

**EDUCATORS' EXPERIENCES IN IMPLEMENTING
THE REVISED NATIONAL CURRICULUM
STATEMENT IN THE GET BAND**

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STATEMENT IN THE GET BAND**

BY

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DECLARATION

I, MNCEDISI CHRISTIAN MAPHALALA hereby declare that **“Educators’ Experiences in Implementing the Revised National Curriculum Statement in the GET Band”** is my own work both in conception and execution and that all the sources I have used or quoted have been indicated and acknowledged by means of complete references.

Signed by  on the
15th day of MARCH 2006.

ABSTRACT

The present study examines educators' experiences in implementing the Revised National Curriculum Statement in the GET Band. The first aim of the study was to ascertain the nature of educators' experiences in implementing the Revised National Curriculum Statement. The second aim was to determine whether educators' biographical factors such as gender, age, teaching experience, qualification and rank have any influence on the nature of their experiences in implementing the Revised Curriculum Statement. The third aim was to ascertain the extent to which educators generally find implementing the Revised National Curriculum Statement to be stressful. The last aim was to determine whether educators' biographical factors (gender, age, teaching experience, qualification and rank) have any influence on the extent to which they generally find implementing the Revised National Curriculum Statement to be stressful. To this end, a questionnaire was administered to a randomly selected sample of three hundred and eight educators.

The findings reveal that educators differ in terms of the nature of their experiences in implementing the Revised Curriculum Statement. A high percentage (61.04%) of educators reports a positive experience about implementing the Revised National Curriculum Statement. The findings also show that age, teaching experience and qualification have an influence on the nature of educators' experiences in implementing the Revised National Curriculum Statement. The findings further reveal that educators differ in the extent to which they generally find implementing the Revised National Curriculum Statement to be stressful. A relatively higher percentage (38.31%) report above average level of stress, 28.90% report below average level and 32.79% report an average level.

The last finding shows that educators' gender, age, teaching experience, qualification and rank have no influence on the extent to which educators generally find implementing the Revised National Curriculum Statement to be stressful.

On the basis of the findings of this study, a model on curriculum implementation process was proposed and recommended.

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CHAPTER ONE

1. ORIENTATION

1.1 MOTIVATION FOR THE STUDY

South Africa's democratic government inherited a divided and unequal system of education. Under apartheid, South Africa had nineteen different educational departments separated by race, geography and ideology. This education system prepared learners in different ways for the positions they were expected to occupy in social, economic and political life under apartheid. In each department, the curriculum played a powerful role in reinforcing inequality. What and how learners were taught differed according to the expectations of their roles in the wider society.

Curriculum change in the post-apartheid South Africa started immediately after the elections in 1994 when the National Education and Training Forum began a process of syllabus revision and subject rationalization. In addition to the rationalization and consolidation of the existing syllabi, the National Education and Training Forum curriculum developers removed overtly racist and other insensitive language from syllabi. For the first time curriculum decisions were made in a participatory and representative manner. The National Education and Training Forum process was neither meant, nor intended to be a curriculum development process but to lay foundations for a single national core syllabus.

Curriculum 2005 was the first major curriculum statement of a democratic South Africa, deliberately intended to simultaneously overturn the legacy of apartheid education and take South Africa into the 21st century. It was an innovation both bold and revolutionary in its magnitude and conception. It signalled dramatic break from the past. No longer would curriculum shape and be shaped by narrow visions, concerns and identities. No longer will it reproduce the limited interests of anyone particular grouping at the expense of others. It would bridge all, and encamps all. It introduced new skills, knowledge, values and attitudes for all South Africans and stands as the most significant educational reform in South African education of the last century.

In October 1997, the Statement of the National Curriculum for grades R – 9 was published in terms of Government Notice 1445. The Assessment Policy in the General Education and Training for Grades R – 9 and Adult Basic Education and Training was introduced in December 1998 (Regulation 19640).

The curriculum framework that was to introduce Outcomes Based Education into our school system was named Curriculum 2005. The 2005 referred to the envisaged final year of implementation. When it was introduced the following time frames for implementation were envisaged:

GRADES	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

Fig. 1.1: Original time frame for Curriculum 2005

(Van Rooyen & Prinsloo, 2003 : 87)

The period 2000 – 2005 was to be devoted to an evaluation and final refinement of the system.

The implementation problems started almost immediately and the Department of Education was unable to stick to its timetable. Teachers were not properly prepared and trained to cope with the new system. The philosophy behind outcomes based education and training was not fully understood in the education system and also by some of the provincial education departments responsible for the implementation. The implementation of Curriculum 2005 brought about some challenges and shortcomings that necessitated its revision. The then Minister of Education Prof. Kader Asmal appointed the Review Committee to begin the process of curriculum revision. In May 2000 a Ministerial Review Committee recommended modifications to the structure, design and aspects of implementation

of Curriculum 2005. Van Rooyen and Prinsloo (2003:86) identify the following as major problems with Curriculum 2005:

- While many educators and officials endorsed the underlying principles of learner participation, activity based education, emphasis on relevance, flexibility, anti-bias, inclusion, holistic development, critical thinking and integration few understood the hugely complicated system.
- There were structure and design flaws in the Curriculum 2005:
 - Everyone was floored by complex language and confusing terminology, meaningless jargon, vague and ambiguous language.
 - The curriculum was overcrowded i.e. it tried to cover too much.
 - Sequence, pace and progression were not well designed.
 - There was little conceptual coherence, mainly because curriculum designers had attempted to avoid prescribing content.
- There was no alignment between curriculum and assessment policy, as well as a lack of clarity regarding assessment policy and practise.
- Teacher training in the new curriculum had been inadequate. Most of the training time had gone into explaining the complex vocabulary; and too little into the substance of OBE. Educators did not apply the principles of OBE in their own methodology.

- Textbooks varied wildly in quality and were often unavailable. The quality was variable as a result of design flaws in Curriculum 2005 and unreliability of the evaluation process. There was overall low use of the learning materials for a variety of reasons. A follow-up support of educators by departmental officials was not sufficient.
- The time frames used had been unmanageable and unrealistic. Implementation had been rushed and therefore inadequate. Curriculum 2005 was implemented before it was ready for presentation and without the foundations for good, inspiring, effective monitoring, and a meaningful, ongoing support process being in place.

In December 2001 the revision process of Curriculum 2005 was completed. The revised version of Curriculum 2005 was known as Revised National Curriculum Statement (RNCS). So RNCS is not a new curriculum but a simplified, strengthened and a streamlined version of Curriculum 2005. It keeps intact the principles, purposes and thrusts of Curriculum 2005 and affirms the commitment of Outcomes Based Education.

The following important amendments were effected on Curriculum 2005 so as to simplify and strengthen it:

- The Revised National Curriculum Statement to be introduced within the manageable time frames.
- The RNCS contains four key design features to replace eight design features of Curriculum 2005 (i.e. Critical &

developmental outcomes, learning outcomes and assessment standards).

- The curriculum is now aligned with assessment.
- A clear description of the kind of a learner we are trying to develop in terms of knowledge, skills, values and attitudes at the end of the General Education and Training Band.
- Some of the confusing terminology was discarded.
- Introduction of learning area statements that specify the learning area and it's defining features.
- Introduction of assessment standards that describe the level of knowledge and skills expected and a range for each of the learning outcomes for each grade level (Van Rooyen and Prinsloo, 2003:17).

When the Revised National Curriculum Statement Grade R – 9 (Schools) became a policy it replaced the Statement of the National Curriculum for Grades R – 9 approved in 1997. The implementation of the Revised National Curriculum Statement Grades R – 9 (schools) is planned as follows: in 2004 (Grades R – 3), 2005 (Grade 4 – 6), 2006 (Grade 7), 2007 (Grade 8), and 2008 (Grade 9). As the Revised National Curriculum Statement is being implemented in Grades R – 6 in the time of conducting this research, the present study attempts to find out about the experiences of educators in implementing it in these grades.

The significance and the contribution of the present study for a doctoral degree are as follows:

- It will reveal empirical evidence on the nature of educators' experiences in implementing the Revised National Curriculum Statement in the General Education and Training Band.
- It will report on the influence of educators' biographical variables on their experiences in implementing the Revised National Curriculum Statement.
- It will reveal empirical evidence on the extent to which educators find implementing the RNCS to be stressful.
- It will report on the influence of educators' biographical variables on the extent to which they find implementing the RNCS to be stressful.
- It will propose a model for a curriculum implementation process in South Africa.
- It will affirm that our education system can flourish if teachers experience positive experiences in implementing the new curriculum.

1.2 THE STATEMENT OF THE PROBLEM

Rapid changes on various levels in the field of education in South Africa have placed many demands on educators, which have had a profound effect on their job satisfaction and working lives. According to King and Marrow (1998:133), the introduction of Curriculum 2005 and its revised version called RNCS required major shifts at a classroom level for educators. Firstly, it was to be outcomes based

with a strong emphasis on the development of skills and attitudes. For educators this required a change towards more complex and demanding teaching methodologies away from the easier traditional, transmission oriented teaching based on content-laden textbooks to match the fixed curriculum. Secondly it involved the collapse of subject disciplines into eight integrated Learning Areas. Educators trained in Geography for example were now required to develop and teach integrated Social Sciences Learning Area involving History, Geography and Environmental Studies as well. This had a major implication for the implementation of the new curriculum.

In view of a variety of problems that beset the initial implementation of Curriculum 2005, the researcher developed an interest in investigating the implementation of the Revised National Curriculum Statement by educators in the GET Band. More specifically, this study intends to find answers to the following questions:

- 1.2.1 What is the nature of educators' experiences in implementing the Revised National Curriculum Statement in the GET Band?
- 1.2.2 Do educators' biographical factors (gender, age, teaching experience, qualification and rank) have any influence on their experiences in implementing the Revised National Curriculum Statement?
- 1.2.3 To what extent do educators generally find implementing the Revised National Curriculum Statement to be stressful?

- 1.2.4 Do educators' biographical factors (gender, teaching experience, qualification and rank) have any influence on the extent to which they find implementing the Revised National Curriculum Statement to be stressful?

1.3 AIMS OF THE STUDY

The following specific aims are formulated:

- 1.3.1 To ascertain the nature of educators' experiences in implementing the Revised National Curriculum Statement in the GET Band.
- 1.3.2 To determine whether educators' biographical factors (gender, age, teaching experience, qualification and rank) have any influence on the nature of their experiences in implementing the Revised National Statement.
- 1.3.3 To ascertain the extent to which educators generally find implementing the Revised National Curriculum Statement to be stressful.
- 1.3.4 To determine whether educators' biographical factors (gender, age, teaching experience, qualification and rank) have any influence on the extent to which they find implementing the Revised National Curriculum Statement to be stressful.

1.4 HYPOTHESES

Based on the above aims of the study, the following hypotheses are formulated:

- 1.4.1 Educators do not differ in terms of the nature of their experiences in implementing the Revised National Curriculum Statement.
- 1.4.2 Educator's biographical factors such as gender, age teaching experience, qualifications and rank have no significant on educators' nature of experiences in implementing the Revised National Curriculum Statement.
- 1.4.3 Educators do not differ in the extent to which they find implementing the Revised National Curriculum Statement to be stressful.
- 1.4.4 Educators' biographical factors such as gender, age, teaching experience, qualification and rank have no significant influence on the extent to which they find implementing the Revised National Curriculum Statement to be stressful.

1.5 DEFINITION OF TERMS

1.5.1 Educators

In this study 'educators' is used synonymously for 'teachers'. The South African Schools Act No. 84 of 1996 (Republic of South Africa, 1996:2) refer to an educator as a teacher. It includes the School Management Team (Principal, Deputy Principal and Heads of Department). An educator or a teacher is a person who helps learners to acquire knowledge, skills and values in a formal teaching environment such as a school. (Ngcongco, 2000:2)

1.5.2 Revised National Curriculum Statement

Revised National Curriculum Statement is a revised version of the National Curriculum Statement (Curriculum 2005). (Department of Education, 2002:8). RNCS is therefore not a new curriculum statement but a streamlined and strengthened Curriculum 2005.

1.5.3 General Education and Training Band

General Education and Training Band refers to the ten compulsory schooling years, made up of the Foundation, Intermediate and Senior phases (Grades R-9) (Department of Education, 2002:103).

1.6 PLAN OF THE STUDY

CHAPTER ONE

This chapter consists of motivation for the study, statement of the problem, aims of the study, hypotheses, definition of terms and a plan of the whole study.

CHAPTER TWO

A theoretical background to the study is provided in this chapter.

CHAPTER THREE

Chapter three details the research design and methodology of study. This includes the collection of data, the selection of subjects, a plan for organising and analysis of data.

CHAPTER FOUR

In this chapter empirical investigation as well as detailed analysis and interpretation of data are discussed. The formulated hypotheses are tested.

CHAPTER FIVE

This chapter presents the main findings of the study, that is, the nature of educators' experiences in implementing the Revised National Curriculum Statement; the extent to which educators find implementing the Revised National Curriculum Statement to be stressful and the influence of educator's biographical factors on the nature of their experiences in implementing the Revised National Curriculum Statement as well as in finding implementing the Revised National Curriculum Statement to be stressful.

CHAPTER SIX

In this chapter, a summary, conclusions and recommendations of the study are outlined.

CHAPTER TWO

2.0 AN ANALYSIS OF THE REVISED NATIONAL CURRICULUM STATEMENT (RNCS) GRADES R-9 AND EMPIRICAL STUDIES ON CURRICULUM 2005

2.1 INTRODUCTION

The launching of Outcomes Based Education (OBE) which is an outcomes-oriented curriculum model or approach and Curriculum 2005, which is the time-frame for implementing or starting the new curriculum in different grades, in 1997 was greeted with mixed feelings in the education sector. The feelings included excitement, anger, trepidation, outrage and caution (Ramroop: 2004:1). While some people saw it as a definite move towards redress and equality in education, others saw it as a way to drop the existing 'standards' of education. But with pressure on the new Democratic Government to address the plight of education coupled with global politics and economics Outcomes Based Education and Curriculum 2005 were to become the key strategies to educational change and reform in South Africa.

The curriculum developers in South Africa believed that this new curriculum has a great potential to achieve a society that meets the needs of the 21st century. Unfortunately in South Africa the implementation has been fraught with problems and negativity that have seriously hampered the realization of the new education system

that could be based on equality and democracy. Ramroop (2004:1) asks the questions: Why is the implementation of the new curriculum so fraught with problems? What is missing in this process that hampers the development of schools? Could it be the case of many gaps that exist between the policy makers and the practitioners? What are the readiness and skills level of educators on the ground to be able to implement the changes? De Clerq (1997:139) states that, although this approach has the potential to restructure and realign a poor and ineffective system, the way it is conceptualized and introduced may jeopardize its ability to address and redress the real problems and causes of the existing system.

De Clerq (1997:140) argues that the manner in which the curriculum changes have been implemented will be counter productive to the need to redress and actually benefit the privileged schools. Could it be true that, the curriculum changes only feed and reinforce the division that have crippled and continue to cripple the development of a post-apartheid society?

The RNCS cannot be treated in isolation, it therefore becomes imperative that the literature be reviewed to determine: the background to curriculum transformation in South Africa; reasons why there has been problems in the implementation of OBE and Curriculum 2005 in schools; factors that are contributing to this problem; and what can be done to alleviate these problems, so that the curriculum transformation which South Africa seeks is fulfilled. This chapter also looks at: the characteristics of an outcome based

education, the debate about outcomes based education; criticism of outcomes based education and an overview of the RNCS. Previous studies on curriculum 2005 will also be reviewed.

2.2 BACKGROUND TO CURRICULUM TRANSFORMATION IN SOUTH AFRICA

The 'Lifelong learning through a National Curriculum framework' document (1996) (Department of Education, 1996) was the first major curriculum statement of a democratic South Africa. It was informed by principles derived from the White Paper on Education and Training (Department of Education, 1995a), the South African Qualification Act (No 58 of 1995) (Department of Education, 1995) and the National Education Policy Act (No 27 of 1996) (Department of Education, 1996). The White Paper emphasised the need for major changes in education and training in South Africa in order to normalize and transform teaching and learning in South Africa. It also stressed the need for a shift from the traditional aims and objective approach to outcomes-based education. It promoted a vision of: 'A prosperous, truly united, democratic, internationally competitive country, with literate, creative and critical citizens leading productive, self-fulfilled lives in a country free of violence, discrimination and prejudice'. (Department of Education, 2002:8)

The precise date and sequence of events leading to the introduction of Outcomes Based Education (OBE) into South Africa's education and training system are not clear, what is clear however, is that since the

mid 1990's OBE has triggered the single most important curriculum controversy in the history of South African education. Not since the De Lange Commission Report of the 1980's (Human Science Research Council (HSRC), (1981), has such a fierce and a public debate ensued not only on the modalities of change implied by OBE, but on the very philosophical vision and political claims upon which this model of education is based.

According to Jansen (1999:3), the historiography of OBE in South Africa is itself a matter of controversy. However it is important to recognize the significance of 1990 as the critical turning point in the curriculum debates inside South Africa. Until that time South African education was characterized by uniform and predictable curriculum policy environment. The apartheid government managed a centralized curriculum policy system, which was variously described as racist, Euro-centered, sexist, authoritarian, prescriptive, unchanging, context blind and discriminatory.

The year 1990 is significant because of changes in the political landscape in South Africa. Following unprecedented political and economic pressures from the liberation movements and the international community, the apartheid regime was coerced into realising key political prisoners (including Nelson Mandela) and unbanning political organizations. The curriculum significance of the political moment defined by 1990 was that within South Africa competing social movements and politicians vehemently began to stake their curriculum positions in anticipation of what now seemed

inevitable – emergence of South Africa's first democratic state following national, nonracial elections.

The National Education Co-ordination Committee (NECC), itself as a nominal alliance of progressive education and labour stakeholders, initiated the National Education Policy Investigation (NEPI) to develop education 'policy options' for the broad democratic movement, in effect the African National Congress and its allies. One of the key research groups in the NECC initiatives was the curriculum group which produced an important foundational documents upon which much of the existing curriculum policy is based (NEPI, 1993). What NEPI did was to provide a broad value framework for thinking about democratic education policy after apartheid. This framework emphasized non-racism, democracy, equality and redress as the platform for post-apartheid education policy (Jansen: 1999:4). In addition to this values framework, NEPI outlined some key operational areas for future policy attention, including early childhood education, adult education, teacher education, educational governance and finance. The most relevant observation made by Jansen from the NEPI work, completed in 1992/93 was that there was no reference whatsoever to OBE in these documents and only broad suggestions about a co-ordinated system of education and training.

The private sector on the other hand initiated the Private Sector Education Council (PRISEC) which predictably, placed within the public debate a series of proposals calling for more vocational and entrepreneurial education rather than formal academic education,

given the demands of the economy. The same ideas were expressed in the influential Education and Systems Change Unity (EDUPOL) of the Urban Foundation, a large venture of businesses and corporations, which placed on the public agenda a prominent role for business in education reform and also outlined a key set of operational areas for state attention in future, two such areas being educational governance and teacher education. Again there was no reference in these documents to outcomes based education or its variants.

The foreign-funded (led by the United States for International Development, or USAID) non-governmental organization (NGO's) themselves produced a wide range of curriculum alternatives mainly within adult education, early childhood development, matriculation preparation programs and academic development curricula within universities. According to Jansen (1999:5) these desperate but critically needed 'curricular' had little impact on the formal education system where the overwhelming majority of school children were located. Also, the philosophies and approaches embedded in this dispersion of NGO education programmes were so diverse (from radical, progressive approaches to mainstream, delivery programmes) that any coherence was difficult to describe, it can however, be safely claimed that there was not a single OBE specific approach in this broad range of NGO curricula.

The apartheid state itself joined this rush for curriculum position, first by publishing the Education Renewal Strategy in two versions and then, crucially, a specific curriculum position dubbed CUMSA or A

New Curriculum Model for South Africa (Jansen, 1999:6). Its core proposals were a rationalisation of the inordinately large number of school syllabuses, the development of core learning areas, and a stronger vocational education emphasis in the school curriculum. Unpalatable as it may seem to some, there appears in CUMSA the beginning of some of the curriculum reforms initiated after the 1994 elections, such as syllabus reduction, learning area specifications and the linkage of education to economic development through an emphasis on science and technology education. The OBE-related idea that 'less is more' in terms of curriculum content organisation may have been started to surface within CUMSA (Jansen, 1999 : 6). But again, there was no specific reference to an Outcomes Based Education system at that time.

The first democratic national election of 1994 saw the establishment of a single national education system. The ministry of Education produced a series of White Papers on Education, the most important being the White Paper on Education and Training of 1995 which emerged, spelling out the proposal for Outcomes Based Education.

In October 1997 the National Curriculum Statement for Grades R – 9 was published in the Government Notice No 1445 and Assessment Policy in the General and Education and Training Band was introduced in 1998 (Regulation 19640). The intention was that the new Outcomes Based Curriculum would be phased in, in 1988 and completed by the year 2005 and it was called Curriculum 2005 (Department of Education, 2002).

The changes that had to be made for Curriculum 2005 were vast and courageous, and as with any such complex process, constant review is necessary and a Ministerial Committee was appointed in 2000 to review the progress and effectiveness of the new curriculum (Department of Education, 2002). The Review Committee recommended that the curriculum 2005 be streamlined and that it be modified to make it more accessible to the educators. The following amendments were made to the National Curriculum Statement of 1997 in what is known as the Revised National Curriculum Statement Grades R – 9 (schools):

- The design features of the curriculum were simplified and streamlined into three concepts:
 - Critical and developmental outcomes;
 - Learning Outcomes;
 - Assessment standards.
- The Curriculum is now aligned to assessment;
- The Curriculum requirements for various levels and phases have been restated in clear and simple language;
- Curriculum overload has been addressed;
- A clear description is given of a kind of learner we are trying to develop in terms of knowledge, skills, values and attitudes at the end

of the General Education and Training Band (Department of education, 2002).

The Revised National Curriculum Statement for Grades R – 9 is not a new curriculum but rather a streamlining and strengthening of Curriculum 2005. It reaffirms the Departments' commitment to Outcomes Based Education (Department of Education, 2002).

2.3 THE THEORETICAL ROOTS OF OUTCOMES-BASED EDUCATION CURRICULUM

According to Nsibande (2002:1) OBE is often described as a global educational curriculum reform phenomenon that many developed countries have adopted to suit local needs. It is formulated according to competency – based debates mainly in New Zealand, Australia, Canada, Scotland and some other parts of the United States where it has been severely criticized. In Australia, OBE has been popular in Ontario. In Scotland especially in Glasgow, it is found on vocational programs. According to Hargreaves, *et al.*, (2001:64), in the early 1990's, the outcomes curriculum emerged in the United States. They commented that from the beginning, the outcomes curriculum was fraught with controversy in countries where it was implemented. The outcomes that challenged the conventional subject's categories and contents were found to be perplexing the public.

In South Africa the new curriculum was modeled according to William Spady's version of OBE. Spady who is regarded as OBE's

leading Advocate, has defined OBE as a “comprehensive approach to organizing and operating an education system that is focused on and defined by the successful demonstrations of learning outcomes sought from each learner” (Spady, 1994:1). Outcomes are clear learning results that learners have to demonstrate at the end of significant learning experiences and are actions and performances that embody and reflect learner competence in using content, information, ideas and tools successfully Spady (1994:1). Regarding OBE paradigm (Spady, 1994:8) states: what and whether learners learn successfully is more important than when and how they learn something. OBE is thus a learner-centered, result oriented approach designed on the belief that all individuals can learn (Department of Education, 1997b: 17).

Based on Spady’s model South African education and training would now be integrated to deliver instruction with pre-determined measurable outcomes leading to qualifications that were certifiable and portable. However, the assumptions made about the realities in the field, about educators’ capacities and commitments, the abilities of school principals to lead such an effort, the available choices of textbooks and curriculum products to buy or borrow for use in schools were not given sufficient consideration (Bhola, 2002:1).

Considering the diverse lives that children now live, it was intended that Curriculum 2005 would align school work with the workplace environment and pursue the values of diversity in the areas of race, gender, and culture. As the emphasis was in conceptual

understanding, problem solving and the application of knowledge, the kind of deeper learning envisaged by OBE was to develop citizens who are imaginative and problem-solvers. The assumption was that with such skills, knowledge, and attitudes, learners would ‘fit’ into knowledge society (Nsibande, 2002:2). In countries where OBE was already implemented, it was not acceptable without criticism. Christie (1999:281), however points out that OBE was regarded as a “state of the art thinking on Western Schooling” and “the best of international experience”. This fails to take into account the fact that OBE was imposed on South Africa from the Western world without a solid understanding of its impact on our local conditions. Jansen (1999:146) outlines ten major reasons why OBE will fail. He first argues that OBE will not fail because “politicians and bureaucrats are misinformed about conditions of South African schooling, but because the policy is driven in the first instance by political imperatives which have little to do with the realities of classroom life” (Jansen, 1999: 146 – 147).

Although Jansen takes rather a radical stance in the way he states the reasons why OBE will fail perhaps it is useful to consider his argument that OBE is likely to undermine the already fragile learning environment in South African classrooms. Potenza and Manyokolo (1999:231) suggest that in order for teachers and learners to successfully negotiate their way through Curriculum 2005, the challenge is for policy makers, curriculum developers, teacher developers and producers of learning materials to provide ways of translating the national curriculum policy framework into practice.

Van der Horst and McDonald (1999:9) claim that the roots of OBE can be traced to the following educational movements of the last 50 years where approaches such as educational objectives, competency-based education, mastery learning and criterion-referenced assessment were part and parcel of OBE:

2.3.1 Educational objectives

In 1950 Ralph Tyler published “Basic Principles of Curriculum and Instruction” (Van der Horst and McDonald, 1999:9). In this work Tyler identified a number of key issues which teachers need to consider when they develop curricula and plan their instruction:

- Educational purpose (Including objectives);
- Content;
- Organisation;
- Evaluation.

According to Van der Horst and McDonald (1999:9), Tyler specifically indicated the importance of identifying and formulating objectives for systematically planning educational experiences. He further indicated that a well written objective should identify both what the learner must be able to do after instruction and the content to which the learner’s action applies. This sounds very much like stating an educational outcome.

After Tyler other theorists continued working on behavioural objectives. The well known Bloom's taxonomy (figure 2.1) where intellectual objectives are placed in a system from simple to complex (from knowledge through understanding [comprehension], application, analysis, synthesis to evaluation) has often been used in curriculum development and instructional design.

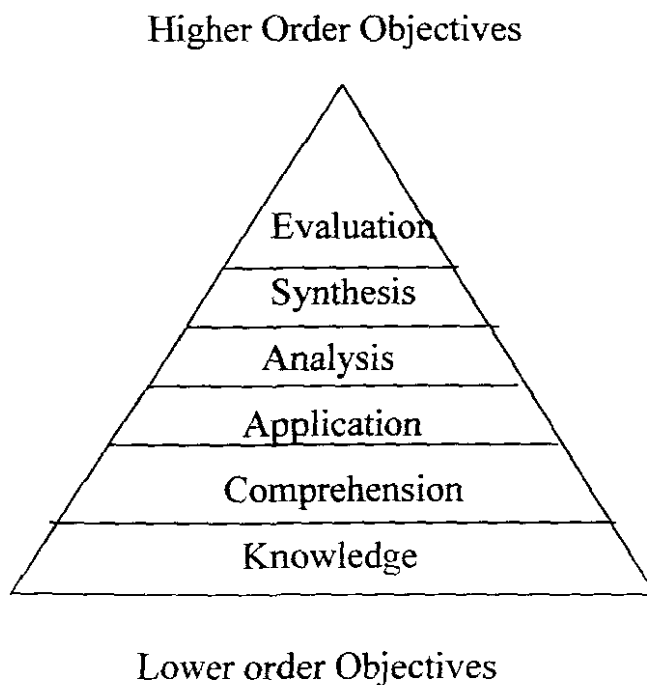


Fig 2.1 Bloom's Taxonomy of Cognitive Domain

(Van der Horst & McDonald, 1999:9).

Bloom's taxonomies have provided educators with frameworks according to which objectives could be organized for instructional use and especially for assessment.

2.3.2 Competency-based education

Towards the end of the 1960's competency-based education was introduced in America. The main reason was that people such as businessmen were starting to question whether education was adequately preparing scholars for life after school. According to Van der Horst and McDonald (1999:10) there was a concern that learners were not taught the actual skills that they would need in a working world. The idea at the time was that competency-based education would focus on an integration of:

- Outcome goals (in terms of specific skills);
- Instructional experiences (to teach the outcomes);
- Assessment devises (to determine whether the learners had mastered the outcomes).

Unfortunately the so-called competency-based education was in practice, often merely reduced to a testing or remedial programme. Lack of agreement on what were considered essential “competencies” led to the failure of this movement. The term competence could, for example include any of the following: survival or life skills, basic skills, intellectual skills, interpersonal skills, and personal skills.

The six critical components that characterize a complete, competency-based education programme include:

- Learning outcomes which are explicit with regard to the required skills (learning outcomes) and the level of proficiency required in these skills (standards for assessment);
- Time which is flexible (learning time is not only restricted to seat time for example in class);
- Measurement which entails explicit, criterion referenced testing of required outcomes;
- Certification which depends on demonstration of required outcomes by the learner;
- Programme adaptability which is managed sensitively to ensure optimum guidance to the learner (Van der Horst & McDonald,1999:11).

What, then, does competency-based education mean? In essence, it supports the idea that all learning is individual and that the individual whether the teacher or the learner, is goal oriented. Furthermore, the teaching-learning process is facilitated if the teacher knows what he/she wants the learner to learn and if the learner knows exactly what he/she is required to learn. Additionally, personal responsibility or accountability for learning is emphasized. The competency-based education sounds very similar to Outcomes Based Education.

2.3.3 Mastery learning

According to Van der Horst and McDonald (1999:11) mastery-oriented learners are those learners who focus on learning goals

because they value achievement and see ability as being improvable. Bloom and his associates believe that mastery learning essentially means that if the proper conditions can be provided, 90 – 95% of learners can actually master most objectives Van der Horst and McDonald (1999:11). The mastery learning concept thus abandoned the idea that learners merely have more or less potential, and therefore achieve more or less learning success. In mastery learning the onus is on the teacher to provide the most suitable conditions for effective learning to occur. In mastery learning approach an effort is thus made to find out why learners fail to reach mastery and to either:

- Provide more time for learning; or
- Provide different media or materials; or
- Diagnose which missing prerequisite knowledge or skills the learner must acquire to master the objectives.

The general aim of mastery learning is thus to ensure that learners are granted the opportunity to be successful at most tasks by providing an appropriate learning environment materials and back-up guidance. The teacher's input is vital. Mastery learning programmes are often described as being teacher controlled, rather than learner-centered.

According to Van der Horst and McDonald (1999:12) both competency based education and mastery learning can be used with great success in Outcomes-Based Education. In both models the importance of the teacher's guidance is noted. A further root of Outcomes Based Education is criterion-referenced assessment.

2.3.4 Criterion-referenced assessment

Assessment is one of the most important activities in OBE. Criterion referenced assessment refers to testing in which learner's score (results) are compared to a set of standards, for example in order to pass an examination at University the student has to achieve 50% or higher in the final examination of the course. The minimum percentage (50%) is called the minimum standard of proficiency. If a student achieves less than 50% she/he fails and cannot proceed to the next level.

The scores are thus not compared to those of other learners or students, but to a given or set criterion or standard of performance. Criterion referenced assessments measure the mastery of very specific objectives. It tells the teacher (and the learner) how well a task can be done. The results of a good criterion referenced assessment should thus tell a teacher what a learner can or cannot do, at least under certain conditions (Van der Horst & McDonald,1999:13).

Criterion-referenced assessment is especially appropriate for OBE since it places the learners' assessment outcome on a scale ranging from no proficiency to excellent or perfect performance. Along this scale are the tasks a learner must perform and the criterion level, which indicates an acceptable level of achievement. Criterion referenced results should be interpreted by the teacher so that the information can be used to adapt the instructional process. Criterion-referenced assessment is thus a measurement tool which can be used

with great effect in the Outcomes Based classroom. Since Outcomes-Based Education puts emphasis on continuous assessment, it is important to note that criterion-referenced assessment should only form a small part of comprehensive assessment in Outcomes Based Education (Van der Horst & McDonald, 1999:13).

In summary the four aforementioned educational approaches (objectives, competency-based education, mastery learning and criterion-referenced assessment) together form the theoretical foundation of what is now called Outcomes Based Education. In Outcomes Based Education many of the characteristics of these four approaches are integrated.

2.4 THE CHARACTERISTICS OF AN OUTCOMES-BASED EDUCATION

The following are the characteristics of an Outcomes Based Education according to Van der Horst and McDonald (1999:13):

- What learners need to learn is stated clearly and unambiguously. The learning outcomes are:
 - ❑ Future oriented;
 - ❑ Learner centered;
 - ❑ Focused on knowledge, skills, attitudes/values;
 - ❑ Characterized by high expectations of all learners;
 - ❑ A base for further instructional decision making;
 - ❑ The learner is:

- Facilitated towards the achievement of the outcomes (by the teacher who acts as a facilitator rather than a mere presenter or conveyor of knowledge);
 - An active and interested participant in the learning process.
- The learners' progress is based on his or her demonstrated achievement.
 - The focus is on being able to use and apply learned knowledge, skills and attitudes rather than or merely absorbing specific or prescribed bodies of content.
 - Learners are advanced because they are able to demonstrate significant skills for independence and future success. In the Outcomes-Based Education learners are thus not advanced automatically, but are required to demonstrate that they deserve to be advanced. They are assessed during the lesson and at particular times when a lesson, until or programme has been completed.
 - Each learner's needs are catered for by means of variety of instructional strategies and assessment tools. Therefore:
 - The teacher must first analyze the learner's needs, for instance, the learner's entry level in terms of fore knowledge, level of proficiency, interests, etc.;
 - Instructional design for each learner is an ongoing process of observations, reflection and analysis;
 - Continuous assessment is thus used to provide information for further instructional decisions.

- Each learner is provided the necessary time and assistance to fulfill his or her potential. Therefore:
 - All learners have to be hard workers;
 - All learners have to be responsible for their own learning and thinking;
 - Apart from the teacher's assessment all learners are also required to assess their own progress.

2.5 THE DEBATE ABOUT THE 'OUTCOMES BASED EDUCATION'

Since the introduction of the new curriculum and OBE there has been many debates and discussions as to what exactly OBE is and how it is going to be implemented in South Africa. According to Spady (1994:5) who is seen as the father of OBE, Outcomes Based Education is about preparing students for life, not simply getting them ready for the university. According to Ramroop (2004:33), this means focusing and organizing a school's entire programme and institutional efforts around the clearly defined outcomes that all students should be able to demonstrate when they leave school. These outcomes must be practical and primarily significant to life after school. From an OBE perspective, it is not a matter of what learners have experienced or what courses they have taken, it is a matter of what they can do when they exit the system (Spady, 1994:6).

From various readings, lectures, workshops and Department of Education publications, one can deduce that OBE's key objective is to

ensure that all learners are equipped with the knowledge, skills, and values that they will need to fulfill various roles in society. This, is therefore, achieved by having clearly defined outcomes that learners will work towards attaining in their various learning contexts. Thus the school environment in both structure and functioning must support and encourage learners to achieve these outcomes.

The core assumption that underpins OBE is that all learners can succeed at their own pace and that the way the schools is operated and managed will have an impact on level of success of the learner. OBE is learner-centered in that the emphasis is on what the learner should be able to know, to understand, to demonstrate and to do and not what the teacher wants the learner to achieve. This shift demands that learners become active participants in the learning process and are expected to take responsibility for their own learning. The educator is required to give opportunities to learners to work at their own pace and in different ways according to their individual abilities and levels of development (Department of Education, 1997a).

According to the Department of Education information booklet on OBE (Department of Education, 1997c), the following are the three types of OBE:

2.5.1 Traditional OBE

With traditional OBE, the curriculum remains constant but the focus is on the outcomes. The outcomes are specific and not holistic and are

often not linked to skills that the learner would need in the working environment and general life. These outcomes are elicited from the syllabus. Traditional OBE does not really challenge the conventional nature of the school day.

2.5.2 Transitional OBE

This type of OBE lies between traditional and transformational OBE. It extends beyond traditional OBE as it uses subject matter as a vehicle to assist in the cultivation and integration of higher order competencies. In transitional OBE, critical thinking, problem solving and effective communication skills are emphasized. However this type does not allow total change to take place.

2.5.3 Transformational OBE

This type of OBE is seen as important to ensure educational reform as it is seen as future-oriented, not just producing good learners to graduate at the end of the school year. It is designed to equip all students with knowledge, competence and orientations that they will need to successfully meet the challenges, demands and opportunities in their lives. Its clear focus is on persons' life long adaptive capacities. In transformational OBE critical outcomes (with the knowledge, skills, attitudes that people need to function as a critical citizens) become the sole determinants of a new curriculum. Schools are allowed to choose content and use teaching methods of their choice as long as these meet the critical outcomes and develop people

who display the agreed upon critical outcomes. This allows educators to relate their teaching directly to their local contexts. Therefore, “Success at school (or any other place of learning) is considered to be of limited benefit unless learners are equipped to transfer that success to life beyond school and are able to see learning as a lifelong process, which is essential to keep pace with rapidly changing conditions in the world of work and in society” (Department of Education, 1997c:19).

According to Ramroop (2004:35) the type chosen by South Africa is no doubt that of transformational OBE as it meets the demands of the rapid social change that South Africa is facing. This type of OBE will be the best to address the transformational needs of South Africa, especially to develop a critically, economically, stable and democratic society.

2.6 CRITICISM OF OUTCOMES BASED EDUCATION

Van der Horst and McDonald (1999:16) state that OBE has had a fair deal of criticism since its introduction to schools in countries such as the United States of America and Australia during the eighties. OBE has also received a great deal of criticism in the South African media. Much of the criticism has come from journalists and concerned educators and parents who are unsure of what Outcomes Based Education actually entails. Uncertainty is the ideal breeding-ground for criticism.

Much of the criticism against OBE has been that the vaguely worded Outcomes in curriculum documents actually cause teachers to retain the content driven instruction and in fact do not contribute to raising learner achievement or success. Teachers are not always able to translate the vaguely worded outcomes into practical teaching-learning activities with specific content (Van der Horst & McDonald, 1999:16). It appears that in the United States of America in particular, problems arose when policy makers moved from the idea of judging the quality of education by focusing on what the learners learn (content approach) to the practical details of specifying those expected results (outcomes approach). The only way of overcoming these problems will be if the teacher is properly trained to deal with them. In South Africa the same problem has been experienced because teachers were not adequately supported in the application of OBE.

The general criticism of OBE is that the outcomes which define what all learners master should often indicate behaviours and beliefs that are vaguely worded and that are largely associated with the emotional attitudes of mind and values (Van der Horst & McDonald, 1999:6). Many of those outcomes do not focus on core academic content. A sound content base is naturally always a prerequisite for critical thinking and problem solving which have been indicated as the heart of Outcomes Based Education and Curriculum 2005.

Another problem in OBE is the fact that when the ruling government prescribed outcomes that include values and attitudes it should in fact take on a parallel responsibility to allow parents to choose amongst a

wide range of schooling options. If this is not the case (as in South Africa where schools are either public or private) a backlash against the outcomes based approach can develop for parents who might not agree with the attitudes and values forced upon them by government in its schools. If the government does not allow a wide range of affordable schooling alternatives, it is left with only one option and that is: to prescribe for government schools carefully described outcomes that should reflect the public concerns on what learners should learn. It is very difficult to achieve public consensus in a country as plural as South Africa. If all stakeholders of the different groups in the country are however, not consulted and if consensus is not reached, education can become indoctrination (Van der Horst & McDonald, 1999:17). In South Africa many parents are opting for different forms of private schooling such as home schooling, in an effort to be able to provide their children with the values which they fear government will not be able to provide.

Some critics of OBE believe that schools using an approach based on Outcomes- Based Education will need to lower their standards to the least common denominator since not all learners have the same potential to learn at the same high standards. A variation of this argument is that Outcomes Based Education will hold back the gifted, and that slower learners will retard the class progress. There is thus a general concern about the same outcomes and that there will naturally be a tendency to lower standards as all learners do not have the same potential, do not work equally hard and are not equally motivated to learn. For Outcomes-Based Education to be successful, a balanced

grading system for educational outcomes will have to be integrated into the instructional process. Some learners will be requested to work towards achieving learning outcomes at a minimum level of competency, whereas those with greater potential will need to work at higher levels of complexity. The individual learner's characteristics and needs will inform the teachers in this regard. The main reason for the success of OBE is that it provides all learners with opportunities to achieve to their individual potential level (Van der Horst & McDonald, 1999 : 14).

Another problem area concerns finance. Implementing OBE costs a great deal of money. Teachers need to be retrained, curricular revised and new assessment criteria and procedures developed. In a developing country where the provision of basic human facilities and care such as basic housing and health facilities require a large input from the government resources, the educational change involved and the financial measures required to do so will have to be prioritized in terms of all the financial needs of the developing country. The question begs: can South Africa afford this change? Good teachers have already been practicing the principles underlying OBE for years (Jansen, 1999:239).

According to Rasool (1999:170) the introduction of outcomes-based education in South Africa became a major flashpoint in the South African education scenario. It sparked an emotionally charged debate and led to a wide-ranging reassessment of the issue in a post apartheid era. One of the prominent figures who have contributed immensely to this curriculum debate is Jansen. He has enriched the curriculum debate

by adding a sense of realism to it. The strength of Jansen's dissection of OBE lies in the fact that it exposes the stark reality that this curriculum innovation, like any other, is not without inherent limitations and therefore cannot be simplistically viewed as a panacea to solve all of South Africa's educational and socio-economic ills. Added to this, Jansen illuminates possible impediments that must be overcome to ensure the overall success of OBE and, in so doing, provides decision-makers with a point of departure for curricular implementation.

Jansen (1999:146) outlines the following major reasons why OBE will fail:

- The language of OBE is too complex, confusing and at times contradictory. In addition, teachers would need to come to terms with more than fifty different concepts, which change in meaning overtime;
- OBE policy is lodged in problematic claims and assumptions about the relationship between curriculum and society. There is not a shred of evidence that suggest that altering the curriculum of schools leads to, or is associated with, changes in the national economies;
- OBE is based on flawed assumptions about what happens inside the schools and how classrooms are organised and what kind of teachers exists within the system;

- The management of OBE will multiply the administrative burdens placed on teachers;
- OBE trivalises curriculum content even as it claims to be a potential leverage away from content coverage which besets the current education system. Children do not learn outcomes in a vacuum. Curriculum content is a critical vehicle for giving meaning to a particular set of outcomes;
- For OBE to succeed it requires trained and retrained teachers, radically new forms of assessment, classroom organisation which facilitates monitoring and assessment, and additional time for managing this complex process.

Van der Horst and McDonald (1999:19) offer an advice to curriculum developers to retain what is effective from the old system and to help teachers to adapt to the new way of thinking about teaching and learning away from rote learning towards understanding and doing.

2.7 AN OVERVIEW OF THE REVISED NATIONAL CURRICULUM STATEMENT GRADES R-9 (schools)

2.7.1 The National Qualification Framework

The RNCS was planned for implementation at schools within the GET band of the NQF. The National Qualification Framework (NQF) is the model that is used to organise all levels of education in South Africa. NQF is divided into three main groupings called bands:

- I. General Education and Training (GET) band, which includes Grades R-9. These are ten years of free and compulsory education. The General Education and Training Certificate (GETC) is issued at the end of grade 9.
- II. Further Education and Training (FET) band, which caters for all post-primary and pre-tertiary learning (Grades 10-12).
- III. Higher Education and Training (HET) band, which accommodates all post-graduate learning, related to degrees and national diplomas.

School grades	NQF Level	Band	Types of qualifications and certificates	
Higher Education and Training Certificates (HET)				
	8	Further Education and Training	Doctorates	
	7		Further research degrees	
	6		Degrees, diplomas and certificates	
	5			
Further Education and Training Certificates (FET)				
12	4	Further Education and Training	School/College/NGOs training certificates mix of units	
11	3		School/College/NGOs training certificates mix of units	
10	2		School/College/NGOs training certificates mix of units	
General Education and Training Certificate (GET)				
9	1	General Education and Training	Senior Phase	ABET 4
8			Intermediate Phase	ABET 3
7				
6				
5			Foundation Phase	ABET 2
4				
3			Pre-school	ABET 1
2				
1				
R				

Figure 2.2 Different levels of education and training.

(Department of education:2002)

2.7.2 The principles of the Revised National Curriculum Statement

The Revised National Curriculum Statement (RNCS) is based on the following principles:

- social justice, a healthy environment, human rights and inclusivity;
- outcomes-based education;
- a high level of skills and knowledge for all;
- clarity and accessibility;
- progression and integration.

2.7.2.1 Social justice, a healthy environment, human rights and inclusivity

The curriculum is seen as a means to create awareness of the relationship between human rights, a healthy environment, social justice and inclusivity. These concerns, as defined in the Constitution, are addressed across the curriculum in each learning area statement.

These issues are not limited to a particular learning area but are seen as strands across the entire curriculum. In particular the “ curriculum attempts to be sensitive to issues of poverty, inequality, race, gender, age, disability and such challenges as HIV/AIDS” (Department of Education, 2002)

2.7.2.2 Outcomes-based education

Outcomes Based Education (OBE) is an achievement-oriented, activity-based, learner-centred education process. Outcomes are the results learners are to achieve at the end of the learning process in OBE, and these outcomes shape the learning process. OBE considers the process of learning to be important as the content. Through its approach the RNCS aims to develop life long learning as a way of life and to enable young people to participate fully at a global level in economic and social life and to achieve their maximum ability. In the RNCS, the learning outcomes and assessment standards were designed to achieve the critical and development outcomes in all the learning areas. These are referred to as design elements of the RNCS (see figure2.2)

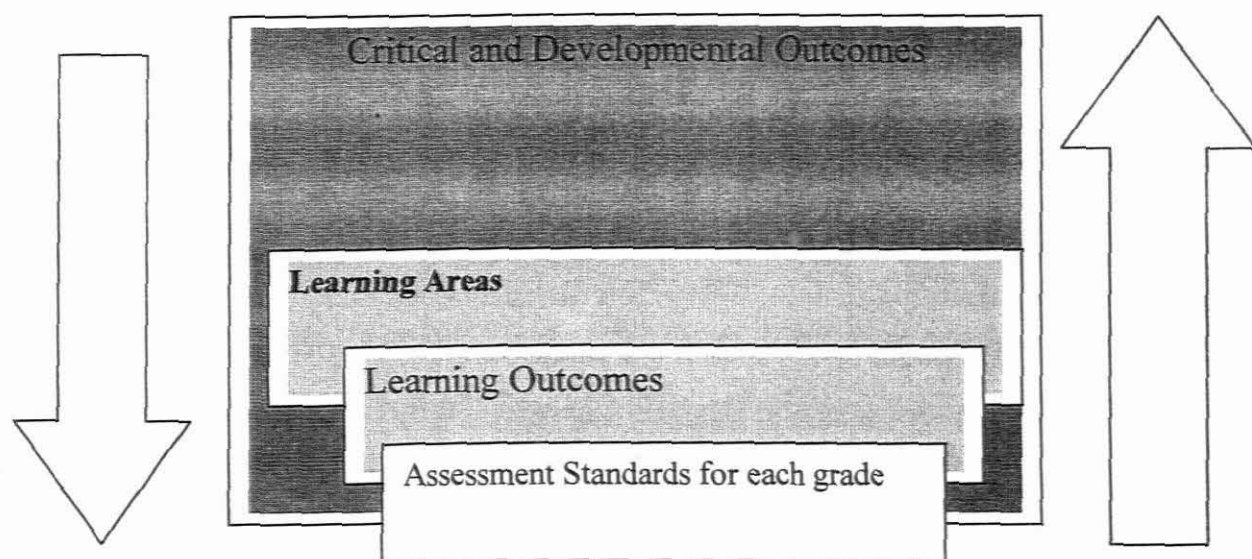


Figure 2.3 Interaction between the design elements of the RNCS
(Department of education, 2002)

Figure 2.3 Illustrates the interaction between the design elements of the RNCS.

The critical and development outcomes are a list of outcomes that are derived from the Constitution and are contained in the South African Qualifications Act of 1995. They describe the kind of citizen the education and training system should aim to create (Department of Education, 2002).

The outcomes include core life skills for learners such as communication, group and community work and evaluation skills. The seven critical outcomes envisage a learner who will be able to:

- Identify and solve problems and make decisions using critical and creative thinking;
- Work effectively with others as members of a team, group, organisation and community;
- Organise and manage themselves and their activities responsibly and effectively;
- Collect, analyse, organise and critically evaluate information;
- Communicate effectively using visual, symbolic and/or language skills in various models;
- Use science and technology effectively and critically, showing responsibility towards the environment and health of others;

- Demonstrate an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation.

The developmental outcomes are also inspired by the Constitution and are aimed at enabling learners to learn effectively and to become responsible, sensitive and productive citizens.

The five developmental outcomes envisage learners who are able to:

- Reflect 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 authentically sensitive across a range of social contexts;
- Explore education and career opportunities;
- Develop entrepreneurial opportunities (Department of Education, 2002).

Through the learning area statements, the RNCS identifies the goal, expectations and outcomes to be achieved. The outcomes and assessment standard emphasise participative, learner-centred and activity-based education. They leave considerable room for creativity and innovation on the part of teachers in interpreting what and how to teach (Department of Education, 2002).

2.7.2.3 A high level of skills and knowledge

The RNCS aims at the development of knowledge and skills. It sets out in particular to empower previously disadvantaged communities by providing for a stronger base from which to enable the development of a high level of skills and knowledge by all. It does this by specifying the (gradually increasing) combination of minimum knowledge and skills to be achieved by learners in each grade and setting high, achievable standards in all learning areas (Department of Education, 2002).

7.2.2.4 Clarity and accessibility

The RNCS is presented in a clear manner that is easy to use both in its design and language. Its two design features, namely, learning outcomes and assessment standards, clearly define for all learners the goals and outcomes that are necessary to proceed to each successive level of the system. In addition the RNCS will be available in all official languages and in Braille (Department of Education, 2002).

7.2.2.5 Progression and integration

Integration is a key design principle of the RNCS. It requires learners to use their knowledge and skills from one learning area to another or from different parts of the same learning area as they carry out tasks and activities. In this way, the learners experience the curriculum (and

the world) as being linked and related. This gives coherence, and supports and expands their opportunities to attain skills, acquire knowledge and develop the attitudes and values that are encompassed across the curriculum.

Progression is another key design principle of the RNCS. Learners are encouraged to gradually develop more complex, deeper and broader knowledge, skills and understanding in each grade. In the RNCS the assessment standards in each learning area statement provide the conceptual progression in each learning area from one grade to the next (Department of Education, 2002).

2.7.3 The Revised National Curriculum Statement: Learning Areas (Grades R- 9)

There are eight learning areas in the National Curriculum statement. A learning area is a field of knowledge, skills and values that has unique features as well as connections with other fields of knowledge and learning areas. The terminology in the following learning areas has been simplified:

- From Language Literacy & Communication to Languages;
- From Mathematical Literacy, Mathematics and Mathematical Science to Mathematics;
- From Human and Social Science to Social Science.

The following learning areas have remained unchanged:

- Natural Science ;
- Technology;
- Arts and Culture;
- Life Orientation;
- Economic and Management Sciences.

Each learning area statement consists of two parts:

- An introduction that introduces the RNCS and the particular learning area – its goals and unique features.
- A section on learning outcomes and assessment standards that gives the requirements and expectations of learners by grade for each of the phases: the Foundation Phase (Grades R-3), the Intermediate Phase (Grades 4-6) and the Senior Phase (Grades 7-9). The learning outcomes and assessment standards should be seen as minimum or essential knowledge, values and skills that are to be covered. They indicate what is essential for progression through the system and are designed in relation to the Grade 9 requirements.

2.7.3.1 Languages

The Languages Learning Area Statement include:

- All eleven official languages: Sepedi, Sesotho, Setswana, siSwati, Tshivenda, Xitsonga, Afrikaans, English, isiNdebele, isiXhosa, and isiZulu;
- Languages that are approved by the Pan South African Language Board (PANSALB) and the South African Certification Authority (SAFCRT), such as Braille and South African Sign Language.

In a multilingual country like South Africa it is important that learners reach high levels of proficiency in at least two languages, and are able to communicate in other languages. The Languages Learning Area Statement follows an additive or incremental approach to multilingualism:

- All learners are required to learn their home language and at least one additional official language;
- Learners thus become competent in their additional language, while their home language is maintained and developed.

The languages learning Area Statement covers each official language as:

- Home language;
- First additional language;
- Second additional language.

Learners' home languages should be used for learning and teaching whenever possible. This is particularly important in the Foundation Phase where children learn to read and write. Careful planning is necessary when learners have to make transition from their home language to an additional language for learning and teaching (Department of Education, 2002).

2.7.3.2 Mathematics

Mathematics is a human activity that involves observing, representing and investigating patterns and quantitative relationships in physical and social phenomena and between mathematical objects themselves. Through this process new mathematical ideas and insights are generated. Mathematics uses its own specialized language that involves symbols and notations for describing numerical, geometric and graphical relations. Mathematical concepts build on one another, thereby creating a coherent structure. Different cultures investigate Mathematics. Mathematics is a purposeful activity in the context of social, political and economic goals and constraints. It is not value – free or culturally neutral (Department of Education, 2002).

2.7.3.3 Natural Sciences

What is today known as science has its roots in African, Arabic, Asian, American, and European cultures. It has been shaped by the search to understand the natural world through observation, codifying and testing ideas, and has evolved to become part of the cultural

heritage of all nations. It is usually “characterized by the possibility of making precise statement which are susceptible of some sort of check or proof”. The Natural Science Learning Area Statement envisages a teaching and learning milieu that recognizes that the people of South Africa have a variety of learning styles as well as culturally influenced perspectives. The Natural Sciences Learning Area takes as premise that all learners should have access to a meaningful science education. Meaningful education has to be learner-centered. It has to help learners understand not only scientific knowledge and how it is produced but also the environmental and global issues. The Natural Sciences Learning Area aims to provide a foundation on which learners can build throughout life.

The Natural Sciences Learning Area Statement promotes scientific literacy. It does this by focusing on:

- The development and use of scientific process skills in a variety of settings;
- The development and application of scientific knowledge and understanding ;
- Appreciation of the relationships and responsibilities between science, society and environment (Department of Education, 2002).

2.7.3.4 Social Sciences

The Social Sciences study relationships between people, and between people and the environment. These relationships vary over time and also geographically. They are influenced by social, political, economic and environmental contexts, and by people's values, attitudes and beliefs. The concepts, skills and processes of History and Geography form the key elements of the Social Sciences Learning Areas Statement. Environmental education and human rights education are integral to both History and Geography. The Social Sciences Learning Area Statement is concerned with what learners learn and how learners construct knowledge. The learning area statement encourages learners to ask and find answers to questions about society and the environment in which they live. This learning area statement aims at contributing to the development of informed, critical and responsible citizens who are able to participate constructively in a culturally diverse and changing society. It also equips learners to contribute to the development of a just and democratic society (Department of Education, 2002).

2.7.3.5 Arts and Culture

The Arts and Culture Learning Area Statement covers a broad spectrum of South African arts and cultural practices. Arts and culture are an integral part of life. They embrace the spiritual, material, intellectual and emotional aspects of human endeavour in society. Culture expresses itself in the arts through ways of living, behaviour

pattern, knowledge and belief systems. Cultures are not seen as static; they have histories and contexts, and they change, especially when they are in contact with other cultures.

The approach towards culture in this learning area statement encourages learners to:

- move from being passive inheritors of culture to being active participants in it;
- reflect creatively on art, performances and cultural events;
- identify the connections between works of art and culture;
- understand the geographical, economic and social contexts in which arts and culture emerge;
- identify the links between cultural practice, power and cultural dominance;
- analyze the effects of time on culture and the arts;
- understand how the arts express, extend and challenge culture in unique ways.

The approach towards arts moves from a broad experience that involves several art forms from diverse cultural contexts towards an increasing depth of knowledge and skill by Grades 8 and 9. The integrity of discrete art forms and the value of integrated learning experiences are recognized. The learning area statement strives to create a balance between developing generic knowledge about arts and culture, and specific knowledge and skills in each of the arts forms (Department of Education, 2002).

2.7.3.6 Life Orientation

The concept of Life Orientation captures the essence of what the learning area statement aims to achieve. It guides and prepare learners for life and its possibilities. Life Orientation specifically equips learners for meaningful and successful living in a rapidly changing and transforming society.

The Life Orientation Learning Area Statement develops skills, knowledge, values and attitudes that empower learners to make informed decisions and take appropriate action with regard to:

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

Together, these five focus areas of the Life Orientation Learning Area Statement address the human and environmental rights outlined in the Constitution (Department of Education, 2002).

2.7.3.7 Economic and Management Sciences

The Economic and Management Sciences Learning Area Statement involves the study of the private, public or collective use of different

kinds of resources in satisfying people's needs and wants, while reflecting critically on the impact of resource exploitation on the environment and on people.

In particular, the Economic and Management Science Learning Area Statement deals with:

- the nature, processes and production of goods and services;
- the South African economy and socio-economic systems in different countries;
- investment and financial management and planning skills, either for private, public or collective ownership;
- the entrepreneurial skills and knowledge that are needed to manage human lives and environments (Department of Education, 2002).

2.7.3.8 Technology

Technology has existed throughout history as an activity in which people use a combination of knowledge, skills and available resources to develop solutions to meet their daily needs and wants. Some of these solutions are products while others involve a combination of products that are used to make systems.

People will always have needs and wants. Solutions are developed through activities that combine knowledge, skills and resources that are used today are different because of the accelerating developments in technology. Today's society is complex and diverse. Economic and environmental factors and wide range of attitudes and values need to

be taken into account when developing technological solutions. It is in the context that technology is defined as: the use of knowledge, skills and resources to meet people's needs and wants by developing practical solutions to problems while considering social and environmental factors (Department of Education, 2002).

2.7.4 The Learning Outcomes

As illustrated in figure 2.3, learning outcomes are part of the design elements of the RNCS. Learning outcomes are derived from the critical and the developmental outcomes and are descriptions of the knowledge, skills and values learners should know, demonstrate and value by the end of the GET band. They cover all eight learning areas. Learning outcomes do not deal with content or method but with what a learner must know or be able to do (Department of Education, 2002).

2.7.5 The Assessment Standards

As figure 2.3 illustrates, assessment standards are also part and parcel of the design elements of the RNCS. Assessment standards describe the extent to which learners must be able to demonstrate their achievement of the learning outcomes. The extent defines the scope (depth and breadth) of what a learner is expected to achieve. In this regard they are grade specific and show how conceptual progression will occur in the learning area. There are different assessment standards for each grade in each of the different learning areas. The

assessment standards embody the knowledge, skills and values that are required to achieve the learning outcomes. Again, they do not deal with the method, however, they guide educators in determining the depth and breadth of the content (Department of Education, 2002).

2.7.6 The differences between assessment standards and learning outcomes

The learning outcomes describe what the learner should know and be able to do while the assessment standards prescribe the minimum level (depth and breadth) of what is to be learnt. The difference between the learning outcome and an assessment standard is that learning outcomes remain the same from grade to grade while assessment standards change from grade to grade. The assessment standards also contribute towards a qualification, like the General Education and Training Certificate (GETC) (Department of Education, 2002).

2.7.7 The Learning Programmes

The RNCS is currently being implemented in schools by means of the learning programmes. Learning programmes are structured and systematic arrangements of activities that lead to realisation of the learning outcomes and assessment standards for a phase. They specify the scope of learning and assessment activities for each phase. They also contain work schedules that provide the pace and sequencing of these activities each year, as well as exemplars or models or

prototypes of lesson plans that can be implemented in any given period.

Learning programmes must ensure that all learning outcomes and assessment standards are addressed effectively and that each learning area is allocated its prescribed time and emphasis in the timetable.

In the Foundation Phase (Grades R-3), there are three learning programmes: Literacy, Numeracy and Life Skills. In the Intermediate Phase (Grades 4-6), Languages and Mathematics are distinct or separate learning programmes. Schools are given the flexibility to determine the number and nature of the other learning programmes based on what is important to the school. However, schools must ensure that the prescribed outcomes for each learning area are covered effectively and comprehensively and that the developmental needs of the learners in a phase are considered.

In the Senior Phase, there are eight Learning Programmes that are based on the learning area statements. Educators are responsible for the development of learning programmes. However, the Department of Education (nationally and provincially) will support the educators by providing policy guidelines for the development of the learning programmes (Department of Education, 2002).

Section 3 of The National Education policy Act of 1996 empowers the Minister of Education to determine, among other things, a national policy guideline on:

- integration within and across learning areas;
- the clustering of assessment standards;
- the relationship between learning outcomes;
- assessment;
- barriers to learning;
- designing a learning problem;
- policy and legislation;
- training, development and delivery;
- resourcing and support;
- planning and organisation (Department of Education, 2002).

Therefore, the RNCS has been revised under the guidelines of this Act.

2.8 EMPIRICAL STUDIES ON CURRICULUM 2005

The studies carried out in South Africa were on the implementation of Curriculum 2005 (Nsibande, 2002; Naptosa, 1999; Gauteng Education and Training Council (GETC), 1999; Jansen 1999; Department of Education & Wits University Education Policy Unit, 2001; Curriculum Review Committee, 2001; Zulu, 2003; Cross, Mungadi & Rouhani, 2002). According to the writer's knowledge, there are no studies conducted on the Revised National Curriculum statement in this country.

Full implementation of the new curriculum (Curriculum, 2005) began with the nation-wide cascade training and the ordering of new learning support material. In January 1998, all Grade 1 educators were expected to begin teaching using curriculum 2005. As weeks turned into months the problems and difficulties with the new curriculum gradually began to surface, echoing what had been raised for attention in the Pilot Project. As in the pilot project, the problems ranged from inadequate training to poor selection of learning materials, from unanticipated interpretations of the new curriculum to problems associated with the language of learning and lack of clarity around assessment (Fleisch 2002:130).

According to Fleisch (2002:130) following the pilot project the district offices began gearing up for training of Grade 1 educators. On the basis of cascade dissemination model the national department hoped to rapidly reach all grade 1 educators. Training however, was permitted to take place only after official school hours. Moreover, limited budgets were available for photocopying. Consequently, 'training' of educators often came to mean little more than bringing a single teacher from a school to a central venue for a dozen of hours to give instruction on the philosophy and theory of outcomes-based education, distribute the policy documents and explain how to plan using the new framework. Other topics, such as how to organize cooperative classrooms and new approaches to assessment, were merely mentioned. Where the district staff worried about the success of the training, they measured it by attendance and what educators

said in the evaluation feedback form. No attempt was made to find out what educators actually understood about the new curriculum.

The quality of the district training programmes was uneven. No independent monitoring of training was done and therefore no mechanisms were in place to strengthen particularly weak district programmes. After the training the 'message' about curriculum 2005 was reinterpreted at school level as the trainer educators attempted to articulate to their colleagues the meaning of the reform. According to Fleisch (2002:131) slogans 'The new curriculum was about teaching relevant things using everyday life; The new curriculum meant that children would pick up reading and writing through activities' quickly replaced reasoned arguments. When the provincial evaluation of the implementation of the new curriculum was finally published in 1999 it contained a devastating indictment of the training.

There was consensus that training was not adequate to successfully initiate Curriculum 2005 in the classroom. More than 50% of educators and principals said that there was not enough training to begin implementation in 1998 and even more believed that there was not enough training to begin implementation in 1999 (NAPTOSA, 1999:12). Broadly, the Grade 1 was regarded as a failure. Beyond problems with the content and resources, the evaluation also found that the organization of the training such as scheduling, location and duration had been a problem. Educators also complained about the methodology and the quality of trainers. The evaluators recommended the adoption of a strategic training approach in which

training would be targeted at identified performance gaps and be focused on ensuring that learning took place (Guateng Education and Training Council, 1999:65).

According to Jansen (1999:236) educators are in many senses the most important educational resource we have and they will determine whether the new curriculum succeeds or not. Therefore, the success of curriculum 2005 depends on the training and support that teachers receive, and their ability to mobilise and manage the resources around them to implement the curriculum.

One of the weaknesses identified by Jansen (1999:239) with educator development was with the model used to deliver this training- 'the cascade model'. The evaluation of the cascade model in Brakpan District in Johannesburg revealed that this model was not an effective way of training teachers for the following reasons:

- Many teachers who received training (master trainers) were not given sufficient time to train the staff back at their schools;
- Because principals and heads of departments were generally not involved as trainers, the management of most schools did not provide the necessary support required to 'cascade' the model at school level effectively;
- Many teachers who were trained by the district indicated that they felt confident to deliver sessions at their schools. However, when district staff visited schools to observe them training the rest of the

staff they were often disappointed at the poor quality of training that was being presented;

- Most presenters and teachers felt that the session on assessment was extremely weak and created a lot of anxiety and confusion.

A study conducted by Nsibandé (2002: 5) reveals key problems which schools were facing with regard to the implementation of Curriculum 2005. These problems were: the technical language used in policy documents; class sizes; lack of resources and lack of training.

Educators were of the opinion that the new curriculum needed smaller classes for effective and productive teaching, this indicates a need for reduction in class numbers. The Review Committee also highlighted the issue of resources. On the issue of training, the educators, if given a choice, said they would like to have more workshops. In the same vein, they said they wanted the workshops to be conducted or facilitated by specialists in the area and that these workshops, should not interfere with the normal running of the school. If they had a choice, educators would also change the following: reduce the amount of recording; reduce the amount of paper work, which is time consuming; modify assessment; address confusing terminology and make the concepts more user friendly.

The Curriculum Review Committee had already raised most of these issues in their report. According to Nsibandé (2002:8), since Curriculum 2005 is centralised, educators who manage it at school level are bound to have beliefs and values. These different values and

ideologies affect curriculum management issues and the manner in which those issues are tackled and resolved. The success of curriculum planning also depends on the staff profile, their expertise, experiences and interests and their expected future professional development. Curriculum decisions are closely bound up with educators' perspectives and attitudes.

One of the key findings of the Curriculum 2005 Review Committee was that the structure of Curriculum 2005 was skewed and "many of the conceptual confusions, lack of clarity in policy document and difficulties with implementation of Curriculum 2005 stem from the basic structure and design flaws". The committee identified three problems related to complexity of language: the use of meaningless jargon and vague ambitions language; the unnecessary use of unfamiliar terms to replace familiar ones and lack of common understanding and the use of Curriculum 2005 terminology. Other related problems raised on the structure and design of Curriculum 2005 included the overcrowding of the curriculum and the weakness in the specific design features promoting: sequences; pace and progression (Nsibande, 2002:10).

The study conducted by NAPTOSA (1999) on the initial implementation of Curriculum 2005 in Grade 1, reveals that some schools indicated that they did not receive the material on time from the Department of Education. But some of the schools who received the material on time did not use it, apparently they did not find it suitable for learners' specific needs. The study also reveals that the

OBE terminology was still not easily understandable, educators indicated that the new terminology was not user-friendly and some said they were still confused. This is consistent with the studies conducted by Nsibande (2002) and Jansen (1999).

The report by NAPTOSA (1999) outlines the most crucial problems experienced by educators in implementing Curriculum 2005:

- Large classes: in many instances classes were too large and classrooms too small to allow educators to control group work and access individual learner. Where learners are school beginners, co-operative learning lends itself to bright learners doing the activities for peers or simply supplying all the answers. This concurs with the findings by Nsibande (2002) where educators complained that when they implemented OBE as suggested, classes tended to be noisy and disruptive.
- Insufficient Training: participants in the study indicated that they were not confident yet as the training they had received and the education department support system were inadequate. They complained that the initial training merely provided background information and guidelines on lesson preparation. Educators reported that trainers were not always competent and some of them had no qualification or experience in junior primary education;
- Assessment: a major problem arose from the fact that educators were not really equipped for the requirements of OBE assessment.

Comments received were *inter alia* the following: too much assessment takes up valuable teaching time as no learning take place while assessing, and too much assessment is required; the record keeping and written report require too much paperwork and teacher time; teachers were not sure of the role of parents in assessment especially as not all parents bother to get involved;

- Timeframes: the report also reveals that the negative effect of the over- hasty implementation of Curriculum 2005 on all concerned was greater than expected. The perception that the change was too rushed and that the department was not ready for the implementation in 1998, is found in the answers of most educators. The educators argued that implementation was done too hastily; there was no opportunity to develop own programmes before the implementation year; the logistical support and necessary material provision were not up to standard.

In another study which was conducted by Zulu (2003:96) on the implementation of Outcomes Based Education in Durban (KwaZulu Natal) educators indicated that the problems facing the implementation of curriculum 2005 could be attributed to the following reasons:

- Poor implementation: foundation phase education as well as members of the school management team conceded that the launch of the new curriculum led to fear, anxiety and frustration. The lack of educator preparation was expressed by educators. Educators felt that the

manner in which implementation was done was not thought out properly. There were no resources and conditions were not taken into account. The majority of educators and members of School Management Team (SMT) held a view that the quality of educator preparation for the new curriculum was too rushed and poorly planned;

This view was supported by similar literature findings by Jansen (1999) who state that at the design level, there seems to be consensus that Curriculum 2005 fell short of constituting an effective curriculum framework for educators and learners. However, given the poor training of educators and lack of resources, as well as the toll that apartheid had inflicted on the education system, the majority of educators found it difficult to know what to teach and tended to act as mere technicians without necessary conceptual and content tools;

- Poor quality of training: all educators in the phase indicated that they had attended the departmental training workshop on OBE. Educators unanimously agreed that OBE training in the five- day black period was inadequate and too basic. This corroborates with the views of Portenza and Monyokolo (2002:181) that the adhoc workshops led to poor implementation. This was also one of the central findings of the Department of Education and the Wits University Education Policy Unit (2001:18) that the training programmes, in concept, duration and quality were often too inadequate especially early in the implementation process. Jansen (1999:205) identified two strands of opinion in the assessment of

training in his interview with thirty-two grade one educators in KwaZulu Natal and Mpumalanga. The first strand regarded the training as necessary and useful but felt that much more training was needed in order to become more meaningful, a second strand regarded the training as simply misguided, that is, the training was too basic and was offered at a level which educators had long surpassed in their own development. It seems that a common thread in the responses of the SMT and educators is that the training period did not prepare them adequately for actual classroom situation.

- Complex terminology: most educators in the study indicated that they felt overwhelmed by the complexity of terms used during training. The problem of terms being too complex is a common view expressed as revealed by the findings of the Department of Education and the Wits University Education Policy Unit (2001:18) that there were flaws in the structure and design of the policy. In particular the language was often complex and confusing. Notions of sequence, concept development and content and progression were poorly developed and the scope of the outcomes and learning areas resulted in crowding of curriculum overall. However, the educators conceded that the follow-up meetings initiated by the SMT and held at staff, grade and phase level played a significant role in capacitating them to understand and unpack the complex terms and to adjust to the new curriculum.

- Too much work: the study also reveals educators concerns in respect of the volume of work involved in the assessment procedure. This could be attributed to the vague understanding of principles of assessment.

2.9 CONCLUSION

It has transpired from the preceding review of literature that the Revised National Curriculum Statement has a number of design elements. The interaction between these design elements makes implementing the RNCS to be a challenging task to the educators. Empirical studies on the implementation of Curriculum 2005 have been provided for the purpose of understanding educators' experiences in implementing a new curriculum.

In the next chapter, the research design and methodology of the study will be detailed.

CHAPTER THREE

3.0 RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

Literature reviewed in the previous chapter has revealed that educators need to understand all the design elements of the RNCS in order to be able to implement it successfully. In this chapter the research design and methodology used in the investigation of educators' implementation of the RNCS will be discussed.

3.2 AIMS OF THE STUDY

The main aim of this study is to investigate educators' experiences in implementing the Revised National Curriculum Statement.

The following specific objectives are formulated:

- 3.2.1** To ascertain the nature of educators' experiences in implementing the Revised National Curriculum Statement.
- 3.2.2** To determine whether educators' biographical factors such as gender, age, teaching experience, qualification and rank have any influence on the nature of their experiences in implementing the Revised National Curriculum Statement.

3.2.3 To ascertain the extent to which educators generally find implementing the Revised National Curriculum Statement to be successful.

3.2.4 To determine whether educators' biographical factors (gender, age, teaching experience, qualification and rank) have any influence on the extent to which they generally find implementing the Revised National Curriculum Statement to be stressful.

3.3 FORMULATION OF HYPOTHESES

Based on the aims of the study the following hypotheses are formulated:

3.3.1 Educators do not differ in terms of the nature of their experiences in implementing the Revised National Curriculum Statement.

3.3.2 Educator's biographical factors such as gender, age teaching experiences, qualifications and rank have no significant influence on educators' nature of experiences in implementing the Revised National Curriculum Statement.

3.3.3 Educators do not differ in the extent to which they find implementing the Revised National Curriculum Statement to be stressful.

3.3.4 Educators' biographical factors such as gender, age, teaching experience, qualification and rank have no significant influence on the extent to which they find implementing the Revised National Curriculum Statement to be stressful.

3.4 THE RESEARCH INSTRUMENT

Data is collected by means of questionnaires. A questionnaire is the set of questions dealing with some topics or related groups of individuals for the purpose of gathering data on a problem under consideration (Van der Aardweg & Van der Aardweg, 1988 : 190). However, the questionnaire has its own advantages and disadvantages.

3.4.1 Advantages of the questionnaire

According to Mahlangu (1987:96) the questionnaire is one of the most common methods of gathering information. It is also time saving and conducive to reliable results. The researcher used the written questionnaire as a research instrument taking into consideration certain advantages cited by Cohen and Manion (1989 : 111-112),. They are as follows:

- Affordability is the primary advantage of a written questionnaire because it is the least expensive means of data gathering.

- Written questionnaires preclude possible interview bias. The way the interviewer asks questions and even the interviewer's general appearance or interaction may influence respondent's answers. Such biases can be completely eliminated in the written questionnaire.
- A questionnaire can be given to many people simultaneously, that is to say that a large sample of a targeted population can be reached.
- They permit a respondent, sufficient amount of time to consider answers before responding.
- They provide a greater uniformity across the measurement situations than do the interviews. Each person responds exactly to the same questions because standard instructions are given to the respondents.
- Generally, the data provided by questionnaires can be more easily analyzed and interpreted than the data obtained from verbal responses.
- Using a questionnaire solves the problem of non-contact "when the researcher calls". When the target population to be covered is widely and thinly spread, the mail questionnaire is the only possible method of approach.

- Through the use of the questionnaire approach the problems related to interviews may be avoided. Interview "errors" may seriously undermine the reliability and validity of the survey results.
- A respondent may answer questions of a personal or embarrassing nature more willingly and frankly on a questionnaire than in a face to face situation with an interviewer who may be a complete stranger. In some cases it may happen that the respondents report less than expected and make more critical comments in a mail questionnaire.
- Questions requiring considered answers rather than immediate answers could enable respondents to consult documents in the case of the mail questionnaire.
- Respondents can complete questionnaires in their own time and in a more relaxed atmosphere.
- Questionnaire design is relatively easy if the set guides of guidelines are followed.
- The administration of questionnaires, the coding, analysis and interpretation of data can be done without any special training.

- Data obtained from questionnaires can be compared and inferences can be made.
- Questionnaires can elicit information, which cannot be obtained from other sources. This renders empirical research possible in different educational disciplines.

3.4.2 Disadvantages of the questionnaire

Although the questionnaire has advantages it also has significant disadvantages. According to Van der Aardweg and Van der Aardweg (1988 : 190), Kidder and Judd (1986 : 223 - 224) and Mahlangu (1987 : 84-85) the disadvantages of the questionnaire are *inter alia* the following:

- Questionnaires do not provide the flexibility of interviews. In an interview an idea or comment can be explored. This makes it possible to gauge how people are interpreting the question. If questions asked are interpreted differently by respondents the validity of the information obtained is jeopardized.
- People are generally better able to express their views verbally than in writing.

- Questionnaires can be answered only when they are sufficiently easy and straightforward to be understood with the given instructions and definitions.
- The mail questionnaire does not make provision for obtaining the views of more than one person at a time. It requires uninfluenced views of one person only.
- Answers to mail questionnaires must be seen as final. Re-checking of responses cannot be done. There is no chance of investigating beyond the given answer for a clarification of ambiguous answers. If respondents are unwilling to answer certain questions nothing can be done to it because the mail questionnaire is essentially inflexible.
- In a mail questionnaire the respondent could examine all questions at the same time before answering them and the answer to the different questions could therefore not be treated as 'independent'.
- Written questionnaires do not allow the researcher to correct misunderstanding or answer questions that the respondents may have. Respondents might answer incorrectly or not at all due to confusion or misinterpretation.

3.4.3 Construction of the questionnaire

The most important point to be taken into account in questionnaire design is that it takes time and effort and that the questionnaire will be re-drafted a number of times before being finalized. A researcher must therefore ensure that adequate time is budgeted for the construction of the questionnaire (Kidder & Judd, 1986 : 243 : 245). All of the above was taken into consideration by the researcher during the designing of the questionnaire for this investigation.

The questionnaire was designed to determine the educators' experiences in implementing the Revised National Curriculum Statement. In order to obtain information needed for the purpose of this study, the questionnaire was divided into three sections, namely, Section A, Section B and Section C.

The first section (Section A) consists of the biographical information of the respondents, namely gender, age, teaching experience, qualification and rank. The second (Section B) consists of the Revised National Curriculum Statement Scale (RNCSS). The third section (Section C) consists of a single item, scale on how educators generally find implementing the Revised National Curriculum Statement to be stressful.

3.4.4 Response alternatives or categories of the rating scales and scoring thereof

With regard to Section B of the research instrument, rating scale with four response alternatives or categories namely, Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) is used. According to Ngidi (1995 : 84) Rossi, Wright and Anderson (1983) have identified two major advantages of such categories. Firstly, they have been tested in many different situations and have worked successfully. Secondly, they have got a wide applicability because they can fit almost any subject matter.

A further advantage of such standard categories is that they are easily adaptable to list of items. One can present a number of different questions or statements while using a single set of response categories, making it easier for both respondent and interviewer (Urbani, 1993 : 93). The five point has become popular in this regard, both for use in scales and for lists of items (Urbani, 1993 : 99). The researcher intentionally omitted the midpoint category because it attracts respondents to choose it, sometimes merely for non-committal purpose.

Urbani (1993 : 96) advises that unfortunately the empirical evidence regarding the effect of the omission of the middle category on responses is inconclusive, so no definite rules in this regard can be offered, suffice to say that the researcher should always be guided by the context of the questions he/she is asking. Therefore the four

categories used in this study are of a Likert type, although they do not have five categories.

With regard to Section C of the research instrument, rating scale with one item and five response categories namely: Not all stressful, Mildly stressful, Moderately stressful, Very stressful and Extremely stressful used three other researchers have used a one item measure of self-reported teacher stress (Kyriacou & Sutcliffe, 1977a, 1978b, 1979a, 1979a, 1976; Laughlin, 1984; Borg & Riding, 1991).

3.4.5 The structure of the items

As mentioned in section 3.4.3 the questionnaire consists of two sections. Section A, with items 1, 2, 3, 4 and 5 solicit biographical information. This information is used in relation to aim number two and aim number four of the study which intends to determine whether biographical factors have any influence on educators, experiences in implementing the Revised National Curriculum Statement as well as on the extent to which they find implementing the Revised National Curriculum Statement to be stressful.

In Section B, there are 32 items. These items are meant to ascertain the nature of educators' experiences in implementing the Revised National Curriculum Statement (aim number one).

In Section C, there is only one item, which aimed at ascertaining the extent to which educating the Revised National Curriculum Statement To be stressful (aim number three).

3.4.6 Validity of the instrument

Validity is the degree to which an instrument actually measures what it purports to measure (Sibaya, 1993:160). Content validity, and face validity are the two various kinds or types of validity interpretation to be discussed and used in this study.

3.4.6.1 Content Validity

Content validity refers to the representativeness of the sample of questions included in the instrument (Henerson, Morris & Fitz-Gibbon, 1997 : 141). Sibaya (1993 : 159) suggests that content validity must be a matter of judgement, not empirical correlation : this really means a systematic examination or scrutiny of the content, to find out if it covers all the information on which the tester means to test subjects. Nzimande (1970 : 43) maintains that content validation entails a careful examination and checking of the scale items, through the use of experts in the field concerned. The researcher of this study will therefore consult the experts from the Department of Curriculum and Instructional Studies at the University of Zululand. Experts will be used for examining the scale items for content validity. Behr (1988 : 122) regards validity as indispensable characteristics of measuring devices.

3.4.6.2 Face Validity

According to Sibaya (1993 : 162) this does not denote validity in the true sense of the term. It simple means that a cursory examination seems to show that the instrument does measure what it is intended to measure. This will be done by the researcher and supervisor before the questionnaire is finalised. The questionnaire is also shown to the experts at the University of Zululand and some students and colleagues to peruse.

3.4.7 Reliability of the instrument

Reliability refers to the degree to which a test is internally consistent (Sibaya, 1993 : 154). In order to ensure that items 1-32 are internally consistent, Cronbach's alpha reliability co-efficient will be calculated.

3.5 METHOD OF CODING OR SCORING AND PLANNING FOR THE ANALYSIS OF DATA

3.5.1 Method of coding or scoring the research instrument

Raw data obtained from the questionnaire are converted to a quantitative form for analysis and display: converting process is called scoring or coding (Orlich, 1978 : 135). Urbani (1993 : 135) defines coding as a process whereby the responses on a questionnaire are classified into meaningful categories and converted into numbers which are suitable for the analysis of data by computer.

In this study the respondents are requested to make a cross through the SA, A, D and SD continuum to describe the statement which suit their experience in implementing the Revised National Curriculum Statement (Section B). They are also requested to make a cross through Not at all stressful (1) Mildly stressful (2) Moderately stressful (3), Very stressful (4) and Extremely stressful (5) continuum to describe the degree to which they generally find implementing the Revised National Curriculum Statement to be stressful (Section C). The items are precoded in the questionnaire.

In Section B the sixteen positively worded statements are assigned codes or values as follows:

- 4 to Strongly Agree
- 3 to Agree
- 2 to Disagree
- 1 to Strongly Disagree

the items in question are 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 17, 18, 20, 22, 24, 25. For the other sixteen negatively worded statements scoring reversed as follows: 4 to Strongly Disagree, 3 to Disagree, 2 to Agree, 1 to Strongly Agree. The items in question are 10, 12, 13, 14, 15, 16, 19, 21, 23, 26, 27, 28, 29, 30, 31, 32.

This is a usual procedure, typically the highest number is assigned to the most positive response and the lowest number to the most negative

response (Orlich, 1978:65; Henerson *et al.* 1987:87, Sibaya, 1993:110).

Once the questionnaire is completed and returned the codes are manually entered onto code sheets. Thereafter, they are punched onto the SPSS Computer Programme designed for research purposes. Coding for respondents' personal particulars (Section A of the questionnaire) is done by assigning numerical symbols using a systematic method. This is because these response categories do not have a quantitative relationship to each other (Orlich, 1978).

3.5.2 Determination of the nature of educators' experiences in implementing the Revised National Curriculum Statement

For the purpose of testing the hypothesis that educators do not differ in the nature of their experiences in implementing the Revised National Curriculum Statement (aim number one) the researcher decided to divide respondents into groups. Since the scoring pattern for positively worded statement is 4, 3, 2 and 1, 2, 3, 4 for negatively worded, establishments lowest possible score is 32 (could be theoretically obtained by a respondent who endorses strongly disagree responses in every positively worded item and strongly agree to every negatively worded item) and the highest possible score is 128 (could be theoretically obtained by one who endorsed strongly agree to every positively worded statement and strongly disagree to every negatively worded statement). With scores that could range from 32 to 128 and four response categories, the following four groups are created:

- * VNE GROUP : A Very Negative Experience group consist of respondents with scores in the range of 32-56.
- * NE GROUP : A Negative Experience group consist of respondents with scores in the range of 57-80
- * PE GROUP: A Positive Experience group consist of respondents with scores in the range of 81-104
- * VPE GROUP: A Very Positive Experience group consists of respondents with scores in the range of 105-128.

The above groups are divided by grouping scores into class intervals (Sibaya, 1993 : 184).

3.5.3 Determination of the extent to which educators generally find implementing the Revised National Curriculum Statement to be stressful.

For the purpose of testing hypothesis for aim number three, where five categories namely used No stress group, mild stress group, moderate stress group, high stress group and extreme stress group will be appropriate.

3.5.4 Procedure for analysing data

Labovitz and Hagedorn (Abhilak, 1994 : 216) suggest that the analysis of data involves both descriptive and inferential statistics. In this study the analysis of data involves both descriptive and inferential statistics. In the following sections the difference between descriptive and inferential statistics are discussed. The procedures to be followed in analysing data using these two methods are also outlined.

3.5.4.1 Descriptive analysis of data

The term descriptive statistics (also called summary statistics) refers to statistical methods used to describe data which have been collected on a research sample (Borg & Gall, 1983 : 356). Descriptively, the data are summarised and reduced to a few statistics for the actual sample (Abhilak, 1994 : 216). Descriptive statistics serves as a tool for organization, tabulation, depicting and describing, summarization and reduction of comprehensible form of an otherwise unwieldy mass of data (Sibaya, 1993:165). Therefore, it does not involve testing of hypotheses for making generalizations about the population parameters. In this study descriptive statistics is used for summarization and reduction of the data which have been collected on a research sample.

Analysis of the respondents in the sample according to their personal particulars (section A of the questionnaire) is done first. Descriptive analysis of the sample data for the 32 statements (section B of the

questionnaire) is then done, using respondent counting, percentages, and average (mean) for the responses to each statement. These concepts are discussed in the following section.

a) Respondent counting and percentages

Orlich (1978:132) maintains that the preliminary step in analysing data is usually counting the responses for every item or respondent counting, using either hand tabulations or electronic data processing. Electronic data processing is used in this study. Respondent counting involves counting the number of respondents who marked SA, A, D and SD categories in each statement. Respondent counting provides a summary of the tabulated frequency for which each category is marked, therefore, frequency data can be converted to percentages, indicating the number of respondents who marked a particular category in relation to the total number of respondents (Orlich, 1978 : 136). In order to avoid bias and giving misleading information, the number of respondents who marked a particular category is always given with the reported percentages in brackets (parenthesis).

b) The mean (average) for the responses to each statement

“By averaging group scores on a set of items, you are reducing or summarizing the data in order to make them easier to work with and interpret” (Henerson, *et al.*, 1987 : 174). When the mean or average for the responses to each item is converted to the nominal categories, it gives an indication of the group’s response to a particular statement

(Orlich, 1978:136; Henerson, *et al.*, 1987:17). In this study it means that when the mean or average for the responses to each item are converted to SA, A, D and SD categories, it will give an indication of the educators' response to a particular statement.

3.5.4.2 Inferential statistics

While descriptive statistics is concerned with summarizing or describing the data of a sample, inferential statistics is concerned with generalizing from a sample to make estimates and inferences about a wider population (Rowntree, 1981:21). Rowntree (1981:19) asserts that the distinction between descriptive and inferential statistics depend upon another : the distinction between samples and populations. Borg and Gall (1983:356) also affirm that inferential statistics is used to make inferences from sample statistics to the population parameter. Sibaya (1993:166) maintains that the purpose of inferential statistics is to predict or estimate or surmise the properties of a population from a knowledge of the properties of only a sample of the population. Therefore, inferential statistics builds upon descriptive statistics (Sibaya, 1993:166). However, the descriptive characteristics of a sample can be generalized to the entire population, with a known margin of error, using the techniques of inferential statistics (Sibaya, 1993:166). Inferential statistics is also used to determine whether differences between groups might be due to chance (Orlich, 1978:144). It therefore involves hypotheses testing. Inferential statistics is used for the same purposes in this study.

To test the hypothesis that educators do not differ in nature of their experiences in implementing the RNCS (aim number one) as well as in extent to which they generally find implementing the RNCS to be stressful a chi-square (χ^2) one sample test is used.

The chi-square (χ^2) test is the most frequently used non-parametrics statistics for significance (Orlich, 1978 : 145; Behr, 1988 : 79). The chi-square (χ^2) test of significance is used when the investigation concerns the category variables, that is, comparing how many members of a sample fall into each one of a number of descriptive categories: concerned with comparing differences in the actual (observed) frequencies (or counts) with the expected frequencies (or counts) Behr, 1988 : 79-80). The chi-square test (χ^2) is a test that tells us the extent to which an observed set of frequencies differs from the frequencies that were expected. It is used when the research data are in the form of frequency counts (Borg & Gall, 1983 : 559). In other words, it is used to test the hypotheses about proportions (Sibaya, 1993 : 258).

In this study the researcher has in the single sample, four groups or categories, namely VNE, NE, PE and VPE. The researcher also have no stress, mid stress, moderate stress, high stress and extremely high stress categories. The researcher intends to test whether significant differences exist between the observed frequencies and the expected frequencies in these four respective categories. This type of chi-square test is called one sample test (Behr, 1988 : 82 ; Sibaya, 1993 : 259).

Since the researcher hypothesis is based on the null hypothesis (which is a 'no difference' statistical hypothesis), it is decided that if there is no significant difference between the frequencies in the four respective categories or groups the null hypothesis will be accepted. However, if there is a significant difference the null hypothesis will be rejected and the alternative or research hypothesis will be accepted.

The null hypothesis is rejected at 0,05 level of significance, which means that the likelihood of the results occurring by chance is less than 5 times in 100. If the calculated probability value of the results (p) is greater than 0,05 level of significance the null hypothesis is accepted. This is recorded as $p > 0,05$. If it is less, the null hypothesis is rejected. This is recorded as $p < 0,05$ (Sibaya, 1993 : 257). Lutz (Abhilak, 1994 : 221) also confirms that using the 0,05 level of significance means that we only reject the null hypothesis when we get sample results whose sampling error probabilities are as low as or lower than 0,05. That is the 5 percent level.

The chi-square test for k independent samples will be used to test the hypothesis that educators' biographical factors such as gender, age teaching experience, qualification and rank have no influence on educators' nature of experiences in implementing the Revised National Curriculum Statement (aim number two) as well as on the extent to which they generally find implementing the Revised National Curriculum Statement to be stressful (aim number four).

The chi-square test for k independent samples is an extension of χ^2 for two independent samples : in general the test is the same for both two and k independent samples (Sibaya, 1993 : 260). This statistical test (the chi-square test for k independent samples) is suitable for this study because the respondents in the sample are categorized in terms of their personal particulars and their responses are considered independently. For example, under the category of gender, males and females responses are treated independently of each other.

3.6 SAMPLING OF THE SUBJECTS FOR THE STUDY

Educators in grade R-6 of the General Education and Training band, where the RNCS will have been implemented, will be the respondents in this study. These respondents will be drawn from schools in KwaZulu-Natal. KwaZulu-Natal Province is about 92,180 square kilometers big in size and consists of four regions. These regions in their alphabetical order are: Ethekeini, Ukhahlamba, uMgungundlovu and Zululand. A list of foundation and intermediate schools in each region will be obtained. In order to ensure that the results are not biased, each region will be sampled. There will be 5 randomly selected schools from each region. Therefore, the total number of schools will be 20.

A simple random sampling method will be used for selecting the sample of this study. The usual definition of a random sampling is that it is a procedure in which all the individuals in the defined population

have an equal and independent chance of being selected as a member of the sample (Borg & Gall, 1983 : 244).

Som (1973 : 20) maintains that in simple random sampling the probability that the universe unit (member of the defined population) will be selected at any given draw is the same as that at the first draw. The technique that is used other than the table of random numbers, is where a slip of paper with the name or identification number of each individual in the population is placed in a container, mixing the slips of paper with the name or identification number (Borg & Gall, 1983 : 246). Sibaya (1993 : 67) advises that to ensure that each slip pulled out has the same probability, it must be returned to the bowl before the next draw. Burroughs (1971 : 58) warns that if one puts the number back into "the hat" after selection then the same number may appear again, if it is not put back after selection, the number of the population as well as the sampling fraction changes, that is, the selection of each individual changes slightly the probability for the next case selected. Sibaya (1993: 67) maintains that if the number previously picked comes up again, we would ignore it, thus the process is called sampling with replacement (Som, 1973 : 20; Williams, 1978 : 106; Sibaya, 1993 : 67).

Borg and Gall (1983 : 244-245) contend that if the replacement is not done, a more precise definition of a simple random sample is that "it is a process of selection from the population that provides every sample of a given size an equal probability of being selected". They maintain that this definition would be technically correct because if no

replacement is made, once the first selection has been made, the population from which the selection is made would become one case smaller. Sampling using replacement technique is therefore the better technique and will therefore be used in this study.

Using 20 as an estimate average number of teachers per school and 20 as a total number of schools that will be included in the sample of the final study, the estimated size of the sample is ± 400 respondents. Travern (1978 : 336) maintains that there is no simple answer to the question "how large should the sample be?" Travern (1978 : 337) further argues that it is evident that merely increasing the size of the sample does not necessary lead to accuracy. Williams (1978 : 45) also maintains that samples are often less than 1% of the size of the population and are nearly always less than 5%. He further asserts that occasionally samples may be as large as 20%, but these do not seem to be frequent and so far seem always to be associated with data stored in computers or with a very small population.

3.7 PLANNING FOR THE ADMINISTRATION OF THE RESEARCH INSTRUMENT

This study was conducted in a form of a field study. The procedure which was followed is outlined below:

- a) A letter requesting permission to conduct research in selected schools was forwarded to the Director: Research Strategy Development and ECMIS in KwaZulu-Natal.

- b) Copies of the letter of approval were made and they accompanied the questionnaires to teachers for the attention of the principals concerned. The researcher personally distributed and collected questionnaires from schools.
- c) A pilot run of the research instrument was conducted among teachers from schools in the Zululand region before the final study. These schools were not included in the final study sample for the main study.

3.8 PILOT STUDY

Pilot study is a abbreviated versions of a research project in which the researcher practices or test the procedures to be used in the subsequent full-scale project (Dane, 1990:42). It is preliminary or "trial run" investigation using similar questions and similar subjects as in the final survey. Kidder and Judd (1986 : 211-212) state that the basic purpose of a pilot study is to determine how the design of the subsequent study can be improved and to identify flaws in the measuring instrument. A pilot study gives the researcher an idea of what the method will actually look like in operation and what effects (intended or not) it is likely to have. In other words, by generating many of the practical problems that will ultimately arise, pilot study enables the researcher to avert these problems by changing procedure, instruction and questions.

The number of participants in the pilot group is normally smaller than the number scheduled to take part in the final survey. Participants in the

pilot study and the sample for the final study must be selected from the same target populations.

According to Plug *et al.*, (1991:49-66) the following are the purposes of a pilot study:

- It permits a testing of the hypothesis that leads to testing more precise hypotheses in the main study.
- It provides the researcher with ideas, approaches and clues not foreseen prior to the study.
- It permits a thorough check of the planned statistical and analytical procedures, thus allowing an appraisal of their adequacy in treating the data.
- It greatly reduces the number of errors because unforeseen problems revealed in the pilot study results in the redesigning of the main study.
- It saves the researcher major expenditure of time and money on aspects of the research which would have been unnecessary.
- Feedback from other persons involved is made possible and lead to important improvements in the main study.

- In the pilot study the researcher tries out a number of alternative measures and select only those producing the best results for the final study.
- The approximate time required to complete the questionnaire is established in the pilot study.
- Questions and/or instructions that were misinterpreted are reformulated.

Through the use of the pilot study as a “pre-test” the researcher was satisfied that the questions asked complied adequately with the requirements of the study.

3.9 CONCLUSION

In the introduction of this chapter, the aims and the hypotheses of this study were outlined. The methods and procedure for selecting subjects for sampling, creating and applying the measuring instrument, coding or scoring and analysing data have been discussed. In the next chapter (Chapter four) the empirical research is reflected, and an analysis and interpretation of the data gained by means of the empirical research is discussed.

CHAPTER FOUR

4.0 PRESENTATION AND ANALYSIS OF DATA

4.1 INTRODUCTION

In chapter three a detailed account of research design and methodology was given. In this chapter the analysis and interpretation of data are discussed. Descriptive statistics is used to summarise educators' responses to the statements without testing the hypotheses of the study. Inferential statistics is used to test the hypotheses postulated in chapter three.

4.2 ADMINISTRATION OF THE RESEARCH INSTRUMENT

The SPSS computer programme was used for analysing data. Cronbach's co-efficient alpha was used to determine the internal-consistency reliability estimates for items 1-32 (Section B), which measure the nature of educators' experiences in implementing the Revised National Curriculum Statement. The internal-consistency reliability estimate is .93, which is excellent (Tabachnick & Fidell, 1989:640).

TABLE 4.1 Distribution of subjects according to biographical variables (N = 308)

Criteria	Levels					
Gender	Male			Female		
Age	25 and below	26-35	36 – 45	46-55	56 and above	
	10	117	135	44	2	
Teaching experience: in years	0-5	6-10	11-15	16-20	21 and above	
	45	90	110	42	21	
Qualification	REQV10 (Matric and below)	REQV 11 (M + 1)	REQV12 (M + 2)	REQV13 (M + 3)	REQV14 (M + 4)	REQV15 (M + 5) and above
	9	2	21	134	112	30
Rank	Post level 1 educator	Head of Department		Deputy Principal		Principal
	189	92		20		07

Table 4.1 illustrates the distribution of educators according to their biographical characteristics. The questionnaire was administered to 308 educators.

4.3 RESULTS OF THE STUDY

4.3.1 Descriptive analysis of data

Table 4.2 **Frequency distribution of responses to items 1-32**
(N = 308)

Statement No.	Response Category				
	SA	A	D	SD	Mean \bar{X}
+1	57 (18.5)	187 (60.7)	54 (17.5)	10 (3.2)	2.94
+2	56 (18.2)	175 (56.8)	72 (23.4)	5 (1.6)	2.92
+3	48 (15.6)	183 (59.4)	72 (23.4)	5 (1.6)	2.89
+4	45 (14.6)	180 (58.4)	77 (25.0)	6 (1.9)	2.86
+5	46 (14.9)	163 (52.9)	85 (27.6)	14 (4.5)	2.78
+6	61 (19.8)	139 (45.1)	99 (32.1)	9 (2.9)	2.82
+7	56 (18.2)	126 (40.9)	117 (38.0)	9 (2.9)	2.74
+8	50 (16.2)	125 (40.6)	123 (39.9)	10 (3.2)	2.70
+9	24 (7.8)	137 (44.5)	122 (39.6)	25 (8.1)	2.52
-10	35 (11.4)	155 (50.3)	90 (29.2)	28 (9.1)	2.36
+11	24 (7.8)	190 (61.7)	84 (27.3)	10 (3.2)	2.74
-12	8 (2.6)	81 (26.3)	168 (54.5)	51 (16.6)	2.85
-13	9 (2.9)	92 (29.9)	165 (53.6)	42 (13.6)	2.78
-14	9 (2.9)	91 (29.5)	167 (54.2)	41 (13.3)	2.78
-15	12 (3.9)	72 (23.4)	170 (55.2)	54 (17.5)	2.86
-16	6 (1.9)	79 (25.6)	176 (57.1)	47 (15.3)	2.86
+17	40 (13.0)	196 (63.6)	48 (15.6)	24 (7.8)	2.82
+18	25 (8.1)	87 (28.2)	150 (48.7)	46 (14.9)	2.30

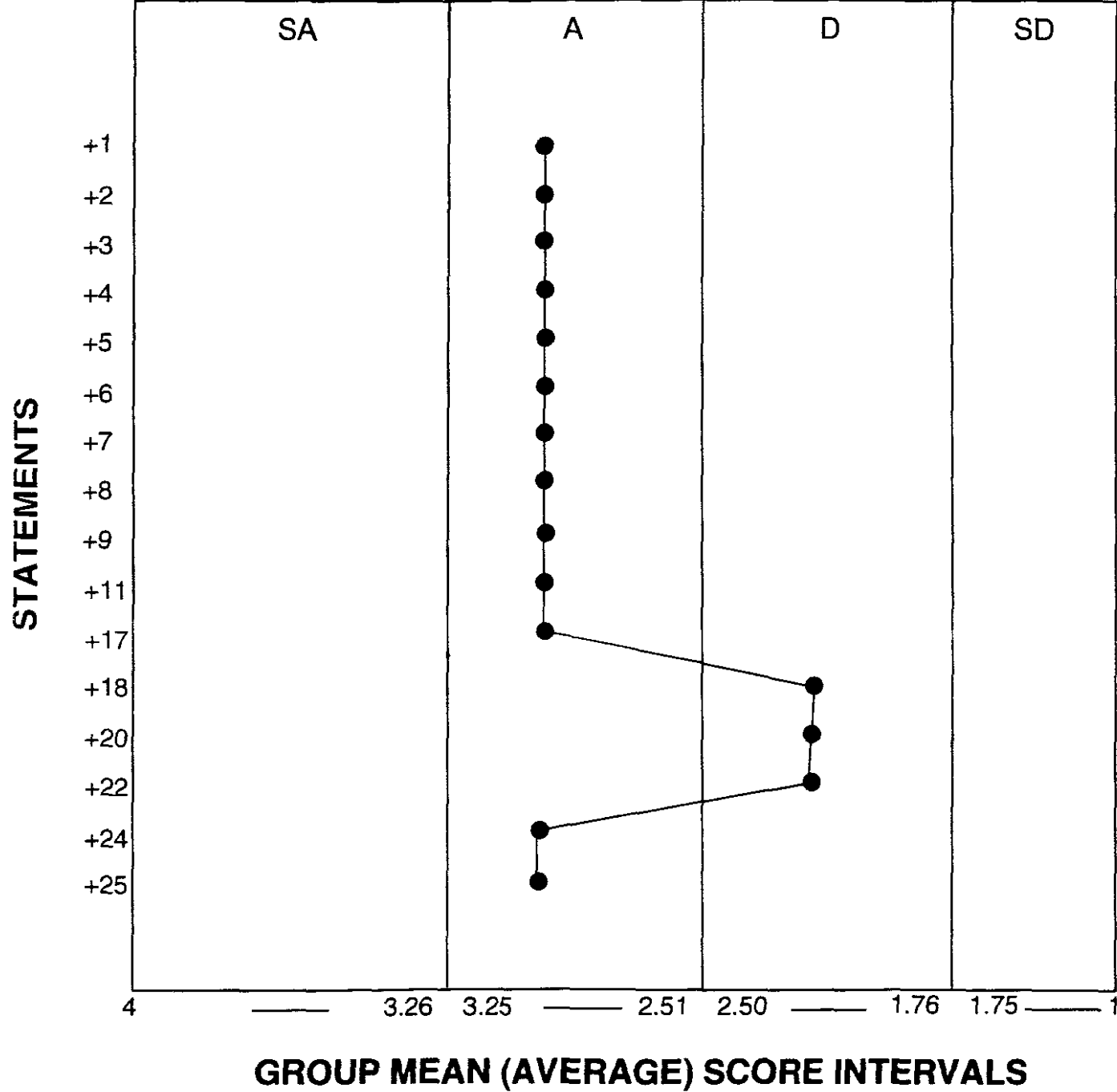
-19	88 (28.6)	176 (57.1)	30 (9.7)	14 (4.5)	1.90
+20	19 (6.2)	73 (23.7)	115 (37.3)	101 (32.8)	2.03
-21	20 (6.5)	117 (38.0)	144 (46.8)	27 (8.8)	2.58
+22	11 (3.6)	121 (39.3)	141 (45.8)	35 (11.4)	2.35
-23	29 (9.4)	125 (40.6)	123 (39.9)	31 (10.1)	2.51
+24	28 (9.1)	136 (44.2)	117 (38.0)	26 (8.4)	2.55
+25	21 (6.8)	216 (70.1)	66 (21.4)	5 (1.6)	2.82
-26	15 (4.9)	107 (34.7)	163 (52.9)	23 (7.5)	2.63
-27	7 (2.3)	105 (34.1)	166 (53.9)	30 (9.7)	2.71
-28	15 (4.9)	133 (43.2)	137 (44.5)	23 (7.5)	2.55
-29	10 (3.2)	136 (44.2)	145 (47.1)	17 (5.5)	2.55
-30	18 (5.8)	105 (34.1)	147 (47.7)	38 (12.3)	2.67
-31	7 (2.3)	96 (31.2)	179 (58.1)	26 (8.4)	2.73
-32	5 (1.6)	91 (29.5)	149 (48.4)	63 (20.5)	2.88

* Percentages are in parentheses

+ Positively worded statements (scoring 4, 3, 2, 1)

- Negatively worded statements (scoring 1, 2, 3, 4)

**GRAPH 1: GRAPHIC PRESENTATION OF RESPONSES TO
EVERY POSITIVELY WORDED STATEMENT**



**GRAPH 2: GRAPHIC PRESENTATION OF RESPONSES TO
EVERY NEGATIVELY WORDED STATEMENT**

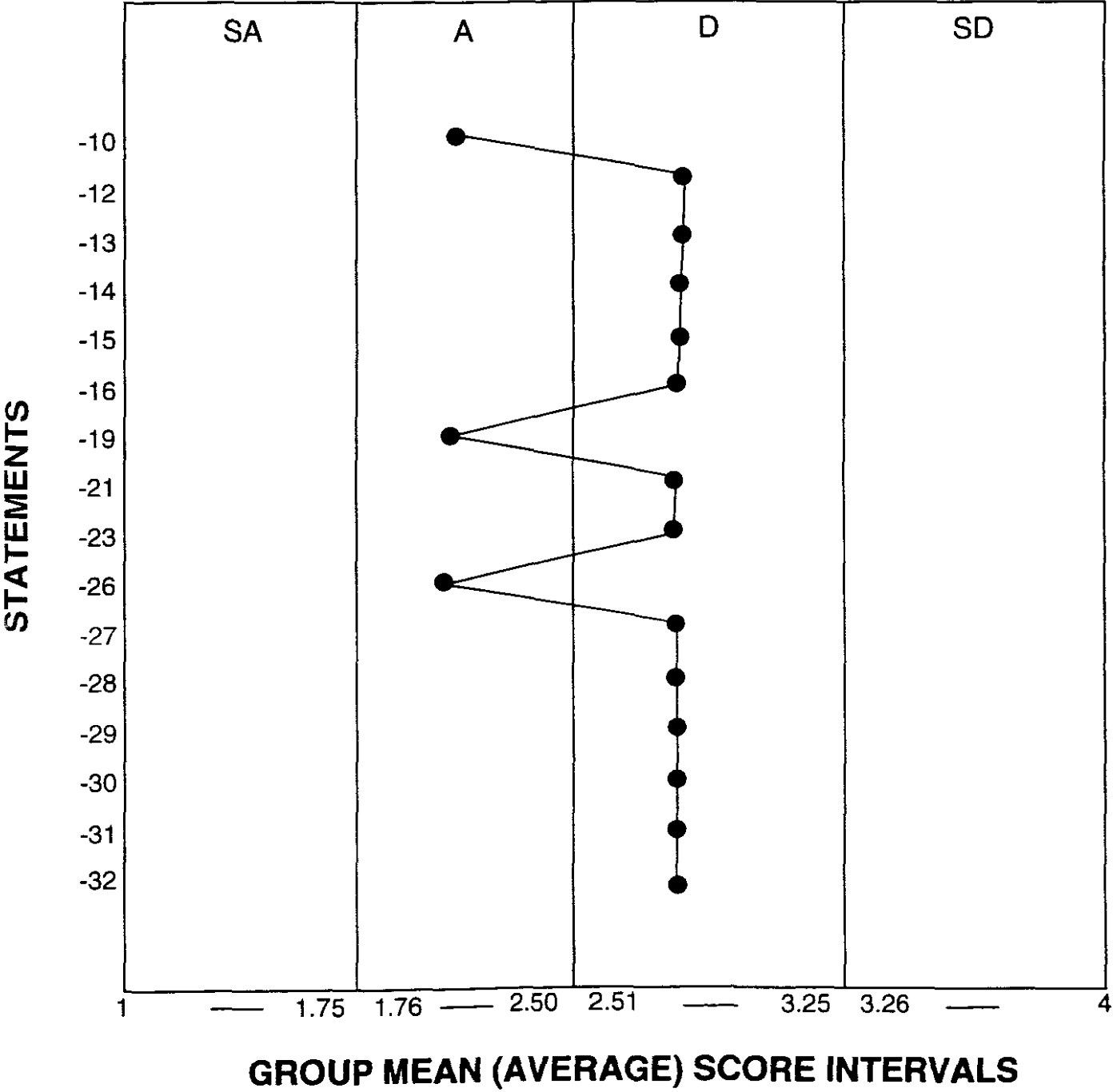


Table 4.2 reveals the following information pertaining to educators' experiences on each statement.

Statement 1 : The RNCS is helpful in planning my learning programme

This statement is positively worded. Table 4.2 reveals that 57 (18.5%) of the educators strongly agree and 187(60.7%) agree that the RNCS is helpful in planning their learning programmes. Only 54 (17.5%) who disagree and 10 (3.2%) who strongly disagree. The mean score is 2.94. When converted back to the nominal categories of the scale it falls within the "A" category (see graph 1). Therefore, on average the educators agree that the RNCS is helpful in planning their learning programmes.

Statement 2: The RNCS is helpful in developing my classroom activities

This is a positively worded statement. Table 4.2 shows that 56 (18.2%) of the educators strongly agree and 175 (56.8%) agree that the RNCS is helpful in planning their classroom activities. About 72 (23.4%) disagree and only 5 (1.6%) strongly disagree. The mean score is 2.92. When converted back to the nominal categories of the scale it falls within the 'A" category (see graph 1). Therefore, on average the educators agree that the RNCS is helpful in developing their classroom activities.

Statement 3 : The RNCS is helpful in assessment my learners' performance

This is a positively worded statement. Table 4.2 reveals that 48 (15.6%) of the educators strongly agree and 183 (59%) agree that the RNCS is helpful in assessing their learners' performance. About 72 (23.4%) disagree and only 5 (1.6%) strongly disagree. The mean score of 2.89 falls within the "A" category (see graph 1). On average, educators in the sample agree that the RNCS is helpful in assessing their learners' performance.

Statement 4 : The RNCS is helpful in my reporting of learners' performance

This is a positively worded statement. Table 4.2 shows that 45 (14.6%) of the educators strongly agree and 180 (58.4%) agree that the RNCS is helpful in reporting their learners' performance. About 77 (25.0%) disagree and only 6 (1.9%) strongly disagree. The mean score of 2.86 falls within the "A" category (see graph 1). On average, educators in the sample agree that the RNCS is helpful in reporting their learners' performance.

Statement 5 : The RNCS is helpful in my understanding of the Outcomes Based Education

This is a positively worded statement. Table 4.2 indicates that 46 (14.9%) of the educators strongly agree and 163 (52.9%) agree that

the RNCS is helpful in their understanding of the Outcomes Based Education. About 85 (27.6%) disagree and only 14(4.5%) strongly disagree. The mean score of 2.78 falls within the “A” category (see graph 1). On average, educators agree that RNCS is helpful in their understanding of the Outcomes Based Education.

Statement 6 : I find simplified terminology of the RNCS easily understandable

This is a positively worded statement. Table 4.2 illustrates that 61 (19.8%) of the educators strongly agree and 139 (45.1%) agree that they find simplified terminology of the RNCS easily understandable. About 99 (32.1%) disagree and only 9 (2.9%) strongly disagree. The mean score of 2.82 falls within the “A” category (see graph 1). On average, educators agree that they find simplified terminology of the RNCS easily understandable.

Statement 7 : I use the RNCS document in my day to day teaching

This is a positively worded statement. According to Table 4.2, 56 (18.2%) of the educators strongly agree and 126 (40.9%) agree that they use RNCS document in their day to day teaching. About 117 (38.0%) disagree and only 9 (2.9%) strongly disagree. The mean score of 2.74 falls within the “A” category (see graph 1). On average, educators agree that they use the RNCS document in their day to day teaching.

Statement 8 : I find it easy to use the RNCS document from which I teach

This is a positively worded statement. Table 4.2 reveals that 50 (16.2%) of the educators strongly agree and 125 (40.6%) agree that they find it easy to use the RNCS document from which they teach. About 123 (39.9%) disagree and only 10 (3.2%) strongly disagree. The mean score of 2.70 falls within the “A” category (see graph 1). On average, educators agree that they find it easy to use the RNCS document from which they teach.

Statement 9 : I found the timeframes for implementing the RNCS to be realistic

It is a positively worded statement. Table 4.2 shows that 24 (7.8%) of the educators strongly agree and 190 (61.7%) agree that they found the timeframes for implementing the RNCS to be realistic. About 122 (39.6%) disagree and 25 (8.1%) strongly disagree. The mean score of 2.52 falls within the “A” category (see graph 1). On average, educators agree that they found the timeframes for implementing the RNCS to be realistic

Statement 10: It took me too long to feel confident to implement the RNCS

This is a negatively worded statement. According to Table 4.2, 35 (11.4%) of the educators strongly agree and 155 (50.3%) agree that it

took them too long to feel confident to implement the RNCS. About 90 (29.2%) disagree and 28 (9.1%) strongly disagree. The mean score of 2.36 falls within the “A” category (see graph 2). On average, educators agree that it took them too long to feel confident to implement the RNCS.

Statement 11: I am satisfied with my content knowledge of the RNCS from which I teach.

This is a positively worded statement. Table 4.2 reveals that 24 (7.8%) of the educators strongly agree and 190 (61.7%) agree that they are satisfied with their content knowledge of the RNCS from which they teach. About 84 (27.3%) disagree and only 10 (3.2%) strongly disagree. The mean score of 2.74 falls within the “A” category (see graph 1). On average, educators agree that they are satisfied with their content knowledge of the RNCS from which they teach.

Statement 12: The RNCS has a negative impact on my record keeping of learners’ performance

This is a negatively worded statement. Table 4.2 reveals that 8 (2.6%) of the educators strongly agree and 81 (26.3%) agree that the RNCS has a negative impact on their record keeping of learners’ performance. About 168 (54.5%) disagree and 51 (16.6%) strongly disagree. The mean score of 2.85 falls within the “D” category (see graph 2). On average, educators disagree that the RNCS has a negative impact on their record keeping of learners’ performance.

Statement 13: The RNCS has a negative impact on my assessment of learners' performance

This is a negatively worded statement. Table 4.2 indicates that 9 (2.9%) of the educators strongly agree and 92 (29.9%) agree that RNCS has a negative impact on their assessment of learners' performance. About 165 (53.6%) disagree and 42 (13.6%) strongly disagree. The mean score of 2.78 falls within the "D" category (see graph 2). On average, educators disagree that the RNCS has a negative impact on their assessment of learners' performance.

Statement 14: The RNCS has a negative impact on my reporting of learners' performance

It is a negatively worded statement. Table 4.2 reveals that 9 (2.9%) of the educators strongly agree and 91 (29.5%) agree that the RNCS has a negative impact on their reporting of learners' performance. About 167 (54.2%) disagree and 41 (13.3%) strongly disagree. The mean score of 2.78 falls within the "D" category (see graph 2). On average, educators disagree that the RNCS has a negative impact on their reporting of learners' performance.

Statement 15: The RNCS has a negative impact on my lesson planning

It is a negatively worded statement. Table 4.2 shows that 12 (3.9%) of the educators strongly agree and 72 (23.4%) agree that the RNCS has a negative impact on their planning of lessons. About 170 (55.2%) disagree and 54 (17.5%) strongly disagree. The mean score of 2.86 falls within the “D” category (see graph 2). On average, educators disagree that the RNCS has a negative impact on their lesson planning.

Statement 16: The RNCS has a negative impact on my teaching methodology

This is a negatively worded statement. According to Table 4.2, 6 (1.9%) of the educators strongly agree and 79 (25.6%) agree that the RNCS has a negative impact on their teaching methodology. About 176 (57.1%) disagree and 47 (15.3%) strongly disagree. The mean score of 2.86 falls within the “D” category (see graph 2). On average, educators disagree that the RNCS has a negative impact on their teaching methodology.

Statement 17: I have received support on the implementation of the RNCS

It is a positively worded statement. Table 4.2 reveals that 40 (13.0%) of the educators strongly agree and 196 (63.6%) agree that they

received support on the implementation of the RNCS. About 48 (15.6%) disagree and 24 (7.8%) strongly disagree. The mean score of 2.82 falls within the “A” category (see graph 1). On average, educators agree that they have received support on the implementation of the RNCS.

Statement 18: I received adequate training on implementing the RNCS

This is a positively worded statement. Table 4.2 illustrates that 25 (8.1%) of the educators strongly agree and 87 (28.2%) agree that they received adequate training on implementing the RNCS. About 150 (48.7%) disagree and 24 (7.83%) strongly disagree. The mean score of 2.30 falls within the “D” category (see graph 1). On average, educators disagree that they received adequate training on implementing the RNCS.

Statement 19: I need further professional development on implementing the RNCS

It is a negatively worded statement. According to Table 4.2, 88 (28.6%) of the educators strongly agree and 176 (57.1%) agree that they need further professional development on implementing the RNCS. About 30 (9.7%) disagree and 14 (4.5%) strongly disagree. The mean score of 1.90 falls within the “A” category (see graph 2). On average, educators agree that they still need further professional development on implementing the RNCS.

Statement 20: I have been visited by departmental officials in my school for monitoring the implementation of the RNCS

This is a positively worded statement. Table 4.2 reveals that 19 (6.2%) of the educators strongly agree and 73 (23.7%) agree that they have been visited by departmental officials in their schools for monitoring the implementation of the RNCS. About 115 (37.3%) disagree and 110 (32.8%) strongly disagree. The mean score of 2.03 falls within the “D” category (see graph 1). On average, educators disagree that they have been visited by departmental officials in their schools for monitoring the implementation of the RNCS.

Statement 21: I have taken steps to upgrade myself on the implementation of the RNCS because I don't understand it

This is a negatively worded statement. According to Table 4.2, 20 (6.5%) of the educators strongly agree and 117 (38.0%) agree that they have taken steps to upgrade themselves on the implementation of the RNCS because they do not understand it. About 144 (46.8%) disagree and 27 (8.8%) strongly disagree. The mean score of 2.58 falls within the “D” category (see graph 2). Therefore on average, educators disagree that they have taken steps to upgrade themselves on the implementation of the RNCS because they don't understand it.

Statement 22: I have received teaching and learning support material to implement the RNCS on time

It is a positively worded statement. Table 4.2 shows that 11 (3.6%) of the educators strongly agree and 121 (39.3%) agree that they have received teaching and learning support material to implement the RNCS on time. About 141 (45.8%) disagree and 35 (11.4%) strongly disagree. The mean score of 2.35 falls within the “D” category (see graph 1). On average, educators disagree that they have received teaching and learning support material to implement the RNCS on time.

Statement 23: I am not satisfied with the quality of teaching and learning support material for implementing RNCS in my school

This is a negatively worded statement. Table 4.2 reveals that 29 (9.4%) of the educators strongly agree and 125 (40.6%) agree that they are not satisfied with the quality of teaching and learning support material for implementing the RNCS in their schools. About 123 (39.9%) disagree and 31 (10.1%) strongly disagree. The mean score of 2.57 falls within the “D” category (see graph 2). On average, educators disagree that they are not satisfied with the quality of teaching and learning support material for implementing the RNCS in their schools.

Statement 24: I find the material for implementing the RNCS supplied by the Department of Education to be useful

It is a positively worded statement. Table 4.2 indicates that 28 (9.1%) of the educators strongly agree and 136 (44.2%) agree that they find the material for implementing the RNCS supplied by the Department of Education to be useful. About 117 (38.0%) disagree and only 26 (8.4%) strongly disagree. The mean score of 2.55 falls within the “A” category (see graph 1). On average, educators agree that they find the material for implementing the RNCS supplied by the Department of Education to be useful.

Statement 25: I am able to develop my materials for implementing the RNCS to supplement those supplied by the Department of Education

This is a positively worded statement. According to Table 4.2, 21 (6.8%) of the educators strongly agree and 216 (70.1%) agree that they are able to develop their own materials for implementing the RNCS to supplement those supplied by the Department of Education. About 66 (21.4%) disagree and only 5 (1.6%) strongly disagree. The mean score of 2.82 falls within the “A” category (see graph 1). On average, educators agree that they are able to develop their own materials for implementing the RNCS to supplement those supplied by the Department of Education.

Statement 26: I have difficulty in using the learning outcomes in implementing the RNCS

It is a negatively worded statement. Table 4.2 illustrates that 15 (4.9%) of the educators strongly agree and 107 (34.7%) agree that they have difficulty in using the learning outcomes in implementing the RNCS. About 163 (52.9%) disagree and only 23 (7.5%) strongly disagree. The mean score of 2.63 falls within the “D” category (see graph 2). On average, educators disagree that they have difficulty in using the learning outcomes in implementing the RNCS.

Statement 27: I have difficulty in using the assessment standards in my implementation of the RNCS

It is a negatively worded statement. Table 4.2 reveals that 7 (2.3%) of the educators strongly agree and 105 (34.1%) agree that they have difficulty in using the assessment standards in implementing the RNCS. About 166 (53.9%) disagree and only 30 (9.7%) strongly disagree. The mean score of 2.71 falls within the “D” category (see graph 2). On average, educators disagree that they have difficulty in using the assessment standards in implementing the RNCS.

Statement 28: I have difficulty in achieving the critical outcomes in my implementation of the RNCS

It is a negatively worded statement. Table 4.2 shows that 15 (4.9%) of the educators strongly agree and 133 (43.2%) agree that they have

difficulty in achieving the critical outcomes in their implementation of the RNCS. About 137 (44.5%) disagree and only 23 (7.5%) strongly disagree. The mean score of 2.55 falls within the “D” category (see graph 2). On average, educators disagree that they have difficulty in achieving the critical outcomes in their implementation of the RNCS.

Statement 29: I have difficulty in achieving the developmental outcomes in my implementation of the RNCS

This is a negatively worded statement. Table 4.2 indicates that 10 (3.2%) of the educators strongly agree and 136 (44.2%) agree that they have difficulty in achieving the developmental outcomes in their implementation of the RNCS. About 145 (47.1%) disagree and only 17 (5.5%) strongly disagree. The mean score of 2.55 falls within the “D” category (see graph 2). On average, educators disagree that they have difficulty in achieving the developmental outcomes in their implementation of the RNCS.

Statement 30: I have difficulty in integrating knowledge and skills from different learning areas when I am implementing the RNCS

It is a negatively worded statement. Table 4.2 reveals that 18 (5.8%) of the educators strongly agree and 105 (34.1%) agree that they have difficulty in integrating knowledge and skills from different learning areas when implementing the RNCS. About 147 (47.7%) disagree and only 38 (12.3%) strongly disagree. The mean score of 2.67 falls

within the “D” category (see graph 2). On average, educators disagree that they have difficulty in integrating knowledge and skills from different learning areas when implementing the RNCS.

Statement 31: I have difficulty in developing learners’ skills, values and attitudes in my implementation of the RNCS

This is a negatively worded statement. According to table 4.2, only 7 (2.3%) of the educators strongly agree and 96 (31.2%) agree that they have difficulty in developing learners’ skills, values and attitudes in implementing the RNCS. About 179 (58.1%) disagree and only 26 (8.4%) strongly disagree. The mean score of 2.73 falls within the “D” category (see graph 2). On average, educators disagree that they experience difficulty in developing learners’ skills, values and attitudes in their implementation of the RNCS.

Statement 32: I have difficulty in differentiating between learning outcomes and assessment standards in implementing the RNCS

It is a negatively worded statement. Table 4.2 indicates that only 5 (1.6%) of the educators strongly agree and 91 (29.5%) agree that they have difficulty in differentiating between learning outcomes and assessment standard in implementing the RNCS. About 149 (48.4%) disagree and 63 (20.5%) strongly disagree. The mean score of 2.88 falls within the “D” category (see graph 2). On average, educators

disagree that they have difficulty in differentiating between learning outcomes and assessment standards in implementing the RNCS.

4.3.2 Analysis of data using inferential statistics

In this section, hypotheses are tested and the results are presented in the tables. There are four hypotheses to be tested in this study. The presentation of data (in the tables) is preceded by the reiteration of each hypothesis.

4.3.2.1 Testing of hypothesis number one

Hypothesis number one is reiterated as follows:

Educators do not differ in terms of the nature of their experiences in implementing the Revised National Curriculum Statement.

The appropriate statistical test chosen for testing this hypothesis is the chi-square one sample test. The chi-square one sample test is appropriate because testing hypothesis number one is concerned with comparing how many respondents of the whole sample fall into each of the descriptive categories, namely, very negative experience (VNE); negative experience (NE); positive experience (PE) and very positive experience (VPE).

The chi-square one sample test is recommended for comparing differences in the observed frequencies with the expected frequencies

in a single sample with various categories to determine whether differences (except for sample error) are typical of the population from which the sample was drawn (Behr, 1988 : 82).

TABLE 4.3 Group and experience levels

	VNE	NE	PE	VPE
	(32-56)	(57-80)	(81-104)	(105-128)
Frequencies	4	116	164	24

A chi-square value of 223.740 at $df = 3$ was obtained for table 4.3. It is significant at our chosen level of significance, which is 0.05. Since $p < 0.05$, the decision is to reject the null hypothesis and conclude that educators differ in terms of the nature of their experiences in implementing the Revised National Curriculum Statement.

4.3.2.2 Testing of hypothesis number two

Hypothesis number two is reiterated as follows:

Educators' biographical factors such as gender, age, teaching experience, qualification as well as rank have no significant influence on educators' experiences in implementing the Revised National Curriculum Statement.

The chi-square test for k independent samples is chosen as an appropriate statistical test for testing this hypothesis. The chi-square

test for k independent samples is appropriate because the respondents in the sample are categorised in terms of their personal particulars and their responses are considered independently.

TABLE 4.4 Gender and educators' experience levels

Gender	VNE (32-56)	NE (57 – 80)	PE (81-104)	VPE (105-128)
Male	2	35	45	5
Female	2	81	119	19

A chi-square value of 1.850 at $df = 3$ was obtained for table 4.4. It is not significant at our chosen level of significance, which is 0.05. Since $p > 0.05$, the decision is to uphold the null hypothesis and conclude that gender has no significant influence on educators' experiences in implementing the Revised National Curriculum Statement.

TABLE 4.5 Age and educators' experience levels

Age	VNE (32-56)	NE (57-80)	PE (81-104)	VPE (105-128)
25 and below	0	7	1	2
26-35	0	47	60	10
36-45	2	48	76	9
46-55	1	14	26	3
56 and above	1	0	1	0

A chi-square value of 49.361 at $df = 12$ was obtained for table 4.5. It is significant at our chosen level of significance, which is 0.05. Since $p < 0.05$, the decision is to reject the null hypothesis and conclude that age has a significant influence on educators' experiences in implementing the Revised National Curriculum Statement.

TABLE 4.6 Teaching experience and experience levels

Teaching Experience: in years	VNE (32-56)	NE (57-80)	PE (81-104)	VPE (105-128)
0-5	0	16	22	7
6-10	0	38	48	4
11-15	1	40	60	9
16-20	1	14	26	1
Above 20	2	8	8	3

A chi-square value of 23.212 at $df = 12$ was obtained for table 4.6. It is significant at our chosen level of significance, which is 0.05. Since $p < 0.05$, the decision is to reject the null hypothesis and conclude that teaching experiences has a significant influence on educators' experiences in implementing the Revised National Curriculum Statement.

TABLE 4.7 Qualification and experience levels

Qualification	VNE (32-56)	NE (57-80)	PE (81-104)	VPE (105-128)
REQV 10 (Matric and below)	0	0	9	0
REQV 11 (M + 1)	0	1	0	1
REQV 12 (M + 2)	0	7	14	0
REQV 13 (M + 3)	0	58	61	15
REQV 14 (M + 4)	3	42	62	5
REQV15 (M + 5) and above	1	8	18	3

A chi-square value of 28.419 at $df = 15$ was obtained for table 4.7. It is significant at our chosen level of significance, which is 0.05. Since $p < 0.05$, the decision is to reject the null hypothesis and conclude that qualification has a significant influence on educators' experiences in implementing the Revised National Curriculum Statement.

TABLE 4.8 Rank and experience levels

Rank	VNE (32-56)	NE (57-80)	PE (81-104)	VPE (105-128)
Post level 1 educator	2	73	98	16
Head of Department	1	33	52	6
Deputy Principal	0	9	9	2
Principal	1	1	5	0

A chi-square value of 12.809 at $df = 9$ was obtained for table 4.8. It is not significant at our chosen level of significance, which is 0.05. Since $p > 0.05$, the decision is not to reject the null hypothesis and conclude that rank has no significant influence on educators' experiences in implementing the Revised National Curriculum Statement.

4.3.2.3 Testing of hypothesis number three

Hypothesis number three is reiterated as follows:

Educators do not differ in the extent which they find implementing the Revised National Curriculum Statement to be stressful.

The appropriate statistical test chosen for testing this hypothesis is also the chi-square one sample test. The chi-square one sample test is appropriate because testing hypothesis number three is concerned with comparing how many respondents of the whole sample fall into each

of the descriptive categories, namely, not at all stressful, mildly stressful, moderately stressful, very stressful and extremely stressful.

TABLE 4.9 Group and stress levels

	Not at all stressful	Mildly stressful	Moderately stressful	Very stressful	Extremely stressful
Frequencies	31	58	101	76	42

A chi-square value of 50.214 at $df = 4$ was obtained for table 4.9. It is significant at our chosen level of significance, which is 0.05. Since $p < 0.05$, the decision is to reject the null hypothesis and conclude that educators differ in the extent to which they find implementing the Revised National Curriculum Statement to be stressful.

4.3.2.4 Testing of hypothesis number four

Hypothesis number two is reiterated as follows:

Educators' biographical factors such as gender, age teaching experience, qualification as well as rank have no significant influence on the extent to which educators find implementing the Revised National Curriculum Statement to be stressful.

The chi-square test for k independent samples is also chosen as an appropriate statistical test for testing this hypothesis. The chi-square test for k independent samples is appropriate because the respondents

in the sample are categorised in terms of their personal particulars and their responses are considered independently.

TABLE 4.10 Gender and stress levels

Gender	Not at all stressful	Mildly stressful	Moderately stressful	Very stressful	Extremely stressful
Male	7	18	33	20	9
Female	24	40	68	56	33

A chi-square value of 2.793 at $df = 4$ was obtained for table 4.10. It is not significant at our chosen level of significance, which is 0.05. Since $p > 0.05$, the decision is to uphold the null hypothesis and conclude that gender has no significant influence on the extent to which educators find implementing the Revised National Curriculum Statement to be stressful.

TABLE 4.11 Age and stress levels

Age	Not at all stressful	Mildly stressful	Moderately stressful	Very stressful	Extremely stressful
25 and below	0	2	3	5	0
26-35	11	18	46	27	15
36-45	14	26	44	33	18
46-55	6	11	8	11	8
56 and above	0	1	0	0	1

A chi-square value of 16.827 at $df = 16$ was obtained for table 4.11. It is not significant at our chosen level of significance, which is 0.05. Since $p > 0.05$, the decision is not to reject the null hypothesis and conclude that age has no significant influence on the extent to which educators find implementing the Revised National Curriculum Statement to be stressful.

TABLE 4.12 Teaching experience and stress levels

Teaching Experience: in years	Not at all stressful	Mildly stressful	Moderately stressful	Very stressful	Extremely stressful
0-5	5	7	19	6	8
6-10	6	14	36	24	10
11-15	10	25	31	30	14
16-20	7	7	9	15	4
Above 20	3	5	6	1	6

A chi-square value of 23.789 at $df = 16$ was obtained for table 4.12. It is not significant at our chosen level of significance, which is 0.05. Since $p > 0.05$, the decision is not to reject the null hypothesis and conclude that teaching experiences has no significant influence on extent to which educators find implementing the Revised National Curriculum Statement to be stressful.

TABLE 4.13

Qualification and stress levels

Qualification	Not at all stressful	Mildly stressful	Moderately stressful	Very stressful	Extremely stressful
REQV 10 (Matric and Below)	1	0	3	4	1
REQV 11 (M + 1)	0	0	1	0	1
REQV 12 (M + 2)	3	6	6	2	4
REQV 13 (M + 3)	12	24	45	41	12
REQV 14 (M + 4)	9	24	37	23	18
REQV 15 (M + 5) and Above	6	4	9	5	6

A chi-square value of 21.613 at $df = 20$ was obtained for table 4.13. It is not significant at our chosen level of significance, which is 0.05. Since $p > 0.05$, the decision is not to reject the null hypothesis and conclude that qualification has no significant influence on the extent to which educators find implementing the Revised National Curriculum Statement to be stressful.

TABLE 4.14 Rank and stress levels

Rank	Not at all stressful	Mildly stressful	Moderately stressful	Very stressful	Extremely stressful
Post level 1 educator	18	34	61	45	31
Head of Department	10	16	33	26	7
Deputy Principal	2	5	5	5	3
Principal	1	3	2	0	1

A chi-square value of 9.456 at $df = 12$ was obtained for table 4.14. It is not significant at our chosen level of significance, which is 0.05. Since $p > 0.05$, the decision is not to reject the null hypothesis and conclude that rank has no significant influence on the extent to which educators find in implementing the Revised National Curriculum Statement to be stressful.

4.4 CONCLUSION

Chapter four detailed the analysis and interpretation of data for both descriptive and inferential statistics.

The next chapter (Chapter five) details the discussion of the results.

CHAPTER FIVE

5.0 DISCUSSION OF THE RESULTS

5.1 INTRODUCTION

In chapter four, details on the analysis and interpretation of data were given. In this chapter, the findings emanating from the data analysed in chapter four are discussed.

5.2 RESULTS FROM DESCRIPTIVE STATISTICS

The graphic presentation (graph1) reveals that on average, educators agree with thirteen of the sixteen positively worded statements, namely, 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 17, 24 and 25. The only three statements that they disagree with are 18, 20 and 22. That is, that they received adequate training on implementing the RNCS, that they have been visited by departmental officials in their schools for monitoring the implementation of the RNCS and that they received teaching and learning support material to implement the RNCS on time. This shows that training of educators, monitoring of the implementation of the new curriculum as well as the support given to educators is inadequate. These findings are consistent with those of other studies that were conducted on Curriculum 2005 (Christie, 1999; Naptosa, 1999; Fleisch, 2002; Nsibande, 2002; Zulu, 2003).

The graphic presentation (graph 2) illustrates that on average, educators also disagree with thirteen of the sixteen negatively worded statements, namely, 12, 13, 14, 15, 16, 21, 23, 27, 28, 29, 30, 31 and 32. The only three statements that they agree with are 10, 19 and 26. That is, that it took them too long to feel confident to implement the RNCS, that they need further professional development on implementing the RNCS and they have difficulty in using the learning outcomes in implementing the RNCS. This means that educators still need support in some areas in order to be able to implement the RNCS adequately.

5.3 RESULTS FROM INFERENTIAL STATISTICS

5.3.1 Findings with regard to the nature of educators' experiences in implementing the Revised National Curriculum Statement

The findings reveal that educators differ in terms of the nature of their experiences in implementing the Revised National Curriculum Statement. A relatively high percentage (53,25%) of educators report a positive experience level compared to those who reported a negative experience level (37.66%), those who reported a very negative experience level (1.30%) and those who reported a very positive experience level (7.79%). If one combines the positive experience group and very positive experience group, it shows that a high percentage (61.04%) of educators have a positive experience about implementing the Revised National Curriculum Statement compared to those who have a negative and very negative experience combined

(38.96%). The implication for these findings is that although there are still problems here and there but the majority of the educators are comfortable with implementing the Revised National Curriculum Statement. The reasons for their positive experiences may be that the Curriculum 2005 has been streamlined and strengthened in the Revised National Curriculum Statement.

5.3.2 Findings with regard to the influence of educators' biographical characteristics on the nature of their experiences in implementing the Revised National Curriculum Statement

The findings show that age, teaching experience and qualification influence the nature of educators' experiences in implementing the Revised National Curriculum Statement. This means that the nature of educators' experiences in implementing the Revised National Curriculum Statement are dependent on these biographical factors.

With regard to age, 70% of educators with 25 years and below report a negative experience in implementing the Revised National Curriculum Statement compared to 30% who report a positive experience. On the other hand between 60% and 66% of educators who are between 26 and 55 years old of age report a positive experience compared to between 34% and 40% of those who report a negative experience. This indicates that the majority of younger educators have a negative experience about implementing the Revised National Curriculum Statement while the older ones have a positive

experience. The reason may be that educators who are 25 years and below still lack confidence as they are still new in the profession.

Regarding teaching experience, between 58% and 64% of educators with less than 20 years of teaching experience report a positive experience about implementing the Revised National Curriculum Statement compared to those who report a negative experience (between 36% and 42%). On the other hand, about 52% of those with more than 20 years of teaching experience report a positive experience while about 48% report a negative experience. This means that the majority of educators who show a positive experience in implementing the Revised National Curriculum Statement are those who have below 20 years of teaching experience. The reason may be that most of the educators with more than 20 years of teaching experience are no longer adaptable to new curriculum changes.

Concerning qualification, all (100%) educators with matric and below report a positive experience in implementing the Revised National Curriculum Statement, followed by those with the highest qualification (REQV 15 or M + 5 and above) (70%). The reason why hundred percent of unqualified educators report a positive experience is not clear. One possible reason may be that it is because they are committed to curriculum changes, as they have no other career options.

5.3.3 Findings with regard to the extent to which educators generally find implementing the Revised National Curriculum Statement to be stressful

The findings indicate that educators differ in the extent to which they experience stress from implementing the Revised National Curriculum Statement. A relatively higher percentage (38.31%) report above average level of stress compared to those who reported below average level (28.90%) and those who reported average level (32.79%). This shows that although most educators have a positive experience about implementing the Revised National Curriculum Statement but some of them still find it to be generally stressful to implement. One reason may be that it has just been recently introduced and they are still adjusting to it. The other reason may be that enough training and support is not provided to them.

5.3.4 Findings with regard to the influence of educators' biographical characteristics on the extent to which they find implementing the Revised National Curriculum Statement to be stressful

The findings reveal that educators' biographical factors (gender, age, teaching experience, qualification and rank) have no significant influence on the extent to which educators generally find implementing the Revised National Curriculum Statement to be stressful.

5.4 CONCLUSION

Chapter five detailed the discussion of the results.

In the next chapter (Chapter 6), the summary, conclusions and recommendations of the study are presented.

CHAPTER SIX

6.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 SUMMARY

6.1.1 The problem

The study was designed to investigate educators' experiences in implementing the Revised National Curriculum Statement. To this end, the problem was stated in the form of the following questions:

- (i) What is the nature of the educators' experiences in implementing the Revised National Curriculum Statement?
- (ii) Do educators' biographical factors (gender, age, teaching experience, qualification and rank) have any influence on the nature of their experiences in implementing the Revised National Curriculum Statement?
- (iii) To what extent do educators generally find implementing the Revised National Curriculum Statement to be stressful?
- (iv) Do educators' biographical factors (gender, age, teaching experience, qualification and rank) have any influence on the extent to which they find implementing the Revised National Curriculum Statement to be stressful?

6.1.2 The aims of the study

- (i) To ascertain the nature of educators' experiences in implementing the Revised National Curriculum Statement.
- (ii) To determine whether educators' biographical factors such as gender, age, teaching experience, qualification and rank have any influence on the nature of their experiences in implementing the Revised National Curriculum Statement.
- (iii) To ascertain the extent to which educators generally find implementing the Revised National Curriculum Statement to be successful.
- (iv) To determine whether educators' biographical factors (gender, age, teaching experience, qualification and rank) have any influence on the extent to which they generally find implementing the Revised National Curriculum Statement to be stressful.

6.1.3 Hypotheses postulated

- (i) Educators do not differ in terms of the nature of their experiences in implementing the Revised National Curriculum Statement.
- (ii) Educators' biographical factors such as gender, age teaching experiences, qualification and rank have no significant influence on

educators' nature of experiences in implementing the Revised National Curriculum Statement.

- (iii) Educators do not differ in the extent to which they find implementing the Revised National Curriculum Statement to be stressful.
- (iv) Educators' biographical factors such as gender, age, teaching experience, qualification and rank have no significant influence on the extent to which they find implementing the Revised National Curriculum Statement to be stressful.

6.1.4 Methodology

A questionnaire was used as a research instrument for collecting data. The instrument was administered to a randomly selected sample of 308 respondents. Both descriptive and inferential statistics were used for analysing data. Respondent counting, percentages as well as means (averages) were used for descriptive analysis in the item by item analysis of data. The chi-square one sample test and the chi-square test for k independent samples are appropriate statistical tests which were used for testing hypotheses of the study.

6.2 CONCLUSIONS

The results of the study led to the following conclusions:

- (i) Educators differ in terms of the nature of their experiences in implementing the Revised National Curriculum Statement.
- (ii) Educators' age, teaching experience and qualification have a significant influence on the nature of educators' experiences in implementing the Revised National Curriculum Statement.
- (iii) Educators differ in the extent to which they generally find implementing the Revised National Curriculum Statement to be stressful.
- (iv) Educators' biographical factors (gender, age, teaching experience, qualification and rank) have no significant influence on the extent to which they find implementing the Revised National Curriculum Statement to be stressful.

6.3 RECOMMENDATIONS

6.3.1 A proposed model for curriculum implementation process

The main purpose of this study was to investigate educators' experiences in implementing the Revised National Curriculum Statement. Based on the findings of this study, a model for curriculum implementation process is proposed.

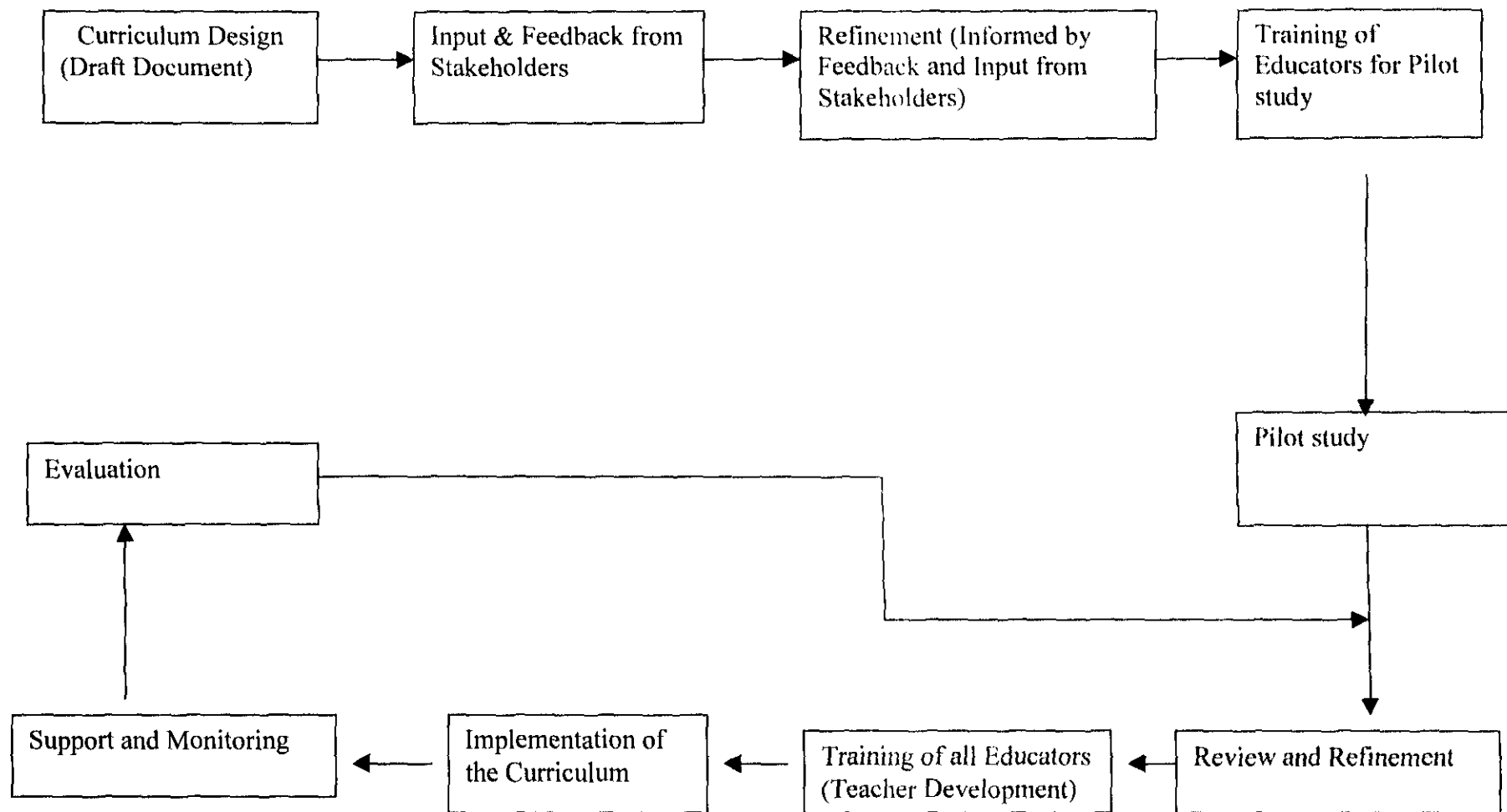


Figure 6.1 A Proposed model for Curriculum Implementation Process

The proposed model provides information about basic elements and factors which need to be taken into cognisance during the curriculum implementation process.

The model starts with the development of a draft curriculum statement by a team of experts from different fields. The draft document should be informed by various factors such as: political; social; economic; technological; environmental factors and child psychology (Commonwealth of Learning, 2000:56). The draft curriculum should then be tabled before the stakeholders (teachers, academics, researchers, educational associations, teacher unions, parents, business, NGOs etc.) to solicit their input. The input and the concerns, which emerge from the feedback should inform the refinement stage of the curriculum implementation process.

The refinement stage should be followed by the training of educators for piloting the curriculum. Workshops should be designed for professional development of educators on topics consistent with the thrusts and vision for the curriculum. Professional development involves all those activities which may assist educators in the implementation of the new curriculum. The pilot study should follow immediately after the training of educators for this purpose. Piloting is a key stage in the process of curriculum development. It involves bringing of curriculum as intended or as set out in the documents and materials 'to life' (Heckman, 1997 : 119).

The dynamics of putting the curriculum in motion or into action with educators and learners itself constitutes a complex process and sequence of events. The selection of schools to take part in the pilot study is also complex, as there should be a representative sample of educators and school environments from across the country. The schools to take part in the pilot study should come from different sections of the country's population (i.e. rural, semi urban, urban and farms). The pilot study will help determine:

- a) How well learners have achieved the learning outcomes or expectations set out in the curriculum statement.
- b) If any changes should be made to the curriculum. The evaluation plan should be in place to assess the success or the failure of the pilot project. The curriculum should at least be piloted to schools for duration of two years to determine its effectiveness. Pilot study also assess needs and preempts problem which might arise.

After the curriculum has been piloted, the next step should be reviewing and refinement of the curriculum. The pilot study does not only provide necessary information for the approval of the curriculum but it also measures the impact of the curriculum on its users (educators and learners). The reviewing and the refinement of the curriculum will therefore be informed by the outcome of the pilot study. The feedback received from the pilot study should be used to modify and strengthen the curriculum.

The training of all educators should follow the reviewing and refinement of the curriculum. Professional development of educators is vital to the implementation of the curriculum. According to Heckman (1997:121) to bring curriculum into practice is a daunting task, which one learns and adapts over a long period of time. It is therefore imperative for educators to receive adequate training to prepare them for the implementation of the new curriculum.

In the implementation stage, this study suggests a Cascade Model as a model for curriculum implementation. The model became a primary means of preparing the educators for Curriculum 2005 implementation. As Curriculum Review Report (Department of Education, 2001) suggests, there should be fewer levels in the cascade model to limit the dilution of the training and provinces should adopt different strategies to adapt the cascade model to suit local needs and locations. The educators who participated in the pilot study and those selected to be representatives across the country should form the nucleus of leadership for other educators within their schools, districts and provinces. They should actively participate in helping prepare other educators to implement the curriculum.

Curriculum implementation entails putting into practice the officially prescribed National Curriculum Statement. The process involves helping learners to acquire and construct knowledge, skills and values. It is important to note that curriculum implementation cannot take place without the learner. The learner is therefore a central figure in the curriculum implementation process. According to the

Commonwealth of Learning (2000: 50) implementation takes place as the learner acquires the planned and intended experiences, knowledge, skills that are aimed at enabling the same learner to function effectively in a society. Putting the curriculum into operation requires an implementing agent. Commonwealth of Learning (2000 : 50) identifies the teacher as the agent in the curriculum implementation process. Commonwealth of Learning argues that implementation is the manner in which the teacher selects and mixes the various aspects of knowledge contained in the curriculum document. Implementation takes place when the teacher constructs syllabus, teacher's personality, teaching materials and the teaching environment interact with the learner (University of Zimbabwe, 1995: 9). Curriculum implementation therefore refers to how the planned or officially designed course of study is translated by the teacher into syllabuses, schemes of work and lessons to be delivered to learners (Commonwealth of Learning, 2000 : 51).

The implemented curriculum requires support and monitoring. A plan should be in place to provide an *on-going support to educators* in the form of in-service training and provision of materials for teaching and learning. Monitoring and support go hand in hand in the sense that it is through monitoring that one can identify areas which need support and development.

The continuous monitoring and support should lead to an evaluation stage of curriculum implementation process. According to Gatawa (1990:50), the term curriculum evaluation has three major meanings:

- The process of describing and judging an educational programme or subject.
- The process of comparing a student's performance with behaviourally stated objectives.
- The process of defining, obtaining and using relevant information for decision-making purposes.

According to Commonwealth of Learning (2000 : 57) curriculum evaluation usually combines three activities:

- data collection for passing judgement
- to identify deficiencies in programmes and to analyse programmes in order to determine alternatives or find appropriate interventions.

Evaluation is not a final stage of curriculum in implementation process because if deficiencies are identified in the curriculum, revision and improvement should be effected. Ideally the curriculum should be evaluated continuously taking into consideration the current circumstances, the curriculum may then be modified in the light of what evaluation has shown. The evaluation should feedback to review and refinement stage.

6.3.2 Limitations of the study and avenues for further research

The following limitations of this study are outlined for directing future studies as it is clear that more research is needed:

- (i) The sample of this study was drawn from educators of KwaZulu-Natal province only, therefore, it is not representative of the entire population of educators in this country. Further studies need to be conducted in other provinces.
- (ii) Only public schools were the target population in this study. Further research, focusing on private schools is needed.
- (iii) The sample of this study was drawn from Foundation and Intermediate Phases school educators only. There is a need for a study at Senior phase and Further Education and Training band once the RNCS has been implemented at these levels.
- (iv) The sample of the study consisted of 308 educators only. More research, with a bigger sample preferably a nation wide study, is essential so that the results can be generalised nationally with great confidence.
- (v) Only the questionnaire was used as a research instrument in this study. Further research, using a combination of questionnaires and interviews is needed.

In spite of the limitations mentioned above, this study has achieved its objective of understanding educators' experiences in implementing the Revised National Curriculum Statement.

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ANNEXURE A

QUESTIONNAIRE

QUESTIONNAIRE

1. This questionnaire is on experiences of educators in implementing the Revised National Curriculum Statement (RNCS) in the General Education and Training Band (GET).
2. You are kindly requested to respond to all the items in this questionnaire.
3. The instructions on how to respond to each item accompany this questionnaire.
4. Information gathered will be treated as highly confidential as possible, therefore do not write your name or the name of the school on this questionnaire.

Your cooperation will be highly appreciated.

Thank you.


MC MAPHALALA

Faculty of Education

**Department of Curriculum and Instructional Studies
University of Zululand**

Private Bag X 1001 (Internal Box 234)

KWADLANGEZWA

3886

Please turn to the next page.

SECTION A

Please cross (x) in the appropriate space or box provided.

1. Gender

1	2
Male	Female

2. Age in years

1	2	3	4	5
25 and below	26 – 35	36 – 45	46 – 55	56 and above

3. Teaching experience: in years

1	2	3	4	5
0 – 5 yrs	6-10 yrs	11-15 yrs	16-20 yrs	More than 20yrs

4. Highest qualification

1	REQV 10 (Matric and below)
2	REQV 11 (M+1)
3	REQV 12 (M + 2)
4	REQV 13 (M + 3)
5	REQV 14 (M + 4)
6	REQV 15 (M + 5) and above

5. Rank

1	2	3	4
Post level1 Educator	Head of Department	Deputy Principal	Principal

SECTION B

Revised National Curriculum Statement Scale (RNCSS)

Below are statements concerning your experiences in implementing the Revised National Curriculum Statement (RNS) in your school. Please make a cross (x) through the letter that best describe your position. The meaning of letters are as follows:

SA = **Strongly Agree**

A = **Agree**

D = **Disagree**

SD = **Strongly Disagree**

1.	The RNCS is helpful in planning my learning programme.	SA 4	A 3	D 2	SD 1
2.	The RNCS is helpful in developing my classroom activities.	SA 4	A 3	D 2	SD 1
3.	The RNCS is helpful in assessing my learners' performance..	SA 4	A 3	D 2	SD 1
4.	The RNCS is helpful in my reporting of learners' performance .	SA 4	A 3	D 2	SD 1
5.	The RNCS is helpful in my understanding of the Outcomes-Based Education Curriculum.	SA 4	A 3	D 2	SD 1
6.	I find the simplified terminology of the RNCS easily understandable.	SA 4	A 3	D 2	SD 1
7.	I use the RNCS document in my day to day teaching.	SA 4	A 3	D 2	SD 1
8.	I find it easy to use the RNCS document from which I teach.	SA 4	A 3	D 2	SD 1
9.	I found the timeframes for implementing the RNCS to be realistic.	SA 4	A 3	D 2	SD 1
10.	It took me too long to feel confident to implement the RNCS.	SA 1	A 2	D 3	SD 4

SA = Strongly Agree
D = Disagree

A = Agree
SD = Strongly Disagree

11.	I am satisfied with my content knowledge of the RNCS from which I teach.	SA 4	A 3	D 2	SD 1
12.	The RNCS has a negative impact on my record keeping of learners' performance.	SA 1	A 2	D 3	SD 4
13.	The RNCS has a negative impact on my assessment of learners' performance.	SA 1	A 2	D 3	SD 4
14.	The RNCS has a negative impact on my reporting of learners' performance.	SA 1	A 2	D 3	SD 4
15.	The RNCS has a negative impact on my lesson planning.	SA 1	A 2	D 3	SD 4
16.	The RNCS has a negative impact on my teaching methodology.	SA 1	A 2	D 3	SD 4
17.	I have received support on the implementation of the RNCS.	SA 4	A 3	D 2	SD 1
18.	I received adequate training on implementing the RNCS.	SA 4	A 3	D 2	SD 1
19.	I need further professional development on implementing the RNCS.	SA 1	A 2	D 3	SD 4
20.	I have been visited by departmental officials in my school for monitoring the implementation of the RNCS.	SA 4	A 3	D 2	SD 1
21.	I have taken steps to upgrade myself on the implementation of the RNCS because I don't understand it.	SA 1	A 2	D 3	SD 4
22.	I received teaching and learning support material to implement the RNCS on time.	SA 4	A 3	D 2	SD 1
23.	I am not satisfied with the quality of the teaching and learning support material for implementing the RNCS in my school.	SA 1	A 2	D 3	SD 4

SA = Strongly Agree
D = Disagree

A = Agree
SD = Strongly Disagree

24.	I find the material for implementing the RNCS supplied by the Department of Education to be useful.	SA 4	A 3	D 2	SD 1
25.	I am able to develop my own materials for implementing the RNCS to supplement those supplied by the Department of Education.	SA 4	A 3	D 2	SD 1
26.	I have difficulty in using the learning outcomes in implementing the RNCS.	SA 1	A 2	D 3	SD 4
27.	I have difficulty in using the assessment standards in my implementation of the RNCS.	SA 1	A 2	D 3	SD 4
28.	I have difficulty in achieving the critical outcomes in my implementation of the RNCS.	SA 1	A 2	D 3	SD 4
29.	I have difficulty in achieving the developmental outcomes in my implementation of the RNCS.	SA 1	A 2	D 3	SD 4
30.	I have difficulty in integrating knowledge and skills from different learning areas when I am implementing the RNCS.	SA 1	A 2	D 3	SD 4
31.	I have difficulty in developing learners' skills, values and attitudes in my implementation of the RNCS.	SA 1	A 2	D 3	SD 4
32.	I have difficulty in differentiating between learning outcomes and assessment standards in implementing the RNCS.	SA 1	A 2	D 3	SD 4

SECTION C

Make a cross through the number that best describe the degree to which you generally find implementing the RNCS to be stressful to you. The meaning of numbers are as follows:

- | | | | | | |
|----|---|-----------------------------|----|---|-------------------------|
| 1 | = | Not at all Stressful | 2. | = | Mildly Stressful |
| 3. | = | Moderately Stressful | 4. | = | Very Stressful |
| 5. | = | Extremely stressful | | | |

	5	4	3	2	1
In general how do you find implementing the RNCS to be stressful to you?					

ANNEXURE B

A LETTER OF REQUEST TO CONDUCT RESEARCH

05 December 2005

The Director : Research Strategy Development and ECMIS
KZN Department of Education and Culture
P/Bag X 9137
PIETERMARITZBURG
3200

Dear Sir

REQUEST FOR PERMISSION TO CONDUCT RESEARCH WITH EDUCATORS AS SUBJECTS

I am registered for a D.Ed degree in the Faculty of Education and a staff member at the University of Zululand. I am writing this letter to request for permission to conduct research with teachers in randomly selected schools under the four KwaZulu-Natal Regions. My investigation is entitled "The implementation of the Revised National Curriculum Statement by the educators in the General Education and Training Band".

The proposed research is intended to achieve the following objectives:

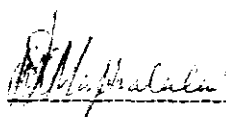
1. To ascertain the nature of educators' experiences in implementing the Revised National Curriculum Statement.

2. To determine whether educators' biographical factors (gender, age, teaching experience, qualification and rank) have any influence on their experiences of implementing the Revised National Curriculum Statement.
3. To ascertain the extent to which educators generally find implementing the Revised National Curriculum Statement to be stressful.
4. To determine whether educators' biographical factors (gender, age, teaching experience, qualification and rank) have any influence on the extent to which they find implementing the Revised National Curriculum Statement to be stressful.

A copy of a questionnaire is attached. I hope it meets your approval. The names of schools and educators in the study will be treated as confidential, but the research findings can be forwarded to your office should you wish me to do so.

Your permission to conduct research in these regions will be highly appreciated.

Yours faithfully



MNCEDISI CHRISTIAN MAPHALALA
(Student)



DR DP NGIDI
(PROMOTER)

ANNEXURE C

A LETTER OF PERMISSION TO CONDUCT RESEARCH



ISIFUNDAZWE SAKWAZULU-NATALI
PROVINSIE KWAZULU-NATAL

DEPARTMENT OF EDUCATION
UMNYANGO WEMFUNDO
DEPARTEMENT VAN ONDERWYS

Fax: 033 341 8612

Private Bag X9137
Pietermaritzburg
3200

228 Pietermaritz Street
Pietermaritzburg, 3201

INHLOKOHHOVISI

PIETERMARITZBURG

HEAD OFFICE

Enquiries:
Imibuzo: Sibusiso Alwar
Navrae:

Reference:
Inkomba: 0092/06
Verwysing:

Date:
Ukuqala: 27 February 2006
Datum:

To: **Mr M. C. Maphalala**
Faculty of Education
Department of Curriculum and Instructional Studies
University of Zululand
KWADLANGEZWA
3886

RE: APPROVAL TO CONDUCT RESEARCH

Please be informed that your application to conduct research has been approved with the following terms and conditions:

That as a researcher, you must present a copy of the written permission from the Department to the Head of the Institution concerned before any research may be undertaken at a departmental institution bearing in mind that the institution **is not obliged to participate** if the research is not a departmental project.

Research should not be conducted during official contact time, as **education programmes should not be interrupted**, except in exceptional cases with special approval of the KZNDoE.

The research **is not to be conducted during the fourth school term**, except in cases where the KZNDoE deem it necessary to undertake research at schools during that period.

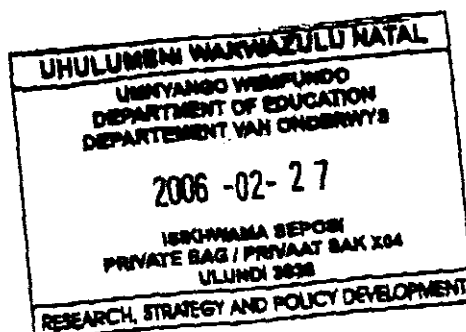
Should you wish to extend the period of research after approval has been granted, an application for extension must be directed to the Director: Research, Strategy Development and EMIS.

The research will be limited to the schools or institutions for which approval has been granted.

A copy of the completed report, dissertation or thesis must be provided to the RSPDE Directorate.

Lastly, you must sign the attached declaration that, you are aware of the procedures and will abide by the same.


SUPERINTENDENT GENERAL
KwaZulu Natal Department of Education





PROVINCE OF KWAZULU-NATAL
ISIFUNDAZWE SAKWAZULU-NATALI
PROVINSIE KWAZULU-NATAL

DEPARTMENT OF EDUCATION
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INHLOKOHHOVISI

PIETERMARITZBURG

HEAD OFFICE

Enquiries:
Imibuzo: Sibusiso Alwar
Navrae:

Reference:
Inkomba: 0082/06
Verwysing:

Date:
Usuku: 27 February 2006
Datum:

RE: PERMISSION TO CONDUCT RESEARCH

TO WHOM IT MAY CONCERN

This is to serve as a notice that **Mr M. C. Maphalala** has been granted permission to conduct research with the following terms and conditions:

- That as a researcher, he/she must present a copy of the written permission from the Department to the Head of the Institution concerned before any research may be undertaken at a departmental institution.
- **Mr M. C. Maphalala** has been granted special permission to conduct his/her research during official contact times, as it is believed that their presence would not interrupt education programmes. Should education programmes be interrupted, he/she must, therefore, conduct his/her research during nonofficial contact times.
- No school is expected to participate in the research during the fourth school term, as this is the critical period for schools to focus on their exams.

SUPERINTENDENT GENERAL
KwaZulu Natal Department of Education

UHLWENI WAKWAZULU NATAL UMNYANGO WEMFUNDO DEPARTMENT OF EDUCATION DEPARTEMENT VAN ONDERWYS 2006 -02- 27 ISIKHAWA SEPOZI PRIVATE BAG / PRIVAAT SAK X84 ULUNDI 3605 RESEARCH, STRATEGY AND POLICY DEVELOPMENT
