS in South Africa will change in 2 or 3 years from now?

Table 4.16: C2005 and NCS change

	YES	NO	TOTAL
Number	74	69	143
%	52%	48	100

Of the 143 respondents 74 (52%) answered yes while 69 (48%) answered no. Almost one half of the respondents believed that C2005 and NCS would change in 2 or 3 years from now, and the other half did not believe so. The indication is that almost half of the respondents did not believe that C2005 and NCS was a

long-term or permanent teaching-learning system in South Africa. This may negatively influence dedication to and support for C2005 and NCS. The probability is 0.51748 (51,74%) meaning that the majority of educational managers do probably believe that C2005 & NCS will change in 2 or 3 years.

Question 4.17: Is the C2005 material such as textbooks & teaching aids supplied by the Education, Department adequate?

Table 4.17: C2005 AND NCS material

	YES	NO	TOTAL
Number	59	84	143
%	41%	59%	100

Of the 143 respondents who answered this question, only 59 (41%) answered in the affirmative and 84 (59%) answered in the negative.

Only 59 (41%) educators indicated their material or teaching and learning aids were enough. The rest 84 (59%) indicated that their material or teaching aids were never enough. The lack of material implies that some of the C2005 and NCS aims, such as the promotion of skills and self-discovery, cannot be realized. Should the population of education managers in the Free State respond to this item, the conclusion is that there is a probability (58,74%) that most of them would have held the opinion that the material supplied is not sufficient..

Question 4.18: Did your teaching experience assist you to implement curriculum 2005?

Table 4.18 Teaching experience

	YES	NO	TOTAL
Number	69	74	143
%	48	52	100

Of the 143 educators who responded to this question, 69 (48%) answered yes, while 74 (52%) answered no.

The majority of respondents (74 or 52%) were not helped by their teaching experience to implement C2005 and NCS as it was not relevant to C2005 and NCS approaches. However, teaching experience assisted 69 (48%) of the respondents when it came to the implementation of C2005 and NCS. A slight difference implies that experience does not seem to be that helpful and that experience acquired may not be relevant for C2005 and NCS teaching. Should the majority of the population respond to this item, the probability is 51,77% (0.51768) that majority would have felt that the teaching experience does not assist with regard to the implementation of C2005 and NCS.

4.4.3 SECTION C

This section attempts to establish factors that are already present and that will facilitate or contribute to the success of curriculum 2005. The responses will be presented according to the percentage of responses in each category. A regression analysis of the data that emerged from section C also revealed significant differences in some questions with regard to gender, age and experience. Although the most significant differences occurred in the case of gender, the differences with regard to age and experience will also be viewed. For the purpose of this study **only those correlational results of significant value, that could have implications for conclusions and recommendations, will be referred to in table form and in the discussions to follow.**

Table 4.19: Correlation between male-female responses with a 95% and 99% significance level

	Male	Female	
Item on questionnaire	— X	— X	Correlation coefficient
21. Curr & Politics	3.0	3.7	-.1961538*
23. Positive principles	2.0	4.0	-.6702178**
25. Parents' support	3.0	2.1	-,1995745*
29. Innovations	3.4	4.0	,6494764**
32. Equipment and material	2.0	3.0	,6655729**
34. Subject expertise	1.4	3.0	-,2100082*
35. Pedagogical expertise	1.5	2.7	,5537003**
36. Business and education support	1.8	2.8	,6532293**
37. Learner motivation	1.7	2.5	,2674843**
38. Organisation's involvement	3.3	3.9	,6517612**
39. Collaborative planning	2.0	3.0	,3665117**
41. INSET programmes	1.4	2.7	,5164558**
42. Monitoring C2005	2.3	3.9	-,1291602*
43. Curriculum models	3.4	4.2	,6090282**
44. Academic improvement	3.4	4.1	,3241634**
45. C2005 adoption	3.6	4.1	,8090282**

* 95% level of significance ($r \geq 0,1946$)

** 99% level of significance ($r \geq 0.2301$)

Table 4.20: Correlation between male-female responses with a 95% and 99% significance level

	Age: 20-39	Age: 40 - 65		Experience: 0-10 years	Experience: 11-21+	
Item on questionnaire	\bar{X}	\bar{X}	Correlation coefficient	\bar{X}	\bar{X}	Correlation coefficient
22. Success among learners	3.4	2.7	.2514706**			
27. Education manager's self-esteem	3.0	1.9	-,2277967*	3.2	2.1	-,1927953*
34. Subject expertise				1.7	3.1	-,2105772*
35. Pedagogical expertise				2,3	3,7	,6741303**
36. Business and education support	1.8	2.8	,6532293**			
37. Learner motivation	1.7	2.5	,2674843**			
38. Organisation's involvement	3.3	3.9	,6517612**			
40 Collaborative working	2.0	4.0	-,2675107**	2.4	3.6	-,1951165*

* 95% level of significance ($r \geq 0,1946$)

** 99% level of significance ($r \geq 0.23012$)

Question 4.21: Curriculum 2005 fits with political changes in our country.

Table 4.21: Curriculum 2005 and Politics

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	10	27	31	31	43	143
%	7%	19%	22%	22%	30%	100%

The majority of educators perceive C2005 and NCS as a political agenda and the implication may be that the bulk of educators feel that the decision to adopt C2005 and NCS was politically motivated, with little educational benefits for learners. The thought that they may be not educating children but promoting party politics may contribute to C2005 and NCS not being implemented correctly by educational managers.

According to table 4.19 there is a negative correlation between the views of males and females (correlation coefficient: -0.1961538), which implies that males and females perceive the relation between the C2005 and NCS and political goals differently. It is clear that females are more convinced about the curriculum-political interrelatedness. These findings have particular management implications, as it seems as if there should be a greater attempt to change the attitudes of female educators towards insight into the benefits of outcomes-based education and not merely viewing it as a political tool.

Questions 4.22: C2005 and NCS promote individual success rates amongst learners.

Table 4.22: Individual Success

	VERY LITTLE	LITTLE	LITTLE	A LOT	QUITE A LOT	TOTAL
Number	6	37	47	16	37	143
%	4%	26%	33%	11%	26%	100%

Of the 143 educational managers who responded to this item 6 (4%) answered very little, 37 (26%) little, 47 33% answered a lot, 16 (11%) quite a lot and 37 (26%) a great deal.

The data indicates that 6 or 4% of the respondents found C2005 and NCS as contributing very little towards individual success, 37 or 26% contributing little and the majority of 47 (33%) answered a lot which implies that C2005 and NCS is neither contributing very little nor a great deal. The other implication may be that the factor will be demotivating or bring about reluctance on the part of managers if they have to implement C2005 and NCS.

Table 4.20 reveals a rather significant correlation (99% significance level) between the responses of the various age groups with regard to implications of outcomes-based education for learner success. Managers can thus assume that the various sub-groups: males and females, younger and older educators and more and less experienced staff members do not differ significantly from their counterparts.

Questions 4.23: C2005 and NCS has positive principles (all learners can learn)

Table 4.23: Positive principles

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	6	21	31	32	53	143
%	4	15	22	22	37	100

Of the 143 respondents 6 (4%) answered very little, 21 (15%) little, 31 (22%) answered a lot, 32 (22%) quite a lot and 53 (37%) answered a great deal.

The indication here is that the majority (59%) confirm that curriculum 2005 has positive principles allowing all learners to learn irrespective of their learning ability. However, the problems related to the implementation of C2005 and NCS and the resultant failure to achieve outcomes may be a source from educators to implement C2005 and NCS.

Males and females seem to have completely different perceptions of the principles underlying outcomes-based education. In contrast with the fact the females are more convinced about the interrelatedness between C2005 and the NCS and political goals, female educators are more convinced about the positive principles embedded in outcomes-based education. When the preceding phenomenon is viewed in a management perspective, it is of great necessity that education managers have to deal with the dominant negative convictions of the male educators, in order to cultivate a positive attitude towards the changes.

Question 4.24: Educators want to see C2005 and NCS being successful.

Table 4.24: C2005 and NCS's success

	VERY LITTLE	LITTLE	A LOT	QUIOTE A LOT	A GREAT DEAL	TOTAL
Number		6	21	47	69	143
%		4	15	33	48	100

Of the 143 educational managers who responded to this item 6 (4%) answered little, 21 (15%) a lot, 47 (33%) quite a lot and 69 (48%) answered a great deal.

There is no doubt that the majority of educators want to see curriculum 2005 being successful. The indication is that educators are positive and want to see this process being successful.

Question 4.25: Curriculum 2005 and NCS are supported by parents

Table 4.25: Parents' support

	VERY LITTLE	LITTLE	A LOT	QUIOTE A LOT	A GREAT DEAL	TOTAL
Number	43	37	31	10	22	143
%	30%	26%	22%	7%	15%	100

Of the 143 educators managers 43 (30%) answered very little, 37 (26%) little, 31 (22%) a lot, 10 (7%) quite a lot and 22 (15%) answered a great deal.

The majority of respondents 43 or 30% are of the opinion that there is lack of parental support while only 22 or 37% indicate that there is a great deal of parental support.

Viewing the above item from the management point of view, there is significant correlation between male and females with regard to parents' support to the school regarding C2005 and NCS. Table 4.21 revealed negative correlation between the views of males and females (correlation coefficient: $-.1995745$), which implies that males and females perceive parents' support differently. It is clear that males are more convinced that parents are giving enough support regarding the implementation of new curriculum while females do not see parents giving the necessary support. These findings have a particular management implication in the sense that the educational manager seemingly will have to approach the two sides differently. Males could be positive toward this issue because of lack of understanding in terms of the meaning of support in C2005 and NCS context, while females can be negative because of lack of knowledge regarding strategies on how to involve parents.

Question 4.26: School principals are in favour of curriculum 2005

Table 4.26: Principals, C2005 and NCS

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	10	16	21	37	59	143
%	7	11	15	26	41	100

Of the 143 school managers 59 (41%) answered a great deal, 37 (26%) quite a lot, 21 (15%) a lot, 16 (11%) little and 10 (7%) very little.

The majority of respondents 59 or 41% believe that principals are very much in favour of curriculum 2005. The implication here is that although principals are in favour of C2005 and NCS, schools are still experiencing problems on how to implement C2005 and NCS successfully.

Question 4.27: Curriculum 2005 is a way of improving educator’s self-esteem.

Table 4.27: Educators’ self-esteem

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	47	37	27	16	16	143
%	33	26	19	11	11	100

47 (33%) of the 143 respondents answered very little, 37 (26%) little, 27 (19%) a lot, 16 (11%) quite a lot and 16 (11%) a great deal.

The majority of respondents, 47 (33%) are of the opinion that C2005 and NCS does not improve educators’ self-esteem while only 16 (11%) believe that it does improve educators’ self-esteem. Lack of self-esteem can be brought about by the problem experienced by educators when they have to implement the new curriculum.

Question 4.28: There is effective communication in the school.

Table 4.28: School Communication

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	16	10	37	37	43	143
%	11	6	26	26	30	100

Of the 143 respondents 16 (11%) answered very little, 10 (6%) little, 37 (26%) quite a lot and 43 (30%) a great deal.

The majority of respondents are of the opinion that there is a great deal of communication in the school. A great deal of communication may be the results of clarity seeking questions, and a search for information because training received did not prepare educators enough for the implementation of C2005 and NCS.

Question 4.29: The school is used to being innovative.

Table 4.29: Innovations

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number		21	32	37	53	13
%		15	22	26	37	100

Of the 143 educational managers, 21 (15%) answered little, 32 (22%) a lot, 37 (26%) quite a lot and 53 (37%) a great deal.

The majority of respondents (90 or 63%) are of the opinion that schools should be places where innovations are tried. This implies that if the majority of educators are of the opinion that changes are crucial at schools then educators will be willing to experiment or implement innovations.

Question 4.30: There is effective leadership in the school

Table 4.30: Effective leadership

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number		27	31	43	43	143
%		19	22	30%	30%	100

Of the 143 respondents, 27 (19%) answered little, 31 (22%) a lot, 43 (30%) quite a lot and 43 (30%) a great deal.

The indication here is that the majority believed that there is effective leadership in the school and this indicates that educators do receive a great deal of support from educational managers.

Question 4.31: Educator's morale is high.

Table 4.31 Educator's morale

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	10	37	47	21	27	143
%	7	26	33	15	19	100

Of the 143 educational managers who responded to this item 10 (7%) answered very little, 37 (26%) little, 47 (33%) a lot, 21 (15%) quite a lot and 27 (19%) a great deal.

An average number (47 or 33%) of managers believe that the educator’s morale is low. While 48 or 34% are of the opinion that the educator’s morale is high and this can be attributed to the fact that there is uncertainty on part of educational managers with regard to C2005 and NCS.

Question 4.32: Equipment and material are adequate.

Table 4.32: Equipment and Material

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	31	37	43	21	11	143
%	22%	26%	30%	15%	7%	100

31 (22%) of the 143 respondents answered very little, 37 (26%) little, 43 (30%) a lot, 21 (15%) quite a lot 11 (7%) said a great deal.

The majority of respondents 68 or 48% believe that there is lack of equipment and material. An average of 31 (22%) indicate that sufficient equipment and material is provided. This implies that a great deal of improvement regarding supplies of equipment and material is still needed.

Question 4.33: There is sufficient administration support.

Table 4.33: Administration support

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	53	37	37	10	6	143
%	37	26	26	7	4	100

Of the 143 educational managers who responded to this item 53 (37%) answered very little, 37 (26%) little, 37 (26%) a lot, 10 (7%) quite a lot and 6 (4%) a great deal.

The majority of respondents (53 or 37%) indicate that there is very little administrative support. While only 6 or 4% indicated that there is a great deal of administrative support.(How could this contribute to the success)

Question 4.34: Educators' subject Expertise is Adequate.

Table 4.34: Subject expertise

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	TOTAL	
Number	69	27	21	16	10	143
%	48	19	15	11	7	100

Of the 143 respondents 69 (48%) answered very little, 27 (19%) little, 21 (15%) a lot, 16 (11%) quite a lot and 10 (7%) a great deal.

The majority 69 or 48% of the respondents indicated that educators subject expertise is very little while only 10 or 7% indicated that educators have a great deal of subject expertise. This can be attributed to the fact that educators did not receive enough training, insufficient equipment and material and lack of administrative support are contributing to inadequate subject expertise.

Males and females have different perception with regard to subject expertise. A correlation coefficient of $-.2100082$ implying a negative correlation in terms of males. Males perceive themselves as having lack of subject expertise concerning C2005 and NCS this can be attributed to lack of training and development. The educational manager should address this issue through intensive training and development.

The different age groups seem to be in agreement regarding subject expertise, while the two groups regarding 0-10 and 11-21+ experience do disagree. A negative correlation of $-.2105772$ exists. The educational manager should approach the two groups differently.

Question 4.35: Educators pedagogical expertise is adequate.

Table 4.35: Pedagogical expertise

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	63	27	27	10	16	143
%	44	19	19	7	11	100

Of the 143 respondents 63 (44%) answered very little, 27 (19%) little, 27 (19%) a lot, 10 (7%) quite a lot and 16 (11%) a great deal.

The majority of respondents indicate that educators' pedagogical expertise is inadequate while only 16 (11%) said there is a great deal of educators' pedagogical expertise. Lack of in-service training with regard to teaching and learning methods, refresher courses can be contributing factors.

Question 4.36: The business community and educators support C2005 and NCS.

Table 4.36: Business Community and Educators' support

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	47	37	31	16	12	143
%	33	26	22	11	8	100

Of the 143 respondents 47 (33%) answered very little, 37 (26%) little, 31 (22%) a lot, 16 (11%) quite a lot and 12 (8%) a great deal.

The indication is that the majority of respondents 47 (33%) are of the opinion that business community and educators are not in support of C2005 and NCS while only 12 or 8% believe that they support C2005 and NCS.

Question 4.37: C2005 and NCS motivates learners

TABLE 4.37: Learner Motivation

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	53	43	21	20	6	143
%	37	30	15	14	4	100

Of the 143 educational managers who responded 53 (37%) answered very little, 43 (30%) little, 21 (15%) a lot, 20 (14%) quite a lot and 6 (4%) a great deal.

The majority of respondents 53 or 37% are of the opinion that learners are demotivated while only 6 or 4% said C2005 and NCS motivate learners. This can be attributed to the fact that learners are now faced with new methods of acquiring knowledge and new approaches to teaching.

Question 4.38: Educator organizations were involved in the design of C2005 and NCS.

Table 4.38: Involvement of educators' organisations

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	6	20	27	47	43	143
%	4	14	19	32	30	100

Of the 143 respondents 6 (4%) answered very little, 20 (14%) little, 27 (19%) a lot 47 (33%) quite a lot and 43 (30%) a great deal.

The majority of respondents believe that the educator organizations were involved in the design of C2005 and NCS.

Question 4.39: Educators are used to planning collaboratively.

Table 4.39: Planning Collaboratively

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	31	47	31	20	14	143
%	22	33	22	14	9	100

Of the 143 respondents 31 (22%) answered very little, 47 (33%) little, 31 (22%) a lot, 20 (14%) quite a lot and 14 (9%) a great deal.

Fifty-five percent of respondents answered very little and this indicates that educators are not used to planning collaboratively as required by the new curriculum.

Question 4.40: Educators are used to working collaboratively

Table 4.40: Working Collaboratively

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	47	37	32	21	6	143
%	33	26	22	15	4	100

Of the 143 respondents 47 (33%) answered very little, 37 (26%) little, 32 (22%) a lot, 21 (15%) quite a lot and 6 (4%) a great deal.

The majority of respondents 47 or 33% believe that very little number of educators are used to writing collaboratively while only 6 or 4% said a great deal of educators are used to working collaboratively. The implication is that this will hamper curriculum delivery as C2005 and NCS requires planning & working together from educators to enhance learning on part of educators.

Both age and experience show a negative correlation in terms of how educators work. A negative coefficient correlation of $-.2675707$ is evident between age group 20-39 and 40-65, and $-.1951165$ correlation implying that young and inexperienced educators are not used to working collaboratively. This also implies that the educators cannot learn or assist one another regarding change. The educational manager should promote teamwork among staff members especially young and inexperienced educators.

Question 4.41: In-service programmes for C2005 and NCS are adequate

Table 4.41: Adequacy of in-service programmes

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	53	32	27	21	10	143
%	37	22	19	15	7	100

Of the 143 educational managers who responded 53 (27%) answered very little, 32 (22%) little, 27 (15%) quite a lot and 10 (7%) a great deal.

The majority of respondents are of the opinion that in-service programmes are very little, while only 7% of respondents believe that there is a great deal of in-service programmes. This implies that there is lack of training mechanism within the department and this leads to educators not knowing whether they are on the correct track or not. In-service programmes are needed in order to equip educators with the necessary skills needed for the delivery of the curriculum.

Question 4.42: Curriculum 2005 is being carefully monitored

Table 4.42: Monitoring of Curriculum 2005

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	53	47	27	6	10	143
%	37	33	19	4	7	100

Of the 143 respondents 53 (37%) answered very little, 47 (33%) little, 27 (19%) a lot, 6 (4%) quite a lot and 10 (7%) a great deal.

Fifty three or 37% of the majority of respondents indicate that very little monitoring of C2005 and NCS is being done while only 7% or 10 respondents believe that a great deal is being done. This implies that there is lack of support on part of the department and the successful implementation of C2005 and NCS depends on monitoring.

Question 4.43: C2005 and NCS IS derived from highly successful curriculum models.

TABLE 4.43: Curriculum Models

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	6	10	27	47	53	143
%	4	7	19	33	37	100

The majority of respondents, 53 or 37% believe that a great deal of C2005 and NCS is derived from highly successful curriculum models while only 6 or 4% are of the opinion that very little of C2005 and NCS is derived from successful curriculum models.

Question 4.44: C2005 AND RNCS will improve academic standards

Table 4.44: Improvements of academic standards

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	10	6	39	27	61	143
%	7	4	27	19	42	100

Of the 143 respondents 10 (7%) answered very little, 6 (4%) little, 39 (27%) a lot, 27 (19%) quite a lot and 61 (42%) a great deal.

The majority of respondents indicate that C2005 and NCS could improve academic standards and this implies that C2005 and NCS is a curriculum that could benefit all and that it is also promising type of a curriculum.

Question 4.45: Changing to the C2005 and NCS system is mandatory, therefore all schools have to adopt it.

Table 4.45: Adoption of C2005 and NCS

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	10	6	31	37	59	143
%	7	4	22	25	41	100

Of the 143 respondents 10 (7%) answered very little, 6 (4%) little, 31 (22%) a lot, 37 (25%) quite a lot and 59 (41%) a great deal.

The majority of respondents 59 or 41% believe that C2005 and NCS is mandatory and all schools have to adopt it while only 10 or 7% see very little of C2005 and NCS as mandatory. This indicates that there is already an acceptance on part of educators.

4.4.4 Section D

This section focuses on the factors that will inhibit or cause difficulties or problems for the success of C2005 and which need particular management attention. A regression analysis was also conducted. Some of the questions revealed significant differences between the various sub-groups: gender, age and experience. The most significant differences occurred with regard to gender. Just as in section C **only those correlational results of significant value, that could have implications for conclusions and recommendations, will be referred to in table form and in the discussions to follow. The following table will reveal the negative and positive correlations.**

Table 4.46 Correlation between sub-groups (gender, age and experience) with a 95% and 99% significance level

	Male	Female		Age: 20-39	Age: 40 - 65		Exper: 0-10 years	Exper: 11-21+	
	\bar{X}	\bar{X}	Cor Coef.	\bar{X}	\bar{X}	Cor coef	\bar{X}	\bar{X}	Cor coeff
48 Obj achievement	3.6	4.6	-0.24692**						
51. Radical changes				2.8	4.0	-0.28893**	2.6	3.9	-0.27869**
56. Measuring objectives	2.3	3.3	0.27751**						
61 Scale of innovation				1.9	3.9	-0.32361**	2.3	4.1	-0.29936**
65. Learner achievement	1.8	2.8	0.19823*						

* 95% level of significance ($r \geq 0,1946$)

** 99% level of significance ($r \geq 0.23012$)

Question 4.47: C2005 does not have a well-defined curriculum content

Table 4.47: WELL-DEFINED CURRICULUM CONTENT

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	43	74	20	0	6	143
%	30	52	14	0	4	100

Forty-three (30%) answered very little, 74 (52%) little, 20 (14%) a lot, zero quite a lot and 6 (4%) a great deal.

The majority of respondents 30% and 52% are of the opinion that C2005 has little or very little well-defined curriculum content. The implication is that educators are not sure of the knowledge or content they should impart to learners or each individual educator plans his or her own content.

Question 4.48: It is uncertain how the objectives will be achieved.

Table 4.48: ACHIEVEMENT OF OBJECTIVES

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	0	16	21	27	79	143
%	0	11	15	19	55	100

Of the 143 respondents 79 (55%) answered a great deal, 27 (19%) quite a lot, 21 (15%) a lot and 16 (11%) little.

The majority of respondents believe that there is a great deal of uncertainty regarding achievement of objectives and this can emanate from the fact that C2005 does not have a well-defined curriculum content.

This aspect gives negative correlation of $-0,24692$ implying that males and females disagree on achievement of objectives. Seemingly males are uncertain on how to achieve objectives while females are sure of the attainment of objectives. The educational manager should address the males' problem through in-service training.

Question 4.49: Educators are unclear about the principles of OBE.

Table 4.49: CLARITY ON C2005 PRINCIPLES

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	43	31	27	21	21	143
%	30	22	19	15	15	100

Forty-three (30%) of respondents answered very little, 31 (22%) little, 27 (19%) quite a lot and 21 (15%) a great deal.

Twenty-one (15%) of respondents are of the opinion that C2005 principles are unclear to them while the majority (43 or 30%) do not have a problem with the C2005 principles.

Question 4.50: Educators are easily confused by the terminology used.

Table 4.50: CONFUSING TERMINOLOGY USED

	VERY LITTLE	LITTLE	A LOT	QUIUTE A LOT	A GREAT DEAL	TOTAL
Number	21	21	13	39	49	143
%	15	15	9	27	34	100

Of the 143 respondents 21 (15%) answered very little, 21 (15%) little, 13 (9%) a lot, 39 (27%) quite a lot and 49 (34%) a great deal.

The majority of respondents (49 or 34%) claim that the terminology used is confusing hence the lack of understanding and instilling of fear to educators.

Question 4.51: The changes are too radical

Table 4.51: RADICAL CHANGES

	VERY LITTLE	LITTLE	A LOT	QUIUTE A LOT	A GREAT DEAL	TOTAL
Number	10	26	27	37	43	143
%	7	18	19	26	30	100

Of the 143 educational managers 43 (30%) answered a great deal, 37 (26%) quite a lot, 27 (19%) a lot, 26 (18%) little and 10 (7%) very little.

Of the 143 respondents the majority (43 or 30%) are of the opinion that these changes are radical while only 10 (7%) believe that the changes are not radical.

This implies that if changes are radical, the educators will be faced with uncertainty and fear and this will hamper the implementation of C2005 and NCS.

The above aspect shows a correlation coefficient of -0,28853 between 20 to 39 and 40- 65 age groups. This implies that educators in the age group between 20-39 and 0-10 years experience change as radically implemented while the 40-65 age group and 11-21 years of experience are satisfied with how change was implemented. The educational managers should approach the two groups differently when attempting to manage this aspect.

Question 4.52: It is too prescriptive.

Table 4.52: IT IS TOO PRESCRIPTIVE.

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	63	37	21	16	6	143
%	44	25	15	11	5	100

Sixty-three (44%) of the respondents answered very little, 37 (25%) little, 21 (15%) a lot, 16 (11%) and 6 (5%) a great deal.

Only 6 or 5% of respondents are of the opinion that C2005 is prescriptive while a whopping 63 or 44% perceive C2005 as not being prescriptive.

Question 4.53: It puts too much emphasis on outcomes at the expense of values, processes and inputs.

Table 4.53: EMPHASIS ON OUTCOMES

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	16	16	10	47	54	143
%	11	11	7	32	37	100

Of the 143 respondents 16 (11%) answered very little, 16 (11%) little, 10 (7%) a lot, 47 (32%) quite a lot and 54 (37%) a great deal.

The majority of respondents 54 (37%) say C2005 puts more emphasis on outcomes while only 16 or 11% are of the opinion that values, processes and inputs are incorporated within the framework of C2005.

Question 4.54: It is imposed from outside by government

Table 4.54: GOVERNMENT IMPOSED SYSTEM

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	10	16	21	37	47	143
%	7	11	15	26	33	100

Ten (7%) of the respondents answered very little, 16 (11%) little, 21 (15%) a lot, 37 (26%) quite a lot and 47 (33%) a great deal.

Most of the respondents (47 or 33%) are of the opinion that C2005 is government imposed while only 10 or 7% believe it is not. This can imply that if the majority of respondents feel it is imposed on them negative attitude can be created. Educators will not have a sense of ownership towards the implementation of C2005.

Question 4.55: There is a shortage of resources such as textbooks.

Table 4.55 : SHORTAGE OF RESOURCES

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	16	26	27	27	47	143
%	11	18	19	19	33	100

Of the 143 respondents 16 (11%) answered very little, 21 (15%) little, 27 (19%) a lot, 27 (19%) quite a lot and 47 (33%) a great deal.

Forty-seven or 33% of the respondents claim that there is a great shortage of resources such as textbooks while 16 or 11% believe there is a very little shortage of resources. Lack of resources can be a hindrance towards the successful implementation of C2005.

Question 4.56: It is difficult to measure objectives

Table 4.56: MEASURING OBJECTIVES

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	27	27	47	26	16	143
%	19	19	33	18	11	100

Of the 143 respondents 27 (19%) answered very little, 27 (19%) little, 47 (33%) a lot, 26 (18%) quite a lot and 16 (11%) a great deal.

The majority 47 (33%) of the respondents are of the opinion that there is an average level of difficulty in measuring objectives while only 16 or 11% claim that there is a great difficulty and 27 (22%) believe that there is very little difficulty in measuring objectives.

Question 4.57: There is insufficient funding for it.

Table 4.57: INSUFFICIENT FUNDING

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	15	21	21	43	43	143
%	10	15	15	30	30	100

Of the 143 respondents 10 (7%) answered very little 21 (15%), little 21 (15%), a lot 43 (30%) quite a lot and 43 (30%) a great deal.

The highest numbers of respondents (43 or 30%) believe that there is a great deal of insufficient funding while only 15 or 10% are of the opinion that there is sufficient funding. Insufficient funding leads to lack of adequate resources and this also hampers successful implementation of C2005.

Question 4.58: It is not perceived as an improvement on present practice.

Table 4.58: IMPROVEMENT ON PRESENT PRACTICE

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	63	47	10	16	7	143
5	44	33	7	11	5	100

Out of 143 respondents 63 (44%) answered very little, 47 (33%) little, 10 (7%) a lot, 16 (11%) quite a lot and 7 (5%) a great deal.

The majority of respondents (63 or 44%) are of the opinion that C2005 is not perceived as an improvement on the present practice while only 7 or 5% see it as an innovation on the present practice.

Question 4.59: It is not easily understood.

Table 4.59: EASY UNDERSTANDING

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	16	27	47	32	21	143
%	11	19	32	22	15	100

Of the 143 respondents 16 (11%) answered very little, 27 (19%) little, 47 (32%) a lot, 31 (22%) quite a lot and 21 (15%) a great deal.

An average number of 47 or 32% claim that there is a lot of easy understanding regarding C2005 while 16 or 11% believe that there is very little understanding and also 21 or 15% of respondents are of the opinion that there is a great deal of understanding. The implication here is that people are not sure whether C2005 is easily understood or not.

Question 4.60: It has not been communicated effectively to the schools.

Table 4.60: EFFECTIVE COMMUNICATION

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	32	47	16	27	21	143
%	22	32	11	19	15	100

Of the 143 respondents 32 (22%) answered very little, 47 or 32% little, 16 (11%) a lot, 27 (19%) quite a lot and 21 (15%) a great deal.

Forty-seven or 32% of the respondents are of the opinion that C2005 was not effectively communicated to schools while 21 (15%) believe that it was effectively communicated.

Question 4.61: The scale of innovation is too large.

Table 4.61: SCALE OF INNOVATION

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	16	30	27	27	43	143
%	11	20	19	19	30%	100

Of the 143 respondents 16 (11%) answered very little, 30 (20%) little, 27 (19%) a lot, 27 (19%) quite a lot 43 (30%) a great deal.

Forty-three or 30% of the respondents are of the opinion that the scale of innovation is too large while a minimum of 16 (11%) are saying the scale is too small.

Question 4.62; It's purpose and goals are unclear.

Table 4.62: PURPOSE and GOALS

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	47	37	27	16	16	143
%	33	25	19	11	11	100

Of the 143 respondents 47 (33%) answered very little, 37 (25%) little, 27 (19%) a lot, 16 (11%) quite a lot and 16 (11%) a great deal.

The majority of respondents 47 or 33% claim that there is very little clarity on purpose and goals while only 16 (11%) are of the opinion that there is a great deal of clarity. Unclear purpose and goals can lead to educators being confused & unclear of what they are supposed to do.

Question 4.63: Educators have no time for the amount of preparation required.

Table 4.63: TIME FOR PREPARATION

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	37	37	31	27	11	143
%	26	26	22	19	7	100

The majority of respondents 37 (26%) answered very little, 37 (26%) little, 31 (22%) a lot, 27 (19%) quite a lot, 11 (7%) a great deal.

A high number 37 or 26% (very little) and 37 or 26% (little) are of the opinion that there is very little or little time for the amount of preparation required while only 11 or 7% of respondents claim that time spend for the amount of preparation is enough.

Question 4.64: Educators are not used to solving problem

Table 4.64: SOLVING PROBLEMS

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	27	37	43	6	30	143
%	19	26	30	4	20	100

Of the 143 respondents 27 (19%) answered very little, 37 little, 43 (30%) a lot, 6 (4%) quite a lot and 30 (20%) a great deal.

An average number 43 or 30% of respondents are of the opinion that educators are used to solving problems while a lesser number believe that educators are not used to solving problems.

Question 4.65: It does not promote the recognition of learners' achievements.

Table 4.65: RECOGNITION OF LEARNER ACHIEVEMENT

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	53	27	31	22	10	143
%	37	19	22	15	6	100

Of the 143 respondents 53 (37%) answered very little, 27 (19%) little, 31 (22%) a lot, 22 (15%) quite a lot and 10 (6%) a great deal.

The majority of respondents 53 or 37% are of the opinion that C2005 recognized learner achievement and only 10 or 6% believe that C2005 does not recognize learner achievement.

Question 4.66: Learners self-esteem is not improved.

Table 4.66: IMPROVEMENT OF LEARNERS SELF-ESTEEM

	VERY LITTLE	LITTLE	A LOT	QUITE A LOT	A GREAT DEAL	TOTAL
Number	47	27	32	21	16	143
%	33	19	22	15	11	100

Forty-seven (33%) of the respondents answered very little, 27 (19%) little, 32 (22%) a lot, 21 (15%) quite a lot and 16 (11%) a great deal.

The majority of respondents believe that C2005 improves learners' self-esteem while 16 or 11% are of the opinion that learners' self-esteem is not improved.

4.4.5 SECTION E

This section is based on management tasks and respondents answer questions in their own words.

4.4.5.1 Which factors contribute negatively to the implementation of C2005 in South African schools?

The majority of respondents gave the following answers as factors contributing negatively to the implementation of C2005 in South African schools.

- Lack of understanding of C2005
- Lack of parental involvement

- Insufficient resources
- Workshop / in-service training duration
- Time allocation
- Multi-grade class teaching
- Hasty implementation of C2005
- Lack of support from Departmental Officials (Learning facilitators).
- Imposed by government.

4.4.5.2 Do you think OBE pleases politician more than it pleases educators.

The majority of respondents (70%) answered yes while only 30% claim it pleases educators?

4.4.5.3 What do you think can be done to address problems associated with C2005 in schools?

The majority of respondents gave the following suggestions for the improvement of the implementation of C2005.

- Recruitment of more educators who did C2005 at college level.
- Involvement of all stakeholders before the implementation process.
- Increase learning facilitators' support
- Timely delivery of learning and teaching material
- Monitoring implementation of C2005 in schools.
- Intensive in-service training for principals, SMTs' & educators.
- Clustering or merging of schools (rural areas)
- Setting of measurable objectives
- User friendly terminology and material
- Provision of sufficient funding.

4.4.6 SECTION F

In this section respondents answer questions based on management tasks according to their own personal feelings, experience or observation. The table below indicates the standardized mean for the fourteen items in this section as per binominal probability scale:

Table 4.67: Standardized mean for items on management actions

DIMENSION	YES FACTOR	NO FACTOR
Situational analysis	1.000	0.00
Change introduction	0.650	0.349
Consultation	0.000	1.000
Planned activities	0.888	0.111
Decision making	0.958	0.041
Communication channels	0.958	0.041
Change readiness	0.741	0.258
Climate	0.888	0.111
Classroom application	0.811	0.188
Implementation programme	0.811	0.188
Programme drawing	0.888	0.111
Evaluation team	0.888	0.111
Feedback	0.853	0.146
Training and support	1.000	0.000

Question 4.68: Do you think it is necessary to analyze the situation before C2005 can be implemented in schools?

Table 4.68: SITUATIONAL ANALYSIS

	YES	NO	TOTAL
Number	137	6	143
%	96	4	100

Of the 143 respondents 137 or 96% answered yes while only 6 or 4% answered no.

The data indicates that the majority of respondents do agree that the situation should be analyzed before the implementation phase. If the total population of educational managers in the Free State Province participated in the investigation, the probability is 1.0000, that the majority would say it is necessary to analyze the situation before C2005 & NCS is implemented in schools.

4.4.6.2 Is it a proper approach to introduce intended changes, such as those required by the implementation of C2005, to educators before the implementation date?

Table 4.69: INTRODUCTION OF CHANGES

	YES	NO	TOTAL
Number	121	22	143
%	85	15	100

The majority of respondents (121 or 85%) answered “yes” and 22 or 15% answered “no”.

The majority of respondents (85% or 121) are of the opinion that it is proper to introduce intended changes to educators before the implementation date. The probability of this item is 0.65079, quite a high number of educational managers in the Free State would suggest that it is proper to introduce intended changes to educators before the implementation of C2005.

Question 4.70: Do you think educators were sufficiently consulted before OBE was adopted?

Table 4.70: CONSULTATION WITH EDUCATORS

	YES	NO	TOTAL
Number	80	63	143
%	56	44	100

Of the 143 respondents 80 (56%) answered yes and 63 (44%) no.

The majority of respondents believe that there was insufficient consultation with educators before C2005 was adopted while 63 or 44% are of the opinion that educators were sufficiently consulted. Regarding consultation with educators, the probability is 0.000 meaning that should the majority of the population respond to this item, educators would feel that they have been insufficiently consulted.

Question 4.71: Are the setting of objectives, budgeting, drawing-up of action plans some of the activities to plan for before implementation?

Table 4.71: ACTIVITIES BEFORE IMPLEMENTATION

	YES	NO	TOTAL
Number	127	16	143
%	89	11	100

Of the 143 respondents 127 (89%) answered “yes” and 16 (11%) answered “no”.

One Hundred and twenty-seven or 89% of respondents see setting of objectives, budgeting and drawing-up of action plans as some of the activities to plan for before implementation. A high number of respondents believe that setting of crucial activities before implementation is important. The probability of this item is 0,88811, that the high number of population agree with the statement.

Question 4. 72: Is it important for the staff to be part of the decision-making process.

Table 4.72: DECISION-MAKING PROCESS

	YES	NO	TOTAL
Number	137	6	143
%	96	4	100

Of the 143 respondents 137 (96%) answered yes and 6 (4%) answered no.

The majority of respondents 137 or 96% are of the opinion that educators or staff should be involved in the decision-making process. Should the majority of the

population respond to this item, the probability is 0,95804, therefore the general statement would be that it is important for the staff to be part of the decision making process.

Question 4.73: During the implementation phase (C2005), should enough time be spent on communication regarding the changes & communication channels should be established?

Table 4.73: COMMUNICATION CHANNELS

	YES	NO	TOTAL
Number	137	6	143
%	96	4	100

Of the 143 respondents 137 (96%) answered “yes” and only 6 (4%) answered “no”.

A high number (137 or 96%) of respondents are of the opinion that communication channels should be established and enough time be spent on communication while only 6 or 4% disagree. The probability for this item is 0,95804, that if majority of the population is involved it means that the final results would feel that enough time should be spent and communicated with stakeholders.

Question 4.74: Should the educational leader determine whether the participants are ready for changes before any change is implemented?

Table 4.74: READINESS FOR CHANGE

	YES	NO	TOTAL
Number	106	37	143
%	74	26	100

Hundred and six (74%) respondents answered yes and 37 (26%) answered no.

The majority of respondents (106 or 74%) are of the opinion that the educational leader should determine whether the participants are ready for changes while 37 or 26% disagree. Should the high number of population take part in this item the probability is 0,74 that the majority will concur with the above findings.

Question 4.75: Does the educational leader have to establish or create a climate or atmosphere conducive to objectivity, trust & confidence in attempting to orient the staff?

Table 4.75: ESTABLISHMENT OF CLIMATE

	YES	NO	TOTAL
Number	127	16	143
%	89	11	100

Of the 143 respondents 127 (89%) answered yes and 16 (11%) answered no.

Most of the respondents (127 or 89%) are of the opinion that a conducive climate should be created in order to orientate the staff members. Since the majority of the sample is of the opinion that a conducive climate should be created, the

probability is 0.88811. A high number of the population will agree with the findings regarding this item.

Question 4.76: Do you think the information and approaches acquired from C2005 workshop can be applied in classroom situation?

Table 4.76: APPLICATION IN THE CLASSROOM

	YES	NO	TOTAL
Number	116	27	143
%	81	19	100

Of the 143 respondents 116 (81%) answered yes and 27 (19%) answered no.

The majority of respondents (116 or 81%) are saying that the information and approaches acquired from C2005 workshops can be applied in the classroom situation while 27 or 19% believe the information cannot be applied. If more educational managers in the Free State Province can be part of this investigation, the probability is 0.81119, the majority of population will confirm that the information from workshops could be applied in the classroom.

Question 4.77: Should C2005 programmes be implemented in schools as set not by the National Education Department?

Table 4.77: IMPLEMENTATION PROGRAMME

	YES	NO	TOTAL
Number	116	27	143
%	81	19	100

Of the 143 respondents 116 or 81% answered yes and 27 or 19% answered no.

Most of the respondents (116 or 81%) are of the opinion that C2005 be implemented in schools as set not by the National Education Department. Regarding this item probability is 0.81119, should the entire population in the Free State be involved in this process the majority will recommend that the implementation plan be availed.

Question 4.78: Should a programme be drawn up before any innovation is implemented?

Table 4.78: PROGRAMME DRAWING

	YES	NO	TOTAL
Number	127	16	143
%	89	11	100

Of the 143 respondents 127 (89%) answered yes while 16 (11%) answered no.

The majority of respondents (127 or 89%) are of the opinion that a programme should be drawn up before any innovation is implemented and 16 or 11% believe it is not necessary to do so. Involving a higher number of population in this item, the probability is 0.88811. The majority of educational managers would agree that a programme should be drawn before any innovation is implemented.

Question 4.79: Is it necessary to establish an evaluation team after the implementation phase?

Table 4.79: EVALUATION TEAM

	YES	NO	TOTAL
Number	127	16	143
%	89	11	100

Of the 143 respondents 127 (89%) answered yes and 16 (11%) responded by no.

One Hundred and twenty-seven or 89% of respondents recommended that an evaluation team should be established after the implementation phase while 16 or 11% disagree. Encouraging more educational managers to be part of the investigation the probability of 0.88811, that a high number of the population would encourage the establishment of evaluation team.

Question 4.80: Does the educational leader have to give verbal or written feedback to staff members about the feelings of the evaluation team?

Table 4.80: VERBAL OR WRITTEN FEEDBACK

	YES	NO	TOTAL
Number	122	21	143
%	85	15	100

Of the 143 educational managers who responded 122 (85%) answered yes and 21 (15%) answered no.

The majority of respondents (122 or 85%) are of the opinion that verbal or written feedback be given by the educational leader to staff members about the findings of the evaluation team while only 21 or 15% disagree. In terms of this item the probability is 0.85315. The general statement would be giving feedback as a necessity should a larger number of the population take part in responding to this item.

Question 4.81: Does the school management team have to give support,

further training & encouragement to the staff members?

Table 4.81: SUPPORT, TRAINING & ENCOURAGEMENT

	YES	NO	TOTAL
Number	143	0	143
%	100	0	100

Of the 143 respondents 143 (100%) answered yes and zero (0 %) no.

All the respondents (143 or 100%) are of the opinion that the school management team has to give support, further training & encouragement to the staff members. Should the educational managers at school level respond to this item the probability is 1.0, the majority of the population will view training, support and encouragement as important.

4.4.7 SECTION G

Section G focuses mainly on the planning and implementation of C2005 and NCS. The respondents answered by choosing one of the following options: never, sometimes, often or always. Table 5.78 gives a summary of how the respondents reacted and also ranks the importance of the various activities in the management of C2005 and the RNCS.

In each of the following cases a linear regression was also conducted to indicate the correlation of the responses between the various sub-groups to provide a deeper understanding of the situation in view of grasping the implications thereof for future management actions.

The regression analysis revealed significant differences in some questions with regard to gender, age and experience. For the purpose of this study **only those correlational results that could have implications for future management actions will be viewed.**

Table 4.82 Correlation analysis between sub-groups

Issue	Never		Sometime s		Often		Always		Total		Mean	Rating
	N	%	N	%	N	%	N	%	N	%		
4.4.7.1 Principals support and encouragement regarding training.	21	15	31	22	37	26	53	37	143	100	2.48	7
4.4.7.2 Principals embarking on situational analysis.	21	15	37	26	43	30	43	30	143	100	2.47	10
4.4.7.3 Poor conditions impede smooth implementation of C2005 and NCS.	16	11	27	19	47	33	53	37	143	100	2.96	5
4.4.7.4 Principals give reasons for implementation of C2005 NCS.	16	11	37	26	43	30	47	33	143	100	2.85	6

Issue	Never		Sometimes		Often		Always		Total		Mean	Rating
	N	%	N	%	N	%	N	%	N	%		
4.4.7.5 Principals consider knowledge, experience and capabilities of educators.	16	11	10	7	43	30	67	48	143	100	3.02	4
4.4.7.6 Principals ensure that the implementation plan consists of objectives, tasks and resources needed.	6	4	10	7	47	33	80	56	143	100	3.4	1
4.4.7.7 Principals establish evaluation committees to reflect on the entire process of implementation.	37	26	47	33	37	26	16	11	143	100	2.14	11

4.4.7.8.Principals keep communication lines open through regular feedback and corrective measures.	16	11	16	11	47	33	63	44	143	100	3.08	3
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Issue	Never		Sometimes		Often		Always		Total		Mean	Rating
	N	%	N	%	N	%	N	%	N	%		
4.4.7.9 Principals take the educators willingness and readiness into consideration before implementing innovations.	21	15	27	19	47	33	47	33	143	100	2.49	9
4.4.7.10 Principals consult with staff members	12	8	37	26	47	33	47	33	143	100	2.58	8

regarding resources.												
4.4.7.11 Principals take the necessary steps to acquire or gain skills relevant to the implementation of changes.	10	7	21	15	43	30	69	48	143	100	3.2	2

Table 4.82 Correlation analysis between the subgroups

According to the above table (4.82) it seems as if the most common activities that are used when implementing changes are aspects such as the drawing of implementation plan, undergoing training, giving regular feedback to staff members and taking corrective measures, consideration of educators knowledge, experience and capabilities, being aware of poor infrastructure conditions and giving reasons to the staff why innovations are important.

The following aspects seems to be of concern, support regarding training of educators, consultation with staff with regard to resources, determining educators willingness and readiness, embarking on situational analysis and establishment of evaluation committees.

4.4.8 SECTION H

In this section the respondents write in the table in order of priority the five main issues they feel need to be addressed by management at school level in order to ensure the success of C2005 and NCS.

The following common responses were identified as major things to do to address to ensure the successful implementation of C2005 and NCS at school level:

- Intensive in-service training of all educators, including education managers on a regular basis through workshops, implementing sharing sessions, cluster meetings, conferences and motivational sessions.
- Timeous provision or delivery of resources like learner educator support material, media centers, librarians and human resources.
- Consultation and involvement of all stakeholders (parents, educators, school community)
- Regular support by District-Based officials (learning facilitators, Resource centre officials and school management and governance developers)
- Provision of guidelines on learner assessment, recordings of assessment, learner portfolios and reporting.

4.5 Summary

In this chapter, a quantitative research was conducted and the questionnaires were analyzed. The following factors were found to be inhibiting or impacting negatively on the implementation of C2005 and NCS: (Section B) lack of material such as textbooks and teaching aids (4.17), lack of parental involvement or support (4.12), previous experience does not assist educators to implement the new curriculum (4.18), training for professional qualification did not prepare the majority of educators for C2005 and NCS (4.10), The majority of educators feel

that the new curriculum was hastily implemented (4.9) and that they did not receive enough support from departmental officials.

The respondents cited the following factors as impacting negatively toward the implementation of C2005 and NCS: Lack of understanding, parental involvement, insufficient resources, lack of training, time allocated not adequate, and multi-grade teaching in rural places and poor infrastructure conditions

The majority of respondents see the execution of the following action plans as the responsibility of the educational manager: availability of the implementation plan, training and development of educators, communicating the innovation to educators. Giving feedback and implementing corrective measures. It is also recommended that the following actions should receive more attention: consultation with stakeholders, situational analysis, establishment of evaluation team or committee, staff readiness and willingness and support and encouragement from educational managers (see section G).

The educational manager must also be aware of responses from different groups. To some items males do not respond the same as females, age groups from 20-39 and 40-65 are not always in agreement, experience of 0-10 and 11-21+ do sometimes differ. Males and females show negative coefficient correlation with regard to: measuring and achievement of objectives, parental involvement, subject expertise, positive principles, curriculum and politics, monitoring, learner achievement and educational managers' self-esteem. With regard to age groups and experience a negative correlation is depicted on: radical changes, scale of innovation, collaborative approach and manager's self-esteem. It is crucial that the educational manager take the above into consideration when approaching the implementation of C2005 and NCS.

Table 5.90 gives a summary of findings and possible solutions for the effective implementation of C2005 and NCS.

Table 4.83: **Problem areas and possible solutions**

Problem areas	Possible solutions for the effective Implementation
Lack of material (LTSM)	Increased LTSM budget allocation to schools and ensure timeous placing of requisitions.
Lack of relevant teaching experience	Increased in-service training, workshops and adequate support from Learning Facilitators.
Lack of parental involvement or support.	Conduct parental seminars, workshops, meetings on the subject on regular basis.
Terminology problems	Produce user friendly material: manuals and documents on the subject.
Lack of consultation or communication	Conduct awareness or advocacy programmes before implementation.
Sufficient preparation time	Simplify preparation format and conduct cluster meetings on preparation format.
Readiness for change	Implement when all stakeholders are ready and willing and understand the innovation.
Lack of motivation	Include motivational sessions and incentives to well performing educators.

The above problem areas will be verified in the next chapter by conducting qualitative research as mentioned in chapter four.

4.6 CONCLUSION

This chapter presented a detailed description of the research design with special reference to qualitative investigation. It focused on the theoretical purpose and justification of the methodology chosen, data gathering techniques, and explanation of the data analysis method used. The importance of the study was also highlighted.

Two hundred questionnaires were handed to education managers to complete. Hundred and forty-three of them were received by the researcher. The data obtained was discussed and interpreted in relation to the research aim of this study. The next chapter presents the findings of this study as a results of data analysis from qualitative investigation. The presentation is in search of adding meaning to the findings from the quantitative investigation.

Chapter 5

MANAGING THE IMPLEMENTATION OF CURRICULUM 2005 AND NATIONAL CURRICULUM STATEMENT: QUALITATIVE INVESTIGATION

5.1 INTRODUCTION

The previous chapter focused on the analysis of quantitative investigations conducted by means of a structured questionnaire. The questionnaire consisted of eight sections and the results of the investigation are summarized and reported in Chapter 5.

The following factors were seen as factors contributing to the success of the implementation of C2005 and NCS (Section C; 4.4.3.):

- Availability of the implementation plan
- Undergoing training
- Giving regular feedback to staff members
- Consideration of educators knowledge, experience and capabilities
- Giving reasons why innovations are important

The following factors were also seen as aspects inhibiting success of C2005 and NCS (Section D; 5.4):

- Communicating change or consultative process (5.4.1.1).
- Lack of resources (5.4.1.2).
- Lack of relevant experience and training (5.4.1.3).
- Terminology and content problems (5.4.1.4).
- Lack of parental involvement and support (5.4.1.5).
- Readiness for change and lack of motivation (5.4.1.6).

Section F and G of the questionnaire dealt with the management tasks and actions performed by the educational managers during the implementation of C2005 and NCS.

In order to provide understanding of the above findings, unstructured in-depth interviews were conducted with five educational managers on various management levels (HODs', DPs and principals) in Free State schools. The researcher followed a grounded-theory approach in gathering data, which was analyzed after each interview (4.4.3). Once theoretical saturation has been reached (when no affirmative or contradictory information came to the fore) the interviews ceased (5.3.2). A point of saturation was reached after five interviews.

This chapter focuses on analyzing data from unstructured interviews; problems encountered; creative steps; tendencies and management actions during the process of implementation of C2005 and NCS. The point of departure will be to provide deeper understanding into the results of the quantitative investigation reported in Chapter 4.

5.2 AN OVERVIEW OF QUALITATIVE INVESTIGATION

The qualitative research method was originally developed by anthropologists and sociologists. This method is of anti-positivistic nature. The anti-positivism attempts through empathy to understand the motives behind human behaviour or reactions (Niemann 1994:55). The qualitative researcher focuses on subjective meaning and captures data in the form of words through an intensive study of cases, and subjecting this data to analytic induction (Gall et al. 1996:28; Neuman 1994:318). According to Neuman (1994:319), researchers follow a path when conducting research. The path is more cyclical it makes successive passes through steps It is more of a spiral, moving upwards but not directly with each cycle or repetition a researcher collects new data and gains new insights.

The idea of qualitative research is to observe participants in their natural setting to avoid control or manipulation by the researcher. The researcher then strives to capture as accurately as possible the perspectives of the participants by observing or interviewing them in an informal setting. The aim is to identify patterns in human behaviour, therefore qualitative research focuses on a naturalistic, interpretative approach to its subject matter, attempting to make sense of phenomena in terms of the meaning people bring to them (Gall et al. 1996:29). This method includes direct observation, participative observation and open, unstructured interviews. Data is collected in the form of words or pictures, not numbers. Types of data included transcripts of interviews, field notes, audio-tapes, video tapes, diaries, personal commentaries and any other method that represents the actual words or actions of people. It is also characterized by the inductive processes of discovering, verifying or identifying casual relationships that derive from an a priori theoretical scheme (Gall et al. 1996:29).

From the above Niemann (1994:154) cites the following as characteristics of qualitative investigations:

- The study objective is the world as defined, experienced and seen by the participants. This means that the qualitative researcher does not necessarily study the conscious knowledge or experience of the individual, because perception forming is not a conscious activity.
- The method of collecting data is open, flexible and not strictly regimented. Unstructured or in-depth interviews and observations are more preferable to pre-coded questionnaires and systematic observation techniques.
- The method of data analysis does not provide a system where collected data can be expressed in a numeric-mathematical way. This means thus that natural language is used in order to prevent certain aspects of the data to be emphasized at the expense of others.

During qualitative research there is constantly a reciprocal cyclical relationship between collection of data and analysis of data that continually influence each other and therefore also work inter-changeable to each other. With this method, it is possible to select data of value and stop collection when no new information with regard to the research problem can be obtained. On the other hand, the collected data can even provoke the analysis of the research problem to be amended (Smaling 1994a:41; Maso 1989:158)

Supporters of this research method argue that human behavior is bound to the context in which it occurs, and that social reality cannot be reduced to variables in the same manner as physical reality (Le Comte 1992: 743, Ary, Jacobs and Razavich 1990: 445). This means that qualitative research seeks to understand human and social behavior as it is lived by participants in a particular social setting.

Qualitative interviews were selected because they are appropriate to “get under the skin” (Duff 1992: 87) of participants, as management of change is still a new approach to the majority of managers in the education sector. These interviews were also conducted as a pilot study (unstandardised) and for the purpose of verifying the findings of the questionnaires (semi-standardised). Empirical researchers using quantitative methods, influenced by positivism, seldom have to defend the objectivity, reliability and validity of the research since they are able to regulate data, they dissociate themselves from prejudice and maintain impartiality and neutrality. Qualitative research is, however, open, flexible and not strictly regimented and this calls into question the objectivity, reliability and validity of the research (Niemann, Niemann, Brazelle, Van Staden, Heyns and De Wet 2000:283).

5.2.1 Objectivity

Objectivity refers to the regimented, impartial and unbiased, value-free, or neutral way in which the research is conducted. According to Kvale (1990:7), one of the limitations of the interviews is that the very adaptability gained by

the personal circumstances can lead to subjectivity and possible bias. The subjectivity of the researcher, according to Niemann (1994:179-181), is regarded as a hindrance in quantitative research, while qualitative researchers view subjectivity as a valuable instrument, and Smaling (1994:17) does not view objectivity as the escape from subjectivity, but rather as “ the intelligent, acquired use for subjectivity to analyze something”, and implies that the view points , experience, definition or interpretation of the participants cannot be ignored. Thus it is important to indicate the role and position of the researcher as these elements may have an influence on the research.

Webster in Niemann et al.(2000:284), maintains that the researcher is not a “ tabula rasa”, but a person with scientific ideas, and a personal theoretical frame of reference, in terms of which the gathering, interpretation and reporting of data will take place. This implies that the researcher should apply the principle of role taking by imagining himself/herself in the position of another to enable him/her to understand, anticipate and interpret the behaviour of others. This allows the object to speak for itself (Niemann et al. 2000:284).

5.2.2 Reliability

Traditionally, reliability is linked to quantitative research, and points to the stability, accuracy, constancy and repeatability of the research, qualitative researcher’s concept of reliability coheres with the above-mentioned. It is defined by Du Toit et al. (2000:35) as the degree to which investigations can be repeated with the same results being obtained. This means discarding of causal error that can influence the results. Niemann (2000:28) refers to internal and external reliability.

Internal reliability refers to reliability during the research, and is achieved by:

- Triangulation, including the use of more than one method of data collection; the use of one more theoretical perspective to interpret data; the use of more than one researcher or observer in the investigation

and the use of two or more types of data resources such as interviews or literature.

- Cross examination: a method used to determine whether casual misinterpretations infiltrated the findings of the research.
- Member checks: the method by which contradictions in findings are referred back to the persons studied for an explanation or solution.
- Consensus: a method in which consensus regarding the findings is reached through open discussions between participants.
- Auditing: the process through which all information regarding the research, as well as data, surveys and notes are kept, so that the findings can be verified by the independent person.
- Mechanisation: the use of audio-tapes and video recordings to store information and computers to process data.

External reliability refers to verification of the findings of the research when the same research is undertaken by independent researchers under the same circumstances and with the same participants (Niemann et al 2000:285; Miles and Huberman 1994:279). Gall et al. (1996:25) and Niemann et al. (2000:286) recommend the following to increase external reliability:

- Make a thick verbal description of what is observed. This refers to the status and role of the research topic and the phenomenon under investigation.
- An exposition of the theoretical starting points and arguments underlying the various choices made in the research.

To enhance reliability of the findings the following measures were taken:

- The principle of a minimum of three methods of research was applied in the research project. In this research project a literature study was undertaken to gather information concerning the topic, quantitative investigation as well as qualitative investigation were also applied.
- The process through which all information regarding the research, as well as data, surveys and notes are kept by the researcher.
- The researcher used audio-bands to store information and computer to process data (Niemann et al. 2000:28).

5.2.3 Validity

Validity has been defined as the extent to which an instrument measures what it is supposed to measure and refers to the accuracy thereof (Goetz and Le Compte 1984:210). According to Goetz and Le Compte (1984:221), the degree of validity can be determined by asking the following questions:

- Are the researchers really measuring or observing that which they think they are doing?
- To what degree are the findings also tested or refined by other research?

As in the case of reliability, it is essential to strive towards the elimination of systematic errors. The following measures could increase the internal and external validity of research data:

Internal validity (validity within the research data), content and concept validity could be ensured by:

- Preparing a register of data, notes, relevant actions or events, theoretical and methodological memoranda and categories of data established, to be used during data analysis.

- Establishing member checks, peer de-briefing and audit trails to make corrections to categories and concepts formed.
- Guarding against bias.

External validity (validity of the results regarding the extended object of the study), as external validity relates to the validity of the research results, the researcher should:

- give an accurate description of the research process, reasons for the choice of methods, the circumstances under which, and context in which, the research was conducted.
- provide a thick description of the research situation and context so that others can ascertain whether, and to what extent the research results are valid or can be useful in their own situation or context.

Different measures can be taken to ensure validity of research data and for the purpose of this study the following measures were applied:

- The researcher selected the participants who were able to supply the needed information – education managers at school level as well as through the systematic analysis of data.
- In order to get concern from the participants pertaining the findings of their information, the finalized findings were discussed with them. The participants felt that the findings were a true reflection of their responses.
- The researcher gave an accurate description of the research process, reasons for the choice of methods, circumstances under which, the context within which the research was conducted.
- In order to obtain validity the researcher checked the findings against the current literature.

- Data was gathered and after five interviews the point of saturation was reached and the research process was terminated.
- To ensure proper audit, the researcher kept all the recordings, notes and forms.

The above measures ensured that the study undertaken is reliable and valid. The analysis of qualitative approaches to research indicates that this method focuses on understanding the world in which one lives, and interpreting it from the participants' frame of reference. The object of study is thus defined as it is actually experienced and observed by the participants themselves.

5.3 DEVELOPMENT OF THE INTERVIEW SCHEDULE FOR THE QUALITATIVE INVESTIGATION

5.3.1 Investigation

The objectives of the study, as well as the broad categories to be researched should guide any process of developing an interview schedule (Motseke 2000: 100). The researcher has to list all the aspects that the study has to cover, then develop a set(s) of relevant questions for these aspects.

For the purpose of this study, the researcher followed a grounded theory approach where the interview started with the research question and little else. The following overarching open ended question was posed to each interviewee, namely **“What problems did you encounter during the implementation phase of C2005 and NCS and in retrospect what would you have done differently?”** The interviews were conducted in a conversational manner and the researcher refrained from asking leading questions and from expressing approval, shock or surprise at the answers of the participants.

5.3.2 Conducting the Interview Schedule

In order to investigate the implementation of C2005 and NCS with reference to change management this study included a profound literature study for the theoretical exposition and grounding of issues at stake, quantitative research was conducted and qualitative research was also done in order to verify the findings from the questionnaire.

Participants from different ranks of educational management positions (ranging from Head of Department, Deputy Principals and Principals) were involved in the research project. Participants represented a variety of cultures and language groups as Sesotho, English, Afrikaans, Tswana and Xhosa. The researcher was aware of the fact that due to use of participants from different ethnic and cultural groups the concepts change could be interpreted differently. The inclusion of participants from different cultures was also taken into consideration to include a variety of views and perceptions on the topic. No specific number of participants were decided upon before the study commenced, but the researcher decided to continue interviews until theoretical saturation had been reached, which occurred after five interviews.

Unstructured in-depth interviews were conducted with each of the participants in order to gain first-hand evidence on the topic. The researcher was granted permission by the participants to use a recording machine for recording their responses, while at the same time reassuring them of the confidentiality of their identities. The researcher and participants were seated at a comfortable desk or table and a recorder was placed between them.

After each interview the exact words of the participants were transcribed for analysis purpose. Directly after the first interview the interview tapes were transcribed. The transcriptions were coded by awarding a symbol to signals of words that represented a particular category or theme. Thereafter a matrix table, containing the various themes and direct words of the participants, was compiled in order to compare the data and thus revealing differences and

similarities. The themes that arose from data, were then used for reporting purposes.

In order to enhance the reliability and validity of the research, member checks were conducted where the final report of the data was referred back to the participants in order to check whether the responses were interpreted and reported as intended by the participants (Niemann et al: 2000: 285, Goetz and Le Compte 1984: 217). The researcher also kept all the recordings, transcription and notes of the interviews so that the findings could be verified by independent persons.

5.3.3 Techniques Used in Analyzing Data from Interviews

Hitchcock and Hughes (1994: 97) mention the following as important guidelines for the qualitative analysis of interviews and conversational material.

- Familiarity with the transcript:
Reading and / or listing (to tapes) over and over again will enable the researcher to have a thorough familiarity with interviews.
- Appreciation of time-limits:
The reading and re-reading of the interviews are time consuming and it would be advisable to analyse the interviews one-by-one as soon as they have been conducted than to choose a large number and analyse them all and not doing them meticulously.
- Isolating general units of meaning:
From the transcripts, there will be broad themes that recur frequently. The researcher should identify these broad themes and relate them to the focus of the research.

For the purpose of this study the above guidelines (or criteria) for the qualitative analysis of interviews were followed or observed (see 4.4)

5.3.4 Data Analysis

To analyze data that was obtained through qualitative investigation (as used in this study) is a complicated task. According to Neuman (1994:404) there is no one recommended method and it is up to the researcher to choose from several options as to the most suitable method.

Given the diverse approaches to the analysis of qualitative data, Miles and Huberman (1994:9) offered the following analytic practices that may be used across different qualitative research types (also 4.4.3):

- Affixing codes to a set of field notes from observations and interviews.
- Noting reflections or other remarks in the margins.
- Sorting and sifting through these materials to identify similar phrases, themes, distinct differences between sub-groups and common sequences.
- Isolating these patterns and processes, commonalities and differences, and taking them out to the field in the next wave of data collection.
- Gradually elaborating a small set of generalizations that cover the consistencies discerned in the data base.
- Confronting these generalisations with a formalized body of knowledge in the form of constructs or theories.

The first step (data reduction) interviews are recorded on an audio-tape. The recording is played back, transcribed and codes are given to different themes and tendencies according to script. Miles and Huberman (1994:65) refer to this process of coding as an abbreviation or symbol applied to a segment of words in order to classify the words. Codes are categories usually derived from the research questions, hypothesis, key concepts and important themes. As data collection proceeds, further episodes of data reduction occur (coding, teasing out themes, finding patterns). The data reduction process continues after field work until the final report is completed (Miles and Huberman 1994:110).

The second step is to work through the data the second time, the initial themes or coding are used as point of departure and then aspire to be refined through adding additional themes, sub-themes or codes. During this step relationships between themes are collated. The data that belong together is then organized and patterns are identified. Miles and Huberman (1994:211-213) refer to this step as matrix display and examination. Use of matrix table where in participants are shown on the vertical side and keywords on the horizontal side of the table and the data is then arranged accordingly. In this way data can be evaluated and the differences or relationships established. Step three is referred to as conclusion drawing and verification. By this time the researcher has already identified themes and sub-theme. The searcher has to look again at the data through the different codes and fo themes and then selects the specific evidence that illustrated the themes the best. Conclusions should be a true reflection of the data. Miles and Huberman (1994:245-262) suggest specific tactics for drawing meaning from a particular configuration of data in a display. The techniques include the following:

- Noting patterns and themes.
- Seeing plausibility.
- Clustering.
- Making metaphors (what goes with what).
- Counting (what's there).
- Making contrasts/comparisons (sharpens understanding).
- Partition variables (differentiate).
- Subsume particulars to the general (seeing things and their relationship more accurately).
- Factoring.
- Noting relations between variables.
- Finding intervening variables.
- Build a logical chain of evidence.
- Making conceptual/theoretical coherence.

Data collected was analyzed as indicated in 4.4.2 and 4.4.3 and reliability and validity were ensured by applying strategies mentioned in 4.2.1.5 and 4.2.1.6.

5.4 ANALYSIS OF THE INTERVIEWS CONDUCTED

5.4.1 Situational Analysis

5.4.1.1 Communicating change

From the interviews with the five respondents, communicating the immanent changes, it seems as if most of them know that communication is important, but not necessarily know how and when to communicate the changes. They responded as follows:

- **A:** “I kept my teachers informed- keep them up to date about what is coming although I was not sure of the changes.”
- **B:** “What I told them was that they will be given training, that was my introduction.”
- **C:** “I try to discuss with them. I don’t know whether it is enough.”
- **D:** “I think they have attended. I don’t have time to interact with them.”
- **E:** “It is not my duty to train them, I don’t know what to discuss with them.”

From the above responses the following views arise:

- The educational managers kept educators informed about the changes.
- It seems there is an element of fear when introducing changes.
- Managers were not sure what to discuss with educators.
- Some managers thought that they were not responsible for the change in the curriculum.

When C2005 and NCS came on, it seemed as if the educational managers felt that there was a need to communicate or disseminate the information

regarding the implementation of C2005 and NCS to educators in order to manage the change in such a way that the educators did not feel threatened, and that learners were not compromised. Educational managers kept educators informed about the changes although some of them were not sure of the content or the new approach to teaching in the classroom. Some educational managers felt that C2005 and NCS will fail because of fear, lack of training and information and also lack of informed human resource (Chapter 5 Section B.5, Section C.26, Section D.57).

5.4.1.2 Lack of resources

The issue of resources is always going to give rise to a lot of debate. This is because resources, whether human or material, cost money. The more affluent schools will always have an advantage over less fortunate schools, with the financial aid to afford the purchase of resources such as textbooks, computers, Internet access and so on. Regarding physical resources, most especially with learner educator support material it seems that shortages of resources created problems for education managers to implement C2005 and NCS successfully. The respondents had the following comments:

- **A:** “Next year we must start implementing C2005 in Grade 10 but there is a great shortage of books. The curriculum is implemented with the idea that the teacher is a facilitator, and learners have to find their own resources.”
- **B:** “----- and in our school there is a lack of resources, because the department did not provide us with material and textbooks. These are valuable resources.”
- **C:** “As a former Model C school we did not get anything from the department, no books, nothing. I think it is a dream to think that teachers will be able to develop their own textbooks at school level.”

- **D:** “It was a bit difficult for the teachers because we experienced lack of material. In some documents the specified content is very vague and this led to a belief that textbooks were no longer necessary.
- **E:** “The only problem we are experiencing now is lack of teaching and learning material.”

From the responses the following points arise:

- There is a definite need to generate and manage resources, whether human or material.
- Teachers need to be educated, trained and encouraged to develop their own resources. These can range from sets of notes from different textbooks to worksheets.
- There is a definite need for textbooks.
- Learners must be educated to find their own resources, it is not always up to the teacher to provide material.
- A problem identified with some textbooks is the prescription of content.

C2005 and NCS demands resource provisioning and it is the specific role of the educational manager to address this issue. The respondents felt that there is a definite need to be supplied with human and material resources.

They also suggest educator training in the development of resources.

Educational managers see textbooks still having a place and being necessary to emp

loy a wider range or variety of resources.

5.4.1.3 Lack of relevant experience and training

The education managers are aware of the training programme taking place but believe that the department is not doing enough with regard to training since the new model demands new approaches on the part of educators.

They were emphatic that proper and efficient teacher training was essential to effective implementation of C2005 and NCS. They reacted as such:

- **A:** “Yes, teachers feel deskilled, they don’t have the necessary knowledge to do the job. I really feel for teachers who are not well trained and qualified to do the job.”
- **B:** “Enough training is needed. I found very serious shortcoming in the initial training.”
- **C:** “Our educators are trying. What is lacking is adequate training. Support is also needed in the classroom.”
- **D:** “Teachers are still not confident enough. Training is taking place, but I don’t know. They don’t know how to handle things.”
- **E:** “Bring training, training.....not for the sake of just training. As principals we also need training, how can we manage something we don’t understand.”

It is obvious from these responses that teacher development and training is essential. The following points are offered:

- Teachers need constant training on a regular base.
- Teachers need to be trained in selection of relevant content and teaching strategies.
- School management teams need training in the management of C2005 and NCS.
- Constant classroom support and monitoring is crucial for effective implementation.

From the responses obtained, one realizes a great need for aggressive educator development and training programmes for the implementation of C2005 and NCS. The initial training by the education departments did not offer much and any follow up training to be done by experts in the field of

classroom implementation was insufficient. As a result of the impact of C2005 and NCS on schools organization, educational managers need to be trained in order to manage and support the implementation of the new curriculum. Teacher training should also address the issue of content and terminology which seems to be giving educators a problem.

5.4.1.4 Terminology problems

The education managers feel that terminology used is one of the major problems retarding progress. They responded as follows:

- **A:** “I think the main problem was the terminology used. NCS has brought better understanding.”
- **B:** “While our educators are still struggling with terminology, there came the National Curriculum Statement.”
- **C:** “Understanding is the order of the day- a new approach, it is also difficult to understand some of the words.”

The respondents felt that terminology was one of the factors causing confusion regarding the implementation of the new curriculum.

5.4.1.5 Parental involvement and support

Lack of parental involvement and support seem to be one of the factors impeding successful implementation. They reacted as such:

- **A:** “We tried to involve parents on several occasions. It is difficult for them to understand that we need them.”
- **B:** “Whenever we organize meetings we try to involve them, but their response is not satisfactory.”

- **C:** “.....but not all of them are reluctant to assist, we do have parents who assist in the classroom when we experience shortage of educators.”

From the above we can conclude that:

- Parents as stakeholders can play a major role regarding the implementation of the new curriculum.
- Parents and members of the community can be used as resources by offering lessons or demonstration skills in learning areas where schools experience shortage of staff.
- Schools do need training on strategies how to get parents involved in school affairs.

Respondents acknowledge the fact that parents as stakeholders can contribute more to the success of the new curriculum. Parents and members of the community can be used as resources to offer lessons and demonstrations where schools experience shortages of teaching staff. It seems that schools also need training on strategies how to involve parents in school affairs.

5.4.1.6 Readiness for change and lack of motivation

According to education managers, it seems educators are not yet ready to contribute positively towards the success of the new curriculum hence there is a need for motivational sessions. Motivated educators will assist educators to have a sense of ownership regarding the implementation of C2005 and NCS. They said the following:

- **A:** “I think the greatest problem was managing this through a period of rationalization. The last two years I lost five educators.”
- **B:** “People are always afraid of changes. Our educators are still searching, not sure of themselves.”

- **C:** “..... so the Grade 7 educator is working with them but she can’t cope well with it.”

The respondents felt that C2005 and NCS instilled fear among educators and they are also not sure whether they are on the right track. Rationalization process also disturbed the smooth implementation of C2005 and NCS. Intervention of experts and motivational speakers are needed to boost the morale of educators. Incentives for well performing educators are needed as recognition to well performance.

5.5 SUGGESTED SOLUTIONS

With regard to the problems mentioned (6.3.1) the participants took some creative or corrective steps in order to assist their educators. To curb the problem of lack of material for the implementation of C2005 and NCS they acted in this manner to acquire the necessary resources:

- **A:** “I encourage them not to say that they have the problem with the material, they must make means to have material. I requested learners to bring the magazines, books, etc. to the classroom.”
- **B:** “Ja, we had fundraising projects, we held them in order to acquire the material that we need.”
- **C:** “We had a bazaar- a fundraising effort this year. Last year we had a melodrama with the kids and it was a huge success, we made lot of money out of that and from that money we had material.”

To assist educators with information, terminology and mastery of the new curriculum the respondents did the following:

- **A:** “What I did in the meantime was to send educators to a computer course just to uplift their self-worth, show them that we are not useless.”
- **B:** “Myself and colleagues came together and we decided that we will ask teacher organizations to conduct extra training for our educators. So we had training from our department and teacher organizations.”
- **C:** “We kept in contact with neighbouring schools. This move assisted us a lot.”
- **D:** “I wanted my teachers to be on top of the situation so I organized expert from outside the department.”

To overcome the problem of lack of parental involvement or support they reacted as such:

- **A:** “I keep my parents informed. I send them newsletters on regular basis. Last week we organized a workshop for them. We try to help them understand the new curriculum.”
- **B:** “It is difficult to get support from parents. We try to implement all strategies to win their support , we conduct parents meeting on a regular basis.”
- **C:** “We give them regular reports and by this we think they will be interested.”

From the interviews, the following type of actions emerged as possible solutions to address the problems identified:

- **Training programmes**

As a result of the changes brought about by C2005 and NCS, training programmes became necessary. From the literature study on C2005 and NCS in chapter 2 it is evident that a new way of looking at education is needed. This relates to the classroom level where the curriculum is implemented and delivered. Table 1.3 shows the difference between the traditional approach and C2005 and NCS, highlighting that there is a shift from content based to learning based on outcomes, where learners demonstrate competency. C2005 and NCS calls for knowledge of outcomes-based curriculum that is learner-centered, content-independent and criterion referenced.

All of the above need to be addressed through staff development and training programmes initiated by the educational manager and the education departments. Educators need training for the interpretation of curriculum policies. The quantitative together with qualitative study strongly supports educator training with the focus on curriculum issues.

- **Resource gathering strategies**

The provision of resources is essential for maintaining an effective C2005 and NCS programme. Resources make it possible for learners to achieve outcomes. An outcomes approach requires more than the use of textbooks. The advent of technologies such as the internet, satellite TV and availability of encyclopedias make it possible for instant data access and retrieval of information. This places demands on those educators who are not technically oriented and the educational manager is compelled to address staff training with regard to the use of computers. Educational managers also embarked on fund raising projects to acquire equipments.

5.6 MANAGEMENT ACTIONS

According to quantitative research table 5.78 of the questionnaire and the interview schedule reflected on how educational managers embarked on management actions in order to drive the process of the implementation of C2005 and NCS forward. It seems as if the following activities are taken into consideration and are used during the implementation phase of C2005 and NCS: introducing change to subordinates; disseminating information; drawing of the implementation plan; undergoing training; consideration of educator's knowledge, experience and capabilities; giving regular feedback and taking corrective measures; being aware of poor infrastructure conditions and explaining why innovations are important and giving support for the integration of change. Chapter 5 Section F and G focused on the management tasks and actions to be performed by educational managers at school level and the majority of respondents agreed to the statements (5.7).

Introducing change to educators is one of the first tasks to be undertaken by educational managers. All the participants responded as follows:

- Keeping educators informed.... Keeping them up-to-date.
- Being able to inform them.
- That was my introduction.
- Meetings with educators and parents were held.
- Educators were informed about the training.

Most of the participants felt that the best approach was to keep the educators well informed about C2005 and NCS. They all agreed on:

- Attending some of the workshops organized by the department.
- The majority of educators have undergone training.
- Attending information sharing sessions.
- Ensuring that all educators involved with C2005 and NCS should have undergo training.
- Giving feedback to educators.

With regard to change the educational manager has to determine whether the staff is ready to implement the changes and they responded as such:

- Educators are more ready than they were in 1997.
- After a while they were looking forward to start with it.
- When they entered this year they were much more confident.
- From the start they were not ready but now it is better.

The educational managers felt that it was their responsibility to orient the staff so that changes became acceptable to the staff. They all agreed that:

- Their task was to lead in such a way that the educators will accept change with regard to the curriculum.
- They began dealing with educators' fear.
- Communicated openly with educators.
- Giving support to educators.

The participants felt that effective training is one of the most useful way of moving an organization forward towards an agreed vision or to specific objective. They felt it necessary to undergo training and they said:

- Attended workshops and courses.
- Sent educators for in-service training.
- Established team building sessions.

With regard to the implementation of C2005 and NCS the participants executed the implementation plan by:

- Availing the implementation plan.
- Monitoring and giving support to educators.
- Consulting with the learners.
- Allocating duties to staff members.

The provision of support services after effective training is one of the necessary programmes to be implemented. The participants relied on:

- Services rendered by learning facilitators.
- Established school support teams or learning/ grade committees.

- Exchanging information with other schools or established twinning programmes.

All aspects of management presume evaluation and evaluation is one of the management actions taking place continuously. The quality and functionality of tasks are measured by evaluation. The participants evaluated the work done by:

- Identifying merits and deficiencies.
- Appointing evaluators by means of a participatory decision making process.
- Deciding on the evaluation criteria and methods.
- Analyzing the results and making recommendations.
- Compilation of a report.

The purpose of feedback is to ensure that the execution of the plan is carried out smoothly and if there is any deviation the plan should be adjusted. The participants see feedback and corrective measures playing an important role as the information that has been gathered through evaluation should be conveyed to the educators so that self-evaluation can take place. Giving feedback thus should take place in such a way that the staff will be able to interpret the information in terms of strong and weak points. They said:

- They always compare to find whether they are on the right track.
- Hold regular meetings to discuss progress.
- Get written and verbal reports on problems encountered.
- They implement recommendations

After successful implementation of changes it is expected that the participants should adopt or reject the innovation. To avoid frustrations the participants:

- Gave support
- Further training on C2005 and NCS.
- Encouragement to facilitate integration.

5.7 PATTERNS IDENTIFIED FROM THE EMPIRICAL RESEARCH

From the quantitative and qualitative research findings common factors or patterns were identified as emanating from the process of implementation of C2005 and NCS. A summary of these patterns will be discussed in the section to follow.

- **Curriculum management**

All participants felt that the management of change was necessary and that the interpretation of policy document was a vital necessity in order to implement C2005 and NCS satisfactorily. Coherent leadership was also a concern to them as it is necessary to manage change in such a way that the educators did not feel threatened, and learners were not compromised. In spite of change in the curriculum, it was also noted that new approaches and methods will be used. The educational manager needs to make sense of the complexity of policy documents on assessment, teaching approaches, terminology and content.

- **Teacher development and training**

According to 5.2.3, the majority of educators were not prepared to handle C2005 and NCS. The initial training offered did not work and follow up training needs had to be done by experts in the field of classroom implementation of C2005 and NCS. From the responses obtained there is a need for intensive educator training. The use of competent educators if available at school level can assist educators with mastering the skills regarding the implementation of the new curriculum. Due to the impact brought about by C2005 and NCS on school programmes, educational managers as well as educators need to be trained in order to manage and support the implementation of the new curriculum.

- **Resources**

From the responses a great deal of demand is placed on resource provisioning. It is the responsibility of the educational manager to competently address provision of material. The respondents confirm that there is a great shortage of educator learner - support material. Late delivery of the available material also causes problems in the implementation of the curriculum. Educator training is also needed in the development of resources.

Resources make it possible for learners to achieve outcomes. C2005 and NCS calls for a different approach to the development of teaching aids, teaching materials and resources. Learners have to access information from a variety of resources. The establishment of media centers, libraries and educator learner support centers for access of information is important. This places a strain on educators who are technically not up to date and the educational manager has to address staff training with regard to the use of these resources. Research also shows that there is also shortage of educators who have been well prepared for delivering the new curriculum.

- **Parental involvement**

The respondents felt that (5.23; 5.4.1.5) there is a great deal that parents can contribute to the success of C2005 and NCS. Parents can be used as resources to offer or demonstrate lessons where schools experience educator shortages or be used as assistant educators where possible. Parents can also play a major role in the production or provision of resources in the classroom. Parents can also assist in fundraising projects. The issue of parental involvement and support poses a demand on the part of the educational manager on strategies they can implement to address the issue.

- **Communicating change**

The educational managers took it upon themselves to keep educators informed about the new developments regarding curriculum change. Although they were not sure of the curriculum content, did not receive training on C2005 and NCS they gave the necessary support to educators. Educational managers felt that coherent leadership was needed in order to alleviate the educator's fear. Certain management tasks were performed during the implementation phase of the new curriculum. A critical factor with the above is that the educational manager requires training with regard to change management as recommended in the literature study in Chapter 3. Lewin and Niemanns' change model could assist educational managers to handle innovations at school level.

- **Readiness for change and lack of motivation**

It seems as if the majority of educators were not ready and motivated to face C2005 and NCS demands. Lack of motivation can be attributed to lack of adequate training and fear of the unknown. Educators were uncomfortable and unfamiliar with the structure and design of C2005 and NCS. It is also not easy for educators to adjust from traditional teaching methods to outcomes-based approach. The role of the educational manager is to support and give guidance where necessary. The task of the educational manager is to inspire and encourage educators to embrace the newer and innovative philosophies and practices of our modern and progressive educational changes. Staff could also be motivated by involving them in decision making at all levels.

5.8 CONCLUSIVE REMARKS

The above patterns seem to culminate in the following core principles, and in conjunction with Chapter 5 Section H, participants were also given an opportunity to come up with issues they feel need to be done by management at school level in order to ensure a successful implementation of C2005 and NCS. Among other things the patterns culminate in the following core principles:

- Intensive in-service training for all educators including educational managers at all levels on a regular basis through workshops, information sharing sessions, cluster meetings, conferences and motivational talks.
- Timorous provision or delivery of educator learner - support material, establishment of media centers, libraries and learner educator - support centers and human resources.
- Consultation and involvement of all stakeholders (parents, educators, school community).
- Regular support by district based officials (learning facilitators, resource center officials and school management and governance structures).
- Provision of guidelines on learner assessment, recording of assessment, learner portfolio and reporting.
- Training of educational managers on change management.

From the qualitative research, the following common patterns emerged, the need to communicate change or consult with educators before implementing C2005 and NCS (5.4.1.1). The participants referred to lack of resources in terms of educator and learner support material, media centers and libraries and also provision of human resources, they also felt that resources were not timorously provided (5.4.1.2). The need to provide intensive educator development and training with the main focus on the structure and design of C2005 and NCS including educational managers was also a point of concern (5.4.1.3). The majority of educators lack relevant experience in terms of C2005 and NCS because by the time they underwent training, they were not

prepared to handle the new curriculum and they were not ready and motivated for change. The participants also felt that parents were not supportive and involved (4.1.2, 5.4.1.5). Terminology and content regarding C2005 and NCS brought about lack of understanding on the part of educators as they felt that not enough training was given. The participants also felt that C2005 and NCS were implemented hastily (5.4.1.4), and there was lack of support from Departmental officials (4.1.2). Guidelines on learner assessment, recording of assessment, learner portfolios and reporting were also regarded as needing attention (4.1.2). The results from the qualitative study concur with the following aspects from quantitative research: communicating change or consultative process (4.1.2, 5.4.1.1), lack of resources (4.1.2, 5.4.1.2), lack of relevant experience and training (4.1.2, 5.4.1.3), terminology and content problems (4.1.2), parental support and involvement (4.1.2, 5.4.1.5), and lack of readiness for change and motivation (4.1.2).

The following aspects from quantitative results emerged as additional to the core patterns: guidelines on learner assessment, recording of assessment, learner portfolios and reporting; regular support by district based officials and hasty implementation of C2005 and NCS.

In this chapter the theoretical framework of qualitative research was outlined also (5.2). The qualitative research of this study detailed, the findings discussed and provided more understanding on the results of the quantitative research. The research design was given and the following aspects were handled: selection of participants, data analysis, tendencies or patterns and major problems encountered regarding management of C2005 and NCS. Educational managers were interviewed and the point of saturation was reached after the fifth interview. Unstructured interviews were conducted with the respondents. The atmosphere was conducive to spontaneous, quality responses. Each interview was taped, immediately transcribed verbatim and the data analyzed with the help of a word-processing programme. The data of each respondent was compared and similarities and differences highlighted. A report was then compiled according to the themes that were identified.

The next chapter of the study will provide a synthesis of all information gathered, provide guidelines for the training of educational managers on change management regarding the implementation of C2005 and NCS. With the assistance of the findings, recommendations will be done for training of educational managers.

Chapter 6

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

6.1 OVERVIEW OF THIS STUDY

The main aim of this study was to contribute and amplify the existing body of knowledge on the impact of educational changes with regard to the implementation of C2005 and NCS and to provide guidelines on effective management of change. Schools implemented C2005 and NCS in phases (2.2.6.2) and for educational managers to be effective within this context requires knowledge of underlying philosophies of C2005 and NCS design and structure of C2005 and NCS as a new curriculum. It was then necessary to make an investigation into the design and structure of C2005 and NCS and the concept change. Research was done by means of literature study (Chapter 2), followed by study on change management (Chapter 3). A quantitative study by means of a questionnaire was conducted in an attempt to find out problems experienced during the implementation of C2005 and NCS (Chapter 5), and then qualitative in-depth interviews were conducted with five educational managers to verify the results of the quantitative investigation (Chapter 6).

New ways of looking at the school's instructional programme are required to ensure quality teaching and learning. The recommendations are aimed at equipping educational managers with skills on how to handle changes with regard to the implementation of C2005 and NCS.

6.2 SYNOPSIS OF THE RESEACH METHODS

6.2.1 Literature study

The research was supported by a literature study on:

- Overview of the curriculum framework for South Africa (2.2)
- The structure and design of curriculum model
- The National Curriculum Statement as revised approach to curriculum (2.2.6)
- Change management

6.2.2 Quantitative research

Quantitative research was conducted by means of two hundred questionnaires being distributed within the five education districts in the Free State. Hundred and forty-three were received by the researcher. Data was analyzed and a report on findings compiled.

6.2.3 Qualitative interviews

Qualitative research was done into the implementation of C2005 and NCS (4.4.2 and 6.3). Five respondents were interview. In-depth interviews were conducted according to and with the assistance of a pre-determined question: **“What problems did you encounter during the implementation of C2005 and NCS and in retrospection what would you have done differently?”**

The respondents discussed the implementation of C2005 and NCS in general and also cited problems they encountered during the implementation phase of the new curriculum and also gave recommendations on handling the problems

they experienced. The findings were also verified with the results from the quantitative study.

6.3 GUIDELINES FOR TRAINING OF EDUCATIONAL MANAGERS FOR CURRICULUM MANAGEMENT AND IMPLEMENTATION

It is apparent that what has gone before C2005 and NCS curriculum has had a marked influence on the design and structure of the curriculum which in itself has implications for educational managers at school level. The objective of the research as stated in section (1.3.2) was attained and the research questionnaire and the interview question posed in section (4.4.2) were satisfactorily answered. The role of the educational manager and the problems encountered (5.8; 6.5.4) regarding the implementation of C2005 and NCS were explained.

In section 3.4 a provisional model for the effective implementation of C2005 and NCS was given. Tasks to be performed by the educational manager were also tabulated and different activities indicated. The qualitative data revealed that educator development and training was also a crucial aspect to be attended to. Due to the above a training programme for the implementation of C2005 and NCS should thus include the following:

- Basic knowledge regarding C2005 and NCS. The new curriculum as set in Chapter 2 calls for a knowledge of outcomes-based curriculum that is learner-centered, content-independent, life-skills orientated and criterion referenced.
- Knowledge and skills in terms of the management of change (Chapter 3) in order to equip educational managers with change management strategies for the implementation of C2005 and NCS.
- More emphasis on areas in which educational managers at school level experienced major problems.

In order to account for the above dimensions there needs to be strong educational managers at schools for the successful implementation of C2005 and NCS. The educational managers need to know about, understand, have a working knowledge of, and translate into practice the management of a paradigm shift, curriculum change and curriculum implementation. In conclusion a training programme for educational managers at school could be designed according to the following model:

6.3.1 Unfreeze

The stage of unfreeze consists of four management tasks to be attended to by educational managers during the first stage of introducing changes to educators. It is further important to take care of participants' attitudes by eliminating or unfreeze the present attitudes so that a space is created for the new ones, and if employees can be made aware that the change relates to their own needs, they will obviously be more receptive. This stage refers to situational analysis, introducing change to the participants, identification of alternatives and developing plans for the implementation (3.5.1).

6.3.1.1 Situational analysis

Educational managers at school level should be trained to critically evaluate the present situation in order to be familiar with factors that can impede effective implementation of the envisaged change. Information on existing fears, human and physical resources at their disposal and the deficiencies that are present, as well as the information and training needs should be gathered (3.5.1.1; 5.8; 6.5.4).

6.3.1.2 Introducing C2005 and NCS

In order to introduce the changes related to the new curriculum the educational manager should:

- Know how to cope with fears and uncertainties of staff members (3.5.1.2; 6.5.1.1).
- Be able to provide correct information regarding C2005 and NCS in order to limit resistance and fear. Information on curriculum change will be most valuable to the staff (2.3; 2.4; 2.6).
- Be able to provide reasons or detailed explanation for changes (2.2).
- Have undergone training on curriculum change (3.5.2.3; 6.5.1.3).

6.3.1.3 Selecting the best alternative

Once the need for change has been communicated and introduced to the staff members, the educational manager should select those innovations that show potential for significantly improving education in the school (3.3.1.3). The staff members should also be involved in decision making because if not, an opportunity can be created for them not to take responsibility for their actions.

6.3.1.4 Planning for the implementation of C2005 and NCS

Planning is seen as the management task concerned with a deliberate reflection on the objectives of the organization, the resources as well as activities (3.5.1.4) and drawing a suitable plan for achieving the objectives. Emphasis on how the management actions will be carried out will, to a great extent depend on the quality of planning. During planning, managers should make use of knowledge, experience and capabilities of staff to achieve the following:

- Setting of objectives
- Drawing up of the budget, action plan, responsibilities of all participants
- Distribution of work with regard to the implementation of C2005 and NCS e.g. determining outcomes, integrating learning areas, compilation of learner educator activities and developing format for continuous assessment (2.5).
- Gathering enough information on curriculum structure and design (chapter 2).

Educational managers should also be aware of creative strategies to curb or overcome problems related to the implementation of C2005 and NCS (6.4).

6.3.2 Change

This stage allows educational managers to establish new patterns and attitudes with regard to changes. It is during this stage that that which has been planned, has to be implemented. The educational manager has to determine whether the participants are ready for those changes so that orientation and training can take place and the time schedule can be finalized (3.5.2). This stage consists of the following activities: determining readiness for change, staff orientation, training, setting a time schedule and implementation stage.

6.3.2.1 Determining readiness for change

Before any change can be implemented the manager should determine the feeling of staff regarding the envisaged change. The educational manager should determine whether the staff views the proposed change as:

- a way of solving the existing problems
- potentially effective
- advantageous
- clear to everybody
- compatible to their values (3.5.2.1; 6.3.6)

Initially evaluation has to take place in order to determine whether defreezing has been completed. The educational manager should be provided with ways of obtaining this information, such as group discussions, staff meetings, questionnaires and interviews with co-ordinators.

6.3.2.2 Staff orientation

In attempting to orientate the staff about C2005 and NCS the educational managers need to be aware of the staff's concerns about innovations.

Educational managers should

- establish a healthy climate by communicating openly with the staff and establishing a healthy working environment and sound interpersonal relationships (6.3.1)
- lead in such a way that the changes become acceptable to the staff and that they are motivated to strive for effective performance (3.5.2.2)
- make sure that the staff understands C2005 and NCS and that all members know their roles and duties concerning changes (2.4; 2.6).

6.3.2.3 Staff training

Effective training is a useful way of moving an organization forward towards an agreed objective (3.5.2.3). Educational managers have to start with pre-implementation training in order to equip the staff with skills and knowledge required to implement C2005 and NCS. They should

- make use of experts, apply strategies such as work rotation, support positions, committee work and external experience to train the staff (3.5.2.3; 6.3.3; 6.6.2)
- provide supportive programmes by encouraging collaboration among participants, educators, parents and learners (6.3.3; 6.4)
- organize meetings where parents and learners are being prepared for the changes that are to take place (6.3.5).

6.3.2.4 Setting a time schedule

Educational managers should guard against implementing too many changes at the same time if they are not accepted it might be difficult. On the other hand it is also important that none of the phases should take up too much time as the staff may then lose enthusiasm and commitment to the programme (3.5.2.4).

6.3.2.5 Implementing C2005 and NCS

C2005 and NCS should be implemented as planned by the National Department of Education (DE). Educational managers should be able to:

- Draw up an implementation plan consisting of tasks to be executed, division of work, an inventory of physical resources needed, description of the quality of work, communication lines, list of coordinators and an exposition of control mechanism.

Constant monitoring is important during the implementation phase (3.5.2.5).

6.3.3 Refreeze

The last phase of change management is refreeze. This consists of three stages, namely, evaluation, feedback and corrective measures and integration. It is during this phase when final acceptance, integration and stabilization of the change take place and new patterns of behaviour and attitudes are permanently established.

6.3.3.1 Evaluation

While the implementation is in progress as well as after the work has been done, educational managers should be trained on how to identify merits and deficiencies through evaluation (3.5.3.1, 3.6). Managers should be able to

- Appoint evaluators by means of participatory decision making processes. The evaluation criteria and methods should also be decided upon so that the quality and functionality of tasks could be measured
- Identify the merits and deficiencies during the implementation stage of C2005 and NCS as experienced by the evaluation committees
- Collect enough information, analyze results, draw conclusions, make recommendations and compile a report on findings
- Ensure implementation of recommendations (3.6).

6.3.3.2 Feedback and corrective measures

Feedback should be given on the work done so that actual performance may be compared with set standards. Verbal or written feedback should be made on a regular basis to keep track of the planned activities (3.5.3.2). Feedback and corrective measures ensure that the plan is carried out smoothly and with the focus on potential or deviations. Educational managers should use this activity to support those members of the staff who could not cope properly with C2005 and NCS and support services should be provided to them (3.5.3.2; 6.4; 6.6.2).

6.3.3.3 Integration

This is an activity when participants are expected to decide whether to adopt or reject the innovation, and in this regard the educational manager should be prepared to provide support, further training and motivation (3.5.3.3; 3.6). In this way the participants have a new system and processes and in this way the change process is completed.

Finally, it is then crucial that educational managers at school level should be trained on the management of change. It is through such training that the means for the resolution of problems, proper use of resources and coping skills for changed conditions could be provided so that a school environment could be conducive to teaching and learning.

6.4 RECOMMENDATIONS

The main recommendation of this study is that there needs to be strong educational managers at school level for the successful implementation of C2005 and NCS. The educational manager needs to know about, understand, have a working knowledge for, and translate into practice the following:

- The management of change, curriculum change and curriculum implementation (Chapter 3).

- The management of human resources; and staff development (5.4.1.3, 5.6, 5.7).
- Mastery of curriculum design and structure (C2005 and NCS) (Chapter 2).
- Effective communication (5.4.1.1, 5.6, 5.7)
- Provision of physical resources to enhance successful implementation of C2005 and NCS (5.4.1.2, 5.6, 5.7).

6.4.1 Management of change, curriculum change and curriculum implementation

Educational managers are people responsible for making sure that an organization achieves its goals. Effective instructional leadership is dependent on a thorough knowledge of the curriculum. This will include curriculum change, interpretation of policies and effective communication (3.1, 4.4.2.1, 4.4.3.6, 4.4.3.8). While studying structure and design of C2005 and NCS in Chapter 2, it became clear that the educational manager needs to be knowledgeable about the general curriculum issues (see 2.2, 2.3, 2.4 and 2.6). It is the responsibility of the educational manager to communicate change to the staff members (5.4.1.1).

Effective management of change demands knowledge of skills on how to implement innovations (3.1). Implementing changes requires effective communication. In order to gain or increase efficiency, quality, responsiveness and innovation the educational manager should be able to communicate effectively with staff members. Managers therefore must have a good understanding of the communication process if they are to perform effectively (3.3.1.3, 3.4.3, 3.5.1.2). To avoid unplanned implementation of changes, it is recommended that educational managers should undergo training on different approaches or models for change implementation (3.4, 3.6, 5.8). It is also imperative for them to attend in-service training on C2005 and NCS (5.7).

6.4.2 Management and provision of human and physical resources

Provision of resources is a prerequisite for maintaining an effective C2005 and NCS programme. The literature study shows that education with outcome-based approach demands the whole school commitment and this includes development and provisioning of resources (4.4.7.6). Resources make it possible for educators and learners to achieve the set objectives and outcomes (5.5, 5.7). Traditional teaching and learning relied mainly on textbooks, posters, charts and computers in well resourced schools. An outcomes-based approach requires information flexibility. The advent of information technology (IT) comprises of complex networks of computers, telecommunication systems, remote controlled devices and internet allow instant data access and retrieval. This places demands on educators who are not technically up to date and the educational manager needs to address staff development and training with regard to the use of these resources (2.5.4, 4.4.2.14, 4.4.3.14, 3.5.2.3).

The study also revealed that timeous provisioning of C2005 material was a problem (4.4.2.7, 4.4.2.10, 4.4.2.13). Schools experience lack or non-provisioning of educator-learner material on the re-opening of schools (4.4.2.7). The literature study shows that resource provisioning is essential to the running of effective teaching and learning programme. Resources are seen as tools necessary for cognitive development, whether inside or outside the classroom. It is suggested that during the time of curriculum change, strategic resources must be provided (4.4.4.9, 4.4.5.1, 4.4.5.2).

The qualitative study showed that the role of the educational manager is to find ways of providing resources for the effective teaching and learning to take place. Functional equipments such as television sets, video recorders, photostat machines, and data projectors are part of his/her job, as is the provision of electronic retrieval devices such as computers and the internet. The study also supports the need to generate and manage resources (4.4.5.3). The respondents are unanimous that educators need to be trained and encouraged to develop their own material. Resource provisioning is dependent on the educators' creativity and potential. The educational

manager needs to be closer to the educators and their teaching needs to be able to provide support.

Both the literature and empirical research found it vitally important to have an adequate supply of resources for teaching and learning to take place. Resource provisioning by effective educational managers is a commitment made to staff and learners to provide material needed for teaching and learning.

6.4.3 Educator development and training

C2005 and NCS brought changes required of teaching and learning, it is imperative to address the issues related to educator development and training. From the literature study in Chapter 2 it is apparent that a new approach is needed (see 2.4). Table 2.1 gives the differences between traditional education and an outcomes-based approach. The new curriculum shows that there is a shift from content based learning to outcomes-based learning. The emphasis is placed on what learners can produce or demonstrate at the end of a lesson (2.4.4). From the quantitative research (4.4.5.3) many textbook-bound educators have difficulty in adapting to the creation of lessons using multiple resources, and then compiling the lesson plans and worksheets that are needed. It also follows from the research conducted (4.4.2.6, 4.4.6.13, 5.4.1.3, 5.5) that educators who have not had proper or adequate training will be disadvantaged when faced with the prospects of teaching in an integrated environment rather than specific subjects.

C2005 and NCS as described in 2.4 and 2.6 in Chapter 2, calls for knowledge of outcome-based curriculum that is learner-centred, content-independent and criterion referenced (2.5.3.2). Curriculum training did not prepare the majority of educators for the implementation of the new curriculum (4.4.2.6, 4.4.6.13) educators find it difficult to integrate knowledge regarding learning areas or programmes. Educators are expected to produce cohesive learning programmes and are also teaching unfamiliar subjects.

The above issues need to be handled through staff training and development programmes initiated by the educational managers. In addition staff needs training to make sense of the curriculum design and content. The policy document describes the following as major stepping stones to understanding and interpreting the curriculum:

- The structure of the curriculum design (2.3, 2.6).
- The specific and critical outcomes (2.4.4.1, 2.4.4.2).
- The learning areas (2.3.4, 2.6.6).
- The assessment criteria (2.4.4.3).
- The performance indicators (2.4.4.3.1).
- The learning programmes (2.4.4.7).

These concepts are formidable enough to understand and make sense of, let alone translate into practical teaching techniques, and it must fall within the scope of development and training of educators.

The literature study on management of change supports the need for staff development and training (3.5.2.3). The role of the educational manager is to create a climate conducive to quality teaching and learning, it follows that staff development and training is one of the major areas of responsibility.

Development programmes are vital to the success of any school implementing new school curriculum and it is the task of the educational manager to initiate programmes that will assist educators to internalise innovations. Professional development comprises an indication of how to increase skills in the application of these techniques.

The qualitative study also encourages educator development and training (5.4.1.3, 5.5). The major issue regarding initial training which was supposed to introduce the concept of C2005 did not work and thus the structure, the clarity and the importance of the new curriculum was lost in the initial confusion and this lead to frustration and negative feeling. Constant monitoring and support of staff is necessary for effective development and training and high motivation levels need to be maintained to clear misunderstanding which was associated with the weak initial training.

From the above discussions, it is clear that educator development and training is crucial to the success of implementing and maintenance of any C2005 and NCS programmes. Specific issues that need to be addressed include:

- Staff orientation in the understanding of the entire curriculum structure and policy.
- A working knowledge of OBE approach and principles such as learner-centred, outcomes-base, content-independent, life-skills orientated and criterion-referenced approaches.
- Professional development and motivation of educators.
- Monitoring and support of educator performance.

The task of the educational manager regarding the above is to motivate and encourage educators to move away from out-dated teaching methods and to embrace the new and innovative approaches and practices of our modern and progressive society.

The educational manager should also take cognisance of how different groups reacted to certain items. The negative correlation between male and females (4.34), negative correlation between 0-10 and 11-21+ experience (4.40) and a negative correlation of ,2675107 between 20-39 and 40-65 age groups (4.40) imply that the educational manager should approach the two groups differently. The above should be considered during the implementation of development and training programmes.

6.4.4 Parental involvement

Parents as stakeholders are seen as a strong support base for educators and the school as a whole (5.4.1.5). The majority of respondents are of the opinion that parents are not doing enough to support the educators with regard to the implementation of C2005 and NCS (4.4.3.6, 4.4.5.1). Parents are seen as reluctant to assist learners with homework or projects. This can be attributed

to the fact that parents lack understanding in terms of the new outcome-based approach (4.4.2.8).

The educational manager should come up with strategies on how to get parents more involved in their children's education. Parents can be invited for information sessions on curriculum issues. During such sessions matters like the new report form can be discussed. Fund raising projects can be organized in order to supplement on resources. Parents can be useful instruments in the classroom to offer demonstration lessons where educators are not clear about the curriculum content (5.4.1.5, 5.7).

Viewing the above item from the management point of view, there is significant correlation between male and females with regard to parents' support to the school regarding C2005 and NCS. Table 4.21 revealed negative correlation between the views of males and females (correlation coefficient: -0.1995745), which implies that males and females perceive parents' support differently. It is clear that males are more convinced that parents are giving enough support regarding the implementation of new curriculum while females do not see parents giving the necessary support. These findings have a particular management implication in the sense that the educational manager seemingly will have to approach the two sides differently. Males could be positive toward this issue because of lack of understanding in terms of the meaning of support in C2005 and NCS context, while females can be negative because of lack of knowledge regarding strategies on how to involve parents.

6.4.5 Readiness for change

While the educational manager is busy communicating change to the staff members he/she should also determine whether the staff is ready or view the proposed change as potentially effective and comprehensive to all (3.5.2.1, 4.4.2.6, 4.4.4.5, 4.4.5.14.4.6.7). Motivating staff and involving them in decision making at all levels will ease tensions. The biggest challenge for the

educational manager is in helping individuals and groups within the organization to work more effectively together. This category typically involves changing attitudes and behaviours of organizational members through the process of communication and decision making (Robins et al 2003:407).

Before any change can be implemented, managers should prepare for organizational change by considering certain guidelines (3.2.4). When following these guidelines prior to initiating change effort, managers will be preparing their organizations for successful change. Several of these guidelines presume that managers will engage in preparing for change well in advance of the decision that a particular change is needed. The objective for educational managers should be to ensure that their organizations maintain state of readiness for change so that they can move quickly and effectively when major changes are needed.

6.5 PROBLEMS EXPERIENCED WITH THIS STUDY

Problems experienced by the researcher during the empirical research included the following:

- Educators fear to complete questionnaires. Some educational managers feared that whatever they wrote could be used against them. Despite the fact that they were not expected to write their names on the inventories, they felt that their handwritings were known to their supervisors or whoever would collect the questionnaires.
- Reluctance to complete questionnaires. Some educational managers were reluctant to complete questionnaires.
- They saw it as a waste of time since the recommendations will not be implemented by the government or department of education. The researcher had to explain to them that it was important for the department to know these problems so as to consider them in its planning.

- Reluctance to co-operate. While in some schools it was easy to find the required number of participants, in a few schools this exercise was difficult. Some educators saw the study as a benefit of an individual, the researcher, and not learners nor educators. This attitude may change with increased exposure to and benefits from this research.

6.6 FURTHER RESEARCH

Very little research has been done on change management with reference to the implementation of C2005 and NCS. Therefore a number of aspects of change management regarding implementation of C2005 and NCS still have to be subjected to thorough research. The following aspects are suggested for further research:

- The research was conducted only in the Free State schools. There is a need to conduct research throughout South African schools as management of change may differ from province to province.
- School-based educators need to be interviewed, in other words, educators who are busy implementing C2005 and NCS. This was not possible because this research was confined to managers at school level.
- Lack of resources was identified as one of the problems impacting negatively on the implementation of C2005 and NCS. The effects of this problem on successful implementation of the new curriculum need to be researched.

6.7 CONCLUSIONS

An overview of the study was given (6.1) in this chapter outlining the main objective of this study which was to contribute and amplify the existing body of knowledge on the impact of educational changes with reference to the implementation of C2005 and NCS and to propose guidelines on the effective management of change. A synopsis of the research methods was given which included a description of the literature study, quantitative and qualitative research. A summary of the findings was discussed which compared the findings of the literature and the qualitative studies.

This study showed that the educational manager, in C2005 and NCS context, needs to address curriculum change and implementation, manage educator development and training, manage provision of human and physical resources, have knowledge on strategies on how to involve parents in school affairs regarding curriculum issues and above all manage and implement change effectively.

A provisional model for the effective implementation of C2005 and NCS was given in Chapter 3. In this chapter guidelines for training of educational managers for curriculum management and implementation were also outlined. Further recommendations were given on the problems mentioned in paragraph two (6.7). Recommendations for further research were also made.

The educational manager also needs to consider how groups gave different responses on certain items. The coefficient correlation between males and females, age groups 20-39 and 40-65, and experience of 0-10 and 11-21+ play a vital role on how the educational manager should respond to participants' views.

6.8 SUMMARY

Change is an integral part of society and thus finds expression in all spheres of life. Constitutional changes in South Africa also imply change in education. Change brings about insecurity, fear and resistance in the workforce and this demands that the school educational leader should manage change in such a way that it could be successfully implemented. In order to equip educational managers for the task of managing change, relevant training should be provided. When the capabilities and deficiencies in the performance of educational managers regarding management of change are identified, programmes which will address the training needs of educational managers can be designed.

The focus of this study was to establish how educational managers managed change with regards to the implementation of C2005 and NCS. The introduction of C2005 and NCS with its outcomes-based approach has been the subject of intense debate since 1990. The new political dispensation based on the principle of human rights and the removal of discrimination on the grounds of race, sex and religion compelled education to change and take the role of preparing learners to be responsible citizens that would fit into the new democratic society. C2005 and NCS differ radically from the traditional, in-put based approach to education by changing to an outcomes-based approach. This causes a change in the role of educational managers. Educational managers are responsible for the successful implementation of the new curriculum. Changes will also be necessary in the way the school is structured and the delivery of the curriculum becomes crucial.

Change is a complex concept. The study from various experts on change was conducted. Change is characterized by aspects such as renewal, feelings, time, continuity and direction. Various forms and types of changes as well as strategies for change have certain educational implications. The educational manager has to take into account the various aspects of change including the internal and external factors which have an influence on change. The

success of change lies in the manner in which it is implemented. Lewin and Niemanns' model of change gives educational managers a clear description of procedures to follow when one is faced with innovations.

The research commenced with a study of C2005 and NCS. The literature study showed that the new curriculum brought about changes in school organization, mainly with regard to the integration of traditional subjects into learning areas, the need to create a learner-centred environment and the introduction of a continuous, formative assessment. The study showed that the educational managers' responsibilities include the management of change, staff development, knowledge of teaching strategies in C2005 and NCS context, effective communication, provision of resources and monitoring.

A review of both the quantitative and the qualitative study of this research project clearly shows that the role of the educational manager has to change in C2005 and NCS environment. The demands are greater than before because a great deal of staff development, support and motivation is necessary for the successful implementation and maintenance of C2005 and NCS into schools.

It is the responsibility of the school educational manager to acquire knowledge and develop skills that will address these issues, and to set up the needed procedures and programmes that will support these changes. The role of the educational manager is to assist in maintaining a teaching staff that can provide the best opportunities for teaching and learning. A conducive learning environment for quality teaching and learning should also be created. For these reasons, there is a need for the educational manager to acquire the necessary knowledge and skills on change management. Training programmes can be designed to equip educational managers with skills to manage change. Guidelines and change management model for the effective implementation of C2005 and NCS concluded the study.

Opsomming

Verandering is 'n integrale deel van die samelewing en vind so uitdrukking in alle dele van die samelewing. Konstitusionele verandering in Suid Afrika dui ook op veranderings in die onderwys. Verandering bring onsekerheid, vrees en teenstand daarteen in die werksmag en dit veroorsaak dat die onderwys leier by die skool dit op so 'n wyse moet bestuur dat dit suksesvol geïmplimenteer kan word. Om onderwys leiers toe te rus vir die taak om onderwys te bestuur moet daar relevante opleiding verskaf word. Wanneer die kapasiteite en tekortkomings van die onderwys bestuurders se vertoning in die bestuur van verandering geïdentifiseer word, kan relevante programme ontwerp word wat die nodige opleiding sal verskaf.

Die fokus van hierdie studie was om vas te stel hoe onderwys bestuurders verandering gedurende die implimentering van NKV en K2005 bestuur het. Die bekendstelling en implimentering van K2005 en NKV was die onderwerp van vurige debat sedert 1990. Die nuwe politieke bestel wat gebaseer is op die beginsel van menseregte en die verwydering van diskriminasie op grond van ras, geslag en godsdiens het onderwys gedwing om te verander en het onderwys begin om die rol te speel as voorbereiders van leerlinge om verantwoordelike burgers te word wat inpas in die nuwe demokratiese samelewing. K2005 en NKV verskil drasties van die vorige onderwys stelsel en verander na 'n uitkomsgebaseerde stelsel vanaf een waar inligting eensydig aan leerlinge gegee word. Dit het 'n groot verandering gebring in die rol van onderwys bestuurders. Hulle is verantwoordelik vir die suksesvolle implimentering van die nuwe kurrikulum. Verandering moet ook plaasvind in die strukture by skole en die implimentering van die kurrikulum word noodsaaklik.

Verandering is 'n ingewikkelde konsep. 'n Studie is gemaak van verskeie kenners se mening oor verandering. Verandering word gekenmerk deur verskeie aspekte soos vernuwing, gevoel, tyd deurlopendheid en rigting. Verskeie vorms en tipes van verandering sowel as strategieë vir verandering het heelwat opvoedkundige implikasies. Die opvoedkundige bestuurder moet die verskillende aspekte van verandering in ag neem sowel as die verskeie interne en eksterne faktore wat 'n rol mag speel in verandering. Die sukses van verandering lê in die manier waarop dit geïmplimenteer word. Die Lewin en Niemann model van verandering gee aan onderwys leiers 'n duidelike aanduiding van watter prosedures gevolg moet word as nuwe skepping te vore kom.

Hierdie navorsing begin met 'n studie van K2005 en NKV. Die dokumentêre studie toon dat veranderinge plaasgevind het aan skole se organisasie, hoofsaaklik met betrekking tot die integrasie van tradisionele vakke met leer areas, die behoefte om leerling-gesentreerde omgewings te skep asook die bekendstelling van deurlopende assessering. Die studie toon dat die verantwoordelikhede van die onderwys bestuurder die volgende insluit: die bestuur van verandering, personeel ontwikkeling, kennis van die onderrig strategieë van K2005 en NKV, effektiewe kommunikasie, voorsiening van hulpmiddelle en moniteering.

'n Oorsig van die kwalitatiewe en kwantitatiewe aspekte van hierdie studie toon duidelik dat die rol van die onderwys bestuurder in die bestuur van K2005 en NKV moet verander. Die eise is baie groter as tevore aangesien baie meer personeel ontwikkeling, ondersteuning en motivering nodig is om die suksesvolle implimentering en behoudbaarheid van K2005 en NKV in skole te verseker.

Dit is die verantwoordelikheid van die onderwys bestuurder om kennis en vaardighede te verkry en te ontwikkel om hierdie aspekte aan te spreek, asook om die nodige prosedures en programme daar te stel wat hierdie veranderinge sal ondersteun. Die rol van die onderwys bestuurder is om `n onderwys span daar te stel en te ondersteun wat die beste geleenthede sal skep en onderhou vir onderrig en opleiding. `n Effektiewe leer omgewing vir kwaliteit onderrig en opleiding moet geskep word. Dit is die redes waarom daar `n behoefte is vir onderwys bestuurders om die nodige kennis en vaardighede te verkry om verandering te bestuur. Opleidings programme kan geskep word om onderwys bestuurders toe te rig met die nodige vaardighede om verandering te bestuur.

Riglyne en `n veranderings bestuur model vir die suksesvolle implimentering van K2005 en NKV sluit hierdie studie af.

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Enquiries: M.A. Kobuoe
Ref No.: Research Project

Tel.No.: (057) 353 2901
Fax No.: (057) 357 5443

The Principal
Public Primary/Secondary School
FREE STATE EDUCATION DEPARTMENT

Dear Sir/Madam

RESEARCH PROJECT: M.A. KOBUOE

1. The above matter refers
2. The above-mentioned student has to fulfil the demands and requirements for PhD degree with the University of the Free State. He has to conduct a research project through a questionnaire and a qualitative interview and the topic reads thus:
Management of Change with reference to the implementation of Curriculum 2005 and National Curriculum Statement in the Free State schools.
3. Permission is hereby requested for the above mentioned student to conduct a research project at your school.

I hope you find this in order.

Thank you.

M.A. KOBUOE

This questionnaire is designed to conduct a needs analysis for the successful implementation of Curriculum 2005 (C2005). It is intended to be able to lead to a recommendation for the management of change in order to ensure that C2005 will be successful. The questionnaire comprises a combination of rapid-completion, closed and a few more time-consuming open ended questions.

The questionnaire will take you about fifty minutes to complete.

The results will be aggregated and reported anonymously, so that it will not be possible to identify or trace individual people or schools. You do not need to write your name on this questionnaire.

If you experience any problems with this questionnaire. The researcher can be contacted at:

17 Cobalt Street
Hospital Park
ODENDAALSRUS
9480

Tel. No.: (057)3532901 (Work)

Cell: 072 339 4853

Thank you very much for your co-operation in completing this questionnaire.

M.A KOBUE
(SCHOOL OF EDUCATION)
UNIVERSITY OF FREE STATE

SECTION A

Indicate data applicable to you by making a cross on the relevant number.

BIOGRAPHICAL DATA

1. Gender	Male	1
		2

2. Age	20-29	1
	30-39	2
	40-49	3
	50-59	4
	60+	5

3. Teaching experience	0-5	1
	6-10	2
	11-15	3
	16-20	4
	21	5

4. Present Post	School Principal	1
	Deputy Principal	2
	Head of epartment	3
	Class Educator	4

SECTION B

Answer the following questions by crossing 1 (YES) or (NO), according to your own personal feeling or experience or observation.

5. C2005 as an approach has been effectively communicated	Yes	1
	No	2

6. Do you understand C2005 terminology easily?	Yes	1
	No	2

7Has C2005 been ushered in with a strong support structure (SMDs, Learning Facilitators, Consultants, etc.	Yes	1
	No	2

8. Are official from the Education Department able to help you with C2005 problems?	Yes	1
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	No	2
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9. Do you think C2005 was introduced too soon/hastily?	Yes	1
	No	2

10. Did the educator training programme you followed at college/university prepare you for C2005?	Yes	1
	No	2

11. Do you receive C2005 material from the Education Department before the first day of the school year?	Yes	1
	No	2

12. Do parents understand the new C2005 report cards?	Yes	1
	No	2

13. Do you know the different bodies such as National Standards Bodies (NSBs), Standards Generating Bodies (SGBs), South African Qualification Authority (SAQA) and National Qualifications Framework (NQF)?	Yes	1
	No	2

14. Do you think the Government has the resources to finance C2005.	Yes	1
	No	2

15. Does C2005 provide for the teaching of basic reading, writing and mathematics?	Yes	1
	No	2

16. Do you think C2005 in South Africa will change in 2 or 3 years from now?	Yes	1
	No	2

17. Is the C2005 material such a textbooks and teaching aids supplied by the Education Department adequate?	Yes	1
	No	2

18. Does your teaching experience assist you to easily implement C2005	Yes	1
	No	2

SECTION C

For the following items please circle the response which is closest to your own opinion.

1 = very little, 2 = little, 3 = a lot, 4 = quite a lot, 5 = a great deal

to what extent do you consider the following items to be factors that are already present and that will facilitate or contribute to the success of Curriculum 2005?

19. C2005 fits with the political changes in our country.	1	2	3	4	5
20. C2005 promote individual success rates amongst learners.	1	2	3	4	5
21. C2005 has positive principles (all learners can learn).	1	2	3	4	5
22. Teachers want to see C2005 being successful.	1	2	3	4	5
23. C2005 is also supported by parents.	1	2	3	4	5

24. School principals are in favour of C2005	1	2	3	4	5
25. C2005 is a way of improving teachers' self-esteem	1	2	3	4	5
26. There is effective communication in the school	1	2	3	4	5
27. The school is used to trying innovations.	1	2	3	4	5
28. There is effective leadership in the school.	1	2	3	4	5

29. Educators' morale is high.	1	2	3	4	5
30. Equipment & materials are adequate.	1	2	3	4	5
31. There is sufficient administrative support.	1	2	3	4	5
32. Educators' subject expertise is adequate.	1	2	3	4	5
33 Educators' pedagogical expertise is adequate.	1	2	3	4	5

34. The business community & educators support C2005	1	2	3	4	5
35. C2005 motivates students.	1	2	3	4	5
36. Educator organizations were involved in the design of C2005	1	2	3	4	5
37. Educators are used to planning collaboratively.	1	2	3	4	5
38. Educators are used to working collaboratively	1	2	3	4	5

39. In-service programmes for C2005 are adequate	1	2	3	4	5
40. C2205 is being carefully monitored.	1	2	3	4	5
41. C2005 is derived from highly successful curriculum models.	1	2	3	4	5
42. C2005 will improve academic standards.	1	2	3	4	5
43. Changing to the C2005 system is mandatory, therefore all schools have to adopt it.	1	2	3	4	5

SECTION D

For the following items, please circle the response which is closest to your own opinion.

1 = very little, 2 = little, 3 = a lot, 4 = quite a lot, 5 = a great deal

To what extent do you consider the following items to be factors that will be inhibit or cause **difficulties** or **problems** for the success of Curriculum 2005?

44. It does not have a well-defined curriculum content.	1	2	3	4	5
45. It is uncertain how the objectives will be achieved.	1	2	3	4	5
46. Educators are unclear about the principles of C2005.	1	2	3	4	5
47. Educators are easily confused by the terminology used.	1	2	3	4	5
48. The changes are too radical.	1	2	3	4	5

49. It is too prescriptive.	1	2	3	4	5
50. It puts too much emphasis on outcomes at the expense of values, processes and inputs.	1	2	3	4	5
51. It is imposed from outside schools by government.	1	2	3	4	5
52. There is a shortage of resources such as textbooks.	1	2	3	4	5
53. It is difficult to measure objectives.	1	2	3	4	5

54. There is insufficient funding for it	1	2	3	4
55. It is not a perceived improvement on present practice.	1	2	3	4
56. It is not easily understood.	1	2	3	4
57. It has not been communicated effectively to the schools.	1	2	3	4
58. The scale of innovation is too large.	1	2	3	4

59. Its purpose and goals are unclear.	1	2	3	4
60. Educators have no time for the amount of preparation required	1	2	3	4
61. Educators are not used to solving problems.	1	2	3	4
62. It does not promote the recognition of learners' achievements.	1	2	3	4
63. Learners' self-esteem is not improved.	1	2	3	4

SECTION E

Answer the following questions in your own words.

64. Which factors contribute negatively to the implementation of C2005 in South African schools?

.....
.....
.....

65. Do you think C2005 pleases politicians more than it pleases educators?

.....
.....
.....

66. What do you think can be done to address problems associated with C2005 in schools?

.....
.....
.....

SECTION F

Answer the following questions by crossing 1 (Yes) 2 (No), according to your own personal feeling or experience or observation.

67. Do you think it is necessary to analyse the situation before C2005 can be implemented in school?	Yes	1
	No	2

68. Is it a proper approach to introduce intended changes, such as those required by the implementation of C2005, to educators before the implementation?	Yes	1
	No	2

69. Do you think educators were sufficiently consulted before C2005 was adopted?	Yes	1
	No	2

70. Are the setting of objectives, budgeting, drawing-up of action plans some of the activities to plan for before implementation ?	Yes	1
	No	2
71. Is it important for the staff to be part of the decision-making process?	Yes	1
	No	2
72. During the implementation phase (C2005), should enough time be spent on communication regarding the changes and communication channels should be established ?	Yes	1
	No	2
73. Should the educational leader determine whether the participants are ready for changes before any change is implemented?	Yes	1
	No	2
74. Does the educational leader have to establish or create a climate or atmosphere conducive to objectivity, trust and confidence in attempting to orient the staff?	Yes	1
	No	2
75. Do you think the information and approaches acquired from C2005 workshops can be applied in classroom situation?	Yes	1
	No	2
76. Should C2005 programmes be implemented in schools as set out by the National Education Department?	Yes	1
	No	2
77. Should a programme be drawn up before any innovation is implemented?	Yes	1
	No	2
78. Is it necessary to establish an evaluation team after the implementation phase?	Yes	1
	No	2
79. Does the educational leader have to give verbal or written feedback to staff members about the feelings of the evaluation team?	Yes	1
	No	2
80. Does the school management team have to give support, further training and encouragement to the staff members?	Yes	1
	No	2

SECTION G

Answer the following question by choosing one of the following options:

Never: 1; Sometimes: 2; Often: 3; Always: 4

Only make a cross on the appropriate number. No answer is right or wrong.

81. I assist my educators to understand C2005 by means of workshops and meetings.	Never	1
	Sometimes	2
	Often	3
	Always	4

82. Whenever I am faced with new developments, I ensure proper analysis of the situation before I can implement the innovation.	Never	1
	Sometimes	2
	Often	3
	Always	4

83. The poor conditions in our schools make it difficult for me to implement C2005.	Never	1
	Sometimes	2
	Often	3
	Always	4

84. I give detailed explanations of reasons for the implementation of C2005 to my educators.	Never	1
	Sometimes	2
	Often	3
	Always	4

85. During any planning phase I make use of the knowledge, experience and capabilities of staff to achieve the desired ends.	Never	1
	Sometimes	2
	Often	3
	Always	4

86. As the principal, I ensure that the implementation plan consists of objectives, tasks to be executed and the resources needed.	Never	1
	Sometimes	2
	Often	3
	Always	4

87. The evaluation committee identifies the merits as well as the deficiencies of the changes and the process taking place.	Never	1
	Sometimes	2
	Often	3
	Always	4

88.	Never	1
	Sometimes	2
	Often	3
	Always	4

89.	Never	1
	Sometimes	2
	Often	3
	Always	4

90.	Never	1
	Sometimes	2
	Often	3
	Always	4

91.	Never	1
	Sometimes	2
	Often	3
	Always	4

SECTION H

Please write on the table, below, in order of priority the five main issue you feel need to be addressed by management at school in order to ensure the success of C2005 at school

MAJOR THINGS TO DO/ADDRESS TO ENSURE THE SUCCESS OF C2005 AT THE SCHOOL LEVEL

92.
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