DISADVANTAGED OUTCOMES BASED EDUCATORS:

EXPLORING THE EFFECTS OF TYPES OF RESOURCES USED IN CURRICULUM 2005, AT THREE KWA-ZULU NATAL PRIMARY SCHOOLS

MISS. L. NAICKER



DECEMBER 2001

UNIVERSITY OF DURBAN-WESTVILLE SCHOOL OF EDUCATIONAL STUDIES

Disadvantaged Outcomes Based Educators:

Exploring The Effects Of Types Of Resources Used In Curriculum 2005, At Three Kwa-Zulu Natal Primary Schools.

By

Loshni Naicker

Student Number: 9256082

Submitted in Partial Fulfilment of the Coordinated Masters in Education Degree in the School of Educational Studies; Faculty of Humanities.

EDMINSON LIBRARY 031 - 2603467

Supervisor: Dr. Chandru Kistan

December 2001

DECLARATION

I, Loshni Naicker, hereby declare that this dissertation which is submitted in partial fulfilment of the Coordinated Masters in Education Degree is my own work and has not been submitted previously for any degree at any University.

Merickel

RESEARCHER

.....

SUPERVISOR

ACKNOWLEDGEMENTS

- ❖ I would like to express my sincere gratitude to the Division of Educational Technology in the Department of Education at the University of Durban Westville, more especially Dr. Chandru Kistan, Mr. Devan Govender and Mr. Ben Nel for their kind and invaluable support, encouragement and guidance in the making and completing of this study.
- I want to thank my family for their continuous inspiration, patience and tolerance during my study.
- I also want to express my deepest thanks and appreciation to my wonderful parents for their constant interest, many sacrifices and selfless support through all my years of studies.
- I would like to thank all the grade 4 and 7 teachers who participated in the research for their support and contribution towards the success of this study.
- I would also like to thank all other persons not mentioned who were of assistance to me.
- Finally, and most importantly I express my sincere thanks and gratitude to the beloved Goddess "Mother Sarasvathi" for her spiritual guidance, divine wisdom and love.

ABSTRACT

Our present day South African education system lies in great turmoil for a variety of reasons. The main reason being that there exists a great shortage of skilled educators required to implement Curriculum 2005 and Outcomes Based Education effectively and efficiently. Thus, it is alternate forms of re-skilling via the use of appropriate resources, namely, distance education, the internet, educational television, newspapers and cluster workshops that could bring adequate "re-skilling" to the thousands of teachers who can positively implement a new, revised and streamlined curriculum by June 2001.

This study aims to prove that it is these types of on-going teacher-support and the use of educational technology at various levels that will ultimately lead to improving the teaching and learning processes. This study could assist the various stakeholders in the education field to formulate policies that would assist in providing the necessary resources, support and re-skilling necessary for the thousands of unprepared South African teachers who are presently experiencing difficulties in implementing this new education system.

TABLE OF CONTENTS

CHAPTER ONE Introduction

PAGE

1.1. Introduction to the study	1
1.2. Purpose of the study	3
1.3. Critical Questions	3
1.4. Rationale for the study	3
1.5. Structure of the study	5
1.6. Limitations of the study	6
1.7. Validity of the study	6
1.8. Conclusion	7

CHAPTER TWO Literature Review

2.1. Alternate types of resources	9
2.2. Appropriate types of resources	15
2.3. "Educational Technology"	18
2.4. Alternate systems of education	26
2.4.1. Distance Education	26
2.4.2. The Internet	35
2.4.3. Educational Television	39
2.4.4. Newspapers	43
2.4.5. Cluster Workshops	54
2.5. Conclusion	57

CHAPTER THREE Research Methodology

3.1. Introduction	64
3.2. The nature of this research	64
3.3. Methods of data collection	67
3.3.1. Participant observation of teachers	67
3.3.2. Questionnaires	67
3.3.3. Semi-structured interviews	69
3.4. Analysis of data	70
3.5. Validity and reliability concerns	70
3.6. Conceptual and Theoretical Framework	71

CHAPTER FOUR Data Analysis and Discussion

74
74
74
75
76
77
78
82
85
86
89

90
93
94
95
97

CHAPTER FIVE Conclusion and Recommendations

102
103
103
104
105
105
113
115
116

BIBLIOGRAPHY	119
APPENDICES	126
Questionnaire for teachers	A1
Interview schedule for teachers	A2
Selections from the transcripts of interviews with teachers	A3

A4
A5
A6
A7
A8
A9
A10
A11
A12

LIST OF FIGURES

PAGE

a) Figure 1: Grades currently being taught by intermediate phase teachers	75
b) Figure 2: Respondents years of teaching experience	76
c) Figure 3: Attendance of OBE workshops	78
d) Figure 4: Adequacy of OBE workshops	79
e) Figure 5: Relationship between teaching experience and adequacy of OBE workshops	80
f) Figure 6: Implementation of OBE follow-up support programmes	83
g) Figure 7: Adequacy of re-skilling for the implementation of C2005	87
h) Figure 8: Colleagues efficiency in OBE implementation	88
i) Figure 9: Importance of types of resources in teaching C2005	90
j) Figure 10: The effectiveness of Technology Education in re-skilling teachers to implement OBE	92
k) Figure 11: Teachers preferences of the duration of OBE workshops	94
l) Figure 12: Teachers preferences of venues for OBE workshops	96

LIST OF TABLES

PAGE

a)	Table 1: Percentage of teachers with C2005 and OBE teaching experience.	77
b)	Table 2: Percentage of teachers preferences of types	98
	of resources	76

CHAPTER ONE

INTRODUCTION

1.1. Introduction to the study:

The very significant changes proposed in Curriculum 2005 in South Africa see teachers as curriculum developers with responsibility for developing local learning programmes along with curriculum materials for support. This presents many challenges to the teaching community that is still trying to recover from the ravages of apartheid. Through its paranoia for control, the apartheid state succeeded in "deskilling" teachers in the very processes that are now required and separate them into teaching contexts that were resourced in vastly different ways. The challenge now is to find ways of bringing these teachers together collectively to develop innovative learning programmes and supporting curriculum materials for Outcomesbased education and Curriculum 2005 teaching and in the process start to develop some of the required skills states Gray (1999: 1). Thus, Curriculum 2005 and its Outcomes-based approach means a total transformation for both pedagogy and professional practice in the classroom. This new education system views educators as curriculum developers, developing local curricula and materials to suit their different contexts; with emphasis upon the development of appropriate skills and attitudes and de-emphasis upon transmission of standard textbook content knowledge. The South African Education Department fails to realise that declaring policies like Curriculum 2005 and Outcomes-based education is not the same as achieving them. Similarly,

Jansen (2000: 4) states that very little consideration was given to the complexity of resources and support systems needed in this major educational reform so as to move from policy enunciation to policy enactment within schools and classrooms. A third world country like South Africa requires tremendous resource base and support systems in developing meaningful learning programmes which requires considerable professional insights and skills. The apartheid government has over the years systematically destroyed much professional initiative amongst teachers with a system of national standards that centrally prescribed curriculum content and textbook knowledge that were coupled with an authoritarian administration. Thus, I agree with Gray (1999: 1), when she suggests that the system has effectively "de-skilled" educators in the essential processes that Curriculum 2005 now demands of them.

In order to narrow the gap between the intended new curriculum and the curriculum in practice; it seems to be somewhat blatant that adequate re-skilling of educators via the use of appropriate resources, namely, distance education, the internet, educational television, newspapers and cluster workshops will ultimately lead to curriculum reform. Kennedy (1993: 428) asserts, that the tremendous demands made on education, forces for change facing the world could be so far reaching, complex and interactive that they call for nothing less than the re-education of human kind. Therefore, it is the restructuring of the different types of resources coupled with ongoing teacher-support and the use of educational technology at various levels that will ultimately lead to improving the teaching and learning processes.

1.2. Purpose of the study:

The purpose of this study is to explore the types of resources most suitable in reskilling educators for Curriculum 2005.

1.3. Critical Questions:

- 1.3.1. Why are the alternate types of resources necessary?
- 1.3.2. What types of resources will be most appropriate?
- 1.3.3. How do we structure resources to effectively re-skill educators?

1.4. Rationale for the study:

For the past two years I have experienced great difficulties in many areas of my teaching, since having to partially implement Curriculum 2005 and Outcomes-based education in Grade 5 classes was indeed confusing. I was given the mammoth task of requiring to change my teaching philosophy, teaching strategies, styles of recording pupils and teachers tasks and developing and locating resources for the various "new" learning areas. Having to change my mindset and getting to grips with understanding Curriculum 2005 and Outcomes-based education as a new system of education was at first extremely demotivating. I had not previously encountered the new curriculum in any of my pre and in-service teacher training courses. I immediately felt disillusioned with the entire teaching fraternity. And having attended a three-day Curriculum 2005 and Outcomes-based education workshop, I realised that it was totally inadequate in terms of preparing me to start teaching a very different and challenging new curricu-

lum. However, the most startling revelation of the workshop was the blatant inadequacies of the Department's regional facilitators' knowledge of Curriculum 2005 and Outcomes-based education themselves. Since many were unable to answer the diverse and most pertinent questions put forth to them by many inexperienced Outcomes-based educators. This made me realise that the Education Department had plunged our country's already dismal Education System into further disarray. Jansen (2000: 4) also reiterates the above position, since he states that there existed an invisibility of Provincial and National services at the classroom level, which was a critical failure in the support system required by teachers as they moved from five-day information sessions back into the classroom. Having liased with several of my colleagues who are currently involved in implementing Curriculum 2005, I received similar feedback about difficulties being experienced in the various areas of this new curriculum. Hence, I attributed most of these problems to one very important reason, namely, the poor development of resources in the "re-skilling" of teachers. Chisholm (2000: 2) states that the successful implementation of Curriculum 2005 depends largely upon adequate resources. Meyers and Jones (1993: 142) also states, "if wellselected and effectively used, resources could be a valuable partner for teachers and learners". Thus, this suggests that appropriate resources are very important in reskilling educators. I feel that alternate types of resources, which are effectively structured could greatly assist in the re-skilling of thousands of educators who can positively implement a new, revised and streamlined curriculum by June 2001. I believe that "Technology Education" as a learning area could invaluably assist in reskilling educators to implement all Curriculum 2005 and Outcomes-based education's

new learning areas; since the use of appropriate resources namely, distance education, the internet, educational television, newspapers and cluster workshops would mean easy access for the thousands of unprepared Curriculum 2005 and Outcomes-based education teachers. These types of on-going teacher-support and the use of educational technology at various levels could ultimately lead to improving the teaching and learning processes. However, there needs to be a structured plan which has to be properly co-ordinated at the Department's National, Provincial and Regional levels in order to make provisions for the relevant hours, days and venues for teachers to be re-skilled in Technology Education. I will send item copies of my research findings to all stakeholders in education. Therefore, I am hoping that my research will assist the Education Department's Provincial and National policy-making units, educators, learners, schools, school governing bodies, universities, technikons, colleges, and parents in providing the necessary resources, support and re-skilling necessary for thousands of teachers who are currently involved in implementing Curriculum 2005 and Outcomes-based education in South Africa.

1.5. Structure of the study:

This research was a case study involving three primary schools, namely, M.Padavatan Primary, Moorton Heights Primary and Crestview Primary Schools from the Chatsworth area in Kwa-Zulu Natal. I used both quantitative and qualitative research methodologies. The survey method was used. Interviews and questionnaires formed part of the research instruments. McMillan (2000: 155) states that questionnaires are used extensively because they provide the best way of obtaining information for a

wide range of research problems; and by establishing a proper rapport with the

subject, a skilled interviewer can enhance motivation and obtain information that

might not otherwise have been offered. The sample consisted of all Grade 4 and 7

educators who had been workshopped in Curriculum 2005 and Outcomes-based

education and were currently implementing the new education system. The educators

supplied information from their experiences and through verbal questioning.

Limitations of the study: 1.6.

This study is not without limitations. This sample is not representative of the entire

population of South Africa, since it was limited to only three schools in a particular

area in Chatsworth, which only involved the Grade 4 and 7 educators who had been

workshopped in Curriculum 2005 and Outcomes-based education. In terms of

constraints of my research, such as time, resources, access, availability and credibility

of secondary data, I chose a sample for purposes of convenience, namely, schools that

reside in the area in which I teach, in order to facilitate data collection and

interpretation of my sample. However, the value of research is not diminished by

limitations, but actually enhanced by reporting such limitations, since Anderson

(1990: 110) states that, "in the game of conducting and reporting research, there is no

harm in having limitations but it is a bad form not to admit them".

1.7. Validity of the study:

McMillan (2000: 272) suggests that validity refers to the appropriateness of the

6

interpretation of results. And in looking at the extent to which the results obtained for a sample of individuals may be generalized to the population to which the research hypothesis applies, can only be valid depending on a multiple of factors. I used methods of triangulating both the research instruments and sources of data. The quantitative data captured from Outcomes-based educators questionnaires were complemented by qualitative information obtained from their dialogues. This study required multiple methods of data collection, namely, questionnaires, interviews, participant observation and literature reviews from varied sources, such as the internet, newspapers, books, policy documents and journals. A pilot study was implemented at each school, in order to facilitate the teachers understanding of the questionnaires that they were required to complete. My supervisor also corrected various aspects of my research study. Hence, the collection of data over a period of several months and from varied sources assisted in increasing the study's claims of reliability and validity.

1.8. Conclusion:

This chapter has sought to highlight the need for using appropriate resources in order to re-skill teachers for South Africa's challenging new education system viz. Curriculum 2005 and Outcomes-based education. It has attempted to indicate the reasons for requiring the use of alternate types of resources for re-skilling teachers. It has also briefly outlined the various types of resources and its restructuring that would be most appropriate in re-skilling Curriculum 2005 and Outcomes-based teachers. It has outlined the motivation for the study, critical questions, limitations and validity of

the study. It also focused upon South Africa's post apartheid educational reforms and discussed the need for the Department of Education and Culture to realise that policy enunciation is not the same as policy enactment, given South Africa's vast inequalities in resource distribution in its schools. The next chapter will focus on an extensive literature review concerning the need for different types of resources, namely, distance education, the internet, educational television, newspapers, cluster workshops and on-going support that could assist in re-skilling teachers to understand Curriculum 2005 and Outcomes-based education's complex new concepts, terminology, teaching methodologies, assessment criterias, specific outcomes, different learning areas and thematic content.

CHAPTER TWO

LITERATURE REVIEW

2.1. Alternate types of resources:

Kahn (2000) suggests that Outcomes-based education is the most far-ranging change to education that this country has ever seen, and that we are not the first nation to change its education system, but that our change is more complex than usual; since in education new Departments were formed, new examinations set, Colleges rationalised and so on; and this context of modernisation includes an education payroll that absorbs 90% of education funding which spares little for development, yet everyone knows that student success is strongly determined by wealth, geography and demography. Yet, "No one in South Africa can claim to be an expert in Outcomes Based Education. It is new for us all, and we are therefore all learners," states Kahn (2000: 4). Therefore, Curriculum 2005 is undoubtedly a major change management project and should be managed as such. However, the government Department structures do not seem to be geared to the management of change. Jansen (2000) also reiterates that by declaring policy; it is not the same thing as achieving it, since he would certainly not be the first observer to applaud the impressive array of policies generated by the South African Government since 1994 for our emerging democracy. He goes on to mention that there was very little consideration given to the complexity of resources and support systems needed to move from policy enunciation to policy enactment within schools and classrooms, since changes expected from policy routin-

ely underestimate the complexity of the system into which such change is introduced. We also realise that curriculum change requires well-trained teachers and a wellorganised support system at the centre and in classroom levels. Thus, policy intended to simply change teacher behaviour is very likely to be short lived and inconsequential unless the focus shifts to changing teacher understanding (Jansen, 2000). Also, Potenza (2000: 2), curriculum adviser for Outcomes-based education, states that teacher orientation and support are essential ingredients of curriculum change; and that this has been inadequate in the context of Curriculum 2005, therefore, it has been agreed that the task team, led by Prof. Linda Chisholm will look at the training for Curriculum 21, modes of delivery and related aspects. Whilst Minister of Education, Prof. Kader Asmal, took the decision to appoint a review committee of independent educationists in February 2000 to look into the viability of Curriculum 2005, since several research processes pointed to problems with the implementation and understanding of the new curriculum. And Garson (2000: 4), too, in reviewing Curriculum 2005 states that the time frames have been unmanageable and unrealistic; since there is widespread agreement that implementation has been too rushed and that it was implemented before it was ready for presentation and without the foundations for good, inspiring training and effective on-going support. One also notices that global changes, without any discriminatory measures, are more likely to benefit advantaged schools rather than disadvantaged institutions, for example, the Durban-Westville's study "Outcomes-based University Of of education implementation in Grade 1 classrooms in Mpumalanga and Kwa-Zulu Natal and (later the Northern Province) demonstrated clearly that well- resourced White schools, already had significant resource advantages that guaranteed a more successful implementation of the new curriculum".

Although Education Minister, Kader Asmal, firmly suggests that Outcomes-based education is an overall approach that is here to stay; and Curriculum 2005 is being reviewed; we need to realise that the best possible chance for its success will depend on adequate resources for the change management process. At present this new system of education has taken place at a time of intense contestation and resource constraints, thus, it has not been managed as a project, but as an "add-on" task. Many suggested that in order for this new education system to succeed in South Africa in the future, it demands management of this vast project and building the capacity to manage it, thus, it requires a shift from public administration to public management. This definitely is an "outcome" worth striving for all.

Most teachers require direction in their teaching of the new learning areas, since some are implementing the system partially, whilst others are incorporating a little of the old system and a little of the new education system and there are those who have not been implementing the new system at all. Many share similar feelings, since the review of Curriculum 2005 by the independent review committee chaired by Prof. Linda Chisholm believes that curriculum designers have tried to avoid telling teachers exactly what to teach, which is one of the weaknesses of the specific design features promoting progression. She goes on to state that the understanding of Curriculum 2005 varies within and between schools, as well as among teachers, trainers and offi-

cials, and although many support the underlying principles of learner participation, activity-based education, emphasis on relevance, flexibility, anti-bias, holistic development, critical thinking and integration; studies have found that many are equally confused about the design and implementation of Curriculum 2005. Therefore, many agree that although it is clear that Curriculum 2005 has generated new debates about teaching and learning, teachers have a limited understanding of the principles of Curriculum 2005, for example,

"We weren't trained properly to implement Curriculum 2005 and teachers get frustrated. All this bad news about Curriculum 2005 also does not help because you get demotivated. You go into class and you don't know how you should proceed. Also, we sit with enormous problems other than Curriculum 2005. Then officials come in and just ask for administration work and a portfolio that has nothing to do with whether the child is really learning. I don't know if this will change but most of the teachers will be grateful if it did. We're all waiting to see what's going to happen-you don't actually know what's going on and what they're planning to do" (Voice of Francis Searle, Foundation Phase, Head Of Department, The Teacher, 2000).

I also agree with the many experts that suggest that resources are a very important aspect that requires immediate attention if Curriculum 2005 is to succeed, since the Curriculum 2005 Review Committee felt that problems with learning support materials range from their availability, quality and use to the training in their use that teachers were given. Also, the absence of basic resources such as pencils, exercise books and photocopiers in many schools only further add to the problems; whilst in the majority of situations, teachers do not have the time, resources or skills to develop their own materials. This problem is further compounded by not enough follow-up support since the Review Committee of Curriculum 2005 discovered that teachers felt

officials often do not value their work and that Departments and school management provide far too little support; whilst Provincial and District managers ability to implement Curriculum 2005 and provide support to teachers is hampered by problems in the organisation of curriculum support structures, shortages and inadequate experience of personnel and lack of resources for supporting Curriculum 2005.

As previously mentioned, the training of teachers for the new education system was undoubtedly inadequate, thus, the re-skilling of teachers in Curriculum 2005 and Outcomes-based education should presently be given immediate priority in order for the correct outcomes to be achieved in the classroom. The Review Committee of Curriculum 2005, too, states that many problems and difficulties were experienced in the process of training teachers for the new curriculum and that these related to training models used, time spent on training and the quality of training. Most teachers felt that the focus was on teaching the new terminology and little attention was given to the substance of Outcomes-based education and Curriculum 2005. Many studies have shown that the Cascade model of training has proved inadequate since this involved training National trainers who trained Provincial trainers who in turn trained district trainers, who then trained teachers. It was further discovered that district trainers often did not understand Curriculum 2005 themselves; therefore, not using the principles of Curriculum 2005 in their own methodology of training. In this respect, the Review Committee of Curriculum 2005 recommended that in order for the training of teachers to improve, more attention should be paid to the quality and content of training and to consistent follow-up support. And I discovered that groupwork in my class resulted in effective outcomes, when well-designed resources were given to novices since this demonstrated confidence in their ability to solve their own problems.

All teachers realise that a well-resourced school provides a healthy environment for teaching and learning to flourish, thus, being a necessary condition to providing quality education. Vawda (2000: 4), an independent researcher and former South African Democratic Teachers Union educator, states that although the role of teachers in delivering quality education and as agents of change must never be underestimated; we need to realise that the contribution of the best teachers will be limited if it is not complemented with social redress, physical and material resources, good school management and governance. Most Non-Governmental Organisations also acknowledge the need for increased resources through aid and debt relief (Bediako, 2000). The Director of the Institute for Curriculum Development (GICD) also recommends that effective teaching and learning cannot take place without the availability and effective use of all types of learning materials (Mahomed, 2000). I also agree with the South African Democratic Teachers Union (SADTU), when it states that most of their teachers received their pre-service training a decade ago and many are poorly qualified, therefore, most are ill-equipped to effectively implement Outcomes-based education in the classroom. They also go-on to mention that the training that teachers received at simplified Curriculum 2005 and Outcomes-based education workshops were very superficial and inadequate and devoid of efficient mechanisms for monitoring and support. Grey (2000), too, suggests that Curriculum

21 seems to represent an improvement in Curriculum 2005, but crucial areas like teacher training and the provision of resources must be addressed if it is going to have a chance of succeeding.

2.2. Appropriate types of resources:

Since the South African Department of Education's five day Curriculum 2005 and Outcomes-based education workshops were inadequate in various ways in terms of preparing thousands of teachers to start teaching a very different and challenging new curriculum; much research findings prove that alternate forms of re-skilling via the use of appropriate resources namely, Distance Education systems, the internet, educational television, newspapers and cluster workshopping concerning all eight learning areas could bring adequate "re-skilling" to the many teachers who can positively implement a new, revised and streamlined curriculum by June 2001. Later on in the study, reasons indicate why these types of on-going teacher-support and the use of "Educational Technology" at various levels could ultimately lead to improving the teaching and learning processes. These types of appropriate resources would assist the Education Department's policy-making unit in providing the necessary resources, support and re-skilling necessary for thousands of teachers who are currently implementing the new curriculum.

I strongly believe that it is the discipline, educational technology, which will assist in linking all resources that are required in the teaching of Curriculum 2005. Therefore, Johnstone (1999: 308), makes recommendations in the project report tabled with the

Heads of Education Departments in February 1999, that the role of resources in the teaching of "Technology" and the re-training of teachers was of utmost importance if it was to be strategically implemented in the National curriculum. Many studies have proven that technology lends itself well to the reconceptualisation of education and training, for examples, [Johnstone (1999), Govender (1999) and Mulroney (2000)].

Johnstone (1999: 309) suggests that technology assists in transforming the quality of teaching and learning by developing teaching methodologies which integrate thinking and practical activities through engagement in technological tasks; facilitates the integration of learning across learning areas (particularly Science and Mathematics); supports Outcomes-based approaches to assessment and links school learning with work in the broader community. However, he goes on to mention that in order for Technology as a learning area to fully develop in South Africa, it needs to develop the following, namely, acceptable levels of pre and in-service expertise among educators; quality teacher education materials; acceptable levels of expertise amongst Provincial Learning Staff (Subject Advisers); adequate equipment and teacher support materials in schools; and well planned medium and long term strategies to retrain teachers and enhance their confidence and commitment to teaching technology. Govender's (1999) study shows that in Technology Education teacher training has been neglected and lacked co-ordination, and that there existed a lack of inset and professional development that was ultimately coupled with a lack of participation in curriculum development. He goes on to state that South Africa's resources and infrastructure for the provision of Technology education is limited, thus, partnerships between industry,

higher learning institutes, schools and the education departments need to be developed so as to act as support programmes in increasing teachers' knowledge and understanding of the Technology learning area, for example, Mulroney (2000: 441), states that the goal of the RICE (RMIT International Community Exchange) program to "develop a model for a large technology-based urban university working in partnership with a rural community" makes extant that commitment to working together, and that this partnership is critical to the university's description of the way it works; since it is designed to ensure that the interest of the community is served and recognises that outcomes are increased by combining resources with others in the community, because it relies and builds on the trust, mutual respect and shared values between the people of the university and the people of the community (RMIT University, 1997; RMIT University, 1998b).

Technology as a new learning area can also help us to develop classroom models that allow for more flexible roles for both teachers and students that lead to "lifelong learning" since while teachers are being held accountable for the existing curriculum in which textbooks are still the dominant technology, our pupils are choosing to use electronic media for their personal access to information. It is very true that many of our pupils are more comfortable with telecommunications and software than their teachers are today (November, 1989). Thus, in order for us to use educational technology as a powerful resource to link us to the world beyond, we need to immediately develop a management plan to take advantage of existing and future technologies in order to re-skill the thousands of unprepared Curriculum 2005

and Outcomes-based educators. Technology can help teachers provide pupils with experiences that will lead to socially responsible action, for example, pupils could identify important community issues and use video and audio tape recorders, cameras and other technologies in order to record events and a local company could gather these projects and eventually publish them in the form of an interactive program. This could be an audio-visual aid of how children from around the world view their societies; and in this way pupils are being taught social responsibility and political action and how technology can be used to make pupils active participants in their communities.

2.3. "Educational Technology":

As a modern day educator it is my belief that "Educational Technology's," great importance and impact in the teaching and learning environment has not yet been fully realised, understood or even explored. However, its nature and historical development is not easily explainable; since "educational technology", as a field of study, is "new" because of the views of what actually constitutes it, has evolved over a period of 45 years. Many researchers in this field have expressed difficulty in identifying sources of the term "Educational Technology," for example, Saettler (1990: 17) states that it is unclear as to who first used this term. However, most researchers in this field make references to educators like John Dewey's "stages of problem - solving" (1916), Wood and Freeman's research "media findings" (1929), Ralph Tyler's "curriculum reform" (1930s), William Heard Kilpatrick (1925), Hoban

and Zisman's (1937) and Dale's (1946) books regarding the extensive and effective use of media in the United States military training during World War 2, which launched the field into legitimacy; since the first indication that a field existed was the emergence of visual education, and later audio- visual education, as a concept, thus, they laid the foundation for the concept of educational technology (Seels and Richey, 1994: 13; Rowntree, 1974: 3). Plomp and Ely (1996) suggest that educational technology emerged as a distinct field of study in the early 1960's; since technologies developed for entertainment, information and communication were applied within education, thus, expanding audio-visual education. Another important aspect, programmed learning, led to an applied behavioural science concept of learning The concepts of "learning resource", "individualized learning" and the "systems approach" were often combined into a process of instructional development. Thereafter, a "problem-solving" concept of educational technology became more attractive as the applied science claims declined in credibility, and improved access to learning was achieved through distance education, supported self-study and new communication interfaces for the physically disabled (Eraut, 1996).

There was on-going evaluations in this field; which undoubtedly led to further improvements, namely, the popularity of "mass communications" led to concerns about it's control; whilst mass media research led to the use of more critical approaches to learning resources and in the 1980s research suggested that emphasis be also placed on interactive settings just as much as educational technology focused on interactive resources. In the 21st century educational technology offers those involved

the opportunity to develop a range of skills and abilities that will result in excellent teaching and an improved quality of learning in the classroom. It also introduces information technology, which seeks to improve the teaching and learning situation and also includes global networking and communications.

In the new millennium it is of utmost importance to every teacher to be exposed to this dynamic new field, since it offers opportunities to develop interactive and innovative teaching and learning systems, strategies and skills and affords us an opportunity to ride the "Superhighway of Globalisation". Therefore, gaining access to the internet (on-line lessons), Distance Education programs, e-mail, chat rooms etc... Hence, the importance and impact of educational technology in the teaching and learning environment is multifold and of utmost importance to every teacher, since this stimulating field of study provides opportunities to be creative by designing teaching and learning resources catering for various education and training contexts so as to enhance the quality of the teaching and learning environment. Finally, Sampath (1984: 132) and Romiszowski (1990: 79) have concluded that educational technology has been the most powerful change agent thus far in restructuring educational systems in countries, like Botswana, Hungary, Scotland and Australia. This field of study has emerged due to the synthesis of media in education, psychology of instruction and systematic approaches to education (Seels, 1989). James Finn and Edgar Dale made major contributions to the development of instructional technology; since Dale developed the "Cone Of Experience" (1946), which was the initial attempt to build a rational that involved both learning theory and

audio-visual communications. Finn promoted the application of the systems theory as a basis for the field in 1956, since his concept of integrated systems and processes incorporated and broadened Dale's idea of the inter-relatedness of materials and processes.

There exists many definitions of educational technology (AECT, 1977; Ely, 1983), however, there are some that are considered mainstay's because they are cited most frequently in literature (Ely, 1973; 1983). The AECT's 1963 definition provided a "work definition" for the field of instructional technology. Other definitions in the field followed, namely, "Educational technology is the development, application and evaluation of systems, techniques and aids to improve the process of human learning" (CET, 1984) and "It is the theory and practice of design, development, utilization, management and evaluation of processes and resources for learning" (Seels and Richey, 1994).

Whilst (AECT) in the USA states that "Instructional Technology is the theory and practice of design, development, utilization, management and evaluation of processes and resources for learning." Percival and Ellington (1984: 19) suggest that, "the principal role of educational technology is to help improve the overall efficiency of the teaching and learning process." All these different meanings of educational technology, however, emphasize it's primary function as "improving the efficiency of the process of learning", for example, increasing the quality of learning, decreasing time to achieve learners desired goals, increasing class sizes

without reducing the quality of learning and by reducing costs without affecting quality; which will all act as important resources in our current democratic post-apartheid South African education climate.

We could look at "The Elton Model" in terms of the development of the main concerns of educational technology. Elton (1977) identified 3 aspects of the field's development, namely, mass communication, individualized learning and group learning. The first practice was not very successful and was criticised for it's "mastery of learning" point of view, whilst "individualized learning" was catalysed by B.F.Skinner's behavioural psychology developments in the 1950s. And the "Group Learning Phase" developed from Carl Rogers humanistic psychology in the 1960s, which argued that group dynamics lends itself to interacting, thus, allowing students to share ideas and learn from one another (similar to C2005 and OBE groupwork principles).

Modern day innovative mediated methods of learning, namely, "Collaborative Learning", "Co-operative Learning" and "Integrated Approaches" lends itself to similar principles where pupils learn through interaction and learn to develop self esteem. However, it is the "Systems Approach" that is at the heart of educational technology, which makes reference to a "Holistic System" (similar to the present day Curriculum 2005 and Outcomes-based education principles of Holistic development of the learner) of the "technology of education". Rowntree (1974: 8) states that "Education itself is also a suprasystem: a system which intermeshes a number of sub-

systems, for example, the administrative system, the catering system, the examination system, the staff-recruitment system, etc... all of which must work together and facilitate the purposes of the most important subsystem of all, "the learning system". Therefore, everything seems to relate to everything else ("inputting" and "outputting"), for example, when Curriculum 2005 and Outcomes-based education was introduced; teachers needed to be trained before implementation could begin. However, this has not been achieved in our country in terms of re-skilling teachers to teach a new curriculum.

"The Systems Approach" to course design tackles course design through a process of logical development and on-going monitoring and evaluation, to allow for continuous improvements to its evolution. Educational technology is an open strategy, thus, allowing for the "four phase problem – solving approach," which requires the design and implementation of learning to relate to its objectives and that the process be treated as that of systematic "trial and error" with clear evaluation which will ultimately lead to improvement in the learning system itself. This is the crux of Outcomes-based education, since all tasks follow similar stages, namely, firstly, conducting a needs assessment, planning, implementing and evaluation of all learners and facilitators tasks encountered.

One of the main contributions of educational technology is that of access, which has led to the development of distance learning education systems and mass communication technology. Another major contribution has been the development

of technological support for people with physical disabilities (Hawkridge and Vincent, 1992). An important role for educational technologists could be to provide sufficient education, training and facilities for local and minority groups to be able to produce and distribute their own learning resources (South African post-apartheid educational reform in the rural areas) since not only access to programmes and learning should be considered, but also access to the means of production and channels of communication as well.

A major feature of educational technology since the 1950s has been the regular stimulus of technological innovation, since each new medium has raised hopes for an impact on education, for example, Overhead projectors, computers etc... There has been a move from viewing educational technology as solely as a "tools technology" approach (1940s) to incorporating systematic analysis of the entire teaching and learning process. Educational technology appears to be a rather elusive concept to define, due to its evolutionary nature and the vast number of terminologies associated with it, however, various definitions place emphases on "improving the overall efficiency of the teaching and learning process". (Govender, 1997: 87) states that "Educational technology is a systematic approach that involves the use of "technology in education" and "technology of education" via the process of design, utilisation, development, evaluation and management, thus it is therefore process driven, which inherently enhances the teaching process through systems orientation and rational problem-solving which must lead to efficacy and efficiency in the teaching and learning situation.

Donald (1990) supports the view that the most important reason for the elevated status afforded to educational technology stems from its insistence on viewing and analysing education via the systems approach, which is based on a rational problem-solving approach which underscores the principle that educational technology is "a way of thinking" (Romiszowski, 1990: 379). This shift in paradigm has resulted in education being analysed from a multi-dimensional view where all stakeholders, role-players, biotic and abiotic elements are given equal status (Percival and Ellington, 1984: 68), analysis and relevance within the educational landscape (Govender, 1997). Romiszowski (1990), too, states that it offers the "tools" to make evaluative statements on the educational worth of current systems as well as to produce innovative systems, like, "Collaborative Learning", "Co-operative Learning" and "Integrated Approaches" that respond to educational problems and opportunities. Most research suggests that in the 21st century educational technologists are in demand because they offer systematic and tangible solutions to a variety of pressing educational problems; thus, educational technology is the application of research, learning theory, emergent technologies and child and adult psychology to solving instructional and performance problems. Thus, it is Curriculum 2005 and Outcomes-based education that requires the aid of a powerful tool such as "technology" to assist in the re-skilling of teachers. However, Technology can be extremely effective in supporting the development of learner-centred and outcomesbased education, but only if and when it is skilfully employed.

"It is now the joint responsibility of all South Africans to have a stake in the education

and training system to help build a just, equitable and high quality system for all the citizens, with a common culture of disciplined commitment to learning and teaching." [Education Ministry. 1995. White Paper on Education and Training. Government Gazette No. 16312 of 1995. p. 18-19]. Therefore, for the achievements of equity, redress, development and economic growth rate in our education and training system, it is a prerequisite that the integration of technology into the different learning areas occurs throughout South Africa and incorporates all social groups. South Africa can favourably gain from the worldwide experience over several decades in the development of innovative methods of education, including the appropriate use of a variety of media. Thus, it is technology by its very nature that can empower learners for participation in the democratic process. Technology can be extremely effective in supporting the development of learner-centred and Outcomes-based education, but only if and when it is skilfully employed (Govender, 2000).

2.4. Alternate systems of education:

2.4.1. Distance Education:

It is extremely alarming to note that although we live in a knowledge society; there exists millions of illiterate people in South Africa. As a concerned educational technologist, I strongly believe that we need to implement alternate systems of education, for example, distance and virtual education in order to address economic, sociological and political situations and bridge the huge literacy gap amongst fellow South Africans. We realise that earning a living in post-industrial, knowledge age soc-

iety will require lifelong learning, training and retraining at every level (Jones, 1997). And it is educational technology that has helped to improve access to learning, since the best-known contribution of educational technology to access has probably been the development of Distance Education Systems (Plomp & Ely, 1996). However, distance learning programs can only be effective when there's a good match of material and media that has been carefully planned, designed and researched so as to meet the educational needs of the learners (Porter, 1997). We need to devise programs that will successfully aid teacher re-skilling in Curriculum 2005 and Outcomes-based education since these adult learners face numerous problems, namely, they are burdened with huge family responsibilities, long-hour jobs (extra-curricular activities after school hours), transport problems and low-earning salaries which do not cater for many to re-skill themselves, which is essential for the knowledge society in which we presently live in, especially regarding our new education system. Thus, re-skilling in Curriculum 2005 and Outcomes-based education can occur through essentially selfeducation by the learner, based on private study in libraries, audio-visual carrels and laboratories (Holmberg; Keegan & Sewart, 1988). According to Otto Peter's (1997), Distance Education is the most industrialised form of education. I strongly believe that is a very important method of re-skilling thousands of unprepared Curriculum 2005 and Outcomes-based implementers in South Africa.

There exists numerous definitions and terminologies of what actually constitutes "Distance Education", due to it's evolutionary nature and societal changes from agricultural to an information society. However, it is Holmberg's (1977: 9) definition

that seems most suitable, since it pays most attention to the needs of the learner, and he outlines the terms as covering the various forms of study at all levels which are not under the continuous, immediate supervision of tutors present with their students in lecture rooms or on the same premises, but which, nevertheless, benefit from the planning, guidance and tuition of a tutorial organisation. A comprehensive definition of the main elements of Distance Education have been properly outlined by (Holmberg; Keegan & Sewart, 1988) as follows:

- the separation of teacher and learner which distinguishes it from face-to-face lecturing.
- the influence of an educational organisation which distinguishes it from private study.
- the use of technical media, usually print, to unite teacher and learner and carry the educational content.
- the provision of two-way communication so that the student may benefit from or even initiate dialogue.
- the possibility of occasional meetings for both didactic and socialisation purposes.
- the participation in an industrialised form of education which, if accepted, contains the genus of radical separation of distance education from other forms.

Whilst, the Director of Distance Education (Moore, 1990) defined Distance Education

as the family of instructional methods in which teaching behaviours are executed, apart from the learning behaviours, including those that in a contiguous situation would be performed in the learners presence, so that communication between the teacher and learner must be facilitated. Distance Education is no more than a method of teaching (Foks, 1979; Hopper, 1979). The teacher and learner are both participating in the shared experience of exploring a common world, however, the teacher might have a little more skill in handling the "tools", for example, in accessing information from the internet, sending e-mail messages, etc... South African society has undergone tremendous transitional changes into a democratic post-apartheid society and in order to bridge the gap for economic empowerment (having a good education) and to bring Curriculum 2005 and Outcomes-based education literacy to the masses of teachers in South Africa, one needs to consider alternate systems of education, for example, the massification of education (internet programs, e-mail messages, audiovisual aids, chat or discussion rooms etc...) and different systems of learning, for example, Co-operative Learning, Collaborative Learning, Integrated Approaches and Cluster workshops in especially under-resourced areas.

Besides the use of e-mail, learners can collaborate with each other more directly and in a more synchronous communication by using chat rooms. A single modal communication such as a chat room, would work great in exchanging ideas, asking questions, sharing ideas and information (Donello, 2000). Recent research suggests that chat rooms have become popular in the United States of America. A chat room would work great for South African educators (who need to network ideas in Curricu-

lum 2005 and Outcomes-based education) since it is easy to use and most learners can use it without installing any new software on their machines.

In Distance Education an institution teaches and the goal of linking of learning materials to learning is at the centre of the organisational structure. South Africa needs financial support from government, non-governmental and donor organisations in order to successfully link systems to facilitate communication. All stakeholders need to support the process of change, for example, the recent "Dukuza Centre For Learning" that was set up in rural Kwa-Dukuza. The Department of Education and Culture subsidised the building of this "Telly-Centre" for teachers from neighbouring schools in this area, so that they could empower themselves, their learners, schools and communities with the new information age. Therefore our government is attempting to bridge the gap between South Africa's third world status with that of the economic empowerment of first world societies. The Department has also employed facilitators to assist these teachers in the use of computers, video-recorders and educational television. The Kwa-Zulu Natal Education Department has pledged to build 50 such "Telly-Centres" in the next 3 years in the deep rural areas of Southern Africa in order to upgrade the qualifications of most teachers and at the same time bring technology to the disadvantaged communities. This type of project would undoubtedly result in the proper re-skilling of many teachers in Curriculum 2005 and Outcomes-based education in rural areas in South Africa. A sizable proportion of the education budget should be allocated to create "Telly-Centres" in areas, especially in South African rural areas, in order to increase teachers understanding of the new curriculum. In terms of Distance Education, it seems that it is always the quantity and quality of learning that is always questioned. However, educational technology allows for the effective development of learning resources and effective individualized learning programmes by following the problem-solving approach to education (Systems Approach) in order to improve the efficiency of the learning process. Thus, although improved access to learning was achieved through Distance Education, supported self-study, new communication interfaces for the physically disabled and the popularity of mass communications increases, we need to realise that in the 1980's educational technology questioned interaction embedded in learning resources and interactive settings for using such resources. Thus, the implications of the developing information society requires the rethinking of educational goals and suggests that the role of educational technology in facilitating this achievement is vital (Eraut, 1991).

Although there exists advantages and disadvantages to Distance Educational programmes, as an educational technologist, a system can be improved by proper planning, designing, implementing and the evaluating of resources (Seels & Richey, 1994). In terms of the independence of the adult learners in Distance Education, learning resources or programs needs to be designed to promote more interaction during learning, so as to eliminate the phenomena of non-starters and drop-outs; so as to encourage motivation and skill acquisition which is needed in mastering the techniques of teaching Curriculum 2005 and Outcomes-based education.

Designers can emulate face-to-face interpersonal interaction through a computer by providing a mix of modalities and formats for exchanging information (Donello, 2000). By also adding an audio or video component this assists in conveying expressions, pitch and tone, thus, providing a format for learners to exchange different types of documents for instance, text, pictures, charts and other graphics or work on documents together facilitates another level of interpersonal interactivity. Thus, the abovementioned interactivity would greatly facilitate Curriculum 2005 and Outcomes-based education re-skilling for teachers via Distance Education programs.

There exists three different approaches to identifying the forms of Distance Education, namely, the choice of medium, institutional type and didactic model. In terms of choice of medium, the different forms of Distance Education can be identified by their use of technical media as the basis for the materials, for example, print-based, audio-based courses, video-based, computers-based, institutional type and didactic model.

In terms of print-based materials, the vast majority of Distance Education courses are print-based, however, for populations like South Africa, for whom literacy is a problem and in those deep rural regions where correspondence type programmes do not reach the vast majority due to poor infrastructure; new methods of Distance Education Systems needs to be designed. The use of audio-based courses in which educational content can be carried by audio-cassettes or transmitted over radio are frequently cost-effective and can be used by teachers grappling with ideas about assess-

ment criteria, lesson planning and the gathering of information about a particular theme being taught (Holmberg; Keegan & Sewart, 1988). Educational technologists can plan and design effective audio packages to reach the thousands of unprepared Outcomes-based teachers in our country.

Distance Education can also be video-based where the basic educational course content is broadcast on television or contained on video-cassettes. The development of cable television and home ownership of video-recorders can bring accredited series of distance educational programmes to the masses, for example, the University Of Minnesota's independent study division offers credit for audio-based Distance Education programmes. A number of institutions have also developed computer-based distance education programmes and educational technologists can create effective multi-media systems in order to bring Curriculum 2005 and Outcomes-based education re-skilling to the thousands of unprepared South African teachers. There should not exist only one institutional organisation influencing the planning and preparation of learning materials since educational technology based on the Systems Approach to problem-solving places emphasis on evaluation systems to improve the efficiency of the overall teaching and learning process. South Africa can also devise an Open University-Type Model similar to the United Kingdom in order to promote a coherent structural link between learning materials and learning outcomes. This will strengthen the possibility that learning takes place constantly and that unnecessary drop-outs are prevented. There exists programs with some similarities to Distance Education that can be effectively developed to bridge the gap between fellow South

Africans given the vast disparities between the different cultures, namely, extension programmes, university without walls and experiential learning programmes. In terms of extension programmes, these are ways of extending the expertise of a university or college to new community populations, and this could assist in the re-skilling of teachers in Curriculum 2005 and Outcomes-based education content. These programmes can offer daytime, full-time and part-time students by different means, at different locations or at different times access to educational programmes. South African teachers will benefit greatly from a "University without walls" programme, which uses an individualised programme based on a learning contract for students with clear learning objectives who cannot realise their educational aspirations through existing programmes (Holmberg; Keegan & Sewart, 1988). Thus, this type of programme can include learning credits, ordinary lectures, Distance Education elements, learning from community sources or job-related activities which can be evaluated and accredited by systems towards a College or University degree. This form of education will undoubtedly assist in updating teachers with new trends in our countries education policies.

The South African education system can develop Experiential Learning Programmes since these will recognise credit for prior learning which did not take place in a lecture room setting and was sponsored by an educational institution but was acquired through work experience including volunteer work, co-operative education or self-study. The South African government needs to provide adequate funds for Distance Education programmes so as to bring re-skilling to thousands of unprepared Curricu-

lum 2005 and Outcomes-based teachers, in order for proper implementation to take place. The Department of Education needs to form an organisation to provide tutoring for Outcomes-based education and Curriculum 2005 learning areas for all grades via Distance Education, the internet and educational television; so that re-skilling of teachers would occur in their very homes since many don't have the time or means of attending formal tertiary institutes to engage in coursework in this vast new curriculum. The setting of Telly Centres and the provision of facilitators having some expertise in the new curriculum would undoubtedly facilitate the on-going development of teachers in the new learning areas. The Education Department should ensure that educational technologists are at the head of these Telly Centres, since they base planning and preparation of learning materials on the "Systems Approach" to problem-solving which places emphasis on evaluation systems; which would ultimately lead to improving the efficiency of the overall teaching and learning process in Curriculum 2005 and Outcomes-based education in our country.

2.4.2 The Internet:

Although the internet has influenced many industries in its short life, its most profound contribution has been to education. It is its interactive nature that enriches the experience and makes resources such as worldwide libraries, laboratories, curricula and expertise available at the click of a button. Much research has shown that education officials are also searching out opportunities to help narrow the gap between the "information rich and information poor" by using schools as a means to provide internet access to all; since this year the Gauteng Department of Education

has taken the initiative to start an Internet connection programme, namely, "Gauteng Online" which is aimed at connecting all the province's schools via the internet. The Gauteng Education minister believes that this is education for the 21st century; since this will broaden our data network, but also advance our pupils technologically. This type of cross-pollination stands to greatly benefit the ever-changing current educational process in South Africa. Thus, by uniting the departments we are actually following first world countries trends, which indeed argues well for South Africa's global future. Although almost all independent schools have computers which are connected to the internet; the Department of Education says that 87% of South African schools do not have computers. Thus, it is Cluster workshopping at the various schools which do have internet facilities, could assist the Education Department in bringing daily updated access to Curriculum 2005 and Outcomes-based education curricula for many unskilled educators.

Although Professor Kader Asmal says that his Department is faced with a challenge to equip 23518 schools that do not have computers; he indicates that we cannot succeed with the required quality improvement to the fullest unless we have resources appropriate enough to take us into the 21st century. He also feels that these resources include qualified teachers, appropriate work-space, equipment and the good use of video and broadcast technologies. Most experts suggest that the web acts as a motivator, allowing pupils to learn by doing far better. Therefore, it would definitely be the internet that is making significant contributions when it comes to easing the demands of providing relevant, interesting and challenging new information about

Curriculum 2005 and Outcomes-based education to South Africa's 13 million schoolgoing pupils.

Internet mail is the cheapest, most flexible and farthest reaching e-mail network in the world today and through it you can communicate with tens of millions of internet users which is bringing us closer to true global communications. The internet may possess vast information, but the world-wide web, which is the internets collection of thousands of informative, graphical, multimedia-ready, hyperlinked sites contains even greater volumes of information.

Mike Chiles, Media Director at Western Cape Department of Education, says that there are ongoing encouragement for schools to use technology projects, for example, "The Telecommunications project" was an effort to link all schools in the province to the internet; and in this way appropriate web based resource material is sourced from the internet and made available to the schools via communication with the Department of Education. This in itself is a wonderful opportunity for the Education Department to provide much needed Curriculum 2005 and Outcomes-based education resource material to assist in the re-skilling of teachers in our province.

Kwa-Zulu Natal seems to be last in terms of its use of updated technology in schools, since other provinces have long started programmes to gain local and foreign funding for the setting up of this powerful resource, for example, the Khanya project, an initiative which networks schools in the Western Cape to facilitate the dissemination of

important curriculum information.

And although access to the internet has a profound role to play for students; the primary concern of our Education Department should be to support teachers in Curriculum 2005 and Outcomes-based education programmes in the form of retraining and correspondence. If one looks at the educational success stories in a third world country like Botswana, one realises that the experiences of using technology in restructuring an entire country's education system is highly effective, since a longitudinal study of five countries in Africa conducted by the West Indies (which ended in the year 2000) proved that Botswana's school pupils scored higher in literacy and numeracy skills as compared to South African scholars (although the South African economy is considered more developed as compared to Botswana) because of most pupils use of educational television and the internet in Botswana schools. I feel that the Education Department should take its cue from such country's educational success and from M-Web (a leading service provider) in dedicating an entire web presence to assist and guide pupils in their studies and at the same time allowing for parents to become more involved in their childrens' studies since Curriculum 2005 and Outcomes-based education warrants the involvement of all stakeholders in education.

Similarly the Department of Education and Culture (Kwa-Zulu Natal) should provide on-going support for teachers since this would provide continuous re-skilling for teachers implementing Outcomes-based education and Curriculum 2005.

2.4.3 Educational Television:

Media educationalists have claimed a totally unique role for media education as a part of the general education of all ages (Fletcher, 1987). Its importance is irrefutable in terms of assisting us to make sense of our complex world. Thus, television plays a vital part in all aspects of our lives. Besides its entertainment aspect, it also provides knowledge that updates us with local and international information on a daily basis. Therefore, educational television concerning our new system of education will reinforce the re-skilling of teachers on a daily basis. In this way teachers will also be adequately prepared to teach the different phase organiser themes in each learning area. This form of media education for teachers will offer a unique opportunity for collaboration between parents, teachers and pupils, where knowledge is not merely handed down but experienced by all the participants; which will be invaluable knowledge, since all stakeholders in education are not familiar with all aspects of curriculum 2005 and Outcomes-based education.

Although mass media (television) usually elicits multiple of messages, it also carries value messages about the importance of our personal image and being, thus, one major message that we receive through the media is that media messages are "naturally" correct. "Today's teachers should know how to organize a learning environment that includes a wide variety of learning media; since the right audiovisual materials can communicate information, teach skills and provide general cultural experiences that learners need" (Wittich & Schuller, 1979: 19). The mass media (television) used as an instrument of instruction would be invaluable in re-

skilling educators for Curriculum 2005 and Outcomes-based education, since these teachers would at least find some time above their family commitments to view these Departmental programmes in the comfort of their own homes; even if they could not retrain themselves by attending a formal tertiary institute for further development. Educational television is a very powerful medium since it can reach many learners at once and programmes can be translated into different languages to accommodate the different language groups in our country. Many countries have adopted educational television in the late 1950's and early 1960's mainly because teachers see the benefit of using electronic mass media to bring stimulating materials from the world beyond into the classrooms. Rockman and Burke (1989: 190) identified 7 possible reasons for the utilization of educational television, namely, improvement of quality of programmes, television as a catalyst, television as a means of extending children's experience, television as a means of introducing affective education, television as a means of equalization of educational opportunity, television as a means of improving efficiency and productivity and television as an instructional based system. Since Outcomes-based education and Curriculum 2005 encourages learners to develop their knowledge, skills, attitudes and values through mainly practical tasks, educational television similarly emphasises learning through activity rather than memorization.

By realising the significance of technology in education, the Department of National Education forged a partnership with the South African Broadcasting Corporation (SABC) in July 1996. The Institutional Division of the SABC is a product of the partnership between the Department of Education and the SABC. In July 1999 the

SABC successfully launched "School TV", a groundbreaking new daily television service to support primary schools. The programmes are designed to support the Foundation Phase of General Education and Training and are guided by the requirements of Curriculum 2005. "School TV" cannot be seen as a panacea but as an extremely powerful tool to support and aid improvement and development of education in South Africa (Govender, 2000).

Thus, the Education Department should be accredited for starting extremely useful educational programmes like "Kagiso Trust", "Eduspectrum", "Education Express" "Open Sesame" (Appendix A7) and "School TV" (Appendix A6); however, more structured programmes should be developed in order to disseminate continuous information about our new curriculum and teaching methods for the different phases for teachers implementing the new system.

At present Foundation Phase Outcomes-based educators can supplement their lessons with the following school TV programmes, which are categorized into 3 learning areas, namely, Literacy Programmes such as "Open Sesame", "Fundani Nathi" (Read with us), "Cula Nathi" (Sing with us) and "Dweba Nathi" (Draw with us). The Numeracy Programmes are "Open Sesame" and "Number-time", whilst the Lifeskills programmes are "Open Sesame", "Fourways Farm" and "Dumani". The SABC School TV Timetable (Appendix A6) provides information about the name of the programme, medium of broadcast, duration of programme and broadcast time. Whilst the School TV educators' resource book (Appendix A7) provides valuable informat-

ion about the name of the programme and its episode number, phase organizer, programme organizer, suggested outcomes and its follow up activity. This form of educational television acts as an appropriate resource for re-skilling Foundation Phase educators currently experiencing difficulties in implementing Curriculum 2005.

For those disadvantaged communities, the Education Department should at least allow school hours off for teachers to attend Cluster workshops that would take place at centres that do have media facilities. It is this form of networking and collaboration amongst the various stakeholders in education that would ultimately provide easy methods to disseminate South Africa's new curriculum and methods of teaching and at the same time try to "level the playing fields" by improving post-apartheid education and providing quality education for all South Africans. Everyone needs to realise that today, television has replaced the print form as the information medium, and that television and interactive video present powerful opportunities for learning (November, 1992).

I feel that curriculum experts should take their cue from the South African Broadcast Corporation's successful launch of "School TV" in 1999, since this service supports the Foundation Phase of General Education and Training, which is guided by the requirements of Curriculum 2005. Similarly, a series of educational television programmes in the different learning areas for the intermediate and senior phases should be developed, since this will provide an extremely powerful tool to support and aid improvement and development of education in South Africa.

2.4.4. Newspapers:

Maureen King (Foundations Phase Facilitator) states that with regard to the development of material, it is apparent that teachers are not material developers, they are teachers, and a sustained writing programme is necessary before teachers feel capacitated enough to begin to develop their own material, specially if the material has to be refined for publication to a larger audience. Hence, the assistance of a materials developer is necessary to refine and rework the presentations by teachers (Royal Netherlands Embassy Foundations Project, 2000). Thus, having been inadequately re-skilled to implement Outcomes-based education and Curriculum 2005; myself and thousands of other teachers in Kwa-Zulu Natal undoubtedly welcome the use of the "Daily News Learn Supplement" (Appendix A8) and "The Sunday Times Readright Supplement" (Appendix A12), likewise thousands of matriculants look towards "Matric Q and A" (Appendix A9) as an important source of guidance in preparing for their crucial final examinations. Although there exists a few deficiencies in its production, I strongly believe that its advantages are numerous; since it has been an on-going support for change for the past few years and not only has its target audiences (viz. teachers and learners) benefited from it but also the wider community itself. I have first hand feedback on this subject since my brother (a present matric pupil) explained its great value and importance as a study aid in preparing for his end of year matric examinations, since almost his entire Grade 12 "Geography Trial Examinations Paper" was similar to the Daily News Education Supplement's (Matric Matters) Geography Questions in terms of the types of questions asked, the layout of the paper and content covered in the various sections being

tested. This speaks volumes of its great value to the majority of learners. Firstly, it is the publishers and donor organisations, namely, The Daily Newspapers, Mondi Papers, The Media In Education Trust, Kwa-Zulu Natal Department of Education and Culture, USAID, The Royal Netherlands Embassy, Technikon Natal, Liberty Life Learning Channel, etc... that need to be praised for taking the wonderful initiative and time to upgrade the standards of education of our fellow South Africans in this crucial period of transformation in our history, thus it is this type of sharing of expertise, access for thousands of learners and on-going support for change that will ultimately assist in upgrading the standards of our South African education system. Although electronic media dominates some of our lives, it is the print format that still serves as an inexpensive, portable, "storable" medium, and handouts drawn from the "Daily News Learn Supplement" (Appendix A8) have found a common place in most schools. The Supplement caters for the foundation, intermediate and senior phases of the schooling curriculum.

However, do teachers consider the design factors that contribute to an effective handout? The Learn Supplement does visualise learning materials from the learners point of view, since the matric pupils are able to interpret it well enough and my grade 5 pupils are able to complete these activities with great excitement and ease. The style of the presentation is appropriate in terms of its logical setting and use of colourful illustrations that ultimately aids in effectively communicating its messages to its consumers.

However, one of the Learn Supplements greatest deficiencies is its language barrier, since all publications have been issued in English; yet the majority of Kwa-Zulu Natal's population of learners' mother tongue is Zulu. In respect of language used in the Foundations package and other supplements, trainers noted the request by teachers to include other languages into the learning programmes (Royal Netherlands Embassy Foundations Project, 2000). The above is an important request given the principles of additive bilingualism and multilingualism in the new language in education policy document. Literally mother tongue instruction is used at the Foundations Phase, thus it would be useful to consider the use of other languages in the materials developed in the learning programmes. And, although it is much easier for Zulu speaking teachers to write material in Zulu, the problem is with the Natal Newspapers, because it is an English newspaper.

However, the Learn Supplements' advantages far outweigh its disadvantages since its attractive presentation tends to transmit information more efficiently in all Learning areas and most importantly they are interactive since most activities relate to the learners and educators lives. Since Outcomes-based education is a new system of education for all stakeholders in our country, everyone requires some guidance and what better way than that of resources forming an integral support system for the reskilling of especially educators and also for learners to work independently at home with convenient access to the newspapers. The information is summarized and the use of well-positioned graphics adds to the easy readability of the newspaper. The information is organised in a manner that elicits pertinent questions from its readers.

readers. The concepts are arranged in a logical manner and the use of appropriate vocabulary facilitates the understanding of the different sections being taught. There are some very creative ideas and my Grade 5 learners enjoy especially the arts and crafts ideas. My puppetry, egg tray flowers, macaroni bead necklaces, party hats, Easter baskets, pencil holders, seedling batches, potato-print cutouts, etc... have all been thoroughly enjoyed this year, since I have integrated the different ideas from the eight learning areas creatively with the aid of the wonderful Daily News Learn Supplement ideas.

The pictures are closely integrated with the meaning of the written aspects, thus, increasing the users comprehension of the articles. Similarly Anderson (1984) describes reading as an interactive process, thus, the more related a readers schemas are to the content and structure of the text being read, the more likely the reader is to comprehend, learn and remember the information. Therefore, the publishers of the Daily News Supplement have designed their articles so that participants can engage in discussion, reading, craft-making, dialogue, art, music, drama, etc...so as to make our learners more critical, independent and at the same time they will be learning important lifelong skills. These lessons include teaching suggestions that are designed to assist learners to activate prior relevant knowledge before they start reading. The Foundations, Intermediate and Senior phases editions is a follow-on theme to the next edition, thus, providing both educators and learners with suggestions for building prerequisite knowledge. The activities assist readers to meaningfully integrate what they already know with what they are reading. The publishers have organized each

theme coherently so as to highlight important messages. Although the concepts, vocabulary, as well as the structures of the text are most appropriate to the different phases undertaken by the different learners; the publishers should be aware of the strong effects of culture on comprehension, and not so confidently assume that children from different subcultures will bring common schemas to the written material. Although there exists the incorporation of all subcultures in the graphics, the language medium used is English, although majority of the learners in Kwa-Zulu Natal are Zulu speaking. The Supplement should consider printing editions in at least two of the most important official languages of our province so as to facilitate easier access to thousands of more learners and educators. The Learn Supplement also has a section for assessment of each learning programme, since the impact of "designed instruction" on learner achievement is of primary importance in this era of educational accountability.

The format facilitates independent and critical thinking. The Learn Supplement has well defined strategies of how to handle different activities and most lessons provide step-by-step instructions and effective guidance on how to complete given tasks successfully. There are also built-in opportunities for practice with feedback and corrections from assessment sections provided, so as to evaluate programmes. And although there might be people who believe that learners should be able to learn from just about anything, there are a number of researchers who have found that the more organized and readable a text is, the more students will learn from it (Osborn; Jones and Stein, 1985). Thus, some researchers have labelled a text that is well organized

and readable as "considerate" to its audience; similarly the Daily News Learn Supplement allows for great interaction amongst its users, which indicates that it is user-friendly. During my interviews most Supplement users agreed that the neat, bold headings and subheadings coupled with the use of numbers and letters for enumeration of specific points are signs of local coherence. The various titles also have an important effect on comprehension as well as visual displays, diagrams and charts.

In presenting a cross section analysis of the Foundations Supplement, 10 academics from the different disciplines at the University of Durban-Westville completed a visual Design Checklist (Appendix A10) of the Supplement in terms of its overall pattern arrangement, verbal elements and appeal. Whilst 10 staff members at the same University rated an appraisal checklist (Appendix A11) of random supplements produced over the period February 2000 to October 2000. The University of Durban Westville's Centre for Educational Research, Evaluations and Policy research conducted (The Royal Netherlands Embassy Foundations Project, 2000) clearly indicates that the areas that need attention in the design of the supplements are more technical than pedagogical and include issues of advertising, the user guide and table of contents. An interview with Outcomes-based education Foundations workshop trainer (Maureen King) states that "The activities are largely determined by the educators who attend the training programmes, and being largely foundations educators, the agenda is closer to them than any other stakeholder... they know what is required and they understand the needs of the learners better than any other..."

The above mentioned study indicates that anecdotal evidence suggests that the 5 visual literacy goals for learners and educators are being achieved in some ways at different intensities and these would include the following observations by educators in the classroom where the Foundations supplements and the Foundations Package are being used effectively:

- Learners are becoming more creative and thinking more critically by identifying, analysing, interpreting and evaluating what they see.
- Learners have become visual makers themselves, demonstrating the ability to create mental pictures and to communicate "visually to others".
- Tangible evidence that learners have become more perceptive individuals by recognising and appreciating aesthetics of visual imagery and by understanding, accepting and valuing personal, cultural and historical differences in image creation.
- Learners have become more discriminating consumers, understanding the motives, methods and emotional appeal of advertising visuals in a modern society.
- In keeping with Outcomes-based education, pupils have started to become lifelong learners, with a positive attitude about learning how to learn about visual images.

The Foundations Education Supplements provide lifelike problems, therefore, in the process of grappling with the real-world challenges learners can acquire the knowledge and skills needed in the real world. And since Outcomes-based education

is the official methodology of Curriculum 2005 and Curriculum 2021, most teachers are organising their instruction around themes and the Supplements units provide a rich focus of this within which learning takes place. The notion of shared experiences in groupwork is also mediated. The Foundations Learn Supplement is excellent in terms of linking the specific outcome and assessment criteria to each activity, thus, affirming a more holistic approach to Outcomes-based education in general (Royal Netherlands Embassy Foundations Projects, 2000).

The Supplement is designed such that learners are required to perform activities that build toward the objective and more recently, cognitive theories of learning, which focus on internal mental processes, also support the principal that effective learning demands active manipulation of information by learners. Theorists have deduced that there exists several necessary conditions for effective learning of each type of objective; however the one condition that pertains to all objectives is practice of the desired skill. And the form of participation covered have included practicing new words, solving a maths problem, practicing sign language and personal learner engagement (Heinich et al, 1999; Grabowski, 1996).

There exists strong evidence of curriculum assumptions focusing upon pedagogical, historical, epistemological and socio-political content. The curriculum content makes innumerable references to culture, class, ethnicity, race and language, thus, advocating Outcomes-based education's principles of education for diversity. Therefore, this inclusive social reconstructionist perspective strives to empower every

learner to seeing themselves as full participating members of South Africa's new democratic society. The curriculum content used is generally approved by the Department of Education and pedagogically sound since it is underpinned by research. There also exists evidence of instructor-independent instruction since media can be effectively implemented in formal education situations where a teacher is unavailable or busy working with other pupils. This type of media provides listed objectives, assembled materials and self-evaluation guidelines. Thus, informal educational settings, for example, learners and parents at home or at the work site can use the print media such as the Foundations Supplement. Much discussion with teachers who use the supplements, indicated evidence that cooperative learning and teamwork had accelerated considerably (Royal Netherlands Embassy Foundations Project, 2000).

Most research suggests that Distance Education is a rapidly developing approach to instruction worldwide, and although no systematic or conscious Distance Education approach is in place, given the rurality of some of the schools, the Foundations Supplements have the potential to develop as a key form of distance learning education for many rural learners who have no exposure to any other type of media. Foundations Supplement learners are involved in more direct, concrete kinds of experiences, such as field trips, or role playing exercises, whilst more advanced learners usually have sufficient knowledge for using audio-visual or even verbal materials. Therefore heterogeneous groups, including learners varying widely in their conceptual sophistication, may profit from the differing levels of content presented.

The above mentioned project suggests that teacher talk and set work are not sufficient, due to the different ability groups of pupils, however, the Foundations Supplement alludes to the development of several types of intelligences with a view to developing a child more holistically. Although many teachers and learners noted the popularity of the Foundations Supplement, an academic from the University of Natal, Costas Criticos (materials developer and educational technology specialist), noted that the Supplements were executed at a reasonably high level for an in-house facility (coordinated by the Media in Education Trust and the Foundations Phase advisors in both Kwa-Zulu Natal and the Eastern Cape Education Departments). However, he also states that aspects like the Supplements design template, design rationale, formatting, typography, print production, illustration quality, lists, headings and navigation devices should be audited by the copy-editors and publishers during its developmental stages.

I strongly believe that The Daily News Education Supplement is a wonderful resource, since it assists all stakeholders involved in the education system, especially thousands of educators daily in their classrooms, who have been inadequately reskilled to implement Curriculum 2005 and Outcomes-based education effectively and efficiently. It not only provides matriculants with excellent guidance in preparation for their crucial trials and year- end examinations, but also provides learners from different grades with educative, fun-filled life-skills activities. Thus, I believe that its advantages far outweigh its disadvantages. Its unity, graphics and audience appropriateness is good, since studies indicate that pictures closely integrated with the

meaning of the text may markedly increase comprehension (Levin and Lesgold, 1978; Schallert, 1980). The publishers use of appropriate topics, concepts, sentence structure, length and vocabulary make the resource user-friendly, thus learners can work with activities at their own leisure and complete exercises without the guidance of an educator.

However, the diverse subcultures languages of Africa were not considered when publishing this resource, since the majority of learners in our province are Zuluspeaking and come from rural areas (bringing with them different cultural and different educational experiences) and will undoubtedly find the language a barrier to interpreting this resource. According to Schema theorists, readers use sets of schema (prior knowledge) to interpret information. Thus, the more related a reader's schema are to the content and structure of the text being read, the more likely the reader is to comprehend, learn and remember information (Anderson, 1984). The resource should activate relevant knowledge before the user reads it, which in this case is only favouring a select group of the population, namely, English first language learners. Therefore, it is very important that publishers, researchers, curriculum developers, teachers, and all others involved in producing the Education Supplement, consider the use of correct text structures that capture the fundamental patterns of human thought such as comparison and contrast, temporal sequence, cause and effect and problem solving incorporating all the different cultures lifestyles. Although, the English language is the linking language of the world, in a province like ours at least a second important official language should also find its way in the print medium of important

resources like the Daily News Education Supplement and there should also be greater access of these publications in rural areas. Although the role of the publishers is a complex one, since all educational consumers cannot be satisfied, they have a very important educational function since all stakeholders in the education system should have access to the very best tools to assist in their education. Although The Daily News Education Supplement's criticisms may be few, its advantages are numerous, namely, economy, individualization of instruction, organization of instruction, tutorial contributions and improvement of teaching practices, thereby upgrading the quality of education for all South Africans.

The Daily News has started a wonderful project in terms of involving many donor organisations to provide newspapers to disadvantaged schools. However, school Governing Bodies, too, should take their cue from these private companies and fundraise in order to set aside a yearly budget to purchase these valuable resources. Those disadvantaged schools that have been adopted by a particular private company on a monthly basis can network and exchange different editions of newspapers with other feeder schools in the area, and in this way cluster workshops would also be an invaluable resource in re-skilling educators for Curriculum 2005.

2.4.5. Cluster Workshops:

"It seems imperative that we encourage all teachers to learn all the time, every day" (November, 1993: 2). He goes on to mention that part of the reason why staff dev-

elopment too often stops with training and never moves on to the important education or thinking level is because of a lack of respect in the professional culture for the teacher as a learner. And while most corporations place a high premium on their professionals' capacity to learn and apply new skills, education has no tradition for valuing the teacher as a lifetime learner, which at present requires most of all, the application of new skills in teaching Curriculum 2005 and Outcomes-based education. We need to develop a clear vision of how technology will really make a difference in areas like lifetime skills and new roles for teachers. There are probably more good ideas frozen in teachers heads than in university academics, yet most of these ideas are useless if not shared amongst colleagues. Technology can only be applied unless education professionals feel comfortable about sharing ideas all the time. Therefore, it is cluster workshopping in Curriculum 2005 and Outcomes-based education that will broaden the scope and effectiveness of staff development. We should always deem it necessary for all teachers to learn every day, since the most cost-effective resource in achieving the re-skilling of teachers is each another.

An interview with Foundations Supplement Facilitator (Maureen King), suggests that coordinating workshops has been complicated for most trainers, since Kader Asmal's ruling that workshops and training be done out of contact time, means that it is not easy to schedule workshops for teachers. She goes on to say that she doesn't mind taking teachers away from their schools, if they are going to gain something. There generally exists a positive feeling about cluster workshops amongst my colleagues at school and other friends in the teaching fraternity, since they believe that these types

of workshops lend itself to networking with new ideas, a variety of skills are learnt at workshops and any workshop enables teachers to develop themselves. The teachers who attend workshops normally return to their schools and share information with others. This form of cluster workshopping ensures staff development on an on-going basis.

It has taken our Education Department too long to realise that a system of on-going networking and cluster workshops amongst educators would be most important in assisting educators in implementing the new learning areas of Curriculum 2005; since the school at which I teach only received documentation (refer to appendix A1: Circular no. 28 of 2001) about forming District Learning Programme Committees representing as many schools as possible for cluster workshopping to begin on the 24/05/2001. The schools at a Circuit level will be clustered and sixteen educators (two per learning area) from each cluster will be elected on to the District Learning Programme Committee, which will be co-ordinated by the District Curriculum Unit and Outcomes-based education district facilitators who are requested to work in consultation with the Regional curriculum co-ordinator. The Department is hoping that these structures will be established as soon as possible, so as to support educators and ensure effective implementation of Curriculum 2005 at grass roots level. Our Department of Education needs to fully utilize the type of communications infrastructure that allows professionals in other fields to simply pick up the phone and ask each other for help which is much needed in our present day's ever-changing education system, for example, the kind of infrastructure in a state-wide network in

Texas, called TENET (Appendix A5), which enables teachers to talk to other teachers in their state and around the world, and it only costs them 5 dollars to open an account (November, 1993). I strongly believe that starting a network like the above mentioned would be a wonderful opportunity for the Kwa-Zulu Natal province to reskill teachers especially at present, with the uncertainty of the many new changes in our schools new curriculum; which would undoubtedly assist us in keeping abreast with new information from the various stakeholders in education.

2.5. Conclusion:

There is great necessity for the use of alternate types of resources in the re-skilling of teachers for Curriculum 2005 and Outcomes-based education. Since this education system is a new venture for basically all stakeholders in the education system; therefore the Education Department should realise that it is on-going teacher-support and the use of educational technology at various levels that will ultimately lead to improving the teaching and learning processes in our country. There needs to be a structured plan that has to be effectively co-ordinated at the Education Department's National, Provincial and Regional levels in order to make provisions for the reskilling of Outcomes-based educators; since many implementers are totally confused about its assessment strategies, teaching methodologies and content material. Kahn (2000) sees this as the most far-ranging change to education that this country has ever seen, however, the Education Department does not seem to be geared to manage this vast change. Thus, Jansen (2000), too, reiterates this by indicating that very little con-

sideration was given to the complexity of resources and support systems needed to move from policy enunciation to policy enactment within schools and classrooms. It is very important to note that curriculum change requires well-trained teachers and a well-organised support system, if the focus is on changing teacher understanding.

The education authorities need to realise that the implementation of a new education system cannot be rushed due to the vast disparities in resource distribution amongst South African schools. Everyone needs to realise that the best possible chance for its success will depend upon adequate resources for the change management process. It is very disappointing to note that most teachers have not much direction in their implementation of this new education system; and ultimately it is the learners that become guinea pigs in all the government's so-called properly planned education policies for our country. Chisholm (2000), in reviewing Curriculum 2005, notes that one of the weaknesses of the new curriculum was that curriculum designers have tried to avoid telling teachers exactly what to teach. She goes on to mention that many are confused about its design and implementation.

We need to find appropriate types of resources that will aid in the re-skilling of teachers for Curriculum 2005 and Outcomes-based education. And since the Department of Education's five day programme to workshop teachers in a totally new and comprehensive curriculum was inadequate; I envisage that alternate forms of reskilling via. the use of appropriate resources, namely, Distance Education, the internet, educational television, newspapers and cluster workshops could bring adequate

re-skilling to many teachers. It is undoubtedly these types of on-going teacher-support and the use of educational technology at the various levels that would ultimately lead to improving the teaching and learning processes in the classroom.

We live in a knowledge society, thus, educational technology will act as a powerful resource in re-skilling Curriculum 2005 and Outcomes-based educators. The impact of educational technology for teachers is manifold and of utmost importance since it provides opportunities to be creative by designing teaching and learning resources catering for various education and training contexts so as to enhance the quality of the teaching and learning environment. Sampath (1984: 132) and Romiszowski (1990: 79) have concluded that educational technology has been the most powerful change agent thus far in restructuring education systems in countries like Botswana, Hungary, Scotland and Australia; so why not South Africa? It is educational technology's "Systems Approach" to course design that tackles it through a process of logical development, continuous monitoring and evaluation that will allow for continuous improvements to its evolution. Educational technology sees evaluation as an essential ingredient. We notice that throughout history, media and technologies for learning have influenced education. Many powerful tools such as the computer, offer possibilities for improving the learning process.

It is the teacher that will make the difference in the integration of media into this process. The roles of the facilitator (teacher) and learner are clearly changing because of the influence of media and technology in the classroom. Here, the teacher becomes

the director of the knowledge-access process. And using different instructional strategies, the teacher may sometimes provide direct instructional experiences for the learners, thus the role of the teacher is paramount in the instructional planning process. Whilst networking with other teachers and media specialists also allows for integration of media into instruction so as to greatly magnify its impact upon learners. One of technology's main contributions is that of access, which has led to the development of distance learning education systems and mass communication technologies. Thus, it is Curriculum 2005 and Outcomes-based education that requires the aid of a powerful tool such as "technology" to aid in the re-skilling of South African teachers.

Therefore, alternate systems of education, such as Distance Education, the internet, educational television, newspapers and cluster workshops will undoubtedly increase re-skilling of Curriculum 2005 and Outcomes-based education teachers. However, these types of resources need to be effectively structured in order to re-skill educators. Nowadays teachers face hectic daily schedules and through Distance Education, essentially through self-education, which can occur at any time and at any place, will ensure the re-skilling of teachers. Educational technologists can also plan and design effective audio packages and literary packages, which are cost effective, so as to reach the thousands of unprepared Outcomes-based educators in our country. Distance Education can also be video-based where the educational course-content, namely, Outcomes-based education and Curriculum 2005, is broadcast on television or contained on video-cassettes, since homeownership of video-recorders, are more of a

necessity than a luxury nowadays, and this will ensure bringing accredited series of Distance Education programmes to the masses of teachers grappling to come to terms with such sudden and drastic changes in our educational system.

Another very valuable resource is the internet, since it has made profound contributions to education via its interactive nature that makes powerful resources like worldwide libraries, laboratories, curricula and expertise available at the click of a button. In this way the Department could set up a vast network to link all education stakeholders in the different provinces and disseminate much needed Outcomes-based education and Curriculum 2005 resource materials on an on-going basis. Another wonderful resource would be educational television, since a series of televised programmes regarding our new system of education will reinforce the re-skilling of teachers on a daily basis. Besides providing an unique opportunity for collaboration between the various stakeholders in education; it would also provide valuable information about different phase organiser themes in the different learning areas. Thus, the mass media (television) presents powerful opportunities for learning in the comfort of one's own home by increasing supportive opportunities for teachers to be re-skilled in our new education system.

I also strongly believe that newspapers would be a very advantageous resource in assisting teachers since it targets the masses, is inexpensive, portable, duplicatable and a "storable" medium. Teachers can also work independently at home since almost everyone has easy and convenient access to newspapers, for example, the "Daily

News" acts as an invaluable resource by providing sub-sections like "Matric Matters" and the "Learn Supplement". If newspapers are properly designed in terms of the type of language used, its format, colour, activities and the type of responses it elicits; this would greatly assist in teaching skills and content- related matters for teachers to implement in the classroom. Newspapers would also prove to be a useful medium to elicit discussions in Cluster workshops. Finally and most importantly the Department of Education should realise that we live in a knowledge society and that technology is ever changing and for us teachers to become lifelong learners; "it seems imperative that we encourage all teachers to learn all the time, every day" (November, 1993: 2).

If the Department of Education provides alternative systems of education via resources like, Distance Education, the internet, educational television, newspapers and cluster workshops; it would not only re-skill teachers in our new education system but also allow them to gain access to the "Superhighway of Globalisation" since they would be able to gain updated information on a regular basis about Curriculum 2005 and Outcomes-based education in an inexpensive way in the comfort of their very own homes and at their leisure. All the above mentioned resources would provide much needed, on-going support for the implementation of a new, revised and streamlined Curriculum 2005, which is here to stay states South African Education Minister, Prof. Kader Asmal.

As a result of the review of Curriculum 2005 instituted by Kader Asmal last year, the draft revised National Curriculum Statement was released in August 2001. Much pub-

lic comment suggests that the year 2002 should necessitate the preparation for teacher orientation to learning programmes and very importantly emphasise the development of policy for learning support materials (Sunday Times ReadRight Supplement, 2001). And in order to ensure that enough time is provided for a manageable implementation process, time frames that are proposed suggest that the years 2003, 2004, 2005, 2006, 2007 and 2008 emphasise teacher development and orientation, the supply and development of learning support materials, development of learning programmes at school level and the orientation of school and district-based management. Here again we notice the importance of resources like newspapers, cluster workshops, educational television, distance education and the internet in disseminating continuous re-skilling in South Africa's dynamic new education system. Therefore, if teachers are re-skilled via the use of the above mentioned technology resources, they would be able to apply technological processes and skills ethically and responsibly, using relevant knowledge concepts. They will also be able to access, process and use information in a variety of contexts. In this manner learners will be able to effectively demonstrate an understanding of the inter-relationships between technology, society and the environment, thus allowing for the efficient implementation of the first General Education and Training Certificate for the revised National Curriculum Statement in 2008.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction:

This chapter concentrates on the research procedure that was adopted to undertake this study. The researcher employed the technique of collecting data by mainly using two instruments, namely, questionnaires and semi-structured interviews in order to answer each of the three critical questions. The "Case-Study approach" was used to study the characteristics of three groups of grade 4 and grade 7 teachers at three schools in the Crossmoor area in Chatsworth (Kwa-Zulu Natal). Case studies are generally concerned with the in-depth study of a single or a few programs, events, activities, groups or other entities defined in terms of time and place (McMillan, 2000). The researcher also employed Nonprobability sampling procedures since convenience sampling was used in order to choose participants for the study.

3.2. The nature of this research:

This study incorporates both the Quantitative and Qualitative research methods of data collection, however, it mainly involves the Qualitative approach. Many suggest that qualitative researchers are supposed to aim at formulating a theory that will explain their data, similarly my study aims "to explain what forms of re-skilling for teachers are most suitable for the implementation of Curriculum 2005 and Outcomesbased education. Qualitative designs allow the hypotheses to emerge from patterns of

recurring events, thus the methodology of the study type includes a case study of 3 schools, in a particular area in which teachers have been workshopped in Outcomesbased education and Curriculum 2005. Qualitative researchers are thought to be operating inductively by beginning with particular observations and proceeding towards formal hypotheses or substantive theories (McMillan, 2000). This study also begins with participant observations of the following, namely, small-scale workshops for teachers which have been held in the past, have been insufficient in re-skilling teachers to adequately implement Curriculum 2005, and I will be proceeding towards formulating a formal hypothesis or substantive theory by measuring it against data sources. The qualitative paradigm allows researchers to meticulously watch for unanticipated leads to explore and to continually adjust their data-collection strategies to benefit from information of which they have become aware of only during the research process itself; which is done through successive cycles of hypothesis formulation and hypothesis evaluation, in terms of emergent designs (Howe, 1988). Thus, this study has designed instruments that elicit information about whether distance education, the internet, cluster workshops, newspapers or educational television would be most appropriate to re-skill educators to effectively and efficiently implement Curriculum 2005 and Outcomes-based education.

Participant observation, interviews with teachers and questionnaires were all combined to illuminate problems, issues and significant features (Partlett and Hamilton, 1972). This research mainly involved illuminative evaluation whose primary concern is "with description and interpretation rather than measurement and

prediction (Partlett and Hamilton, 1975). Therefore, this study concentrates on information-gathering rather than the decision-making component of evaluation. This methodology was chosen because it incorporates participant observation, thus allowing me to draw from my experiences as a participant in Outcomes-based education and Curriculum 2005 activities conducted at Departmental workshops with the other participants of the study. There also exists the constant desire to understand this new education system meticulously that requires the important contributions of teachers to the process of data collection.

Data obtained by participant observations are thought to reflect the "insider's perspective", thus qualitative case studies of the three schools under investigation will reflect dialoguing, self-participation, diary-recording and observation schedules, which, unlike Quantitative questionnaire analysis will undoubtedly lead to more indepth findings of a particular situation.

Although my study is mainly qualitative in nature, since data was gained by means of semi-structured interviews and participant observation, there also exists several parallels between quantitative and qualitative research, therefore I have also employed quantitative research methodologies, namely, questionnaires which will elicit answers to whether teachers have been previously adequately re-skilled in Outcomes-based education and Curriculum 2005 and what forms of re-skilling would be most appropriate in implementing Curriculum 2005 and Outcomes-based education effectively and efficiently in the future in our country.

108ormation

3.3. Methods of data collection:

3.3.1. Participant observation of teachers:

During the research, I operated as a participant observer, since I attended a few Departmental workshops concerning Curriculum 2005 and Outcomes-based education. I also operated in my role as a grade 5 Outcomes-based teacher who experienced teaching Curriculum 2005 learning areas, and these types of activities and interactions were seen as important opportunities to collect data. Many emerging issues and potential problems were identified from these observations coupled with my experiences. My own background as an Outcomes Based educator could be seen as a limitation of this research, however, I constantly asked my colleagues to validate my interpretations in order to overcome this. This method was chosen because it entailed the sustained immersion of the researcher among those whom he or she seeks to study with a view to generating a rounded, in-depth, account of the group (Bryman, 1988). I interacted with the people I was studying and made observations. Although Kellehear (1993), states that participant observations has its own disadvantages, such as observer bias and could be time consuming; I overcame these problems by regularly asking my colleagues to validate my collected data.

3.3.2. Questionnaires:

Questionnaires were another important form of data capture. The researcher will administer questionnaires to all grade 4 and grade 7 teachers via the school principals of the three schools under investigation. The three schools in the Crossmoor area in

Chatsworth (Kwa-Zulu Natal) were selected. The questions will be based on the reflections of teachers who have been recently workshopped in Curriculum 2005 and Outcomes-based education. The information received from the questionnaires will assist in discovering appropriate types of resources and effective forms of re-skilling of teachers, which will result in the effective implementation of Curriculum 2005. The purpose of the questionnaire is to provide the researcher with a basis for more indepth questions in the semi-structured interviews that will follow on the initial analysis of the responses to the questionnaires. The questionnaires will also provide leads to follow upon determining the consistency of the responses to the semi-structured interviews that is hoped to provide more in-depth answers and additional questions to the research study.

The advantage of questionnaires was that it was easy to quantify and they showed patterns easily. The time required for the analysis of questionnaires is much shorter than that which is required for the analysis of qualitative data (McMillan, 2000). The questionnaires (Appendix A1) were designed and administered to participants in each of the three schools. The sample included mainly experienced teachers.

The questionnaires were designed after several Outcomes-based education and Curriculum 2005 workshops were attended by the participants and the researcher. It had multiple choice and open-ended questions. The items of the questionnaires were discussed with my supervisors and colleagues. After further consultations with them, the questions were finalised. The questionnaires were personally distributed to the

principals of the above mentioned schools, and they in turn administered the questionnaires to appropriate teachers on their staff. I eventually received 18 out of the 19 Questionnaires sent to the 3 schools. The questionnaire items were coded and the data was analysed using a computer software programme called Statistical Package for the Social Sciences (SPSS). Therefore frequencies, patterns and relationships were established from this data.

3.3.3. Semi-structured Interviews:

The researcher will conduct semi-structured interviews with a grade 4 and a grade 7 educator respectively, as a follow up to the questionnaire so as to develop in-depth responses to some of the items on the questionnaire. The purpose of the semi-structured interviews is to also put new questions to them to prove their experiences and to determine exactly how their training at Outcomes-based education workshops have impacted on their teaching of Curriculum 2005 and Outcomes-based education in their classrooms.

After the questionnaires were analysed, the information obtained from the analysis guided me in modifying the design of an interview schedule (Appendix A2). A grade 4 and grade 7 teacher was chosen from the research sample. The interviewees came from one of the three schools investigated. The sample included mainly experienced teachers. They included teachers who contributed to the development of the Curriculum 2005 and Outcomes-based education workshop programmes and who were currently implementing the new education system in their respective schools.

The interviews were scribed with the permission of the interviewees and transcriptions of the interviews (Appendix A3) followed. Each interview took about thirty minutes. The interviews were conducted at the interviewees school.

3.4. Analysis of data:

The researcher will analyse the data by means of computer- aided analysis (SPSS). This computer spreadsheet-programme, will be used to analyse the data for the questionnaire. The data gained from the semi-structured interviews will be analysed to deduce the feelings of teachers involved in implementing Curriculum 2005 and Outcomes-based education; and also to point out areas in which there existed weaknesses in the re-skilling of teachers to implement this new curriculum and teaching methodology. These semi-structured interviews will allow for more in-depth follow-up questioning and add to new lines of enquiry in terms of finding suitable forms of re-skilling for educators to effectively and efficiently implement Curriculum 2005 and Outcomes-based education in the future.

3.5. Validity and reliability concerns:

McMillan (2000) suggests that in combining qualitative and quantitative methods of data collection, this form of triangulation enhances the validity of the study. Therefore, triangulation is an approach in which multiple observers, theoretical perspectives, sources of data and methodologies are combined (Bryman, 1988). Cohen and Marion (1994) also define triangulation as the use of more than one meth-

od in the study of some aspect of human behaviour so that the multiplicity of perceptions present in a social situation can be discerned. Thus, methods of triangulation were used in order to support different data claims, namely, multiple-persons viewpoints (for example, questionnaires, semi-structured interviews, participant observations and literature reviews). The collection of data over a period of several months and from varied sources assisted in increasing the study's claims of reliability.

3.6. Conceptual and Theoretical framework:

Teaching becomes problematic due to constant negotiations of forces of power and control, therefore the theoretical and paradigmatic worldview of my research will incorporate both the Hermenuetic paradigm and the critical paradigm of curriculum inquiry. In terms of the Hermenuetic paradigm of social research, my research study emphasises the active role of participants in "meaning-making" through negotiations, interpretations and redefinition of situations, thus, the appropriate use of certain types of resources and proper re-skilling of teachers will efficiently facilitate the learning processes. In accordance with this paradigm, if South African teachers are adequately resourced and re-skilled, then only would they be well prepared to facilitate the "learning processes" whereby the pupil's learning is central to the process which allows for self-growth and fulfilment of individualities. The worldview of my research also operates within the critical paradigm of curriculum inquiry, since emphasis on the democratisation process will only occur if teachers are adequately re-

skilled to produce and use appropriate resources that will facilitate an educational process that transcends the constraints of race, gender and socio-economic class and work to promote principles of social and personal justice as set out by Linda Chisholm's Review Committee Of Curriculum 2005 (May 2000, Pretoria).

It is due to "Action Research" that all stakeholders in the educational process realise that a 7-day workshop to teach a new curriculum is inadequate. It is not the policy-makers but the implementers (teachers) that experience the daily difficulties that arise from teaching the new education system since they are faced with being semi-skilled due to lack of on-going staff development, Departmental workshops and in-service training programmes, limited access to important resources and also the large class sizes impact negatively.

Action research is a specific type of applied research that aims at solving a specific classroom or school problem, or could even help make a decision at a single local level (McMillan, 2000). Therefore, the intent is to improve practice immediately within one or a few classrooms or schools. Therefore, as a researcher I am constantly planning, acting, observing and reflecting on the above processes so as to find more effective types of resources which will ultimately facilitate the "re-skilling" of South African teachers, so that they will be able to handle a more revised and streamlined Curriculum 2005 come June 2001, through democratic transformation in the learning processes. In Action Research teachers are seen as active contributors to producing the curriculum that their pupils will encounter, therefore proper training is vital in

implementing a "new curriculum", which can only be successfully achieved by developing appropriate types of resources for developing, implementing and transmitting Outcomes-based education and Curriculum 2005 effectively and efficiently.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION

4.1. Introduction:

This chapter aims at contextualising the methodology described in Chapter 3. Thereafter it focuses on the results of the data gathered from the research. The research process described in the previous chapter involved mainly sampling the opinions of teachers using interviews, questionnaires and participant observation so as to build a picture of the very important role that resources play in the adequate re-skilling of teachers in implementing Outcomes-based education and Curriculum 2005 effectively and efficiently. Therefore, chapter 4 presents the summary of all the data collected from the questionnaires and interviews that the respondents completed. This chapter also incorporates data analysis in the form of statistics, tables and graphs in summary form after which a detailed discussion follows.

4.2. Analysis of Educator Questionnaires:

4.2.1. Teachers Profile: Grades currently being taught

All the respondents teach at primary schools in an urban area. The questionnaires indicated that 44% of the respondents teach grade 4 classes only, whilst 17% teach grades 4 and 7, and 39% of teachers teach grade 7 only (refer to *figure 1*).

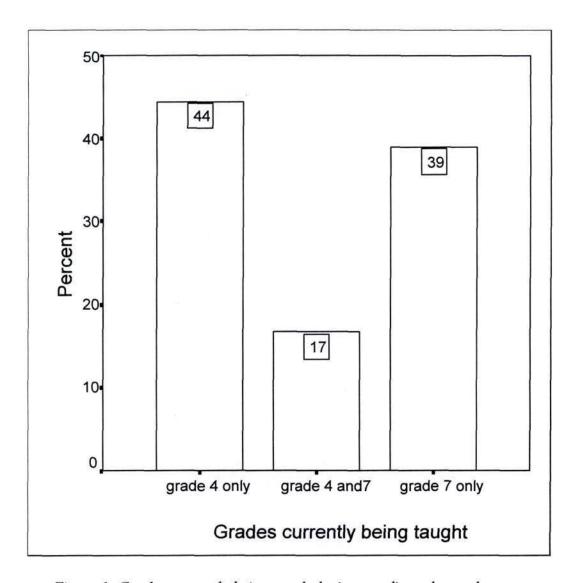


Figure 1: Grades currently being taught by intermediate phase educators

4.2.2. Teaching Experience

17% of the respondents had between 1 to 9 years of teaching experience, whilst 33% had taught between 10 to 19 years, and the majority (50%) had been teaching at primary schools between 20 to 29 years. As a result the majority are seasoned teachers since only 17% have less than 9 years of teaching experience (refer to *fig. 2*).

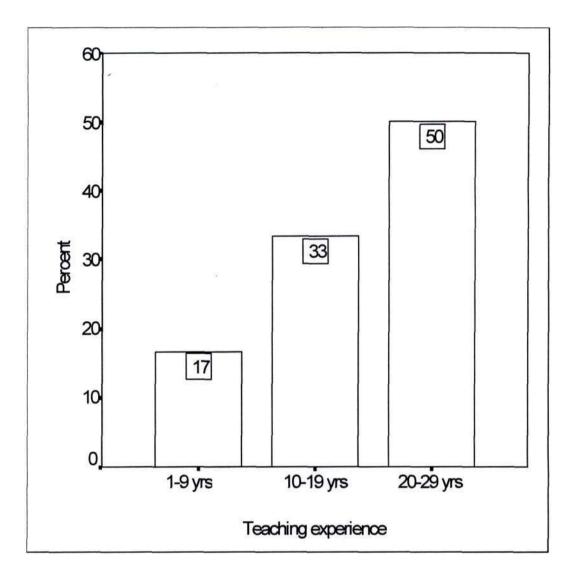


Figure 2: Respondents years of teaching experience

4.2.3. Number Of Years Teaching C2005 And OBE

15% of the respondents indicated teaching Curriculum 2005 and Outcomes-based education for lesser than 1 year, whilst 22% had taught the new curriculum for 3 to 5 years. The majority (63%) of teachers had implemented the system for only 1 to 2 years (refer to *table 1*). These results show that the majority of teachers have just star-

ted implementing Curriculum 2005 and Outcomes-based education in their schools, therefore this system needs to be constantly evaluated in order for the most appropriate teaching methodologies, resources and assessment criteria to become future policy in South Africa.

NO. OF YEARS TEACHING C2005 & OBE

NO. OF YEARS TEACHING	PERCENT
> 1 year	15%
1 – 2 years	63%
3 – 5 years	22%

Table 1: Percentage of teachers with C2005 & OBE teaching experience

4.2.4. Number Of Workshops Attended

11,4% of teachers indicated that they had attended between 11 to 15 workshops before implementing Curriculum 2005 and Outcomes-based education in their classes. 16,6% of teachers had attended between 6 to 10 workshops, whilst the majority (72%) had attended between 1 to 5 workshops. *Figure 3* indicates that the majority of teachers had very little retraining in the new curriculum. Most respondents indicated in the questionnaires and during interviews and participant observation sessions that they were inadequately re-skilled to implement a challenging new education system immediately, since they had not attended enough developmental workshops.

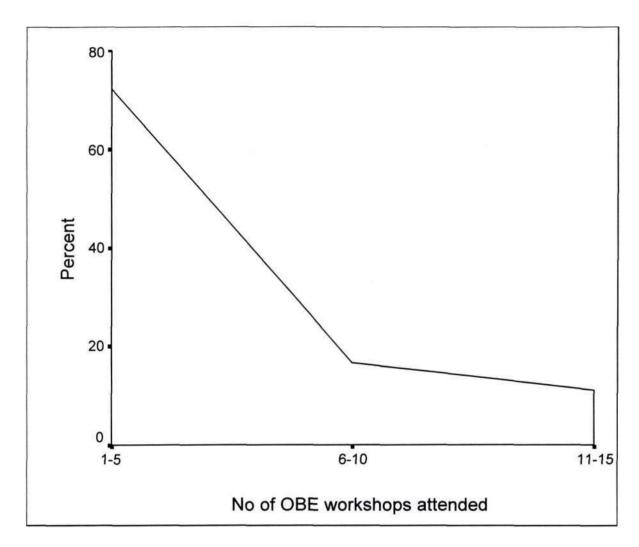


Figure 3: Attendance of OBE workshops

4.2.5. Inadequate Workshops

Figure 4 shows that lesser than 20% of teachers felt that the Curriculum 2005 and Outcomes-based education workshops were sufficient in re-skilling them to implement the new system effectively. More than 80% of teachers felt that the workshops were inadequate.

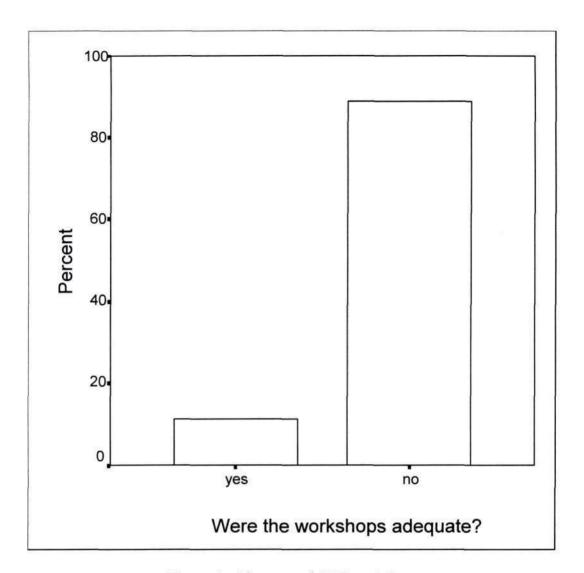


Figure 4: Adequacy of OBE workshops

Figure 5 shows that 94% of respondents with 1 to 9 years of teaching experience indicated that the workshops were inadequate. 38% of respondents with 10 to 19 years of teaching experience indicated that the workshops were inadequate. 56% of teachers with 20 to 29 years of teaching experience felt that the workshops were also very inadequate. Figure 5 also indicates that most of the seasoned teachers felt that the

workshops were inadequate. The questionnaires revealed that the younger teachers were involved in pre-service training in the new education system, therefore these workshops were merely follow-up support in implementing the new system. The younger teachers also agreed that it was easier for them to change their mindsets. They felt that the workshops were taught in an effective manner since the teachers became the learners by involving themselves in practical exercises and thereafter evaluating the process. They believed that the workshops for grade 7 were adequate because it was extremely relevant and informative. They also felt that the Departmental workshops were a learning experience for all concerned (the facilitators and educators), therefore the information gained was enough to begin the process.

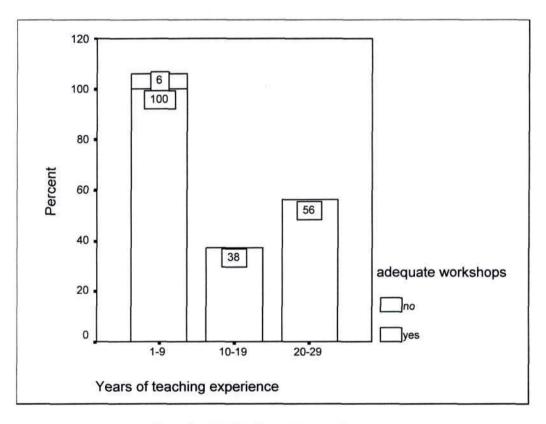


Figure 5: Relationship between teaching experience and the adequacy of OBE workshops

More than 80% of teachers felt that the Departmental workshops were inadequate for numerous reasons. The learning at the workshops was merely theory and very difficult to assimilate since the terminology used was confusing and there was insufficient time spent on training. A participant indicated that the approach was too theoretical and did not prepare them for the practical logistical nightmare that awaited them, and also felt that the workshops were directed at more the philosophy behind an Outcomes-based education approach rather than being more "hands on". The workshops were not practical since they did not consider the difficult school situations such as large class sizes and the limited availability of resources. Most importantly, the Curriculum 2005 and Outcomes-based education training was too rushed since a single week of workshops is insufficient time to be trained in 8 learning areas. Since the workshops were extremely rushed, the varying interpretations caused much confusion amongst teachers during networking and lesson planning sessions. The Chatsworth Teachers Centre (venue for Departmental workshops) could not accommodate all teachers in a single class for a particular learning area. These workshops recommended many different types of textbooks for use in the different learning areas, however, majority of these schools do not possess the necessary funds to purchase them. Most teachers indicated that they did not learn new ideas at every workshop but instead merely gave their views and were involved in most of the report backs and that the facilitators were not able to answer questions related to the new system's implementation in the classroom. The facilitators did not have clear directives and they were not very informative since there was no comprehensive guidance into different aspects of the curriculum. Most teachers agreed that too much of

information was covered over a too short period. The more experienced teachers felt that the low number of workshops coupled with very few follow-up workshops resulted in too little time to implement and change a mindset of the past.

Most experienced teachers indicated that a new curriculum is very difficult to understand, therefore teachers should have been given a minimum of 3 months of intensive in-service training prior to implementation. Teachers indicated that when curricula undergo transformation, it becomes imperative that the personnel that are responsible for its delivery in the classroom are adequately trained to manage the change. It is quick-fix strategies like these that fail dismally in this respect, although the curriculum change may be good.

4.2.6. Follow-up support

Figure 6 shows that 22,2% of teachers felt that they received adequate follow-up support after attending workshops. And 77,8% of teachers felt that they did not receive adequate follow-up support from Provincial departments, district and school management in the implementation of the new curriculum. Some teachers indicated that they were involved in the pilot study of Curriculum 2005 and Outcomes-based education, therefore they had received sufficient support from all stakeholders concerned. They also felt that managements' incapacity to fully understand the new curriculum led to a complete absence and commitment of interaction between management and teaching and learning. However, school management do provide assistance wherever possible and do attempt to provide some resources concerning the

new curriculum. Some teachers also indicated attending a few Departmental followup workshops.

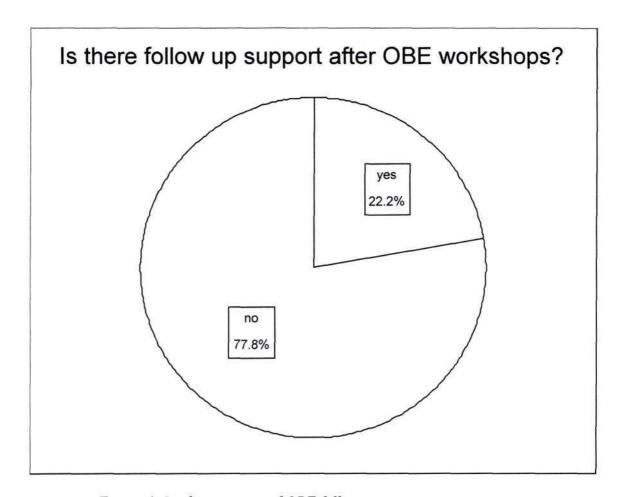


Figure 6: Implementation of OBE follow-up support programmes

Most teachers (77,8%) felt that there existed a lack of Provincial, district and school management follow-up support in implementing OBE, because of the absence of fully knowledgeable manpower or personnel (who occupy senior positions) to disseminate much needed and updated information in all learning areas. Most teachers felt that confusion reigns supreme in the implementation of the new curriculum because no-

body is able to explain the finer points or bring about some clarity in the teaching of Curriculum 2005 and Outcomes-based education. Most teachers are allowed to experience a period of "trial and error". The educators also felt that networking with other schools demands plenty of time, energy and commitment; and not all teachers show such endeavour towards the success of the OBE programme. Most importantly, teachers believed that Departmental guidance on an on-going basis was lacking since they did not provide the necessary structures at district and school level to continue assisting teachers with follow-up support in the new curriculum. The issue of inadequate resources and shortage of trained personnel add to the problem of implementing follow-up support programmes at Provincial, district and school levels. Some teachers indicated that the management personnel at schools were too busy to continue follow-up programmes. They also indicated that Provincial departments do not have sufficient funds to continue with follow-up support programmes in the learning areas. Most participants were concerned about continually raising problem areas about the new curriculum, yet not many solutions have been tabled since 1997.

The questionnaires indicated that a minority of respondents (22,2%) felt that the Provincial departments, district and school management provide adequate follow-up support in the implementation of the new curriculum. A participant felt that she had received sufficient support from all stakeholders concerned since she was involved in the pilot study of Curriculum 2005 and Outcomes-based education. Some felt that school management do provide assistance whenever possible and do purchase few textbooks in the different learning areas. They also indicated having attended a few

Departmental follow-up support workshops.

4.2.7. Re-skilling in C2005 and OBE

Figure 7 indicated that 94% of respondents felt that they did not receive adequate reskilling in the new education system, whilst only 6% felt that they had received adequate re-skilling. The few teachers who felt that they were adequately trained to implement C2005 and OBE were newly qualified graduates who had undergone OBE training during their Teaching Diploma courses. In receiving pre-service training in the new curriculum they believed that they did not require further training.

Most teachers felt that the Cascading Model of Information Dissemination and Training is inadequate and being trained by fellow OBE practitioners does not go the full way of imparting skills and knowledge. Instead they equipped themselves far better with newly published books in the different learning areas, newspapers and information from the internet. Most teachers felt that re-skilling was inadequate because very few workshops were held and the inadequate funds did not allow for the provision of updated resources like relevant textbooks for the different learning areas.

Figure 7 indicated that most teachers agreed that there was inadequate re-skilling for the implementation of Outcomes-based education and Curriculum 2005. Most believed that when changes are radical there requires intense training of personnel, therefore everyone needs to take cognisance of the fact that re-skilling takes time and the mindset has to also change and adapt. Invariably educators who lack the compet-

ence in implementing the new curriculum (which may be no fault of their own) find it extremely challenging in the classroom, therefore, this real dilemma for educators does not promote effective learning and teaching. Most participants felt very strongly about the issue of workshops being an on-going and developmental process in their lives. They believed that learning was always a new experience for everyone therefore they constantly welcomed new ideas which was lacking at the workshops, more so since most facilitators themselves were not very knowledgeable about the new curriculum. Many experienced teachers indicated that they were uncertain about whether they were approaching Curriculum 2005 correctly since although it is easy to find content matter in the different learning areas and to teach it; teachers require more time to adjust to the methodology of teaching this content material. They felt that "Old habits die hard", therefore more workshops are required to assist in the practical implementation of this complex new education system. The teachers felt that Departmental, district as well as school staff should provide on-going workshops and especially implement on-going follow-up support workshops in order to evaluate classroom programmes and to assist teachers in the various problem areas of its implementation.

4.2.8. Adequacy of colleagues training

Figure 8 indicates that most teachers are of the opinion that their colleagues do not possess the necessary skills required to implement Curriculum 2005 and Outcomesbased education, since 77,8% of teachers felt that their colleagues required more training whilst 22,2% indicated that their colleagues were adequately prepared to imp-

lement the new system. Most teachers stated that during networking they had realised that their colleagues were also experiencing similar problems with Outcomes-based education since most felt that the large class sizes, lack of resources, guidance and follow-up support coupled with minimal attendance of workshops compounded the

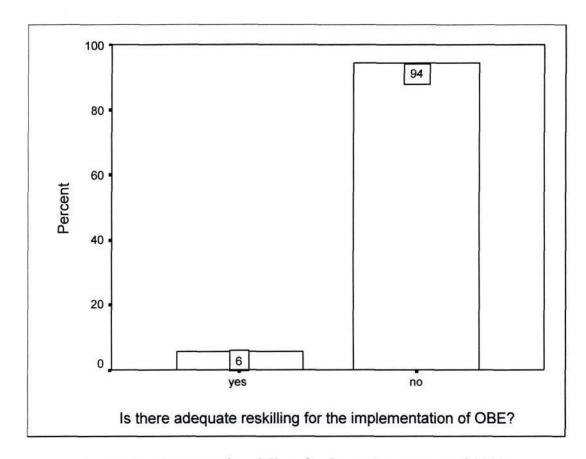


Figure 7: Adequacy of re-skilling for the implementation of C2005

already negative feeling of implementing Curriculum 2005. Most colleagues indicated experiencing problems with assessment and recording of their lessons. Many teachers stated that their colleagues believed that although they had attended a few Departmental workshops, they still required lots of time to master skills in the new

system of education, therefore workshops should be on-going and developmental in nature.

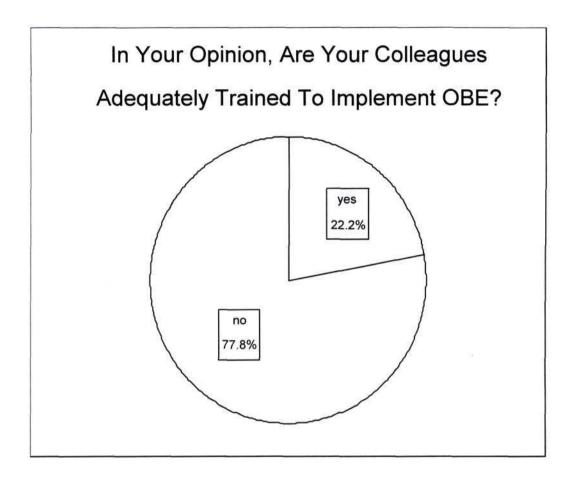


Figure 8: Colleagues efficiency in OBE implementation

The few teachers who did indicate that their colleagues do possess the necessary skills required to implement Curriculum 2005 and Outcomes-based education, felt so because they had shown positive interest and the willingness to alter their mindsets from the past Christian National Education System which still features in most of our South African schools today. Their colleagues indicated that after a few years of practicing the implementation of C2005 and OBE, they were becoming increasingly familiar

with its terminology, teaching methodologies and curriculum structure. Most colleagues also felt that it was through a period of trial and error that they were becoming more confident with the new education system.

4.2.9 Types of resources most desired

Most participants indicated that a variety of resources, namely, charts, pictures, textbooks, educational television, worksheets, video cassettes, teacher manuals, cluster workshops, Distance Education programmes, the internet, networking, workshops, audio-visual aids, stationery, physical facilities and different types of furniture would facilitate their understanding and teaching of the new curriculum. Some respondents felt that regular visits by Outcomes-based education facilitators to schools in the different areas would provide much needed guidance and support in many problem areas. Some felt that there should be time allocated in the school calendar for educators involvement in in-service training programmes in the different learning areas and also for networking with the different schools.

However, *figure 9* indicates that the priority of resources most desired amongst respondents were mainly cluster workshops, newspapers, the internet and teacher guides. 56% of teachers indicated that cluster workshops were an important form of re-skilling. 17% felt that newspapers were an important resource and 11% indicated that the internet was a very informative resource in lesson planning in Outcomesbased education since it provided updated and world-wide information about Curriculum 2005. 17% of teachers felt that teacher guides were important resources

since they provided effective step-by-step guidance in the new learning programmes.

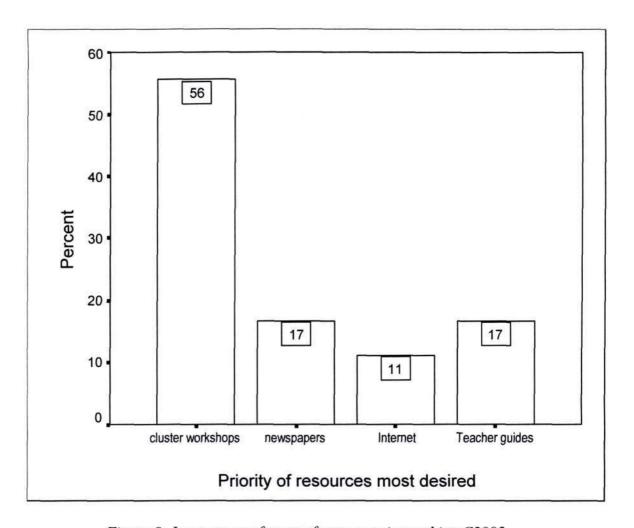


Figure 9: Importance of types of resources in teaching C2005

4.2.10. Technology Education as a resource

Most respondents felt that technology education could act as a powerful resource in re-skilling teachers to implement Curriculum 2005 and Outcomes-based education more effectively and efficiently. 72,2% indicated that technology education definitely assists teachers in implementing OBE. However, 27,8% of teachers felt that technol-

ogy education does not assist teachers in implementing OBE. Most respondents felt that technology is a learning area that develops all learners creativity and innovativeness, which inculcates critical thinking skills which provides practical experience that is of vital importance for the success of Outcomes-based education. Many teachers indicated that we are living in a world of changing technology and the re-skilling of our educators (not only for the purposes of Curriculum 2005 and Outcomes-based education) will go a long way in equipping our learners with the necessary skills when they leave school. Some believed that if an educator is highly skilled in the field of Technology, more effective teaching and learning would take place since the present direction of education is Technology driven (computers, internet and audio-visual aids), hence the need. Most respondents believed that educators require re-skilling in Technology Education in order to empower learners to earn a living when they eventually leave school, since we live in a knowledge society and Technology is continually changing and improving our lifestyles in many facets, therefore everyone needs to be continually interacting with Technology at all levels of society. Most teachers indicated that it could also be upgraded timeously. Most educators believe that with the lack of human resources to assist educators, Technology Education would be effective and cost efficient to all stakeholders in education and therefore link education to the "Superhighway of globalisation".

Figure 10 illustrated that 27,8% of teachers felt that Technology Education did not assist in re-skilling teachers to implement Outcomes-based education. Some teachers noted that 60% of Kwa-Zulu Natal schools are at present under resourced in terms of

water, electricity, sanitary facilities and human resources, therefore energy should be channelled into this development. They felt that Technology Education is a luxury for a marginal lot since we in South Africa live between first and third world status. A few respondents also believed that the teaching and learning act is not such a technical activity and that Technology could assist a little but sight should not be lost of the other aspects of teaching such as content material, the structure of lesson presentations and teaching methodologies.

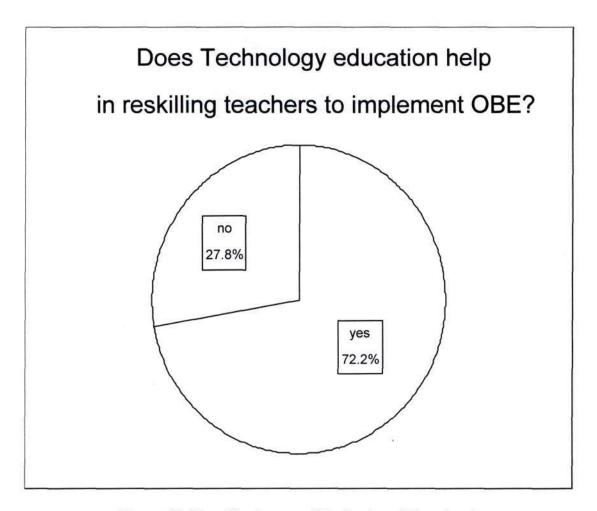


Figure 10: The effectiveness of Technology Education in re-skilling teachers to implement OBE

4.2.11. Duration of workshops most desired

Figure 11 indicates the duration of workshops that would best assist in the adequate re-skilling of teachers in implementing Curriculum 2005 and Outcomes-based education effectively and efficiently. The majority of respondents (50%) indicated that a period of 3 months or an entire school term was the most desired duration of OBE workshops. They felt that this period of time was sufficient to gain intensive reskilling in in-service training programmes. Whilst 17% of teachers preferred attending workshops twice a month since this type of developmental and follow-up support programmes would allow for continuous evaluation and improvement to problem areas of teaching the new curriculum. A small percentage of teachers (11%) indicated that 2 days of workshops were adequate in re-skilling teachers. Whilst a further 11% of respondents felt that a very lengthy period of 6 months should be allocated to retraining in the new curriculum. Another 11% of teachers felt that 3 workshops per term would be ideal in teaching the necessary skills in C2005 and OBE since this would allow for on-going evaluation and development for educators. Figure 11 illustrates that the majority of teachers felt that the Education Department should allocate 3 months or preferably an entire term in the school year for re-skilling in Outcomes-based education since a change in curriculum of such magnitude requires intense re-skilling for positive and proper implementation by the various personnel involved. Similarly, Kahn (2000) believes that Curriculum 2005 is undoubtedly a major change management project in all South African schools and should be managed as such, but the governmental Department structures do not seem to be geared to the management of change.

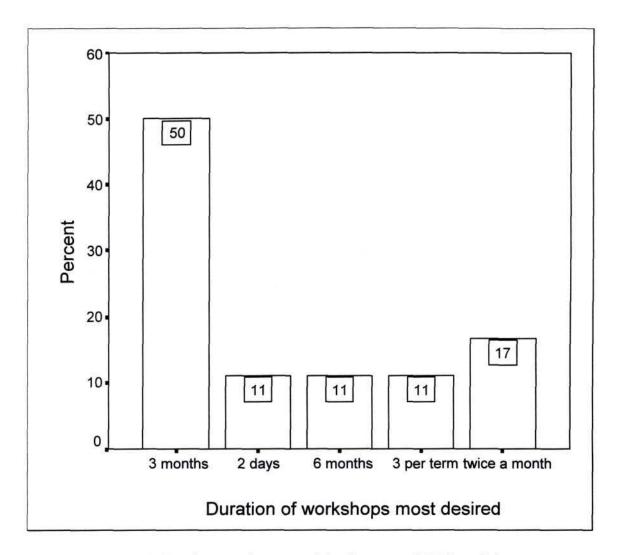


Figure 11: Teachers preferences of the duration of OBE workshops

4.2.12. Venues for workshops

Figure 12 indicated the various respondents preferences of venues for workshops. The majority (56%) of teachers preferred to attend Outcomes-based education workshops at Universities because they believed that academics possessed the necessary expertise in the various learning areas in Curriculum 2005. They also felt that this was a

suitable venue because of the availability of physical resources such as computer laboratories and libraries containing current information about Curriculum 2005. However, 22% of teachers felt that workshops should be held at Teachers Centres since these were places that encouraged teacher development and were centrally located for each school district. A few teachers (11%) also felt that OBE workshops should be held at their own schools so as to facilitate on-going staff development in weaker areas of the implementation of the new curriculum and at the same time should encourage networking with feeder schools in the area. Some teachers (11%) felt that re-skilling in the new education system in the luxury and comfort of their own homes would be a very good idea since Distance Education programmes, the internet and educational television could provide development and support in the different learning areas in C2005 and OBE continuously.

4.2.13. <u>Preferences of resources</u>

Table 2 illustrates that the majority of respondents (32%) felt that Cluster workshops were the most useful resources in re-skilling educators to implement OBE since this form of re-skilling provided contiguous interaction with its learners, which assisted in evaluative feedback from all stakeholders concerned. The newspapers were another very popular resource used by many educators in assisting them to upgrade their OBE skills in the classroom. They felt that it was user-friendly and appealed to all age groups and also assisted in lesson planning, reading activities or merely the completing of fun puzzles and games that increased our general knowledge about Curriculum 2005. Therefore 22% of teachers indicated using resources like "The

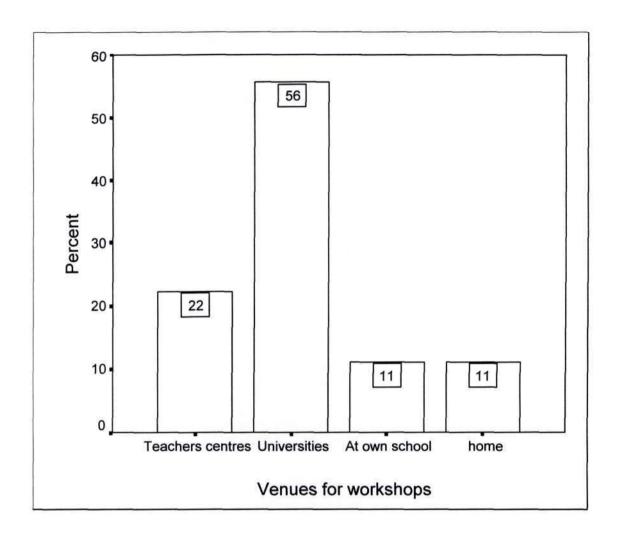


Figure 12: Teachers preferences of venues for OBE workshops

Daily News Learn Supplement", "The Daily News Matric Q & A Supplement" and "The Sunday Times ReadRight Supplement" daily in their classrooms and homes. 16% of teachers felt that educational television would be a priority resource in reskilling educators to implement Curriculum 2005. They felt that television programmes such as "School TV", "Open Sesame" and the "Liberty Life Learning Channel" were excellent resources in assisting educators to implement OBE effective-

ly and efficiently. A further 16% of educators indicated that the internet was an invaluable resource in assisting them to gain current information about the status of the new education system as well as providing a variety of content material for the different learning areas. They especially indicated using exciting lesson plans from different internet sites such as (askeric), for the different learning areas in the intermediate phase. A minority of educators (14%) felt that Distance Education would be a valuable resource in re-skilling educators in OBE through correspondence programmes in the privacy and comfort of their very own homes. These seasoned educators felt that maximum re-skilling in OBE would occur if the learning programmes were effectively structured, since they too had achieved their degrees and diplomas through Distance Education programmes. They believed that this was also a good method of receiving updated information about the status of Curriculum 2005 and Outcomes based-education in South Africa since the system is presently under constant review.

4.3. Conclusion:

The data collected from questionnaires, interviews and participant interviews incorporated detailed data analysis in the form of statistics, tables and graphs that provided information about the topic under investigation. The data captured showed that most Outcomes-based educators were definitely disadvantaged due to numerous factors in implementing Curriculum 2005, thus most teachers indicated that the types of resources used as support materials in teaching the new curriculum was undoubtedly inadequate and impacted greatly upon the effectiveness and efficiency of

the teaching and learning processes. The review of data indicated that there existed a need for the use of alternate forms of re-skilling via the use of appropriate resources, namely, Distance Education, the internet, educational television, newspapers and cluster workshops. The teachers indicated that these types of on-going teacher-support and the use of Educational Technology at various levels would ultimately lead to improving the teaching and learning processes in C2005 and OBE. Most teachers indicated that Technology Education emphasised evaluation in all teaching and learning processes, thus allowing for continuous improvements that argued well for the implementation of the new curriculum.

PREFERENCE OF RESOURCES							
TYPES OF RESOURCES	PERCENT						
distance education, internet, educational television, newspapers, cluster workshops	14%						
cluster workshops, newspapers, educational television, distance education, internet	32%						
newspapers, educational television, internet, distance education, cluster workshops	22%						
educational television, internet, distance education, cluster workshops, newspapers	16%						
internet, distance education, cluster workshops, newspapers, educational television	16%						

Table 2: Percentage of teachers preferences of types of resources

Figure 1 indicated that most respondents were experienced teachers, therefore providing credible data. These teachers could also draw important parallels between the reasons for the constraints experienced in the Christian National Education System and Curriculum 2005. Figure 3 indicated that majority of teachers had experienced very little re-skilling in the new curriculum, which made implementation in the classroom highly problematic. According to figure 4 more than 80% of teachers felt that the Departmental OBE workshops were inadequate for numerous reasons in re-skilling them to implement the new system effectively. Figure 5 also indicated that most of the seasoned teachers felt that the workshops were inadequate. Most experienced teachers indicated that a new curriculum is very difficult to understand if teachers are given a 7-day superficial workshop to retrain themselves.

Figure 6 indicated that majority of teachers (77,8%) did not receive adequate follow-up support from Provincial departments, district and school management in the implementation of the new curriculum. Most teachers believed that the Outcomes-based education facilitators were themselves not fully knowledgeable about the new curriculum and its teaching methodologies. Many teachers also indicated that the issue of inadequate resources and critical shortage of trained personnel to implement the much-needed resources added to the problem of implementing follow-up support programmes at Provincial, district and school levels.

Figure 7 illustrated that the majority of respondents (94%) felt that they had not received adequate re-skilling in the new education system. Most teachers also felt that

re-skilling was inadequate because insufficient workshops were held and inadequate funds did not allow for the provision of updated resources like relevant textbooks in the new learning areas. Most felt that radical changes require the intense training of personnel of which re-skilling takes time and the mindset has to also change and adapt. Most teachers believed that workshops should be developmental and on-going since Curriculum 2005 and Outcomes-based education was a new experience for all concerned.

Figure 8 illustrated that 77,8% of teachers felt that their colleagues experienced similar difficulties in implementation of the new curriculum, therefore lacking the necessary skills required. Most teachers indicated that during networking they had realised that their colleagues were also inadequately re-skilled to implement Outcomes-based education. Many respondents indicated that a variety of resources would greatly facilitate their understanding and teaching of the new curriculum. Figure 9 shows that the priority of resources most desired amongst respondents were mainly cluster workshops, newspapers, the internet and teacher guides. 56% of teachers felt that cluster workshops were an important resource whilst 17% felt that newspapers were a valuable resource. 11% of respondents felt that the internet was a very informative resource in Outcomes-based education lesson planning due to sites like (askeric), which provided updated world-wide information about the development of Curriculum 2005. A further 17% of teachers felt that teacher guides were also very useful resources that provided effective step-by-step guidance in teaching the new learning areas.

The data analysis suggested that most respondents (72,2%) felt that technology education would act as a powerful resource in re-skilling teachers to implement Curriculum 2005 and Outcomes-based education more effectively and efficiently (refer to *figure 9*). Most teachers believed that we live in a knowledge society, therefore Technology Education will definitely assist in empowering learners in a global society. According to *figure 11* (50%) of respondents indicated that the duration of workshops were inadequate to re-skill teachers in a new curriculum. *Figure 12* indicated that respondents preferred Universities as venues for workshops instead of Teachers centres. The data analysis yielded the type results which the study had initially aimed to prove, since it was definitely the different types of resources and the use of Educational Technology that would provide on-going teacher-support and ultimately lead to improving the teaching and learning processes.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1. Introduction:

The vision for an effective teaching and learning system as proposed in 1994 by the White Paper on Education (1994: 19) states that it is "An approach which combines the principles of learner-centeredness, life-long learning, flexibility of learning provision, the removal of learners to access learning, the recognition for credit of prior learning experiences, the provision of support for learners, the construction of learning programmes in the expectation that learners can succeed, and the maintenance of rigorous quality assurance over the design of learning material and support systems.... including use of guided self study and the appropriate use of variety of media, which give practical expression to open learning principles."

This research endorses that resources such as Distance Education, the internet, educational television, cluster workshops and newspapers can be used to improve the quality of Outcomes-based education, especially if it is appropriately employed. The above mentioned resources coupled with the use of Technology Education can greatly assist in redressing the imbalances of the past apartheid education system and move towards improving the re-skilling of teachers in the implementation of a challenging new education system like Curriculum 2005. These types of resources will serve to empower educators and learners to constantly improve both the teaching and learning

processes and Technology Education would greatly assist in evaluating these processes.

5.2. Conclusion:

5.2.1. Appropriateness of resources to support educators:

The Media in Education Trust has always advocated that appropriate resources and necessary support-material are an integral part of Outcomes-based education's teaching and learning processes since they are of the belief that when a child merely hears what an educator has to say during formal instruction, they forget vast quantities of information easily. However, when learners view tasks they do tend to remember activities but when they are actually involved in performing these activities then they normally register this knowledge and are able to easily access and retrieve this information at a later date or when a situation demands its need. Therefore, Outcomes-based education's instruction necessitates the use of appropriate types of resources and support material which if and when effectively designed and implemented through the processes of Technology Education, viz. needs assessments, planning, implementation and evaluation would result in learners eventually achieving the desired specific outcomes when performing tasks.

The analysis of data indicates that alternate forms of re-skilling via the use of appropriate resources namely, newspapers, cluster workshops, Distance Education systems, the internet, teacher guides and educational television concerning all learning

areas could bring adequate re-skilling to the many inexperienced Outcomes-based educators who can positively implement a new, revised and streamlined curriculum (refer to *figure 9*). Most respondents also indicated that the discipline, Educational Technology, would greatly assist in linking all the above mentioned resources in the teaching of Curriculum 2005, since we presently live in a knowledge society and technology seems to be ever advancing globally (refer to *figure 10*). Many studies have proven that technology lends itself well to the reconceptualisation of education and training, for examples, [Johnstone (1999), Govender (1999) and Mulroney (2000)].

5.3. Attitudes of educators towards re-skilling in C2005 and OBE:

Most respondents sited various reasons for possessing a very negative attitude towards implementing Curriculum 2005. Many experienced educators felt that the Education Department had allocated a very limited retraining period for the holistic development of themselves. Teachers also felt that they did not receive adequate follow-up support from Provincial Departments, district and school management in the implementation of the new curriculum, therefore stifling development in the different learning areas (refer to *figure 6*). They felt that they were presently experiencing a period of trial and error in implementing Outcomes-based education in their classrooms. Some teachers also expressed annoyance at the absence of fully knowlegeable manpower in disseminating much needed information about Curriculum 2005. Majority of respondents (94%) felt that they had not received adequate re-skilling in the new education system (refer to *figure 7*). Most teachers

were of the opinion that their colleagues do not possess the necessary skills required to implement Curriculum 2005 and Outcomes-based education effectively (refer to figure 8). Most respondents felt that Technology Education would act as a powerful resource in re-skilling teachers to implement Curriculum 2005 and Outcomes-based education more effectively and efficiently (refer to figure 9). A large percentage of teachers felt that cluster workshops, newspapers, educational television, Distance Education programmes and the internet were most preferred in terms of the types of resources used at Outcomes-based education workshops in the retraining of educators (refer to table 2). They felt that the above resources would serve to greatly improve the teaching and learning processes in the implementation of Curriculum 2005.

5.4. Recommendations:

The study's data analysis yielded very valuable suggestions concerning the use of appropriate types of resources for the re-skilling of educators in Curriculum 2005 and Outcomes-based education. The conclusion of this chapter will attempt to evaluate the present re-skilling of educators and provide valuable recommendations to Provincial and National Education Departments, schools, parents and tertiary institutions regarding methods of improving the teaching and learning processes in implementing Curriculum 2005.

5.4.1. Recommendations to the Department of Education:

The analysis of data collected suggested numerous recommendations be made to the

Department of Education's Policy-making unit. Figure 2 suggests that the Department of Education has to date employed very few newly qualified teachers who do possess the necessary skills to implement Outcomes-based education effectively. They would undoubtedly act as valuable human resources in terms of networking with experienced colleagues at their schools and provide much-needed assistance to those grappling with the new system. It is recommended that the Education Department halts the processes of the identification of excess and surplus educators for purposes of redeployment; but instead employ more newly qualified educators who have been involved in pre-service Outcomes-based education training in order to upgrade the quality and standards of education at South African schools, which at present is the National Ministry's prime objective.

The Department of Education's Policy-making unit needs to implement a National programme which allows for the constant evaluation of the Outcomes-based education system, in order for the most appropriate teaching methodologies, resources and assessment criteria to become future policy in South African schools. *Figure 3* indicates that the majority of teachers possessed very little re-skilling in the new curriculum, therefore the Education Department needs to make provisions for teachers to attend more Departmental developmental workshops during the course of the year, in order for them to become adequately re-skilled to implement a challenging new education system like Curriculum 2005. Therefore, in the future it is hoped that the Education Department does consider funding more Outcomes-based education workshops for teachers. The Department of Education should have by now realised

that The Cascading Model of Information Dissemination and Training has created many problems, since Provincial, Regional and district facilitators were themselves unskilled in the retraining programme and this type of model did not go the full way of imparting the necessary knowledge and skills. These Departmental facilitators could not answer many pertinent questions posed to them by inexperienced Outcomes-based educators at Departmental workshops. The Departmental officials should ensure that workshops are not merely theory but practical enough to be assimilated in the classroom situation, by considering large class sizes and the limited availability of important resources as well.

The Education Department should ensure that Departmental workshops are not rushed since varying interpretations caused much confusion amongst teachers during networking and lesson planning sessions. The facilitators should be adequately trained in each learning area and sufficient time should be allocated to each learning area at Departmental Outcomes-based education workshops, since too much of information was covered over too short a period of time. The Department of Education should regularise visits by Outcomes-based education facilitators to district schools so as to provide much needed guidance and support in many problem areas.

The Department of Education should prioritise the provision of Outcomes-based education textbooks for the different learning areas to all schools, since most schools do not possess the necessary funding to purchase these important resources that are required to implement Curriculum 2005 effectively. The Education Department needs

to also consider increasing the number of follow-up support workshops as well as Departmental workshops in all school districts in order to alter the mindset of the past. The study indicates that the Department of Education needs to allow a minimum of three months of intensive in-service training in Curriculum 2005 and Outcomes-based education before more teachers start implementing the new system of education. The Department of Education should take cognisance of the fact that when curricula undergoes transformation, it becomes imperative that the personnel that are responsible for its delivery are adequately trained to manage the change process, since quick-fix strategies fail dismally, although the curriculum change may be good. Kahn (2000) too, suggests that Curriculum 2005 is a major change management project, but the question being asked is whether or not the South African Department of Education can actually manage this type of large-scale change process efficiently. The best possible chance for the successful implementation of Outcomes-based education will depend largely upon the adequate and appropriate types of resources used for the change management process.

The Department of Education needs to allocate sufficient time in the new school year for educators to network with the necessary stakeholders involved in Outcomes-based education since networking demands plenty of time, energy and commitment. Departmental guidance on an on-going basis is severely lacking since there needs to be basic provision of the necessary structures at district and school levels so as to continue assisting teachers with follow-up support programmes in the new curriculum.

In order to endeavour towards the success of the Outcomes-based education programme in South African schools, the National Education Department needs to redress the issue of inadequate resources, shortage of trained personnel and the Provincial departments insufficient funding to continue with developmental workshops and necessary follow-up support programmes. The Department of Education also needs to table more solutions to the problem areas that have arisen in the implementation of Curriculum 2005 since not many have been tabled since 1997.

The Department of Education needs to place emphasis upon the importance of the discipline "Educational Technology" in Outcomes-based education, since one of its best-known contributions to education is that of access, which led to the development of Distance Education (Plomp & Ely, 1996). The Education Department's Policymaking unit needs to devise programmes that will successfully aid teacher re-skilling in Curriculum 2005 and Outcomes-based education since adult learners face hectic daily schedules which do not cater for many to find the opportunity to re-skill themselves at tertiary institutes. Distance learning programs are very effective when there's a good match of material and media that has been carefully planned, designed and researched so as to meet the educational needs of learners (Porter, 1997). Therefore, effective C2005 and OBE Distance Education program packages can be devised for the majority of inexperienced Outcomes-based education teachers to use at their leisure in the comfort of their very own homes.

Technology as a new learning area can assist in developing classroom models that

allow for more flexible roles for both teachers and pupils that lead to "lifelong learning" which is prioritised in the knowledge society that we presently live in. Most learners are choosing to use electronic media for their personal access to information instead of depending upon their facilitators recommended textbook ideology. The Department of Education needs to subsidise the building of many "Telly-Centres" in different Provincial communities for all stakeholders in education so as to empower themselves with the new information age and link themselves to the world beyond. The Department needs to also employ facilitators who do possess the necessary expertise to assist educators in on-going re-skilling in Curriculum 2005 at the various Telly Centres. These trained personnel would be in the best possible position to effectively guide educators as to the proper handling of the hardware and software associated with resources such as computers, educational television, Distance Education programmes, the internet and video-recorders. This type of project would ensure the upgrading of the qualifications of many teachers and simultaneously bring technology to the disadvantaged communities of Southern Africa.

The Education Department needs to forge strong partnerships with local and international business or gain the assistance of donor organisations in funding Internet Connection programmes in all Provincial schools in order to bridge the gap between "the information rich and information poor". The internet's interactive nature enriches the experience of learners and makes resources such as worldwide libraries, laboratories, curricula and expertise available at the click of a button. Therefore, internet sites like (askeric) can provide valuable on-going assistance to teachers in

Outcomes-based education lesson planning.

The Department of Education should ensure that all Regional Educational Development Centres possess the current Curriculum 2005 video-recorded series in the different learning areas. The series such as "School TV" and "Open Sesame" provide valuable literacy, numeracy and arts and cultural lessons for learners. Govender (2000) suggests that "School TV" can be seen as an extremely powerful tool to support and aid improvement and development of education in South Africa. The Department of Education needs to place emphasis upon the fact that television and interactive video present powerful opportunities for learning (November, 1992). Therefore, the Department of Education needs to forge an on-going partnership with the South African Broadcast Corporation in accrediting a series of Outcomes-based education television programmes in the different learning areas for the intermediate and senior phases of schooling. In this way the National Education Department would be providing access of Outcomes-based education learning material to the masses in an inexpensive way since television is fast becoming more of a necessity than a luxury in homes nowadays.

The Education Department should allow hours off school time, especially for those disadvantaged communities, for teachers to attend Cluster workshops that would take place at centres that do have media facilities. It is this form of networking and collaboration amongst the various stakeholders in education that would ultimately provide efficient methods of dissemination of the new curriculum and methods of

teaching so as to improve the quality of post-apartheid education.

The Department of Education should forge an on-going partnership between "The Daily News" and "Sunday Times" newspapers since these newspapers have published valuable supplements (viz. The Learn Supplement and The ReadRight Supplement") concerning all learning areas of Curriculum 2005 and Outcomes-based education. These have been an on-going support for change for the past few years for all stakeholders in education in the wider community. It is this type of inexpensive, portable, storable and duplicatable medium and the sharing of expertise and access for thousands of learners that will ultimately assist in upgrading the standards of our South African education system.

The Education Department needs to be commended on its initiative to establish District Learning Committees in the different Learning areas so as to support educators and ensure the effective implementation of Curriculum 2005 at grass roots level. Thus, Cluster workshopping ensures on-going staff-development and "it seems imperative that we encourage all teachers to learn all the time, every day" (November, 1993: 2). The Department of Education needs to also form an organisation of facilitators possessing the necessary expertise for on-going tutoring in Outcomes-based education and Curriculum 2005 learning areas for all grades via Distance Education programmes, internet sites, educational television series, newspaper supplements and cluster workshops at Telly Centres to ensure developmental reskilling of educators in Outcomes-based education. The Department should ensure

that qualified educational technologists occupy management positions at these Telly Centres, since they base planning and preparation of learning materials on the "Systems Approach" to problem-solving which places emphasis upon evaluative systems which will lead to improving the overall teaching and learning processes in Curriculum 2005 and Outcomes-based education in the South Africa. The Education Department needs to make provisions for a structured plan to be effectively coordinated at National, Provincial and Regional levels for the re-skilling of Outcomes-based educators who are confused about the new systems assessment strategies, teaching methodologies and content material to be taught. Most research studies recommendations suggest that Curriculum 2005 and Outcomes-based education is a new venture for basically all stakeholders in the education system therefore, the Education Department needs to take cognisance of the fact that it is the use of appropriate types of resources, on-going teacher-support and the use of educational technology at various levels that will ultimately lead to improving the teaching and learning processes in this fairly new system of education in our country.

5.4.2. Recommendations to parents:

Parents form an integral part of the Outcomes-based education schooling system.

Parents that do have access to facilities like computers, the internet, etc... should make daily use of Outcomes-based education programmes accredited by the Department of Education. Their regular involvement in school-based parents meetings and monitoring of learners continuous assessment programmes help to evaluate the most appropriate teaching methodologies, resources and assessment criteria from the

community's viewpoint. Every school needs to choose a group of responsible parents to be involved in the Outcomes-based education training programme, so as to implement the new system efficiently during relief teaching. In this way parents would be able to assist the Department of Education in relief teaching whilst teachers attend intensive three month Outcomes-based education in-service training programmes at various Provincial Universities. Parents who have been workshopped in Outcomes-based education can also assist in relief teaching whilst teachers attend developmental follow-up support programmes. The idea of communities sharing responsibility in parents relief teaching would also assist in alleviating the problem of district facilitators having insufficient time to re-skill themselves in the new system of education.

Parents from the different communities form an important resource for learners in terms of the different cultures oral traditions, skilled artisans expertise and networking. All schools should form important partnerships with parents involved in industries. This relationship can be of assistance, for example, specialists in the field of Information Technology can provide the much needed guidance and support required by educators and learners since Outcomes-based education requires learners to develop skills which will become instrumental in their daily lives. Some parents possess the necessary skills in Technology and since this is a field that is ever advancing and its skills are a necessity in the knowledge society that we presently live in, this would provide very important on-going support to schools in imparting technology skills. Parents can also support learners in the effective use of resources

such as newspaper supplements, educational television and the internet Outcomesbased education programmes.

5.4.3. Recommendations to Tertiary institutes:

The analysis of the data illustrated that most teachers preferred Outcomes-based education workshops being held at Universities. They identified Universities as appropriate venues for the processes of re-skilling because they were ideally situated in terms of efficient access to human and material resources. They felt that lecturers possessed much expertise in the new learning areas since they were constantly reviewing and researching Curriculum 2005 and making valid improvements to the system. The resources prevalent at Universities such as computer laboratories, internet facilities, Distance Education programmes, laboratories and libraries also provide current information about the new system of education.

The Universities need to forge more on-going partnerships with international Universities so that they would be able to compare the strengths and weaknesses of different types of education systems in comparison to South Africa's initiatives during its democratic educational revolution. The Universities should also issue more scholarships and bursaries for educators to conduct much-needed research about the validity of the Outcomes-based education system and provide evaluative recommendations to the Education Department. The lecturers involved in school-based teaching practice can also evaluate the Outcomes-based education system in terms of the processes of action-research and this type of situation would provide

valid recommendations for future Outcomes-based education policies. Universities are also spacious enough to accommodate the large numbers of teachers involved in re-skilling. Their large lecture halls, parking facilities, human and material resources and canteen facilities would greatly assist in the efficient administering of re-skilling programmes for many educators in Kwa-Zulu Natal.

All Provincial Universities should be year-marked as possible venues for the development of educators involved in the new education system. Tertiary institutes should also produce teachers who are well-equipped with the necessary theoretical and practical knowledge and skills so as to effectively implement Outcomes-based education. Tertiary institutes should also form partnerships with schools and school governing bodies so as to disseminate on-going current information about Outcomes-based education to all stakeholders, since research always leads to the improvement of systems.

5.4.4. Recommendations to schools and school governing bodies:

Schools play a vital role in the dissemination of information regarding Outcomesbased education. School governing bodies should form strong partnerships with their respective schools in order to make provisions for people with the necessary expertise to support development of the new curriculum at schools. The principals and governing bodies should devise a policy regarding structured times for teachers to be involved in Outcomes-based education networking with feeder schools, Nongovernmental organisations and Teachers Development Centres. They should also ensure the on-going processes of staff development at schools regarding Curriculum 2005, by time-tabling weekly sessions with colleagues after contact time with pupils are over.

The management staff and governing bodies should ensure that a roster for relief teaching is drawn up on a rotational basis; allowing teachers to attend more Outcomes-based education workshops for effective re-skilling to occur. The governing bodies should use the criteria of hiring more newly qualified teachers onto their staff, because only they possess the necessary pre-service training in Outcomes-based education. These teachers would undoubtedly be assets to their schools because they would help in the dissemination of much-needed Outcomes-based education information to seasoned teachers. These newly qualified teachers could also hold developmental workshops for feeder schools in the area at their own schools.

The school governing bodies should assist in holding fundraising projects, for example, Debs Balls, Family Fun Days, Cultural Concerts, Fun Runs, etc... so that schools would possess the necessary funding to purchase much-needed Outcomes-based education resources such as relevant textbooks, computers, internet facilities, televisions, newspapers and Distance Education programmes. Potenza (2000: 2), curriculum adviser for Outcomes-based education, states that teacher orientation and support are essential ingredients of Curriculum change; and that this has been inadequate in the context of Curriculum 2005. The school governing body members should also be a part of Outcomes-based education training so that they would be in a

favourable position to advise the wider community of the new system of education in the absence of educators.

The school principal should ensure that all management staff members receive adequate re-skilling in Curriculum 2005, since level one educators would require assistance from their respective Heads of Departments, Deputy principals or from principals themselves. The school principals should also ensure that the necessary emphasis is placed upon "Technology" as a powerful resource in Curriculum 2005, since we live in a knowledge society and technology is ever-advancing globally. Most importantly, principals should always be positive-minded about allowing their staff time off to attend as many workshops as possible in order to re-skill and develop themselves continuously, thereby improving the teaching and learning processes in Outcomes-based education.

BIBLIOGRAPHY

- Anderson, G. 1990. Fundamentals of Educational Research. London: Falmer Press.
- Anderson, R. C. 1984. "Role of the Reader's Schema in Comprehension, Learning & Memory." In Learning in American Schools: Basal Readers and Content Texts. New York: Longman.
- 3. Bediako, T. June/July 2000. (Vol. 4; No. 5). Framework falls short of what NGO's hoped for. The Educator's Voice: South Africa.
- Bryman, A. 1988. Quantity & Quality in Social Research. Unwin Hyman: London.
- 5. Chisholm, L. Aug. 2000. The Review of C2005. The Teacher: South Africa.
- Cohen, L. & Marion, L. 1994. Research Methods in Education. Routledge: London.
- http://coe.sdsu.edu/eet/Articles/interaction/start.htm
 Donello, J. 2000. Mediating Interpersonal Interactivity.

- Emerson, A. 1993. *Teaching Media In The Primary School.* College Of St. Mark and St. John: Plymouth.
- Fletcher, C. 1987. The meanings of community in community education.
 Milton Keynes: Open University Press.
- 10. Garson, P. July 2000. Asmal in Hot Seat. The Teacher: South Africa.
- 11. Govender, D. 1999. (Vol. 4). Implementing Technology Education In South Africa: Where Do We Want To Get To? Natal College Of Education: South Africa.
- 12. Govender, V. 2000. To investigate the use of School TV in enhancing teaching and learning in the Foundation Phase at Acacia Primary School. University of Durban Westville: South Africa.
- Government of National Unity. 1994. White Paper on Reconstruction and Development. Government Gazette No. 16085 of 1994.
- 14. Gray, B. 1999. (Vol. 1). Teacher Development Through Curriculum Development Experiences From The Science Through Applications Project. University Of the Western Cape: South Africa.

- 15. Grey, J. Aug. 2000. A Costly Failure. The Teacher: South Africa.
- 16. Heinich, R. 1985. Instructional media. New York: John Wiley.
- 17. http://coe.sdsu.edu/eet/
 Hoffman, B. 1999. *To be or not to be ... an autodidact.*
- Holmberg; Keegan & Sewart, 1988. Distance Education (An International perspective). Routledge.
- Jansen, J. D. Jan./Feb. 2000. Keep It Straight And Simple...". The Teacher:
 South Africa.
- Johnstone, H. H. 1999. (Vol.1). Laying The Foundations For Technological Literacy In South Africa. Pietermartizburg: South Africa.
- Jones, G. R. 1997. Cyberschools: An Educational Renaissance. Engelwood Publishers.
- 22. Kahn, M. May 2000. Curriculum Transformation Presents Major Challenges

 Ahead: Can We Manage Change? The Teacher: South Africa.

- Kellerhear, A. 1993. The Unobstrusive Researcher, A guide to methods. Allan
 Unwin (Pty) Ltd. Australia.
- 24. Kennedy, P. 1993. Preparing for the Twenty First Century. New York: NY Random House.
- KwaZulu Natal Department Of Education & Culture. 2000. The Daily News
 Education Supplement: Durban.
- Liberty Life Learning. Sept. 2001. The Sunday Times ReadRight Supplement: Durban.
- 27. Mahomed, H. June/July 2000. (Vol. 4; No. 5). *Curriculum transformation-Where to now?* The Educator's Voice: South Africa.
- 28. Masterman, L. 1980. Teaching Television. London: Macmillan.
- 29. McMillan, J. (3rd ed.). 2000. *Educational Research: Fundamentals For The Consumer*. New York: Longman.
- Meyers, C. & Jones, T. B. (1993). Promoting active learning: Strategies for Classroom. Sanfransisco: Jossey Bassey.

- 31. Monare, M. May 2001. *Internet plays a role*. The Sunday Tribune: South Africa.
- 32. Mulroney, G. 2000. (Vol. 2). Developing A Model For An Urban Technological University In Partnership With A Distant Rural Community. RMIT University: Australia.
- http://www.anovember.com/articles/brave.html
 November, A. 1992. Brave New World Revisited?
- 34. http://www.anovember.com/articles/moving.html
 November, A. 1989. *Moving from Paper to Light.*
- 35. http://www.anovember.com/articles/political.html
 November, A. 1990. *Political Winds Propel Cruise*.
- http://www.anovember.com/articles/risky.html
 November, A. 1993. Risky Business: Redefining Professional Development.
- 37. Osborn, J. H; Jones, B. F. & Stein, M. 1985. *Educational Leadership: The Case for improving textbooks.* (pp. 9-16).

- Partlett, M. & Hamilton, D. 1975. Education as illumination: A new approach to the study of innovatory programs. Unpublished manuscript.
- Percival, F. & Ellington, H. 1984. A Handbook Of Educational Technology.
 Kogan Page: Great Britain.
- 40. Plomp, T. & Ely, D. P. (2nd ed.). 1996. *International Encyclopedia Of Educational Technology*. Pergamon: United States.
- Porter, L. R. 1997. Creating The Virtual Classroom. John Wiley & Sons Publishers.
- 42. Potenza, E. Aug. 2000, Where To From Here, C2005? The Teacher: South Africa.
- Rockman, S. and Burke, R. 1989. *Use of Television in the Classroom*.
 Oxford: Pergamon Press.
- 44. Romiszowski, A. J. & Criticos, C. 1994. The Training And Development Of Educational Technologists For The 21st Century. Engelwood Cliffs: New Jersey.

- Rowntree, D. 1974. Educational Technology In Curriculum Development.
 Harper & Row. Ltd: London.
- 46. SADTU, June/July 2000. (Vol. 4; No. 5). SADTU's department replies to the Report of the Curriculum 2005 review team. The Educator's Voice: South Africa.
- http://edweb.sdsu.edu/EDTEC/EDTEC- HOME.HTML.ET.
 (San Diego State University).
- 48. Seels, B. B. & Richey, R. C. 1994. *Instructional Technology: The Definition And Domains Of The Field.* AECT: Washington D.C.
- University of Durban Westville Centre For Education Research, Evaluations and Policy. Dec. 2000. Royal Netherlands Embassy Foundations Project: Durban.
- Vawda, S. March 2000. (Vol. 4; No. 1). Factor's Contributing to Quality
 Education For All The Educator's Voice: South Africa.
- 51. Wittich, W. A. & Schuller, C. F. (6th ed.). 1979. *Instructional Technology: Its Nature And Use.* Harper & Row Publishers: New York.

APPENDICES

APPENDIX A1

QUESTIONNAIRE FOR TEACHERS

Kindly respond to the following questions in a manner that will reflect your private and honest opinion. Your response will be treated with strict CONFIDENTIALITY.

Please answer the questions below by placing a cross (x) in the correct box or filling in the correct answer.

QUESTIONS:

1. Which grades do you teach?

Grade 4 only	Grades 4 & 7	Grade 7 only
3	4	5

2. Indicate the number of years you have been teaching?

1 – 9 yrs	6
10 – 19 yrs	7
20 - 29 yrs	8
30 + yrs	9

3. How many years have you taught Curriculum 2005 and Outcomes Based Education at your school?

> 1 year	10
1-2 years	11
3-5 years	12

4. Indicate the number of workshops you attended before implementing Curriculum 2005 and Outcomes Based Education in your class?

1 - 5	13
6-10	14
11 - 15	15
16 - 20	16
21 - 25	17
25 +	18

5. Do you feel that these workshops were adequate?

YES	NO
19	20

Please Explain:	

6. Do provincial departments, district and your school management provide adequate follow-up support in the implementation of the new curriculum?

YES	l NO
21	22

Give reasons your answer:	• • •
***************************************	••
	••
	••
	••
7. Do you feel that you have received adequate re-skilling in this new education system?	
YES NO 24	
Give reasons for your answer:	
	• •
	•
8. Do your colleagues possess the necessary skills required to implement Curriculum 2005 and Outcomes Based Education?	n
YES NO 26	
Give reasons for your answer:	•
	00

9. Give examples of resources that you feel would facilitate your understanding and teaching of the new curriculum.

Cluster workshops, newspapers & educational television	27
Newspapers, internet & educational television	28
Internet & distance education	29
Teacher manuals	32

10. Do you feel that "technology education" could act as a powerful resource in re-skilling teachers to implement Curriculum 2005 and Outcomes Based Education more effectively and efficiently?

YES	NO
33	34

Give	rea	ISOI	ns f	or	you	ır a	ns	we	er:.	•••	•••	•••	•••	•••	•••	•••	•••	 •••	•••		 •••		• • •	• • •	• • •	 •••		
		•••			•••	•••										•••	•••	 •••			 	•••	•••		•••	 	••••	
		•••			•••									•••			•••	 	•••	•••	 •••				•••	 •••		
		•••			•••	• • • •				•••	•••	•••					•••	 •••	•••	•••	 • • •	•••	• • •		•••	 	••••	
		•••																 			 	•••			•••	 		

11. Indicate the number of workshops and possible venues that you feel would best assist in the adequate re-skilling of teachers in implementing Curriculum 2005 and Outcomes Based Education effectively.

Number of workshops

3 months	35
2 days	36
6 months	37
3 per term	38
Twice monthly	39

Possible Venues

Universities	41
Teacher Centres	42
Teacher training Colleges	43
Home	44

12. How would you rank item	as $(12.1 12.5.)$ in order of its importance?
12.1. distance education	
12.2. the internet	
12.3. educational television	
12.4. newspapers	
12.5. cluster workshops	

APPENDIX A2

INTERVIEW SCHEDULE FOR TEACHERS

Questions asked to a grade 4 and grade 7 teacher who has been workshopped in Curriculum 2005 and Outcomes Based Education.

Questions:

- 1. What grades do you teach?
- 2. How long have you been teaching?
- 3. What are your feelings about South Africa's new education system?
- 4. Do you and your colleagues feel totally prepared to implement this new curriculum? Why?
- 5. Do you feel that suitable resources could assist you in understanding and implementing this new education system more efficiently?
- 6. What types of resources do you feel would be most suitable in re-skilling educators effectively? Give reasons for your answer?
- 7. How, when and where do you feel teachers can be adequately re-skilled to implement Curriculum 2005 and Outcomes Based Education?
- 8. Do you feel that suitable resources like the internet, distance education, cluster workshops, newspapers and educational television could greatly assist in providing on-going support and much needed development for many teachers grappling with the new education system? Give reasons for your answer?

- 9. All the abovementioned resources seem to be linked to "technology education" which acts as a powerful resource in developing teachers for Curriculum 2005 and Outcomes Based Education. Do you agree? Why?
- 10. What recommendations would you make to all stakeholders in education (viz. educators, schools, school governing bodies, parents, tertiary institutions, provincial and National Education Departments) for the use of these important resources in the teaching of Curriculum 2005 and Outcomes Based Education?

TRANSCRIPTS OF INTERVIEWS WITH TEACHERS

Teacher 1: Female, with 1 year of Curriculum 2005 and Outcomes Based Education teaching experience.

Q 1: What grades do you teach?

T1: Grade 4

Q 2: How long have you been teaching?

T 1: 26 years

Q 3: What are your feelings about South Africa's new education system?

T 1: The new system is more suitable for learners intending to pursue their careers in technical tertiary institutions. The standards are too low for the academically inclined learners. They are easily bored because tasks are completed very quickly. However, the English second language learners will benefit from the system. Schools should implement half and full yearly examinations for grading pupils and for promotion purposes. The oral work done in second language learning, for example, Afrikaans is very superficial. Most learners will end up achieving very low competency levels in reading, spelling, and writing skills. I prefer the old system of education because content being taught is too simple and inadequate for grade 4 learners. The high-flyers get left behind. The large

class numbers are not suitable to implement Outcomes Based Education for a variety of reasons. There is no individual attention, no proper discipline with groupwork and inadequate resources. The sharing of resources, for example, textbooks becomes problematic. Some pupils are merely passengers in groupwork and depend on others to think of good ideas, to do research and the gathering of resources for tasks. Groupwork is fine sometimes but individual work suffers. There are too many requirements from the new education system, for example, range statements, specific outcomes, performance indicators, programme organisers, phase organisers, etc... The old syllabus is more structured, organised and all levels of questioning is catered for. In the new system teachers seem to be doing more recording than implementing. There is inadequate staff development. With continuous assessment the weaker pupils tend to pass easier and the brighter pupils tend to fall back.

- **Q 4:** Do you and your colleagues feel totally prepared to implement this new curriculum? Why?
- T 1: No. There was inadequate training. There was only one week of training. These 5 week days commenced at 8am and ended at 2pm. There was a break in between the 6 hours. However, the worst scenario was not being allowed to be workshopped in all learning areas, so my colleagues split up and went to different workshops, thus, at the end of the week nobody was able to attend all the different learning areas which meant sharing information and resources given at the workshops and all this posed problems in implementing the new

system. The facilitators were unskilled and merely provided a brief overview of each learning area, therefore, with all these setbacks we cannot implement a new curriculum.

- **Q 5:** Do you feel that suitable resources could assist you in understanding and implementing this new education system more efficiently?
- T 1: It would help a great deal, but teachers need more training on an on-going basis.

 The Department of Education and Culture should provide at least a term off for adequate re-skilling of teachers in all learning areas so that they will feel more confident about implementing the new system. The Education Department should provide substitute teachers for those teachers being workshopped.

 Cluster workshopping, networking and staff development on a regular basis is very important.
- **Q 6:** What types of resources do you feel would be most suitable in re-skilling educators effectively? Give reasons for your answer?
- T 1: Textbooks, educator manuals, audio-visual aids, newspapers, periodicals and magazines, encyclopaedias, computers and the internet, workshops on an ongoing basis and networking with feeder schools in the area. These types of resources will ensure continuous development in the new system.
- Q 7: How, when and where do you feel teachers can be adequately re-skilled to implement Curriculum 2005 and Outcomes Based Education?

- T 1: INSET (in-service training) programmes should be rotated term wise for teachers, whilst substitute teachers assist schools. The Education Department should have a pool of substitute teachers who can be rotated at different schools in different areas. PRESET (pre-service training) programmes at tertiary institutes regarding Curriculum 2005 and Outcomes Based Education is very important, since newly qualified teachers can phase in the new system with ease. There should be on-going workshops with staff at school, outside schools and at Teachers Centres.
- **Q 8:** Do you feel that suitable resources like the internet, distance education, cluster workshops, newspapers and educational television could greatly assist in providing on-going support and much needed development for many teachers grappling with the new education system? Give reasons for your answer?
- T 1: Yes. The internet is a wonderful resource for gaining information, however, we need to consider the problems of access for many. Distance education, if effectively structured and well organised would be an excellent resource in reskilling teachers for Curriculum 2005 and Outcomes Based Education; because I achieved my degree by studying through correspondence at the University of South Africa and being a working mother with 2 children I found that this was the only way I could complete my teaching degree. Educational television would aid the new system of education because children become more focused on the learning material and television also means interacting with different learning resources instead of the boredom of only being subjected to classroom

activities. It creates interest amongst pupils, who later discuss what they have just seen since they can identify with the pictures. Curriculum 2005 and Outcomes Based Education principles also suggest that learners tend to perform tasks better if they see and do them instead of merely hearing them. The "Liberty Life Learning Channel" is also a wonderful learning resource since my children found William Smith's Mathematics and Physical Science questions and answers a great help in especially their matric year. Educational television plays a very important role in society since its target audience is varied. Newspapers are a good resource in the classroom since it provides current local and world-wide information for learners. There are always topical issues and adverts. This resource lends itself to learning in all learning areas. I use the "Daily News Learn Supplement" and the "Sunday Times ReadRight Supplement" in my class. There are wonderful activities such as story-telling, mathematics, crossword puzzles, songs, interesting facts, riddles, games, competitions, arts, culture and crafts that my class enjoys. Its design and layout is very appealing. It is always readily available and if I forget to bring it to class, some pupil is bound to bring it along. I also share it would my colleagues. Our school recently benefited from the "Sunday Times ReadRight Simba Competition" in which the collecting of coupons resulted in our school receiving a good few boxes of books for our school library. The "Daily News Matric Matters" also greatly assisted my children in preparing for their final matric exams. And lastly I would say that Cluster Workshops can be a great source of help in training teachers in the new system on an on-going basis, since this will

allow for networking with different people involved in the education system locally and outside our school.

- Q 9: All the abovementioned resources seem to be linked to "technology education" which acts as a powerful resource in developing teachers for Curriculum 2005 and Outcomes Based Education. Do you agree? Why?
- T 1: I agree. All learning areas lends itself to the field of technology. Our constant use of computers, newspapers, audio-visual aids and educational television all links up to technology. If facilities for these resources are provided, these would be good resources.
- Q10: What recommendations would you make to all stakeholders in education (viz. educators, schools, school governing bodies, parents, tertiary institutions, provincial and National Education Departments) for the use of these important resources in the teaching of Curriculum 2005 and Outcomes Based Education?
- T 1: Constant staff development, networking on an on-going basis and the availability of resources would aid development and reach goals in the effective implementation of Outcomes Based Education.

TRANSCRIPTS OF INTERVIEWS WITH TEACHERS

Teacher 2: Male, with 3 years of Curriculum 2005 and Outcomes Based Education teaching experience.

Q 1: What grades do you teach?

T 2: Grade 7

Q 2: How long have you been teaching?

T 2: 17 years

Q 3: What are your feelings about South Africa's new education system?

T 2: I am positive about the new change.

Q 4: Do you and your colleagues feel totally prepared to implement this new curriculum? Why?

T 2: Yes and No. At a political level- yes, it's what this country needs. At the level of the chalk face- no- here there are large class sizes, financial constraints of schools and lack of material resources. An Outcomes Based Education curriculum is too open ended and there are no developmental stages, for example, a structured syllabus to follow.

Q 5: Do you feel that suitable resources could assist you in understanding and

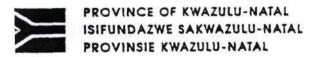
implementing this new education system more efficiently?

T 2: Yes.

- **Q 6:** What types of resources do you feel would be most suitable in re-skilling educators effectively? Give reasons for your answer?
- **T 2:** Material resources, for example, a structured national framework syllabus for each grade.
- Q 7: How, when and where do you feel teachers can be adequately re-skilled to implement Curriculum 2005 and Outcomes Based Education?
- T 2: How- Only giving teachers a thorough understanding of the political and economic necessity for implementing curriculum change. Reminding educators that Outcomes Based Education is a policy matter and therefore non-negotiable. Changing mindsets through political education strategies. When- immediately. Where- as close to the places of work as possible.
- **Q 8:** Do you feel that suitable resources like the internet, distance education, cluster workshops, newspapers and educational television could greatly assist in providing on-going support and much needed development for many teachers grappling with the new education system? Give reasons for your answer?
- T 2: No. I think we should relocate the battle of Curriculum transformation in our country. Resistance is coming for a lack of political commitment for the Indian, White and Coloured teachers. The new education system is not so complicated

that educators can't understand it. I also think that we should stop trying to copy so called first world standards, for example, the internet, computers, etc... I think that this is the solution to our country's needs, we don't need computer buffoons, we need the child who after finishing school is mentally and socially prepared to enjoy a meaningful life for themselves and their family.

- Q 9: All the abovementioned resources seem to be linked to "technology education" which acts as a powerful resource in developing teachers for Curriculum 2005 and Outcomes Based Education. Do you agree? Why?
- **T 2:** No. Technology Education is about teaching children the skills of doing and not so much the skills of using. There is enough opportunity outside of formal education for these pupils to learn about and use the technology available.
- Q 10: What recommendations would you make to all stakeholders in education (viz. educators, schools, school governing bodies, parents, tertiary institutions, provincial and National Education Departments) for the use of these important resources in the teaching of Curriculum 2005 and Outcomes Based Education?
- **T 2:** I'd ask them not to fool themselves into believing that these resources are the panacea to our political and economic challenges.





DEPARTMENT OF EDUCATION AND CULTURE UMNYANGO WEMFUNDO NAMASIKO DEPARTEMENT VAN ONDERWYS EN KULTUUF

AD OF	FICE .	INHÍOKO HHC	OVISI	HOOFKANTOOR
tress:	2nd Floor Administration Building King Dinizulu Highway Ulundi 3838	Private Bag: Isikhwama Seposi: Privaatsak:	Private Bag X04 Ulundl 3835	Telephone: Ucingo:035-8743660 Telefoorn35-8743687 Fax:
ulries: nuzo: rae:	Dr LT Mbatha	Reference: Inkomba: CUR/ Verwysing:	739	Date: Usuku: 21/05/2001 Datum:

CIRCULAR NO. 38 OF 2001

To: REGIONAL CHIEF DIRECTOR DIRECTORS: SUPPORT / MANAGEMENT REGIONAL CURRICULUM CO-ORDINATORS/TLS/POSES RECEIVED IN RECEIPTRY DISTRICT HEADS/SEMS DISTRICT OBE FACILITATORS SCHOOL PRINCIPALS

KWAZULU-NATAL DEPARTMENT OF EDUCATION AND CULTURE

Establishing Curriculum Structures to support implementation of Carlos

- 1. In order to support and empower educators at schools level, the Provincial Curriculum Committee in consultation with the KZN Stakeholders Forum initiated the formation of DISTRICT LEARNING PROGRAMME COMMITTEES (DLPCs). This is against the background that many educators still battle with the implementation of C2005.
- 2. The first structure will be established at a District Level. The DLPC will be linked to existing Learning Area and Phase Committees at Regional and Provincial Level.
- 3. The DLPCs do not in any way replace the Learning Area Committees, but rather serve to complement the work done in the Learning Area Committee.
- 4. The core function of the DLPC will be to develop Learning Programmes, which are central to the successful implementation of C2005. In addition, educators in the committee will have the opportunity of networking and interacting with each other to discuss matters of common interest in respect of OBE implementation.
- 5. As Regions differ in terms of the numbers of Districts, schools and the distances between schools etc, it is not possible to dictate the exact composition of the DLPC. However the following criteria should be adhered to:
- Each district must have DLPC in all eight Learning Areas.
- The DLPC would be required to draw up Learning Programmes for all three Phases viz. Foundation, Intermediate and Senior Phases.
- It is therefore important that educators from the three different phases are selected to serve on the DLPC.

- Schools at a Circuit level are clustered and sixteen (16) educators (two per learning area) from
 each cluster are elected on to the District Learning Programme Committee. This committee should
 represent as many schools as possible.
- The establishment of the DLPC will be coordinated by the District Curriculum Unit and OBE District Facilitators who are requested to work in consultation with the Regional Curriculum Coordinator.
- 6. It is hoped that the structures will be established in the second term, as this will support educators and ensure effective implementation of C2005 at grass roots level.

7. Your co-operation in this matter will be appreciated.

Mr. NS Shamase

(Acting Superintendent General)

0405717 Date



If you enjoy this article, you will love Alan's new book! Click here for more information.

~ Written by Alan November in February 1993 when he was technology consultant for the Glenbrook High Schools, Glenview/Northbrook, Illinois.

It seems imperative that we encourage all teachers to learn all the time, every day

Technology training for teachers ought to be more like sex education. Would you want your son or daughter to take a sex *training* course or would you want them to take a sex *education* course?

Okay, assuming you got this one right, why do you think we treat so much technology staff development as training and not as education?

If we really want to educate teachers to think about and apply technology to radically improve education, we will inevitably challenge the basis of our system. Obviously it is easier to stay in the training business. Education is much riskier.

Part of the reason staff development too often stops with training and never moves on to the important education/thinking level is a lack of respect in the professional culture for the teacher as learner. Unlike many corporations that place a high premium on their professionals' capacity to learn and apply new skills, education has no tradition for valuing the teacher as lifetime learner. Case in point: it is not unheard of for an engineer to be paid up to 100 days a year to learn, yet the average teacher in the U.S. gets one to three days.

Although money is a major barrier to quality staff development, it is not the only one. There are other factors - such as attitudes and visions - that we can control to improve staff development.

Attitude Adjustment

We've all heard it said, or said it ourselves at one time: "I can't leave my classroom to attend training. My students need me, and it will take days to recover from having a sub in class."

I used to think this was an admirable position. Not anymore. If we can't leave students for a few days or even a week without the process becoming totally disrupted, maybe there is something wrong with the model that perpetuates students' overdependence on a teacher for learning.

Clear Vision

Staff education cannot flourish in a school where there is no shared vision of how much more students can achieve.

I often visit different school systems and I hear how educators and school board members do not have the authority to create powerful visions because of barriers such as state testing, SAT scores, college admissions requirements, the school schedule, and old-fashioned people in the community.

Ignore the current barriers. They are destined to fall. Instead, develop a clear vision of how technology will really make a difference in areas like family literacy, lifetime skills, authentic assessment, and new roles for teachers.

Tie vour staff development into that vision. For example, if you currently do staff development department-by-department but your vision is a multi-disciplinary approach,

redirect the staff development to reflect that. The move from departmental staff development to a systems approach is a big leap, but it has to be done. Your staff development program can either make the vision happen or weigh it down like an anchor.

Talk to Colleagues

There are probably more good ideas frozen in teachers' heads in schools across America than in many think tanks and university schools of education. But these ideas are useless unless they are shared among colleagues. Yet research indicates that teacher typically spend less than two minutes a day talking to each other about ideas.

How can we possibly apply technology unless education professionals feel comfortable about sharing ideas all the time?

Limited idea sharing, in turn, limits the scope and effectiveness of staff development. But education does not have, or at least does not fully utilize, the type of communications infrastructure that allows professionals in other fields to simply pick up the phone and ask each other for help.

The kind of infrastructure I'm talking about is exemplified in a statewide network in Texas. called TENET, which enables teachers to talk to teachers in their state and around the world, and it only costs them \$5 to open an account.

In any staff development plan, it seems imperative that we encourage all teachers to learn all the time, every day. The most cost-effective resource for achieving this is each other.

This article can be found on the Web at http://www.anovember.com/articles/risky.html

If you enjoyed this article, you will love Alan's new book! Click here for more information.

For more information about services Alan November and Educational Renaissance Planners can provide, contact us at:

http://www.anovember.com/ lelia@anovember.com

Phone: (781) 631-4333 Fax: (781) 235-5332

P.O. Box 812380

Wellesley, MA 02482-0018



[home]



[search]



new



[services]



[ideas]



[forum]



grants



[contact]





[booking] [credentials]







10h00 - 12h00 on SABC 2

TIMETABLE: FOUNDATION PHASE

WEEK 21

17 JULY- 21 JULY 2000

	MO	N	TU	JES		W	ED	TH	U	25		FR	I
10:	00-11:00	No.						*	3.0			336	10
10:00	O OPEN SESAME SESOTHO 28 minutes episede 21		OPEN SESAME ISIZULU 28 minutes episode 21		OPEN SESAME ENGLISH 28 minutes episode 21		OPEN SESAME ENGLISH 28 minutes epitode 21		OPEN SESAME ISIZIAU 28 minutes episode 21				
	E D	U	C	A	T	0	R	A	L	E	R	т	•
10:30	FUNDANI NATHI		FUNDANI NATHI		EN	NI NATHI		ANI N	2011 D.S	FUNI	ISIZUU		
	9 minute episode			ninutes sode 1			rinutes rode 1		minutes pisode 1			abiroqu oi	
10:40	NUMBERTIME . ENGLISH		NUMBERTIME ISIZULU			BERTIME GUSH	0.000	ABERTI NGLISH	CONTRACTOR S	NU	MBER'		
0.00	14 minut episode	3.72		minutes sode 1		1000	minutes sode 1		4 minute pisade 1	Y/7		ld minis episede	
	ED	U	C	A	T	0	R	A	L	E	R	T	•



Open Sesame



Learning Programme: Numeracy

INTRODUCTION

Meet Kermit, Cookie Monster, Bert and Ernie, cute and furry Elmo and a hast of other wacky, way out, beloved Muppet characters. Each episade is a roller coaster journey through the three Learning Programmes - so choose your favourite Phase and Programme Organiser and enjoy the ridel

. " ! Information about each episado .

Learn the difference between "happy and sad". Find out about brushing your teeth, bottom and lop", drawing a circle and how we get our water- from clouds to tap. Learn about the number 8 and the letter 8b.

1	0	Phase Organisers:	Personal Development
J	画	Programme Organisers:	Emotions
	1	Suggested	UCSOIACS; UCSO7AC2; LOSO3AC1; MLMMS SOIACI

Find out about eyes, noses and mouths, having your eyes tested, looking after your hair, what's under the street, "here and there", using old things to make something new, the four seasons and the joy of reading. Learn about the number 8 and the letter Aa episode Phase Week 22 Organisers: Environment; Personal Development Programme Littering/Recycling; Not judging others because they are Organisers: different Suggested Outcomes: LLC SOTACJ; LO SOTACZ; MLMMS SOTACT

Malume's Follow Up Activity -

- Malume's Follow Up Activity
 The learners can compare one another. They could look at eyes, nases, mouths, hair colour and hair length. They should notice their differences and similarities.
 - Let the learners cut pictures of people from magazines. They should discuss the differences and similarities.

Find out about school, grouping similar objects, subtraction, imagination, "next to and next", straight and curred lines, and counting to ten. Learn about the number I and the episode A Phase Week 23 Organisers: Personal Development Programme Organiserst Schooling Suggested LLC SOTACE: MLMMS SOTACE; MLMMS SOTACE Outcomes

Malume's Follow Up Activity -

. The learners can draw objects using only straight lines, then using only curved lines, and finally by combining straight and curved lines.

Find out about the sounds a car makes, going to a car wash, form animals, frags, "worm and cold" and "up and down", Learn about the number 5 and the letter Mm episode Week 24 Personal Development; Communication Organisers: Organisers: Programme Looking after pets. Up and down Suggested Outcomes: LIC SOTACZ: MIMMS SOTACT

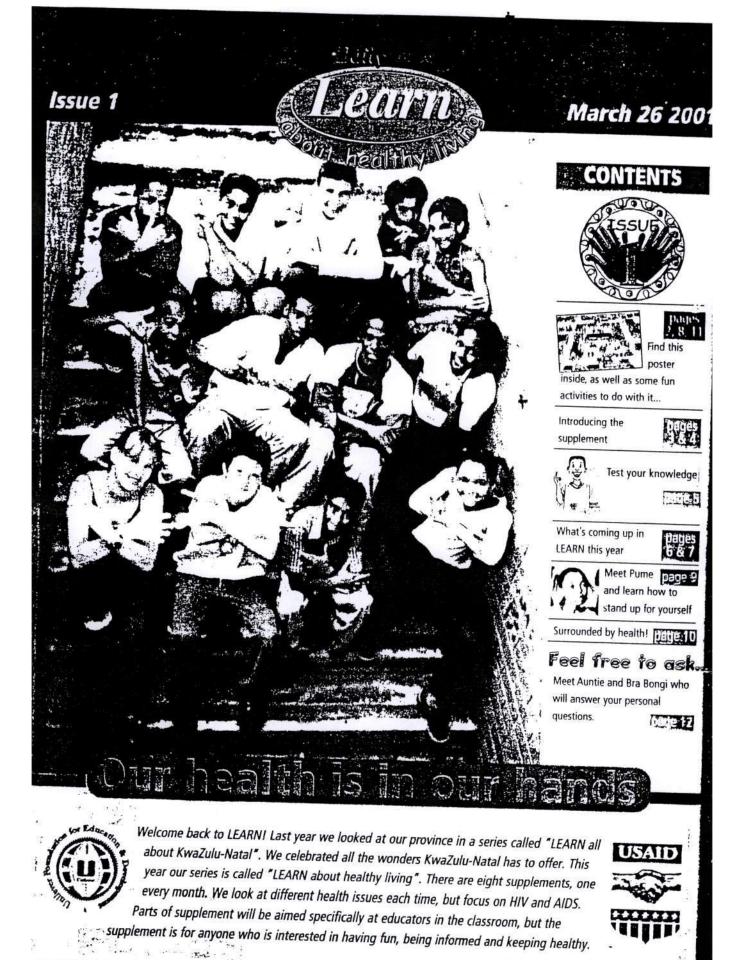
Malume's Follow Up Activity -

• The learners can use their bodies to explore up and down. They can try other positions, e.g. sitting or lying flat, or jumping up and down.

Find out more about necks, the cancept of "between", "reaching", counting to twenty, and different and copes. Learn about the number 4 and the letter Yy. episode Phase Week 25 Environment: Communication Organisers Programme Organisers: landscapes; One-to-one correspondence Suggested LLC SOTACZ: MLMMS SOTACT

Malume's follow Up Activity -

Malume's ration up activity
The learners can count different objects around the classroom, i.e. get them to use numbers in relation to objects and sounds.



TO THE TOTAL PROPERTY OF THE P

Welcome to LEARN in 2001

We can make a difference!

Every day in KwaZulu-Natal, the newspapers tell us about the deadly diseases that threaten people's lives. Already this year, thousands of people have died from AIDS and hundreds have died of cholera in KwaZulu-Natal. When we read these stories, it's easy to feel hopeless and powerless, As ndividuals, what can we do to improve the health and well-being of the people in our province? Can we really change the situation?

Some people believe that we can! A group of education and health stakeholders have launched a project to promote healthy living and to combat HIV and AIDS in KwaZulu-Natal. This. project brings together teachers from all eight regions of KwaZulu-Natal to share their understanding and experience of the health. issues that affect young people in the province, and to develop teaching materials that directly address these issues.

This supplement provides a place for these teachers to share their experience and expertise with other teachers in the province it also provides further information and ideas for promoting health education inside and outside the classroom.

"What can I do today"

At the first workshop held with KwaZuhi-Natal teachers in March, the discussion was mainly about combating HIV and AIDS. Guest speakers spoke about the importance of AIDS education, and participants had a chance to ask questions, to share ideas and to talk openly about their hopes and fears for themselves and their learners.

By the end of the workshop, everyone was committed to tackling AIDS head-on by talking about it, raising awareness and building a sense of responsibility amongst their colleagues and their learners.

declare war!

Educators It became clear that we don't have to be 'experts' to do our bit to help in the fight against HIV and AIDS. Participants realised that there were things that could be done right away. They made pledges to:

- ✓ avoid discriminating against victims of the disease;
- ✓ lend support to organisations that assist people living with HIV and AIDS:
- talk openly about HIV and AIDS and encourage others to do the same;
- not be ignorant and say things like "idliso bathakathiwe" it won't happen to me;
- talk to learners and young people about the disease;
- raise AIDS awareness in our communities and help people to understand that AIDS is serious and there is no cure at the moment.

"What can I do about HIV and AIDS today?" What is YOUR answer? Perhaps this supplement will make this question easier to answer and help you to find out more about combating AIDS. The aim of this supplement is to help ourselves and others to realise that OUR HEALTH IS IN OUR HANDS.



Whose project is this? e-Kwazull-Natal Department of Education and Culture The N auto Horelius and Independent Ne They have been joined by the funders and health stakeholders. The swiss Adency of Development and Cospoeration, Unitever, and sh United States Agency for International Developme Other protos which have already lent their support are: of soils of the Cost himion Action crossors in Mittember 1950: same strang gas Desputations alcohismes alon quest speaker at the worksho

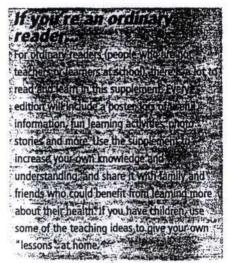
Our health is in our hands



How to use the supplement

No matter who you are, there is something in this supplement for you

These supplements are aimed at educators and learners in the classroom, as well as other readers who are not at school. There will be eight editions this year, one a month. In each edition, we will focus on a different aspect of health (see pages 6 and 7), and each edition will deal with the topic of HIV and AIDS.



If you're an educator in the classroom...

Educators from around KwaZulu-Natal will be getting together with experienced trainers to develop activities for you to use in your classroom. They will select, adapt and develop learning materials (posters, background information, stories and other items) for you and your learners to work with in the classroom. They will also design learning activities for the Intermediate Phase and the Senior Phase which will give you a step-by-step guide for working with the learning materials and implementing the activities.

The activities are designed to be part of the 'regular' curriculum in the framework of curriculum 2005 (learning areas/learning programmes). The links to the curriculum will be shown.

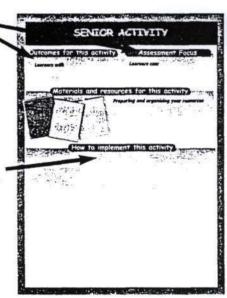
The diagram below shows you what the learning activity pages will look like. The key aspects of OBE are dealt with in the learning activities in a way which is easy to understand.

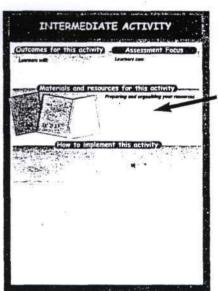


Outcomes are stated clearly and linked to assessment approaches.

A step-by-step guide is given on how to implement the activity

There are useful hints and tips that can help improve teaching and learning





How to use the general section to develop learner support materials is explained and there are ideas for making and using other resource materials

Suggestions are rgiven for other learning activities that could be linked to the Programme Organiser being used



Let this be a journey of discovery we undertake together. Write in and share your stories, ask questions and contribute to making this a two-way communication tool. Meet Auntie and Bra Bongi on the back page in "Feel free to ask..."

This supplement is also intended for learners to read themselves. There are many ideas to think about and practical things to do, starting with the guiz on the next page.

Outcomes for learners

The LEARN supplements will empower learners with life skills for healthy living. This supplement, and the supplements that follow in the series, will help to enable learners to:

- ✓ take responsibility for their own health and realise that "our health is in our hands";
- ✓ look at positive actions, solutions and attitudes;
- ✓ make good choices about behaving in a safe way;
- promote health: the health of learners, their school, their home, their community and their environment:
- ✓ be informed and encouraged about the health issues facing them.



Learn about healthy living

Our health is in our hands

Just how much do you know?

Test your knowledge in our fun quiz



Choose one of the answers provided. When you have finished, check your answers against those given on the back page. You will find out a lot more about these answers as the series continues, so keep reading!

- Boys' and girls' bodies start to change at a certain age because of changes in their:
 - a. diet
 - b. environment
 - c. hormones
- 2. Which of these are also known as the "building blocks" for our cells?
 - a. Vitamins
 - b. Proteins
 - c. Carbohydrates
- 3. The special cells that make our body immune to germs and infections are known as:
 - a. white cells
 - b. red cells
 - c. plasma
- 4. HIV stands for:
 - a. Herpes Infected Virus
 - b. Hyper Immune Virus
 - c. Human Immunodeficiency Virus

- 5. Which of these diseases is **not** carried in dirty water?
 - a. cholera
 - b. bilharzia
 - c. malaria
- 6. When we have diarrhoea we must:
 - a, not eat or drink anything
 - b. drink a solution of sugar and salt in water
 - c. have an enema
- 7. Gender equality means that:
 - a. boys and girls have the same rights and responsibilities
 - b. boys are better than girls at most things
 - c. boys and girls are exactly the same
- 8. Doing something that you feel is wrong to please your friends is called giving in to:
 - a. poor self-image
 - b. peer pressure
 - c. bribery

- When you stand up for yourself and your beliefs without hurting someone else, you are being:
 - a. assertive
 - b. passive
 - c. aggressive
- 10. Who dies when they get Acquired Immune Deficiency Syndrome (AIDS)?
 - a. Children
 - b. Grown ups
 - c. Everyone

Check your answers on the back page!



What would you do if..

Here you do not have to choose an answer. Just read through each situation, decide for yourself where you stand and circle one of the responses given. Count how many times you circled the letters a, b or c and then turn to the back page to see what your score means.



Situation 1:

You come home from school one day and find an intruder in your house. What will you do to protect yourself?

a. I know = b. I'm not sure # c. I don't know

Situation 2:

Someone at school offers you money for sexual favours. What will you say? What will you do?

a know h I'm not sure c I don't know

Situation 3:

One of the friends that you hang out with suggests that you try a special drink or smoke dagga 'just for fun'. How will you react?

a. I know ... b. I'm not sure ... c. I don't know

Situation 4:

You are walking home one afternoon and a stranger stops to offer you a lift. What will you do?

a. I know ... b. I'm not sure ... c. I don't know

Situation 5:

You are at a party and you start to feel uncomfortable about the way the people around you are behaving. What will you do?

a. I know b. I'm not sure c. I don't know

Situation 6:

Someone telis you that they feel attracted to you in a sexual way. You have similar-feelings for this person. What will you do or say?

a. I know - b. I'm not sure : c. I don't know

Now turn to the back page

Our health is in our hands



Learn about healthy living Issue 1: March 2007

What's coming up in LEARN...

1. Our health is in our hands

Welcome to LEARN

In this first issue, we look at some of the ways we can take responsibility for our own health and the health of the people around us. Find out how much you already know about healthy

living and responsible choices by doing the quiz on page 5. Check to see whether your school is a health-promoting school by working with the poster and the questions on page 8. Read the story on page 9 and think about how good you are at saying NO when you need to. There is lots to think about in this first edition. We hope you enjoy it.



2. Health and healing



Knowing how our bodies and minds work is the key to staying healthy. If we understand our own physical and emotional needs, we can make wise choices about meeting our needs, improving our health, and healing ourselves when we are ill. Our

look at how our attitudes affect our health and well-being.

wonderful creation. It's exciting to find out how it works!

health, and healing ourselves when we are ill. Our bodies are made up of different systems and these need to be kept in good working order. For example, a healthy immune system helps us to fight disease, so in Edition 2 we will look at ways of keeping the immune system strong. Staying healthy is also about having a positive attitude towards life. It's about treating ourselves and others with care and understanding so that our relationships are strong and healthy. In Edition 2, we will

3.HIV and AIDS: talk about it

Scientists have worker but exactly what the AID virus is and above is agreeds. In Edition 3 we are

going unions auther acts. Once we know the facts we can talk sensibly about HIV and AIDS! We can talk about how it spreads and how to avoid it. We can talk about relationships and the responsibility that comes with naving sex. Talking honesty and openly about

relationships sex and HIV/AIDS is the first step towards stopping the

THE FUTURE
AINT WHAT
IT USES
TO BE.

HIV?

We must know the facts about HIV/AIDS and talk openly and honestly.



4. Water for life!

IV proce the

Have you noticed that in almost every religion, water is a symbol of cleansing, healing and new life? Think of all the religious ceremonies that use water, such as baptism and *memulo*. Perhaps this is because everyone needs clean water for life. Dirty water can carry diseases like cholera, diarrhoea, dysentery and typhoid. In South Africa, many people die from these diseases, especially children. In Edition 4 we will

Remember to

wash your hands

before you eat

look at ways of keeping water clean and safe. We

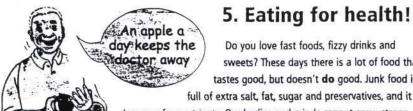
will talk about sanitation. Good sanitation means getting rid of human waste in a way that does not harm our water or our environment.





Our health is in our hands

Learn about healthy living Issue 1: March 2001



5. Eating for health!

Do you love fast foods, fizzy drinks and sweets? These days there is a lot of food that tastes good, but doesn't do good. Junk food is

has very few nutrients. Our bodies and minds cannot grow strong and healthy if we live on junk food. In Edition 5 we will talk about

foods that harm us and foods that help us and heal us. We will look at what should go into a healthy, balanced diet, and what foods help to build the immune system when we are unwell.





6. Making the right choices

ou think. mayoe (should just by it a Sooner or later, you will see the facts ing choices like this you might have many opportunities to smoke and take drugs and you will need to decide what to book can force you to do these things, nor can they force (*) of to do them. The thoice is yourse Do you have the facts you to make these choices wisely? In Edition 6 we will look at a 10 common to the common of the co acts, but remember, the choice is always up to you.



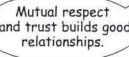


7. Healthy relationships



You know how it feels when you're not getting on with your friends or when there's fighting at home. You feel sad, lonely, unsure of yourself and you start to wonder what life's all about. You don't need us to tell you that unhappy relationships are bad for your health and well-being. So what can you do to make sure your relationships with family and friends are positive? There are lots of things you can do. Most important is to remember that you have rights and responsibilities. And so does everyone else. Healthy relationships happen when people accept one another's rights and honour their own responsibilities. This way, everyone is treated with respect and dignity. In Edition 7 we'll look at some good ways to build strong relationships.

> Mutual respect and trust builds good relationships.





HIV and AIDS 8. Living with HIV and AIDS is everyone's problem. We must **的**类似,这一点是许多态度



Are you HIV-positive or HIV-negative? Whatever your answer: fact is that you are living with HIV and AIDS. We are all living with HIV and AIDS because it affects every single one of us, whether not we are infected with the virus. Do you know people who are infected? Do you know people who are ill or dying? Do you know people who have already died from AIDS? How do you feel a people who are infected, ill or dying? What about the famili ends they leave behind? Are people in your school and communit ng openly about the disease, of are they keeping silent and the questions we will consider in Edition 8.3

Our health is in our hands

Learn about healthy living Issue 1: March 2001



A healthy environment

Health is not just something that affects our bodies. We can also have a healthy attitude, and promote ideas and practices that keep our environment and our community healthy.

Nho said what?



Can you find people in the health-promoting school poster who could be saying the following words?

"I am so disappointed in your behaviour. I thought the three of you had become good friends again."



Thank you for coming to elp us fix the school

"Open your mouth wide. This medicine will help your body fight the disease'



- Calentin in the "As a community we have to join together to fight HIV and AIDS."

AT 50 1773 "I told that boy to leave me alone



"Here is a healthy snack to





Make up some more words yourself. Ask a friend to guess which character from the poster said what,

Is my school a healthpromoting school?

How does the school shown in the poster compare to your school? Read through the questions below and decide whether your school is health-promoting or not health-promoting. You can use a checklist like the one here to keep a tally of your answers.



MY SCHOOL	promotes health 🗸	does not promote health X	At Are their trees in your school grounds abothey help to keep your school grounds shoot a Does sometine take care of the plants (a
1. The food sold 2. The clinic and health services 3. The water to drink			55 How do you get rid or publish at your scrool are pressible to recycle any materials?
and wash in 4. The trees for shade 5. The waste disposal and recycling 6. The sport and outdoor			fortabler a place captaly sported despite offices activities (since place and clean).
activities 7. The guest speakers 8. Learning about the environment			### Probation of Probable to talk to your spours about the sort of
9. The way bullies are treated 10. Going to and leaving school	A Profile	1	
Super construction of the second			And a superior of the control of the
Andrew State of the Control of the C		ing Alice 13.	For more information about health-promoting schools see the contact details on page 11.



Stand up for yourself!

We all need to take a positive, proactive approach to being healthy. But sometimes saying yes to health means saying no to others...

You always have the right to say no. No to sex, no to friends, no to anything that makes you feel uncomfortable. But it is not always easy to say no. You will get better at it if you practise.

Tips for saying NO

- Say NO strongly. You don't have to smile and be polite if the person is not hearing what you are saying.
- Say what you mean. Don't say maybe if you mean NO.
- You have a right to disagree. Respect yourself and the other person you are dealing with.
- · Stick to the point. Don't let the other person tell you that you are wrong.
- Walk away if you are still being ignored.
- If things feel difficult ask a friend or adult you trust for help or advice.

Saying NO feels good

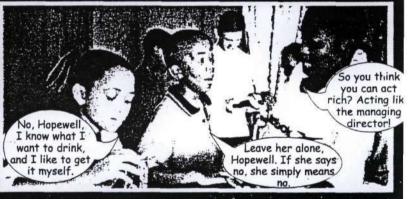
- Top feel petter about yourse fill you do
 Mhat you believe in.
- rou respectly durse flend others respectly but
- Your confidence improves every time you
 - statous for yourse for
- You can say no to another person in such a way that you both feel live winners
 - When you say no, you are
 - ביפר זוכן פרוניםים.

Like all young people, Pume loves going on dates and to parties. But she knows she should be careful, because some of the guys especially, like to show off. Look at what happened at a party.











What do you think?

Why do you think Pume said what she said? Discuss the following points with your friends:

- · Was anything Pume said rude or hurtful?
- Do you think Hopewell was offended?
- Explain what you think were in his thoughts.
- What is the difference between Hopewell and Emmauel's attitudes towards girls?
- Who do you admire more Hopewell or Emmanuel?
 Give reasons.

Our health is in our hands



Feel free to





Dear Auntie, I have mever had a boyfniend before, but there is this guy who likes me. I like him too but I am so afraid of HIV and AIDS. What can I do? Theresa

Dear Theresa,

You might like this guy, but this does not mean you want to have sex with him! Think carefully about what YOU want. You can say NO. If you want to have sex together you must use a condom every time or you could contract the HIV virus and you could fallpregnant. Get as much information as you can before you decide what to do. On this page there are some numbers you could phone for expert help and guidance. Auntie

Dear Auntie. I am afraid to talk to my parents about sex because they never talk about things like that. They will think that I am forward and without shame. Thandi

Dear Thandi

Sex is a natural part of life and it is not shameful to talk about it. Your curiosity about sex is normal and it's a good idea to find out as much as you can. If you can't talk to your parents there are other people you can talk to, such as a counsellor or a family planning sister, or an older woman whom you trust. For expert information and advice, try calling LoveLife and LifeLine (see the numbers below). Keep asking and you will find the answers you need! Auntie

Dear Bira Bong My friends are all +all and I don't seem to be growing as fast as they are. In other ways too they are beginning to be like men. I am worried that there is something wrong with me. Paulus

Dear Paulus

Please don't worry! We all develop at different paces and it's normal to feel a bit worried if you seem slower than your friends. But you will catch up. In the meantime, you don't have to be big and strong to have a big heart and a strong



CONTRACT

For help, counselling and advice:

LifeLine:

031-312 2323 (Durban) 033-394 4444

(Pietermaritzburg) 039-315 5447 (Margate) 035-753 3333

(Richard's Bay)

LoveLife: 0800 121 900 Childline: 0800 055 555. Sinikithemba Christian Care Centre: 031-268 5718 AIDS helpline:

0800 012 322

For information and advice:

Health-promoting schools: 033-395 2132 SANTAG (Sanitation

Action Group):

031-206 2216

10年10年的10年10年10日 10年10年10日本第七年11日

Section one: 1: c, 2: b, 3: a, 4: c, 5: c, 6: b, 7: a, 8: b, 9: a, 10: c

Section two: Were most of your responses?...

"I know" - Well done for thinking ahead and having confidence in your decisions. You are someone who takes health and safety seriously and you are well prepared. Keep checking that your knowledge and your choices are based on sound information. Continue to think carefully about your decisions, and keep reading and learning!

"I'm not sure" - You have ideas about how to take responsibility for your health, but you don't trust your own decisions. You need to make up your mind and stick to your decisions. Be sure of who you are and what you want in life. Find out more, make sure that the knowledge you have is correct, and ask for advice and guidance from people you trust. You have a right to make your own choices in life, so make them and be sure!

"I don't know" - Are you fast asleep? It's time to wake up! You can't go through life not knowing what you want or what you believe. If you don't know what you want, others will decide for you ... and you might not like what they choose for you. Think ahead about the challenges you will face in life. Make sure you have all the information you need. Make your own decisions and be prepared to stick to them! Keep reading this supplement to find out more about healthy choices!

funders:





Tel: (031) 308 2615 Fax (031) 308 2559





DEPARTMENT OF EDUCATION AND CULTURE URINYANGO WEMFUNDO NAMASIKO DEPARTEMENT VAN ONDERWYS EN KULTUUR

POVINCE OF KWAZULU-NATAL IFUNDAZWE SAKWAZULU-NATAL F KWAZIH ILNATAL

t and research: The Media in Education Trust in partnership

Telephone: (031) 303 4206 Fax: (031) 303 4209 Email: miet@miet.co.za

Production team for this issue:

Writing: Ruby Peinke, Louise Torr, Liz Mattson Design and sub-editing: Jessica Nicholson Photographs: Ruby Peinke and Wilna Botha Illustrations: Hildegarde van Zy Contributions: Soul City, SANTAG, KwaZulu-Natal Department of Health. Thanks to the pupils of Amanzimtoti High.



Our health is in our hands

Learn about healthy living

Messages about health

What influences me?

As we grow up and become young adults, we are surrounded by many different influences. We learn from different groups of people. Try to think of how hese different groups of people influence you every day. You can fill your answers in here. If you are stuck read through the ideas below. Compare hese ideas to what you have written in each box.

	The Media	School	2
Family			Friends
7 4.11.17			1110000
		***	***************************************

	FIGURE 18 DE DE LA COMPANIE DE LA CO	Markey of True California	***************************************
	A PER CONTRACTOR		
	HERE WAS TRACTED		
\\			
Gender			Community
	A STATE OF THE STA		
		Contract	
	100		

Family

Our family influences us the most – usually this is a positive influence, but sometimes we may wish it could be different. From our families we learn about:

BELIEFS: We learn most of our beliefs from our family.

VALUES: Our family teaches us things that are right, wrong or important.

PAST:Our experiences help make us who we are. LOOK:We usually inherit our looks, shape and size from our families.

Gender

Gender refers to whether you are a girl or a boy. This affects your identity. Our family, community and the media tell us how girls and boys should behave and act. This is not always positive if we get the message that boys are better than girls.

The media

The media (television, radio, newspapers) can have a powerful influence on the way that we think and feel about ourselves.

IMAGE: The media tells us how to look, what to wear, eat or buy. It can affect the way that we feel about ourselves.

NEWS AND POLITICS: We hear news and opinions in the media. This influences us. We learn what is supposed to be good and bad behaviour.

School

At school we learn about who we are, and how the world works. School should also teach us to think and ask questions. School should help us to explore our own special talents and interests.

Friends

Our friends are very important. They help us learn about ourselves as people separate from our family. We share experiences as we grow and change together.

BELIEFS AND VALUES: What our friends think and do influences us. Friends teach us values and beliefs different from those we grew up with.

PEER PRESSURE: Sometimes we want to be popular with our friends and fit in with them, so we do things we don't like.

Congmunity

Our community can expect us to behave or think in a certain way.

HISTORY: We often share a history with the people in our community. These shared experiences can create a common understanding between people about what is good and what is bad.

VALUES: There are often shared values and beliefs within a community.

What we learn from others

Discuss these questions with a partner. Write down notes in a notebook if you would like to.

- Write down three beliefs or values that are important to you right now.
- What beliefs or attitudes have you learnt from these different groups of people?
 - 3. Do you agree or disagree with the things that you have been told?

Adapted from: Soul City Grade 9 workbook







BUSINESS ECONOMICS: STANDARD GRADE QUESTION ONE

1.1 MATCHING: Match the term in column B with its description in column A. Write down the question number and next to each, the letter of the alphabet corresponding to the correct answer.

COLUMN A	COLUMN B			
Cost which change directly with the number of units produced	A Prospectus			
A document giving the right to a company to	B Trademark			
invite the public to buy shares	C Oligopoly			
Insurance companies may spread the risk among other insurance companies when they	D Founding Statement			
are unable to insure a large risk	E Security			
The number of shares which may be sold to pay for the preliminary expenses of launching	F Ethics			
a company	G Advertising Consultants			
This principle provides compensation on the occurrence of any events stated in the contract	H Gearing			
6. There are only a few sellers of a product	I Cash budget			
dominating the market	J Underwriting			
 A special device, stamp, label or sign which may appear on manufactured goods. 	K Reinsurance			
Maintaining favourable ratio between own	L Minimum Subscription			
and borrowed capital.	M Jobbing			
The institution that promotes standardisation in industry and commerce.	N Variable cost			
10. This is the right that is allocated or delegated	O Policy			
to a person by virtue of his qualities and capabilities.	P Responsibility			
name (green green and a state of the state o	Q Authority			
	R SABS			
	S SARB			
	T Indemnification			

 $[10 \times 2 = 20]$

Listen to Ukhozi FM from Monday to Thursday between

17:30 - 17:45 and Monday and Wednesday nights between



Listen to Lotus FM every Thursday night from 20:30 - 22:00 to the "On Line" programme when Matric Matters will be discussed. August 13 - Mathematics.

August 15 - Mainemancs.

August 15 - English First Paper

August 20 - Biology

August 22 - Physical Science, Accounting

August 27 - Economics, Business Economics

August 29 - History, Geography





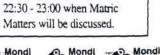












Business Economics Standard Grade - knowers

BUSINESS ECONOMICS STANDARD GRADE: ANSWERS

QUESTION ONE

1.1 Multiple Choice

1.1.1 N

1.1.2 A

1.1.3 K

1.1.4 L

1.1.5 T

1.1.6 C

1.1.7 B

1.1.8 H

1.1.9 R

1.1.10 Q

[10x2 = 20]

1.2

1.2.1 b

1.2.2

1.2.3 c

1.2.4 a

1.2.5 c 1.2.6 d

1.2.7 c

1.2.7 c 1.2.8 d

1.2.9 t

1.2.10 c

 $[10 \times 3 = 30]$

1.3

1.3.1 Memorandum of Association

1.3.2 amalgamation

1.3.3 market research

1.3.4 quality control

1.3.5 advertising consultants

1.3.6 subrogation

1.3.7 work study

1.3.8 convenience goods

1.3.9 control

1.3.10 policy

 $[10 \times 2 = 20]$

















Business Beautomics Standard Grade - Questions

1.2. MULTIPLE CHOICE

Chose the correct answer from the options provided. Write down the appropriate letter of the alphabet next to each question number, eg. 1.2.11 A.

- 1.2.1 The continuity of this enterprise is affected by death or retirement of one member
 - A. Khula Fresh produce CC
 - B. Smith and Sons
 - C. KZN Manufactures Ltd
 - D. ABC Distributors (Pty) Ltd
- 1.2.2. Freedom Stationery (Pty) Ltd may immediately commence business after receipt of the.........
 - A. Memorandum of association
 - B. Certificate to commence business
 - C. Article of association
 - D. Certificate of incorporation
- 1.2.3. Which of the following media and method would be most effective in advertising the correct use of a machine?
 - A. Radio
 - B. Press
 - C. Television
 - D. Posters
- 1.2.4 This type of ownership restricts the maximum membership to 10
 - A. Close corporation
 - B. Co-Operative
 - C. Private company
 - D. Partnership
- 1.2.5. Which one of the following is an example of a specialty store?
 - A. Sales House
 - B. Shoprite Checkers
 - C. ABC Shoes
 - D. Game Discount Store
- 1.2.6will appear in a capital budget
 - A. The purchase of trading stock
 - B. The payment of wages
 - C. The settlement of creditor's accounts
 - D. The purchase of a computer





















1.4

1.4.1 true

1.4.2 true

1.4.3 true

1.4.4 true

1.4.5 true

1.4.6 true

1.4.7 false

1.4.8 true

1.4.9 false

1.4.10 true

 $[10 \times 2 = 20]$

1.5

1.5.1 fixed

1.5.2 liquidity

1.5.3 cession

1.5.4 optimum point

1.5.5 undercapitalised

 $[5 \times 2 = 10]$

OUESTION TWO: (FORMS OF OWNERSHIP)

- 2.1 The partnership articles includes:
- The aim of the business
- · The amount of capital required
- · Ratio in which the profits are divided
- Partners who will manage the business
- The settling of disputes
- · The duration of the partnership
- · The rate of interest payable on capital and drawings
- · Salaries payable to managing partners
- Procedure to be followed when the partnership is to be dissolved.

Any $6 \times 2 = 12$

2.2 DIFFERENCES

PRIVATE COMPANY	PARTNERSHIP		
It is a legal person apart from members	Has no legal personality		
Can enter into contracts : sue and be sued	Has no contractual capacity		
Liability of the shareholder is limited	Liability is unlimited		
Minimum number of persons is one	A minimum number of two persons		
Maximum 50	Maximum is 20		
Shareholders cannot act as agents	Each partner is an agent		
Regulated by the Companies Act	Oral or written agreement		
 Death of shareholder does not affect continuity 	Death or retirement affects the partnership		
Name must end with the words "Pty Ltd"	Cannot use these words		
Capital raised by issuing shares to public	Partners contribute capital		

Any $5 \times 4 = 20$





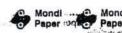












Business Económics Standard Grade - Questions

OUESTION SEVEN PRODUCTION - FUNCTION

7.1. Describe THREE aspects of factory safety.

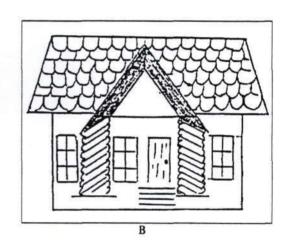
(6)

7.2. Differentiate between FIXED COST and VARIABLE COST. Make use of examples

(8)

7.3. Study the following diagrams and then answer the questions.





7.3.1. What kind of process would be used in the production of products described in \mathbf{A} ? (2)

7.3.2. Outline FIVE advantages of the kind of production illustrated in picture A (10)

7.3.3. What kind of production is illustrated by the picture \mathbf{B} (2)

7.3.4. Describe THREE advantages of the kind production illustrated in picture B (6)

7.4 The following transactions appear in the book of XYZ Manufactures of the month of July 1999.

Timber used R280 000 Direct labour R80 000 Overheads R10 000 1000 tables are produced monthly

7.4.1. Calculate the prime cost (3)

7.4.2. Calculate the unit cost (3)

[40]



















Business Economics Sundend Grade - Auswers

7.2 Fixed and Variable costs:

Fixed costs are costs that do not change with a change in the number of units produced, or with the production hours. Example

Variable costs are costs that change when the volume of production changes. Example (8)

7.3.1 mass production

(2)

7.3.2 Advantages of mass production

- · Lower costs per unit
- · Specialization can be attained
- · Stockpiling cost per unit is low
- · Division of labour is possible
- · Workers and machines are employed optimally
- · Handling of materials is restricted
- Production control process is simplified
- There is uniformity

Any $5 x^2 = 10$

7.3.3 Jobbing

(2)

7.3.4 Advantages of jobbing

- There is greater flexibility and adaptability to new circumstances.
- · Delays in production can be more easily overcome
- Multipurpose machines and equipment are usually less expensive than single purpose machines
- Fluctuations in the demand for the product can be managed more easily.

Any $3 \times 2 = 6$

7.4 Calculations

7.4.1 Prime cost is calculated as follows: (3)

Direct labour cost + direct material cost R150 000 + R280 000

= R430 000.

7.4.2 Unit cost is calculated as follows:

Number of units

= R520000

Total cost

10 000

= R520















(3)





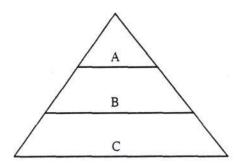




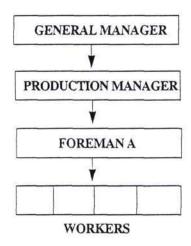
Business Economics Standard Grade - Questions

QUESTION EIGHT GENERAL MANAGEMENT

Study the diagram below and answer the questions



- 8.1. Name the levels illustrated by $\underline{\mathbf{B}}$ and $\underline{\mathbf{C}}$ (4)
- 8.2. Name the kinds of decisions that are taken in $\underline{\mathbf{A}}$ and $\underline{\mathbf{B}}$ (4)
- 8.3 Study the diagram below.



8.3.1. The above structure illustrates the line organisation structure.

Give four advantages of this structure.

(8)

- 8.3.2. Name the other two structures that may be adopted in an organisation
- (4)

8.4 List FIVE principles of effective planning

(10)

8.5 List FIVE factors which promote motivation

(10) [**40**]

{TOTAL MARKS : 300}















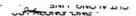












Business Economics Standard Grade - Answers

QUESTION EIGHT: (GENERAL MANAGEMENT)

8.1 Middle level management (2)
Lower level management (2)

8.2 A - strategic decisions (2)
B - tactical decisions (2)

8.3.1 Advantages of the line organisation structure

- · The system is easy to design and easy to understand
- · Only one head gives orders no confusion
- · It is easy to determine who carries authority
- · Quick decision making

 $4 \times 2 = 8$

8.3.2 Functional organization structure

Line and staff organization structure

8.4 Principles for effective planning:

- · It must be flexible and adaptable to change
- · It must have a scientific basis
- It must be suitable for a specific task
- · It must be co-ordinated into a heirarchy of plans
- · Planning must be realistic
- Planning must be transmitted to all supervisors and workers
- · Planning must be futuristic in nature
- · There must be a time scale
- It must be simple and clear
- · Plans must preferable be in writing
- Planning must be a means to an end and not an end in itself.

Any $6 \times 2 = 12$

8.5 Factors that promote motivation

- security
- · fair remuneration
- · appreciation and acknowledgement of good work
- · interest in the worker
- · good human relations
- · good liaison with workers
- · reasonable instructions
- · opportunities for self realisation

Any $5 \times 2 = 10$

[TOTAL MARKS: 300]

















APPENDIX A10

Table 8: Visual Design Checklist of Foundations Supplement (adapted from Heinich et al (1999)

Overall Pattern	Exemplary	Acceptable	Poor	Comments
Alignment		90	10	
Shape	5	85	5	
Balance		90	10	
Style	80	20		
Colour scheme	95	5		
Colour appeal	95	5		
Arrangement				
Proximity		60	40	
Directionals		60	40	
Figure-ground contrast	60	30	10	
Consistency	70	30		
Verbal Elements				
Lettering style	90	10		
Letter size and spacing	10	80	10	\$
Appeal				
Surprise	100			
Texture	80	20		
Interaction	35	25		

APPENDIX A11

Table 9: Appraisal Checklist of Foundations Supplement

Rating	High	Medium	Low	Comments
Match with curriculum	7			definite use of OBE/C2021 principles and discourse
Accurate and current	~			clear use of current and accurate material
Clear and concise language		8		 avoid use of technical OBE language simple/easy to understand
Motivation/maintain interest	~			exciting visual displayslearner interaction
Learner participation	•			 group work and individual activities
Technical quality				clear scriptaverage layout and design
Evidence of effectiveness	•			encouraging comments by learners/teachers
Free of bias/advertising				there are no advert displays
User guide/documents			-	does need more clarification
Reading level of organisation		•		 excellent for English mother tongue users second language difficulties
Clarity of organisation		•		systematic and clear
Table of Contents/index		•		activities are clearly indicated

APPENDIX A12





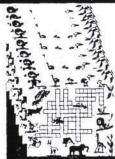
We thank the Telkom Foundation for its sponsorship of copies of ReadRight to underresourced schools



Complete cut-out-andkeep book inside

HAVE YOUR SAY

Fell the Minister what you think about the changes to Curriculum 2005



Have fun with our wildlife picture rossword

Food for your face



PLUS

How to use your head on the field



Helping us help South Africa



We thank the following organisations for their sponsorship of ReadRight and the Sunday Times to under-resourced schools throughout South Africa:

The Liberty Foundation, Telkom Foundation, Zenex Foundation, Jim Joel Foundation, Reserve Bank of South Africa and Hillside Aluminium.

Distribution to the sponsored schools is supported by Sunday Times teacher-training workshops. FOR PARENTS

SOFT TOUCH

Psychologist
Neal deals with
the sensitive
problem of a
boyfriend who
resents a
reader's son

For sales, distribution and editorial queries phone (011) 280-3142 or e-mail

readright@sundaytimes.co.za

For subscriptions phone 0860-5252-00

Win a four-day trip to the Kruger National Park for yourself and your classmates. See page 3









THIS week, weave a thin belt or even a bookmark using a simple loom made from plastic straws.

What you will need:

· Wool:

Control of the second of the s

- Five plastic drinking straws;
- · Cardboard;
- Masking tape; andA "needle" a piece
- A "needle" a piece of straightened wire (a coat hanger would also work).

What to do:

1. Cut five lengths of wool the length you want your weaving to be plus a bit extra.

Thread the wool through the live plastic drinking straws.

Tie the five threads together at one end at



the top of the straws.

4. Now weave a small strip of cardboard between the knot and the top of the straws by going in and out, under and over across the wool threads.

5. Place a piece of masking tape over the cardboard strip to hold the threads firm against the cardboard. Push the straws up against

Information supplied by the Early Learning Resources Unit. For more information, contact ELRU on (021) 762-7500. the cardboard strip.
6. Tape the bottom of the straws to hold the



loom together

7. Tie a thread to one of the existing threads just under the cardboard strip and start weaving. Weave in and out over the straws in one direction.

8. Go around the end straw and back across the straws in the opposite direction.

9. Continue in this way. Push the threads you are weaving close together as you go.

As you work, push the woven material off the ends of the straws at the top. Leave about 3cm of woven material on the straws until you have finished.

You can change colours by breaking off your old thread and tying new wool onto it.

10. To end, tie the thread you are weaving to one of the existing threads.

Remove the straws and tie the threads at the bottom against the last row of weaving (like the fringe of a carpet).



F YOU ever find yourself stranded in the bush without toothpaste and a toothbrush, don't despair.

The Magic Guarri and Leadwood trees, found in the Kruger National Park, are there to help keep your teeth sparkling white.

For a free and easy-to-use toothbrush, break off a branch from the Magic Guarri tree and strip off the bark.

Chew the tip until it's ragged and, there you go, you have yourself a toothbrush.

This tree also provides yummy black berries, so it's a good thing to brush your teeth after eating them.

For the toothpaste, scoop some white ash from a burnt Leadwood tree.

The ash contains lime that can be used as toothpaste.

But what happens if you are at home and want to experiment with natural resources?

Well, we've drawn up a beauty regimen for both boys and girls. This is almost guaranteed to give you soft and supple skin, bright eyes and shiny, healthy hair.

If you have dreadlocks like me and you want them to lock quickly and grow healthy, grab a lemon from the fridge, cut it in half and

Freshen up the natural

Way

Nature has always
provided us with
the ingredients to
maintain our
health and beauty.
And these
products are not
even expensive

squeeze the juice onto your hand. Rub the juice all over your hair, concentrating mostly on the tips. Wrap your hair up tight and let the lemon do its thing overnight.

Now, on to the face. I don't think kids are allowed into beauty salons. Anyway, salons are expensive, and so are beauty products bought



from cosmetic counters.

An easy way to exfoliate or scrub your face is to take raw oats (the cereal you eat cooked for breakfast) and mix them with water and a little soap or face wash. Rub the oats over your face and neck. Rinse them off with cold or lukewarm water and you'll feel the dead skin

Video review

Rugrats in Paris — The Movie

This is another full-length movie spin-off from the popular television series

Stu Pickles goes to work at Paris's new amusement park, EuroReptarland, with the Rugrats in tow.

The terrifying toddlers wreak havoc on the Parisian sidewalks, meet a new friend, Kimi, and Chuckie's dad falls in love

Five lucky ReadRight readers can each win their own copy of Rugrats in Paris.



To enter, answer the question below on the back of an envelope or postcard and send it to: Rugrats ReadRight competition, PO Box 1742, Saxonwold 2132. The competition closes on October 5.

QUESTION: Who is the Rugrats' new friend?











Your chance to have your say

AS A result of the review of Curriculum 2005 instituted by Education Minister Kader Asmal last year, the draft revised National Curriculum Statement was raleased last month.

Public comment on the revised curriculum can be made until October 12 don't miss out on this apportunity to voice your

opinion.

The "streamlined and strengthened" curriculum is available on the website http://education.pwv.gov.za or from the Department of Education, Telephone (012) 312-5334 or (012) 312-5123 for details. Fax your comments to (012) 321-0647 or (012) 325-4001.





MAKING IT HAPPEN: Education Minister Kader Asmal is serious about improving the quality of education with a new curriculum

The draft revised National Curriculum Statement

Qualification framework

THE draft revised National Curriculum Statement consists of: • An overview of its background, principles and process; the key elements of the eight learning area statements; guidelines for the development of learning programmes; and a framework for implementation.

 Eligit learning area statements for Languages.
 Mathematics, Natural Sciences.
 Social Sciences, Arts and Culture, Life Orientation. Economic and Management Sciences and Technology.

 A qualification framework for General Education and Training for schools. Learning area statements

These provide the substance of the revised curriculum. They aim at producing citizens for a democratic SA, and provide a clear and accessible curriculum that promotes active learning and the achievement of the goals of the Constitution

Each learning area statement

develops a strong sense of:

Our belonging to a local community, South Africa, the African continent and the world;

 Gender awareness anti-racism, human rights and inclusivity; and

The relationship between

skills, knowledge, social life and

General Education and

Training certificate already exists. It is linked to Curriculum 2005 with its eight design fea-

The proposed qualification framework for the National Curriculum Statement will be linked to the design of the revised curriculum with its three

Each learning area statement includes sections on its scope and purpose; learning outcomes and assessment standards by grade and phase; and guidance

on assessment.

Learning programmes The overview of the NCS provides guidelines for the

features. It will be a whole-school qualification specifically for schools and will be achievable at the end of Grade 9.

It will be implemented for the first time in 2008, which is when the first learners to have

experienced this curriculum graduate from Grade 9.

development of learning programmes. It also shows how they can reduce overload in the curriculum.

• Proposed learning programmes for the Foundation Phase (Grades R-3) are: Literacy. Numeracy and Life Skills.

 Proposed learning Proposed learning programmes for the Intermediate Phase (Grades 4-6) are: Languages, Mathematics. Science and Technology (a combination of Natural Sciences and Technology). Social Sciences, Arts and Culture, Life Skills, and Economy and Society (a combination of Life Orientation and Economic and Management Sciences)

Management Sciences)

Proposed learning
programmes for the Senior
Phase are: Languages.
Mathematics, Natural Sciences. Social Sciences, Arts and Culture, Life ()rientation. Economic and Management Sciences, and Technology

Implementation roll-out

IN ORDER to ensure that enough time is provided for a manageable implementation process, the following time frames are

2001: Public comment followed by revision and finalisation of the revised draft National Curriculum

Statement for implementation;

• Development of learning programme guidelines.

2002:

Pilot:
Preparation for teacher orientation:
Development of policy for

learning support materials.

2003:

• Incorporation of pilot results into a detailed implementation

strategy;
• Teacher orientation and

development:

Development of learning support materials;
 Orientation of school and

district-based management:

district-based management;

Oevelopment of learning programmes at school level.

2004:
Implementation of Grades R-3;
Further teacher orientation and development:
Supply of learning support materials:

Operating support of learning.

Development of learning programmes at school level.
 2005:

Implementation of Grades 4 to 6;
 Further teacher orientation and development;

Supply of learning support materials;
Development of learning

programmes at school level. 2006, 2007, 2008:

Implementation of Grades 7, 8
 and 9:

Implementation of the first General Education and Training certificate for the revised National Curriculum Statement in 2008.

Learning outcomes for the eight learning areas

Background

LANGUAGES

• Listening: The learner is able to listen for information and to listen for information and enjoyment, and respond appropriately and critically in a wide range of situations.

Speaking: The learner is able to communicate confidently and effectively in spoken language in a wide range of situations.

Beauting and winter. The

 Reading and viewing: The learner is able to read and view for information and enjoyment. and respond critically to the values in texts.

• Writing: The learner is able to

write different kinds of factual and imaginative texts for a wide range of purposes.

Thinking and reasoning: The

learner is able to use language to think and reason, and to access, process and use information for learning

■ There is a sixth outcome for additional languages (but not for first language): The learner knows and is able to use the sounds, vocabulary and grammar of the additional language

MATHEMATICS

 Numbers, operations and relationships: The learner is able to recognise, describe and represent numbers and their relationships; and is able to count, estimate, calculate and check with competence and confidence in solving problems.

 Patterns, functions and algebra: The learner is able to recognise, describe and represent patterns and relationships, and solve problems using algebraic

THE revised National Curriculum Statement reduces

The concepts that organise the curriculum. These replace the specific outcomes, range statements, phase and programme organisers, assessment criteria, performance indicators and expected levels of performance.

Instead of these, only two are used: learning outcomes and assessment standards.

The learning outcomes are similar to the specific outcomes, but there are only three to five per learning area. They express the broad expectations of what is to be achieved by learners in the General Education and Training band.

The assessment standards are more specific and show how the outcomes are to be achieved in each

language and skills

 Space and shape: The learner is able to describe and represent characteristics and relationships between 2D shapes and 3D objects in a variety of orientations and positions.

• Measurement: The learner is

able to use appropriate measuring units, instruments and formulae in a variety of contexts.

Data handling: The learner is able to collect, summarise, display and critically analyse data to draw conclusions and make predictions. conclusions and make predictions. and to interpret and determine chance variation.

NATURAL SCIENCES

The learner is able to: Develop and use science process skills in a variety of

settings.

 Develop and apply scientific nowledge and understanding.
 Gain an appreciation of the relationship and responsibilities between science and society.

SOCIAL SCIENCES

History:

The learner is able to:

· Demonstrate historical

knowledge and understanding.

Use inquiry skills to investigate the past and present.

Demonstrate an

understanding of historical interpretation.

Geography: The learner is able to: • Demonstrate knowledge and understanding of the interrelationships between people.

resources and the environment.

Use inquiry skills to investigate key concepts and processes used in Geography.

 Make critical and informed choices and take actions to deal with social and environmental

ARTS AND CULTURE

The learner is able to · Create and present work in

each of the art forms.
(This outcome deals with the practical experience of Arts and Culture, and the appropriate knowledge, skills, values and attitudes needed to present and pursue arts interest.

· Reflect critically on artistic

and cultural processes and products in past and present

contexts.
(This outcome deals with knowledge and understanding of history of the arts, aesthetics, culture and heritage and aims to find a way to foster healing and

nation building.)

• Demonstrate personal and interpersonal skills through individual and group participation in arts and culture activities. (This outcome deals with

personal and social development - the ability to develop and work individually and with sensitivity in the culturally diverse South African cultures.)

• Analyse and use multiple

forms of communication and expression in arts and culture

LIFE ORIENTATION

The learner is able to: Make informed decisions about personal, community and environmental health.

• Demonstrate an active commitment to constitutional rights and social responsibilities and show sensitivity to diverse Use acquired life skills to achieve and extend personal potential to respond effectively to

challenges in his/her world.

• Demonstrate an understanding of, and participate in, activities that promote movement and physical

velopment.

• Make informed choices and decisions about further study and career choices

ECONOMIC AND MANAGEMENT SCIENCES

The learner is able to Demonstrate knowledge and understanding of the flow of money in solving the economic problem.

• Demonstrate an understanding of reconstruction, growth and development and reflect critically on its related

processes.

• Demonstrate knowledge and the ability to apply a range of managerial, consumer and financial skills.

Develop entrepreneurial attitudes, knowledge and skills

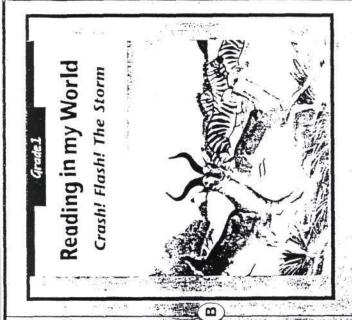
TECHNOLOGY

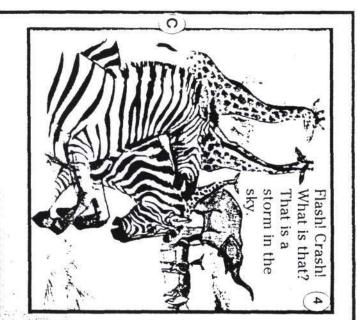
The learner is able to: Demonstrate an understanding of the inter-relationships between technology, society and the environment.

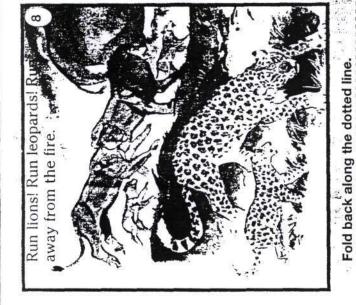
 Apply technological processes and skills ethically and responsibly, using relevant knowledge concepts.

 Access, process and use information in a variety of



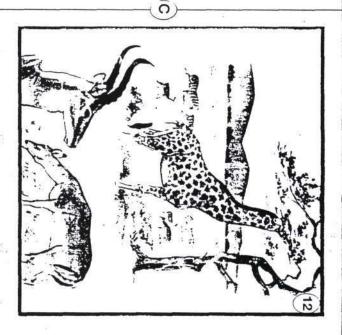








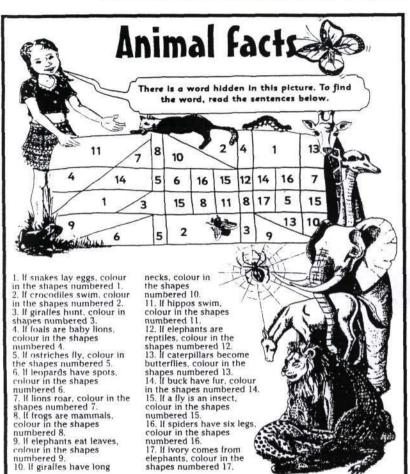








FOUNDATION AND INTERMEDIATE PHASE: National Parks





Look at the picture and answer these questions!

- 1. How many parrots are
- there?
 2. How many zebras are there?
- 3. How many buck are there?
- How many monkeys are there?
- Add these two numbers
- together. ______4. How many giraffes are
- 5. Subtract the number of giraffes from the number of
- 6. Subtract the number of moneys from the number of giraffes?
- 7. How many animals are there altogether?
- 8. How many ostriches are there that can fly?

Ingwe nengonyama

(Xhosa)

Namhla kudibene Today a leopard ingwe nengonyama and a lion are meeting Uyabizwa, uyabizwa You're invited to come ubukele and watch

This song is usually sung when two strong sports teams are playing one another People are invited to come and see which team is the strongest



The activities "Ingwe nengonyama", "Animal facts" and "Game park" were adapted from the ESST publications, My New English Fun Book, The Learning Adventure Volume 3 and Learning Adventure 2. For more information, phone (021) 461-6399



How to make your storybook

THIS week we have published a 12-page storybook, 'Crash! Flash! The Storm', for you to cut out and keep. Follow the instructions below on how to

make the book.

Step 1: Tear Pages 5 and 6 out of today's ReadRight.

Step 2: With Page 5 of ReadRight facing you, turn the sheet clockwise so that the cover of the stephenk is in the tower. of the storybook is in the top right corner.

Step 3: Cut along the solid line

that runs around the outer edges

of the picture.
Step 4: Fold Page 5 of ReadRight

Step 4: Fold Page 5 of ReadRight back along the dotted line, dividing the page in half so that the A on Page 7 of the storybook touches the A on Page 6.

Step 5: Pages 8, 9 and the cover of the storybook should now be facing you (the right way up). Fold Page 8 of the storybook over so the B on the right side of

Page 8 meets the B on the left side of Page 9. Step 6: You now have Pages 4 and 5 of the storybook facing you. Fold Page 4 towards Page 5 so that the C on the left side of Page 4 meets the C on the right side of Page 5

Page 5. Step 7: The cover of the Step 7: The cover of the storybook should now be facing you. Staple along the spine on the left-hand side so the pages of your book are secure. Step 8: Use a pair of scissors

or a ruler to separate the pages at the bottom and the right-hand side of your book. You now have a completed copy of Crash! Flash! The Storm. Happy reading!

The book Crash'
Plash' The Storm
was adapted
with permission of Juta Education
Publishers. For more information, pho
(021) 797-5111

Your guide to these activities

Dear Teacher

Today's activities continue with the theme of National Parks that was introduced last week.

THE STORY

Cut out the story Crash' Flash' The Storm This story is ideal for early readers. Print unfamiliar or new words from the story (for example, giraffes and zebras) onto pieces of cardboard. Find pictures from old magazines to match the words you have prepared on the flashcards.

Use the flashcards, together with the cut-out pictures, to familiarise learners with the new vocabulary before actually starting to read the

The learners can match the flash-

can also find and match the words printed on the cards in the text prior to reading it.

Remember to make sure that your learners understand the meaning of each new word introduced in the story. Discuss the picture on

each page before reading the text.

These pre-reading activities prepare learners for the story content and will give them confidence with the new reading material.

Discuss the different natural habitats common to wild animals in South Africa. Use the poster published in the September 2 edition of ReadRight to examine these areas (known as biomes)

ANIMAL FACTS

By following the clues and colour-ing the right shapes, learners

should end up with the word ZOO. This may be difficult for some of them to see at first.

To colour the shapes correctly, they will need to be able to read the sentences clearly, understand their meaning and know something about the features and habits of the different animals mentioned.

Many learners may need additional support. They will need to know, for example, that giraffes don't hunt so they should not colour in the shapes numbered 3: or that spiders have eight not six legs so they should not colour in the so they should not colour in the

You may want to go over the questions together with them beforehand, depending on what you think they already know about these different animals.

INGWE NENGONYAMA

This is a Xhosa version of a popular traditional song. There may be learners in the class who can recite a Zulu or a Sotho version of it. Learners could also ask their parents if they know the tune and then teach it to the rest of the class

As both the English and Xhosa words are printed here, you can use the song to develop learners' knowledge of some key words in both lan-

Ask other language users to give ou the equivalent words in their language

Ask learners if they know of other songs about wild animals. Ask them to sing them *The Lion Sleeps Tonight* is one that most learners will probably know and enjoy singing together

GAME PARK

Use this activity to give young learners practice in adding and subtracting numbers from 1 to10. They will also get practice in reading simple English text and in using their visual literacy skills.

Note whether they can identify

and count all the animals in the pic-ture, even those that are half hidden by another animal in the fore-ground, like the two zebras.

Learners can assess themselves on the activity. Let them work in small groups or with a partner and check their answers themselves before you go over the activity with the whole class

Extend the activity by asking learners to draw and colour their own pictures of the different kinds of animals shown



PROBLEM: My boyfriend and I have been going out for a long time and essentially have a good relationship. However, he shows a lot of resentment, jealousy and antagonism towards my four-year-old son. What should I do?

SOLUTION:

It needs to be stated right from the outset that your commitment to your son is your first priority.

Your boyfriend's insecurity about how much you care for him belongs only to you and him — It has nothing to do with your son.

It is not uncommon for problems in a relationship to be blamed on outside factors like children -

but if your son were to disappear suddenly it is highly unlikely your boyfriend would feel any more secure. Your son has become the scapegoat in your relationship and this needs to stop.

It is time for you and your boyfriend to talk honestly. He needs to tell you what makes him feel insecure and you need to tell him why you feel the need to keep the peace all the time

There is almost no choice to be

First priority is your

TOUCH

Psychologist Neal

Gething answers your parenting

queries

to accept the reality that there are three of you, not two. son Answering the SOFT

following questions may help you:

• What would you

and your boyfriend fight about if your son was not an issue?

 What are some of your biggest fears when opening your relationship?

 Do you and your boyfriend engage in power struggles? Your son may have become the "problem" that the two of you are trying to control.

 Is your boyfriend willing to stand by you in other ways? His difficulties with your son may simply indicate his selfishness.

· Are you ready to change yourself and not your boyfriend? You may have to become strong and assertive. You may have to fight for the rights of your son and yourself.

· Are you getting the emotional support you need? If both you and your boylriend are willing to change and grow, you can build a new



with your boyfriend is

to succeed, he needs

What is the best advice you have given your children? Think first and don't

react emotionally to situations. Education is important. Read as much as you can.

What is the best advice that you were given by your parents as a child? My mom gave me the same advice.

How do you balance the time you need to spend on your career with being a mom? It's difficult. When I spend time with my kids, I always tell them how much I love them, how lucky I am to have them and that they give me so much joy. My son complains that "mommy

kisses me too much" - this is painful for me because he is at the stage where he doesn't want to be seen being kissed by his mom.

How much time do your children spend reading? My daughter reads a lot, just like her parents. My son has just begun to read and reads

everything, including the numberplates of the cars in front of us. He then demands an explanation of what the numbers

What are their favourite children's storybooks? Jabulani likes Tom & Jerry and Chantal likes Cinderella.

If you could be a character in a storybook, who would you choose to be and why?



LOVING FAMILY: Thembi Mogoai with he daughter, Chantal, and her son, Jabulani

I would like to be one of the I would like to be one of the Power Rangers. They have such exciting jobs getting rid of the evil in the world. They also have tremendous support from their team, no matter what.

What mistakes have you made

as a parent?
Not spending more time with my kids while I was busy building my

What advice do you have for other parents? Show your children love and talk

to them. Teach them about issues like drug abuse. Listen to them. Teach them to

argue their opinions rationally argue their opinions rationally and reasonably. Talk to them as if they have brains — you'll be surprised what you end up talking about. It's very fulfilling.

Do you have a problem you can't solve on vour own? Perhaps one of the following organisations can help:

• Life Line: Phone (011) 728-

Tough Love: Phone (011) 886-3344

Hospice Association of South Africa: Phone (021) 852-4559

• People Opposed to Woman Abuse (POWA): Phone (011) 642-4345

• The Islamic Careline: Phone (011) 838-6085/6

· Aids Call Centre: Phone 0800-012-322

If you would like your organisation to be included on this list, fax (011) 280-5150: or email gunnj@ sundaytimes.co.za

Contact us

Send your letters and queries to ReadRight at PO Box 1746, Saxonwold 2132; fax (011) 280-5150; e-mail readright@sundaytimes.co.za; or post your comments on our website at www.sundaytimes.co.za/education

Positive parenting

A child needs to feel part of a family

TO BE effective parents, we need to know what it is that children really need to grow and develop into independent,

mature and responsible adults.

On a physical level children have the same basic requirements for survival as adults. But for children to develop a good self-esteem, fulfil their potential and form satisfying relationships later in life, they

need more than just food and water.
At the top of this list of requirements is love. From birth children need a stable, consistent, dependable and loving relationship with their parents or caregivers. Children need approval, affirmation and acceptance for them to feel worthwhile and part of the family

The family must be built around security and trust. It must be reinforced by realistic parental expectations and a consistent democratic style of discipline.

Children also need new experiences for mental growth. New experiences will challenge children, and conquering these challenges will give them a sense of mastery and achievement and develop their self-confidence.

This will also encourage them to try new things, which will help them learn and grow all the time.

To ensure their mental growth, children need praise and recognition for all their attempts, efforts and achievements, even those they fail at.

The mistakes and failures children make should be seen as an integral part of their

learning experience.

Too much punishment will stop them trying again and their growth and development will be impeded.

Yet, as we encourage and motivate our children, it is important to instil a sense of independence.

independence.
Children need responsibility and need to be taught to care for themselves through feeding, washing and dressing.
Encouraging responsibility through independence results in children having the freedom to move away from their parents, making choices for themselves.

parents, making choices for themselves. Children need to be recognised as

unique individuals. Allowing children to develop their own interests and lifestyles, rather than meet parental expectations, will help them feel

special.
As children grow, their basic needs remain the same. How they are met, however, will change. For parents wishing to raise happy, healthy children, it is imperative we acknowledge these changes and needs and adjust our parenting skills accordingly



Brought to you by the Family Advice Centre Telephone (011) 975-7106/7

Capital Gains Tax and You ...

What it means to you

Capital Gains Tax (CGT) will come into effect on 1 October 2001. CGT is a tax, which you will pay on the gain made when selling a capital asset such as your house. Any natural person, legal entity such as a company or close corporation, or a trust when making a profit or a loss when selling a capital asset. will be liable for CGT. Individuals and special trusts do have an advantage in that the first R10 000 of capital gains per year will be exempt from CGT.

Most people are concerned with the implications of CGT in relation to their private residential home. The concern is that in the event of them selling their homes they will be taxed on the gains they might make. While this is true to a certain extent most people will not incur any CGT on the sale of a primary residence. This is because the first R1m gain/loss

made on the sale of a primary residence will be excluded from CGT.

More than one home

Those who are lucky enough to own more than one home. for example a holiday house, will incur CGT on the total gain they make on the sale of that second property. The RIm exclusion will not apply to second properties.

Base Cost

To determine whether you have made a gain or a loss on the sale of your property you will have to determine what the base cost of your property is. The base cost is the actual capital cost and includes the expenses you incurred in acquiring the asset. For example, any legal fees or conveyancer fees or even agents' commission will form part of your base cost.

Upkeep, inflation and wear and tear are, however, not taken into consideration when determining the base cost of an

Calculating the gain or loss

When you sell your house (primary owner occupied) any gain made, which is in excess of R Im will attract CGT. The R Im exclusion will apply to so much of the land as does not exceed two hectares. I.e If your property is 3 hectares in size. only I ha will be subject to CGT.

For the most part, the man in the street will not be affected by CGT. It is however useful to have a basic understanding of how the tax will work and how you could be affected.

