

**THE USE OF RESOURCES IN OUTCOMES BASED
EDUCATION AT FOLWENI PRIMARY SCHOOLS**

BY

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DECLARATION

I, **SIBONGISENI CAROL CHARMAINE**, declare that this dissertation is my own work, and has not been submitted previously for any degree.

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ABSTRACT

The purpose of this study is to investigate the use of resources in Outcomes Based Education mainly at three Folweni Primary School at Folweni township. After extensive reading and hardworking, I have discovered more information about the use of resources in Outcomes Based Education, As a result of this study, which focuses on the use of resources in OBE, my experience based on knowledge and skills has been developed. Such experience has been developed in terms of concepts such as OBE, outcomes, in OBE, concept resource, learner-centered approach, types of resources, importance of using resources and problems resources solves in Outcomes Based Education. All these areas are covered in this report.

Other areas which are also covered are presented as follows:

Chapter one covers the statement of the purpose, critical questions, rationale of the study and motivation of the study.

Chapter two covers the definition of concepts, types of resources, importance of using resources in OBE and problems resources solves in OBE.

Chapter three covers the research methods.

Chapter four covers research findings.

Chapter five covers research data analysis.

Chapter six covers conclusions on findings and recommendations.

Therefore, using resources in OBE heighten motivation for learning, which leads learning to become stimulating as well as intellectually rewarding.

Resources expose learners to multiple contexts as well as stimulating a variety of cognitive processes. Thus learners become fully engaged in stimulating pro-active discussions, which leads to active participation in the learning. Therefore, I felt that resources in OBE needs to be researched in order that stakeholders be aware of the relevance and importance of using resources in Outcome Based Education.

TABLE OF CONTENTS

CHAPTER 1 PAGE NO.

INTRODUCTION

1:1 Introduction	1-4
1:2 Purpose of the study	5
1:3 Critical question	5
1:4 Motivation for the study	5
1:5 Rationale for the study	6-8
1:6 Conclusion	8-9

CHAPTER 2

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2:1 Review of the literature	10-16
2:2 Definition of concepts	16
2:2:1 Concept "OBE"	16-17
2:2:2 Concept "Outcome" in OBE	18-22
2:2:3 Concept "Resources" in OBE	22-23
2:2:4 Learner centered concept	23-24
2:3 Resources from the new curriculum	24-26
2:4 Different types of resource	27-31

2:4:1 Resources from the media	32
2:4:2 Using radio as a resources	32-35
2:4:3 Using television as a resource	35-37
2:4:4 Using computer as resource	37-41
2:4:5 Using newspaper and magazines as resources	41-44
2:4:6 Using textbooks as resources	44-51
2:4:7 Resources from waste	51-55
2:4:8 Resources from the everyday environment	56-61
2:4:9 Resources within the community	61
2:4:9:1 Using learners as resource	62-64
2:4:9:2 Using people as a resource	64-65
2:4:9:3 Using community members and specialists as resource	65-67
2:5 Importance of using resources in OBE	67-71
2:6 Problems resource solves in OBE	71-72
2:7 Conclusion	72-73

CHAPTER 3

RESEARCH METHODOLOGY

3:1 Introduction	74
3:2 Sampling method	74-75
3:3 Research subject / participants	75-76

3:4 Study type	76-77
3:5 Sites visit and time frame	77-78
3:5:1 Phase 1-planning	78
3:5:2 Phase 2-beginning data collection	79
3:5:3 Phase 3-basis data collection	79
3:5:4 Phase 4-closing data collection	79
3:5:5 Phase 5-Completion	79
3:6 Data Source and instruments of gathering data	81
3:6:1 Instrument of data gathering	82-85
3:7 Graphics and tables	85
3:8 Conclusion	85-86

CHAPTER 4

RESEARCH FINDINGS

4:1 Introduction	87
4:2 Short description of Folweni	88-89
4:3 Schools at Folweni	89-93
4:4 Resources and facilities schools	93-94
4:5 Case studies	94-95
4:6 Case study one	95-104
4:7 Case study two	104-107
4:8 Case study	107-109

4:9 Conclusion	109-110
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CHAPTER 5

DATA ANALYSIS

5:1 Introduction	111
5:2 Questionnaires (appendix)	111
5:2:1 Summary of teachers demographic details	111
5:2:2 Questions about resources	112
5:2:3 Questions about methods	112-113
5:2:4 Questions about learning areas	113-115
5:2:5 Analysis data from teachers	115-116
5:3 Summary of learners demographic details	116-117
5:3:1 Summary of learners who (and those who did not) participate in the study	117
5:3:2 Resources known and used by learners in school and at home	118
5:3:3 Analysis of data from learners	118-119
5:4 Limitations and Constraints	120-121
5:5 Conclusion	121-122

CHAPTER 6

RECOMMENDATION AND CONCLUSION

6:1 Introduction	123
6:2 Recommendation	123-125
6:3 Conclusion	125-126

BIBLIOGRAPH

APPENDICES

LIST OF PLATES

	PAGE NO.
Plate 1: RESOURCES FROM THE MEDIA	28
Plate 2: RESOURCES FROM WASTE	29
Plate 3: RESOURCES FROM EVERYDAY ENVIRONMENT	30
Plate 4: RADIO AS A RESOURCE	31
Plate 5: TELEVISION AS RESOURCE	32
Plate 6: COMPUTER AS RESOURCES	35
Plate 7: NEWSPAPERS AND MAGAZINES AS RESOURCES	37
Plate 8: NEWSPAPERS AND MEGAZINES AS RESOURCES	41
Plate 9: TEXTBOOKS AS RESOURCES	44
Pate 10: PROMOTING THE IMPORTANCE OF READING	47
Plate 11: RESOURCES FROM WASTE	51
Plate 12: RESOURCES FROM EVERYDAY ENVIRONMENT	56
Plate 13: RESOURCES FROM THE COMMUNITY	61
Plate 14: LEARNERS AS RESOURCES	62
Plate 15: PEOPLE AS RESOURCES	64
Plate 16: COMMUNITY MEMBERS AND SPECIALISTS AS RESOURCES	65
Plate 17: OLD WAYS OF COMMUNICATION	98
Plate 18: MODERN WAYS OF COMMUNICATION	98
Plate 19: MODELS OF TELEPHONE	99
Plate 20: LETTERS AS RESOURCES FOR COMMUNICATION	99
Plate 21: NEWSPAPERS AS RESOURCES OF COMMUNICATION	100

Plate 22:	MODELS MADE FROM WASTE RESOURCES	101
Plate 23:	MODELS MADE FROM WASTE RESOURCES	102
Plate 24:	RESOURCES FROM WASTE AND FROM THE ENVIRONMENT	103
Plate 25:	POSTERS, CHARTS AND CHALKBOARD	103

LIST OF TABLES

PAGE NO.

Table 1	Testing river water quality	60
Table 2	Teacher- learner population	75
Table 3	Research subjects / participants	76
Table 4	Time frame of sites visit	78
Table 5	Time frame of data collection	81
Table 6	Number of grades, learners and teachers in school (Hlengisizwe)	96
Table 7	Number of grades, learners and teachers in school (Mklomelo)	105
Table 8	Number of grades, learners and teachers in school (Masuku)	108
Table 9	Teachers demographic details	111
Table 10	Resources used by teachers ion schools	112
Table 11	Methods of teaching and learning	113
Table 12	Learning areas for foundation phase	114
Table 13	Learning areas for the intermediate phase	114
Table 14	Learners demographic details	117
Table 15	Resources know and used by learners in schools and at home	118

LIST OF GRAPHS

PAGE NO.

GRAPH 1 : PIE GRAPH

117

LIST OF APPENDICES

- Appendix 1: A map of Fofweni areas
- Appendix 2: Teachers questionnaire
- Appendix 3: Learners questionnaire
- Appendix 4 : Teachers interview schedule
- Appendix 5: Learners interview schedule
- Appendix 6: Seven critical outcomes
- Appendix 7: Learning area
- Appendix 8: Clockwork courage
- Appendix 9: In touch with the world by print
- Appendix 10: Reading for pleasure
- Appendix 11: Supporting education through technology
- Appendix 12: Radio education alive and kicking
- Appendix 13: The classroom of the mind reaches into every corner
- Appendix 14: Call to action: KADER ASMAL 1999
- Appendix 15: KZN CIRCULAR NO. 94 ... OF 1999
- Appendix 16: KZN CIRCULAR 2000-06-28
- Appendix 17: KZN CIRCULAR – SURVEY (LSEN)
- Appendix 18: KZN CIRCULAR –ELITS 15-08-2001
- Appendix 19: KZN CIRCULAR –ELET NO.199 P.2 27-08-2000

CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

When the first South African democratically elected government was put in place in 1994, it had a clear mandate to transform all the spheres of life in this country, ridding them completely of the apartheid policies and laws. In the realm of education and training, given the already longstanding opposition to the discriminatory tendencies of apartheid education, transformation was evidently long overdue.

From its inception, the apartheid education system was severely criticized for its huge disparities in the provision of resources, for being tailored along racial lines, and for yielding an invariably inferior quality of education to the majority of South Africans. One of its greatest failings, however, was its inability to produce a decently skilled workforce.

It produced a workforce with an inadequate skills-profile compared to that workforce in the late – industrializing countries, and those of the successful, mature industrial countries such as Germany and Sweden (NEPI, 1993: 175-176). Observably, many school leavers seemed rather ill equipped to cope with the demands of the job market, (Malan, 1997: 2). And this contributed negatively

in the economic growth and general development of this country (Hughes, 1996: 57).

The White Paper on Education and Training (Department of Education, 1995a: 5-15) states that, a new education system emerging from a process of transformation will serve both the new democracy and the people of this country. It will further produce well-rounded adults, able to move flexibly between occupations. Such adults will be independent critical thinkers, capable of accomplishing greatly in life. Amongst the likely implications of the White Paper is the advancement of the country through the development of a better-qualified workforce. Citizens will thus be empowered to partake meaningfully in wealth generation and redistribution.

Transformation of education in South Africa was partly necessitated by the country's own transformation from an apartheid state which was autocratic to a democratic and a free society. It is important to point out those continual debates and discussions that took place over many years also informed the direction and development of this process of change.

A document called A National Training Strategy Initiative (1994) is one of the products of such deliberations. It emerged from a concerted research contribution by a task team from trade unions, organised business and the former departments of labour and education.

As a recommendation it suggested the establishment of a National Qualifications Framework (NQF) (Lubisi, Parker and Wedekind, 1998: 65). The intended function of this body was lay the foundation for the processes of transformation in the spheres of education and training in this country. Subsequently to this, the South African Qualifications Authority (SAQA) Act was passed on the 4th of October 1995. The SAQA Act makes provisions for the development and implementation of the NQF. The objectives of the NQF as detailed in the Act (1995b: 1) are: -

- (a) to create an integrated national framework for learning achievements;
- (b) to facilitate access to, and mobility and progression within education, training and career paths;
- (c) to enhance the quality of education and training;
- (d) to accelerate the redress of past unfair discrimination in education, training and employment opportunities, and thereby;
- (e) contribute to the full personal development of each learner and the social and economic development of the nation at large (FLT Document 1996).

In the previous era, education and training in this country were anomalously regarded as two separate activities occurring in an almost parallel fashion. Learners mobility between the two was almost impossible. The NQF sought to eliminate this situation by proposing an integrated approach, where a good measure of portability of knowledge, skill and competencies between the two realms could be guaranteed and rendered a norm.

Each sector will under NQF recognize learner's prior learning from the other sector. Besides having a role in the human resource development, this will also serve the objectives of the Reconstruction and Development Programme and perhaps even contribute to the realization of life long learning.

In 1997 the South African Ministry of Education, upon recommendations by the South African Qualifications Authority and the NQF, introduced Outcomes Based Education (OBE) as new model for education and training in this country. Further to this development, the Minister of education formally launched the new curriculum (Curriculum 2005) designed along the principles of Outcomes Based Education in February 1997. Curriculum 2005 effectively replaced the old curriculum that formed the basis of the apartheid education. It was envisaged that its implementation would be gradual starting with grade one and seven in 1998 and being fully phased-in and operational in all grades by year 2005.

This move resulted in developing policies and programmes which encourage the creative and efficient use of resources. Resources are essential in helping educators in all spheres to move away from a pre-occupation with delivering content and in helping them develop their role as facilitators of a variety of learning process (Teli Document 1996: 56). Using resources in Outcomes Based Education will make learning to be learner-centred and learners will take responsibility for their learning and develop critical thinking skills, reasoning and reflection skills. For learners and educators, resources are an important part of planning meaningful learning activities.

1.2 PURPOSE OF THE STUDY

The purpose of the study is to investigate the use of resources in Outcomes Based Education at three Folweni Primary Schools at Folweni.

1.3 CRITICAL QUESTIONS

- ❖ What is Outcomes Based Education?
- ❖ What are resources?
- ❖ Why do teachers use resources in Outcomes Based Education?
- ❖ How do teachers use resources in Outcomes Based Education?

1.4 MOTIVATION FOR THE STUDY

This study was conceived on the backdrop of the fact that OBE was never properly piloted in South African schools before its implementation. Though there are a number of scientific evaluative studies on the implementation and success of OBE and mastery learning at the school and / or classroom level in other countries, practically none have been conducted in the South African context.

There is very scanty evidence from literature to suggest an existence of studies where evaluative studies on the use of resources in OBE and mastery learning have been done certainly, not in South Africa. The study aims to contribute by exposing the dynamics of availability of a resource rich learning environment in the successful implementation of OBE in this country.

1.5 RATIONALE FOR THE STUDY

The past apartheid education system was severely criticized for its huge disparities along racial lines and for yielding an invariably inferior quality of education for the majority of South Africans. This led to learners with inadequate skills compared to those who have at least better learning resources. Learners failed to cope with their learning demands especially matric learners. This contributed negatively in the economic growth and general development of this country (Hughes – 1996: 57). To solve this problem of resources the department has engaged itself in a series of initiatives on delivering quality life-long learning to all citizens.

This move resulted in encouraging the creative and effective use of resources in Outcomes Based Education by The Media In Education Trust (MiET) which was funded by United States Agency for International Development (USAID) in developing more learning resources. As one of the active participants in a Materials Development Project sponsored by USAID, I felt a need for investigating the use of resources in OBE especially in the Foundation and Intermediate Phases which have already implemented the approach of Outcomes Based Education, especially at three Folweni Primary Schools.

As learning is viewed differently, learners still need knowledge. Therefore, the role of education is to help learners use that knowledge in a meaningful context

and to develop a range of skills, values and attitude towards their learning by using resources effectively. This can be done in various ways, by building on learners existing knowledge and skills through self-discovery and through active involvement in the learning process. A great deal of attention must be focused on developing a mentally appropriate curriculum for learners which promote active learning, creativity, personal empowerment, life long learning and discovery learning.

Teachers need to engage themselves in the development of educational resources. They must involve themselves in the provision of educational resources so as to realize their educational potential. (Criticos 1999). To renew and improve the art of teaching, teachers' need to respond to it positively since educational media of our time represents a challenge both to teachers and learners (Frantzen 1995). Teachers' experiences and skills of using resources will assist learners to achieve the desired learning outcomes in Outcomes Based Education.

Using resources in Outcomes Based Education exposes learners to context and content as well as stimulating a variety of cognitive processes, as well as encouraging active participation. Learners may heighten their sense of involvement by engaging in stimulating provocative discussions. This leads learners to develop a positive reinforcement in their learning when they find out how well they are doing and discover ways in which they can improve their performance.

This widens the range of learner's performance and increases their capabilities in their spheres of life. Using resources in OBE makes learning areas clear and appealing to learners of diversified backgrounds and varying abilities. Therefore, the designing of meaningful learning activities will ensure that learners interact with the resources for effective teaching and learning in the classroom context.

Thus in this study, I want to take an in-depth look into why teachers use resources in Outcomes Based Education and how teachers use resources. Therefore, I felt that resources in Outcomes Based Education needed to be researched in order that all stakeholders could be aware of the relevance and importance of using resources in Outcomes Based Education.

The findings of the study will be useful to teachers who are eager to benefit more in using resources in Outcomes Based Education but who still look upon them with skepticism. The findings will also be useful to Materials Developers for future use in various teaching and learning contexts, and finally resources could become more goals-oriented and purposeful in a learner's life.

1.6 CONCLUSION

This chapter gives a reader the background information on the reasons motivating the conduct of this study. Most important, the main issues are statement of purpose, critical questions, motivation of the study and the rationale for the study. All these main issues fall under the category of the research

proposal. The next chapter gives the reader the theoretical framework of the study, the literature review, concepts such as OBE, resources, outcomes and other main issues of this study.

CHAPTER 2

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 A REVIEW OF THE LITERATURE

The literature review plays a vital role in any research endeavor. Since the literature review is so important it is useful to begin by exploring the value and functions of a literature review.

- ◆ A literature review broadens and refines existing knowledge.
- ◆ A literature review helps clarify theoretically, methodological and analytical issues.
- ◆ A literature review sharpens and clarifies research questions.
- ◆ A literature review will identify current debates and controversies.
- ◆ A literature review can highlight gaps and under researched areas.
- ◆ A literature review may be its own intrinsic merits (Mc Millan (1997)).

A literature review must inform the overall research process. A good literature review will be useful at various points in a study and be incorporated at various stages in the final written product. The selective use of a of a literature review suggests that the literature review can take a number of forms. A review the literature must be able to identify themes, issues, topics and questions relevant to the particular research. The literature review ought to represent a coherent argument not just a list of facts. In this way, the researcher engages

in a reflective dialogue with relevant materials collected via the literature search. Therefore, as literature review should be ongoing.

Looking at the theoretical framework of this study 'like many models of education, the use of resources in Outcomes Based Education (OBE) is grounded on firm philosophical thinking. From reading of this area, it emerged that theories like socio-constructivism, teaching to transgress, pragmatism, behaviourism and critical theory form the theoretical base of this paradigm of teaching and learning. (claassen, 1998: 35.)

Central to the philosophy of social constructivism is the concept of social transformation. Constructivist teaching practices help learners to internalize and reshape or transform new understanding that result from the emergence of cognitive structures.

The emphasis in a constructivist classroom is not on transmitting information but on promoting learning through learner intellectual activity such as questioning, investigating, problem generating and problem solving. It is about constructing knowledge not receiving it, understanding and applying, not repeating back, thinking and analyzing not accumulating and memorizing information and about being active not passive learning. (Marlowe 1998)

This theory of constructive is on the learner-centered approach. This conceptual paradigm represents an epistemological shift from regarding scholars as the mere recipients of data and information, which is supposedly beginning to regard the actions of learners during instructional episodes as the prime interior for the selection and development of media.

Learners are viewed as thinkers with emerging theories about the world and educators generally behave in an interactive manner, mediating the environment with learners. According to Branch (1995) , the notion of a learner-centred paradigm is intended for professionals interested in moving away from instructional media designs that encumber limiting, didactic, passive singular models of teaching and move towards alternative designs which facilitate active, multi-functional inspirational situated approaches to learning.

Central to the philosophy of teaching to transgress is the concept of social transformation, which challenges education as a liberatory practice, and with pedagogical strategies that may be not jut for learners but for educators themselves. Hooks, (1994) strongly believe that teachers as facilitators must transgress from the traditional approach which makes learners to be passive in the classroom situation to an approach which allows learners to be critical thinkers rather than passive participants.

This theory argues for open learning, welcoming the effective use of resources in Outcomes Based Education meaningfully and purposefully. It combines both the following, the

theory and practice strategies. This theory also argues for transformative and critical educators rather than traditional accommodative hegemonic and autocratic educators. It challenges teachers to have a clear understanding of what they teach, what resources they use, why they use resources in their teaching and how they use resources in teaching and learning contexts. Therefore, Bel Hooks (1994) calls upon a critical pedagogy and a liberatory system in the classroom situation.

Through using resources in OBE a number of techniques in interactive learning helps in making the classroom a more hospitable environment for learners of all backgrounds as we are teaching in a multicultural context. Classrooms become a place of ecstasy and pleasure, a place of promise and possibilities where learners learn to raise critical questions and allows also some critique. Learners learn to share insight, strategies and have a critical reflection.

They learn to be involved in a dialectical exchange of ideas in the classroom context and make use of various resources in their research projects. Teaching and learning becomes sheer pleasure and meaningful for everyone involved. Their involvement is stimulated and the school becomes a working community with resources that provides opportunities of learner empowerment. Learning in the classroom is truly engaged and also becomes dynamic and fluid through effective use of resources.

Central to the philosophy of pragmatism is also the concept of social transformation. Pragmatism stresses the use of methods and approaches that are practical and more suitable to the accomplishment of desired results. Taking a close look at the systems approach, the system approach is unique in the sense that it enables analysis of not isolated components but of the whole and helps one to think in a Gestalt way rather than in a fragmented manner.

The systems approach is an educational tool developed to make the educational adventure more successful, holistic, responsive, responsible, logical, orderly, self-correctable and flexible rather than wholly intuitive, unordered, undefinable and doubtful (Kaufma 1976). According to Pervical and Ellington (1993), the systems approach is a term used to describe the systematic application of Educational Technology to an educational or training problem starting with the input (entry behaviour) and output (terminal behaviour) and determining how best to progress from the former to the latter.

The systems approach to instructional design enables the teaching-learning progress to be systematically planned, designed, carried out and evaluated in order to accomplish the goal of student learning.

Application of the systems approach to instructional design produces a learning system, which arranges human and non-human resources in an efficient manner for effective student learning. The system approach to instruction explores to find effective ways of talking about designing and organizing learning situations in

practice. It includes the progress of planning the instructional setting, the delivery system and all instructional hardware and software and all components needed for the system to operate as intended by the designers. The systems approach thus represents a progress for solving an instructional problem (Mehra, 1985). It can provide education with a useful logic for improving what it does and how well it succeeds in meeting its own objectives. Through the systems approach learners will develop their level in skills and competencies after learning, and the teaching and learning process will become dynamic, fluid, and meaningful.

Central to the philosophy of critical theory is the concept of critical thinking. It is crucial that critical thinkers who want to change our teaching practices talk to one another collaboratively in discussions that cross boundaries and creates space for intervention. The foundations of critical theory lie in the empowerment of the society and learners to question things and to think critically (Lincoln, 1993). In Outcomes Based Education learners are given some research projects to be researched.

They work in collaborative groups solving the research problem by using various resources. Learners practice their thinking skills critically. This encourages involvement in the interactive process of knowledge creation and learners learn to organise and manage themselves and their research projects responsibly and effectively. This helps in developing interpersonal and communication skills.

Therefore, the critical paradigm emphasises the democratisation process of change and places its emphasis on the emancipatory role-empowering individuals to transcend the constraints of socio-economic class and examine the constraints on the process of acquiring power over the curriculum working towards an examination of the socio-historical political, economic variable constraining the development of more emancipatory curricula (Lincoln, 1993). Therefore, the South African version of Outcomes Based Education affords critical outcome a pivot role of importance.

2.2 DEFINITION OF CONCEPTS

2.2.1 OUTCOMES BASED EDUCATION (OBE)

Outcomes Based Education is interpreted differently in various parts of the world where different OBE approaches are used. For the purpose of this study the concept Outcomes Based Education will be understood to mean the following: "a process of teaching and learning which accepts as its premise that the definition of outcomes forms the basis of all educational activity, including the description of qualifications, the development of curricula, the assessment of learners, the development of educational structures and institutions and even the planning of finances, buildings and other resources" (Malan, 1997: 10).

Spady (1996) argues that OBE can, as in the South African model be used as a tool for a complete transformation of an educational system. He calls this Transformational Outcomes Based Education. Outcomes Based Education in

South Africa tries to emphasize the need to connect theory to practice. The definition of OBE does not deviate from the Foundation Phase South African Policy Document (1997:20) which suggests that Outcomes Based Education makes provision for the inclusion of children with disabilities, out of school children and other children with special education needs.

Therefore, the Outcomes Based Education model is so radically different from the previous education approaches that it is referred to as a "paradigm shift". Principles like equality, capacity building, quality and redress of the inequalities of the past are clearly enshrined in this new system of education. There are three major premises upon which Outcomes Based Education is founded.

These are – all students can learn and succeed not necessarily in the same way or at the same rate, success results in further success and lastly schools control the conditions under which learners succeed (Ellis and Fouts, 1993: 96, Boschee and Baron, 1994: 193). The first premise is based on the notion that every learner is capable of learning and mastering the curriculum. The length of time taken by learners to accomplish a task should be a variable not a constant.

The second premise pre-supposes the importance of prior learning. What the learner has mastered reinforces his or her determination and in terms of its supportiveness it is also crucial for the learner to succeed. This might, for example include questions of richness and exhaustiveness of information resources provided to enable a learner to achieve the critical outcomes.

2.2.2 CONCEPT 'OUTCOMES' IN OBE

The definition of outcomes is very important because it helps us to understand our new system of education and training, (Outcomes Based Education) OBE. Therefore Spady, and Marshall wrote (1994)

Outcomes are clear, observable demonstrations of student learning that occur after a significant set of learning experiences. They are not values, attitudes, feelings, beliefs, activities, assignments, goals, scores, grades or averages, as many people believe. Typically, those demonstrations, or performances, reflect three: - (1) What the students knows; (2) What the student can actually do with what he or she knows; and (3) the student's confidence and motivation in carrying out the demonstration. A well - defined outcome will have clearly defined content or concepts and be demonstrated through a well - defined outcome process beginning with a directive or request such as "explain", "organize", or "produce".
(p, 20 - 21)

In Outcomes Based Education statements are made about what knowledge, skills, values and attitudes learners should acquire as a result of their learning. These statements are called outcomes because they say what the results or outcome of learning should be. Thus 'Outcomes' in OBE refer to the end product of the process of teaching and learning and Marshall (1994) identify three groupings of these outcomes. These are - traditional outcomes, transformation outcomes, and transitional outcomes. Traditional outcomes can be equated to

specific aims expected to be accomplished after a specific unit has been covered. In OBE terms, these will basically refer to things on competencies a learner will be able to demonstrate. Transformational outcomes are those outcomes which epitomise qualities like problem-solving, information processing, good communication and all other such qualities. Transitional outcomes are those outcomes that gives priority to high-level competencies such as critical thinking, effective communication, technological applications and complex problem, solving rather than to particular kinds of knowledge or information (Fullan, 1993).

Spady (1994) sees outcomes as the knowledge, competencies and in the NQF and SAQA Act these broadest outcomes are called the critical cross-field outcomes. Therefore South African version of Outcomes Based Education places much significance on critical cross field outcomes. These outcomes which are generic in nature weave through all of the eight learning areas namely: -

- Language, Literacy and Communication (L L C)
- Mathematical Literacy, Mathematic and Mathematical Science (M L M M S)
- Human and Social Sciences (H S S)
- Natural Sciences (N S)
- Technology (TECH)
- Art and Culture (A C)
- Economics and Management Science (E M S)

(Adapted from South African Phase documents: Sunday Times, Read Right, 23 / Life Orientation (L O) [01 / 2000]

Learning area outcomes are defined for each of the learning area. These are skills, values and abilities, in which a learner is expected to demonstrate for each learning area (Bhengu, 1997).

These have replaced the traditional schools subjects. For each learning area there is a set of outcomes based on the critical outcomes which give the most important outcomes of learning associated with the particular learning area. These outcomes are called specific outcomes because they are specific to the learning area. They help make the critical outcomes applicable to the learning areas. Critical outcomes are the broadest outcomes which are considered to be the most important for all learning. The Department of Education developed the following critical outcomes for all education including schools, technikons and universities where learners should be able to demonstrate their ability to: -

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

- ❖ Demonstrate an understanding of the world as a set of related systems by recognising that problem solving contexts do not exist in isolation.
- ❖ Reflect on and explore a variety of strategies to learn more effectively.
- ❖ Participate as responsible citizens in the life of local, national and global communities.
- ❖ Be culturally and aesthetically sensitive across a range of social context.
- ❖ Explore education and career opportunities
- ❖ Develop entrepreneurial skills.

(SAQA, 1998).

Therefore, all learning whether at university, schools or in the work place should be organised to help learners achieve these outcomes. They reflect essential qualities that all South Africans will need if we are to build a new democratic society and create a thriving economy. (Adapted from South African Phase document: Sunday Times, Read Right, 23 / 01 / 2000)

In order for the cross-field outcomes to be accomplished, learners need to carefully process, analyse and synthesize information and knowledge and be able to supply inherent skills and competencies to other scenarios in life. They need a learning environment in which they are valued and in which they are required to respect and value others' point of view, to engage in constructive debates and to develop effective communication skills. The development of these high order thinking skills pre-supposes an existence of what Karrison (1998: 349) calls "a resource rich learning environment". She maintains that such a context

exposes learners to a wide range of diverse sources of information, representations of ideas and views in many forms and languages. She contends that critical outcomes are more likely to be accomplished where eclectic learning resources, that is those collected from a wide range of resources, are actively used.

The critical outcomes have a major influence on the kind of learning environment learners need and the kinds of activities they must engage in if they are to progress towards achieving the outcomes.

Knowledge, skills and values cannot be separated, because knowledge is a theory that guides a learner to use skills effectively (SAQA Online, 2001).

2.2.3 CONCEPT RESOURCES

For effective implementation of Outcomes Based Education resources play a critical role in the teaching and learning context. The concept "Resource" means a source or aid as support, something resorted to in time of need. (Collins English Dictionary) (1965). Resources include a variety of things for example objects, skills, or anything else which satisfies a particular need. Something can be classified as a resource when certain conditions are met, namely: -

- When there is a demand or need for it or
- When specific knowledge, skill or technology is necessary to obtain or access it (Hall, Holomisa, Sekete and Weber, 1999).

Therefore, resources are means of doing something. According to Ellington, Percival and Race (1993), a resource in education is a set of material or situations that is deliberately created or set up in order to enable an individual learner to learn. No resource on earth has a fixed or intrinsic value. The value of a resource depends on how it is used. Resources are an important part of planning meaningful learning activities.

2.2.4 LEARNER-CENTRED CONCEPT

The learners - centred approach to education presupposes that the curriculum is developed around the peculiar needs of a learner. The learner - centred concept is based on the need for educational practice which prepares individuals to participate in society as contributors rather than only as consumers. The contention is that a learner centred paradigm provides a conceptual framework for facilitative, inclusive, active and responsive learning through media usage that remains focused on learner achievement (Branch, 1995). "The premise here is that true learning is spontaneous emotionally-invested and cannot be pre-packed." (Ellis and Fouts, 1993: 172) A learner-centred paradigm is based on interactive learning theories, participatory learning theories, and communication theories and situated learning theories.

According to (Branch, 1995) the notion of a learner-centred paradigm is intended for professional designs that encumber limiting, didactic, passive, singular modes

of teaching and move towards an alternative designs which facilitate active, multi-functional, inspirational situated approaches to learning.

Therefore, the purpose of the paradigm is merely to promote creative thinking about schemes for considering and re-considering the utilisation of media during instructional episodes within the South African context. Learner-centred approaches place emphases on constructivism. "Each of us constructs our own meaning and learning about issues, problems and topics. Because none of us has had exactly the same experiences as any other person. Our understandings, our interpretations, and our schemata (knowledge constructs, learning) (Marlowe and Page, 1998: 10).

2.3 RESOURCES AND THE NEW CURRICULUM

The new curriculum focuses on knowledge, skills attitudes and values (the outcomes) which learners should develop rather than only on the content that learners are given by the teacher. But this does not mean that teachers are no longer needed to present clearly organised and relevant information to their learners. If they rely only on this, learners would not develop the full range of thinking, communication and problem-solving skills they need to develop their full potential.

In order to achieve these competencies, learners need to be actively involved in the learning process. This means that they need to spend their time solving problems, making models, designing plans, resolving conflicts, working in

groups, making posters, trying out ideas applying knowledge in different contexts as well as understanding the information that the teacher gives them (Educators Guide, 1999).

Therefore, our task as teachers is to develop activities that will give learners the opportunity to gain new knowledge, develop new skills and think about their attitudes and values. Resources are an important part of planning meaningful learning activities. Teachers must make the best use of resources that are available in schools as well as in the community where they teach. Teachers need first to identify which outcomes they want their learners to work towards and then choose the resources which will help them to achieve those outcomes. For example, if you want your learners to debate on social issues like HIV / AIDS, Crime, Violence, and Cholera, the newspapers and the magazines are good resources.

Even articles on these issues can be used effectively to start classroom discussions under the phase organiser called Life Orientation (L O). [See appendix 1] Even Kader Asmal (1999) in his eleventh priority which underlines all priorities also emphasize that we need to deal urgently and purposefully with the HIV / AIDS emergency in and through the education and training system (Asmal, 1999).

Resources do not have to be sophisticated, commercially produced or costly creations to be effective but tailor-made resources made to suit your own

teaching and learning situation are often the best (The Media in Education Trust 1999). Certain criteria must be taken into consideration in organising resources (Pollard and Ton 1993).

Those criteria are: -

- Appropriateness: What resources are needed to support the learning processes which are expected to take place.
- Availability: What resources are available? What is in the classroom, the school, the community, business, libraries, museums, resource centre? Are there cost time or transport factors to be considered.
- Storage: How classroom resources are stored? Which should be under teacher control? Which should be openly available to the learners? Are they clearly labeled and safety stored?

(Pollard and Ton, 1993).

Educators should be involved in the provision of educational resources so as to realise their educational potential. (Criticos 1995) Resources should thus be seen to support a curriculum rather than as a means by which it is selected. Even Mathews (MIE, 1999) strongly believes that resources like newspapers can be used as a valuable learning resources in classrooms as well as in disadvantaged schools. Planning of using resources in the teaching and learning situation must be of vital importance in any teaching and learning context. Gallian (1994) also highlighted that "Any medium / resource must be planned and constructed by means of rational, flexible, verifiable taxonomic criteria."

2.4 DIFFERENT TYPES OF RESOURCES

The resources available to schools in South Africa vary enormously. Therefore a wide range of potential learning resources exist even in the most disadvantaged classrooms. Resources range from textbooks and other print and electronic media to the variety of objects occurring inside and outside the classroom in the natural and manufactured environment. Resources include the contributions of learners, parents and communities, their experiences, knowledge, stories, sounds, culture, languages, music careers, art, crafts, objects from the natural environment and much much more (Educator's Guide, 1999).

Resources in the form of equipment, apparatus, artifacts and media are a means of deepening, enriching and broadening the curriculum through providing first hand experiences. Resources may even be in the multimedia format. It is such materials that Kamison (1998: 349) refers to as forming the resource rich environment.

Resources are categorized as follows: -

- Resources from the media
- Resources from the waste
- Resources from the everyday environment
- Resources within the community

(Educator's Guide, 1999)

Resources from the media



Plate 1 Audio-visual media that assist learners in almost all the learning areas taught at school

Resources from the waste

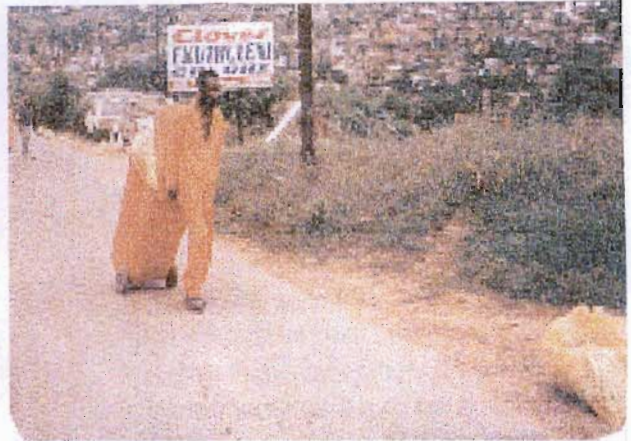


Plate 2 Waste resources that encourages the development of hands on experiences.

Resources from the everyday environment

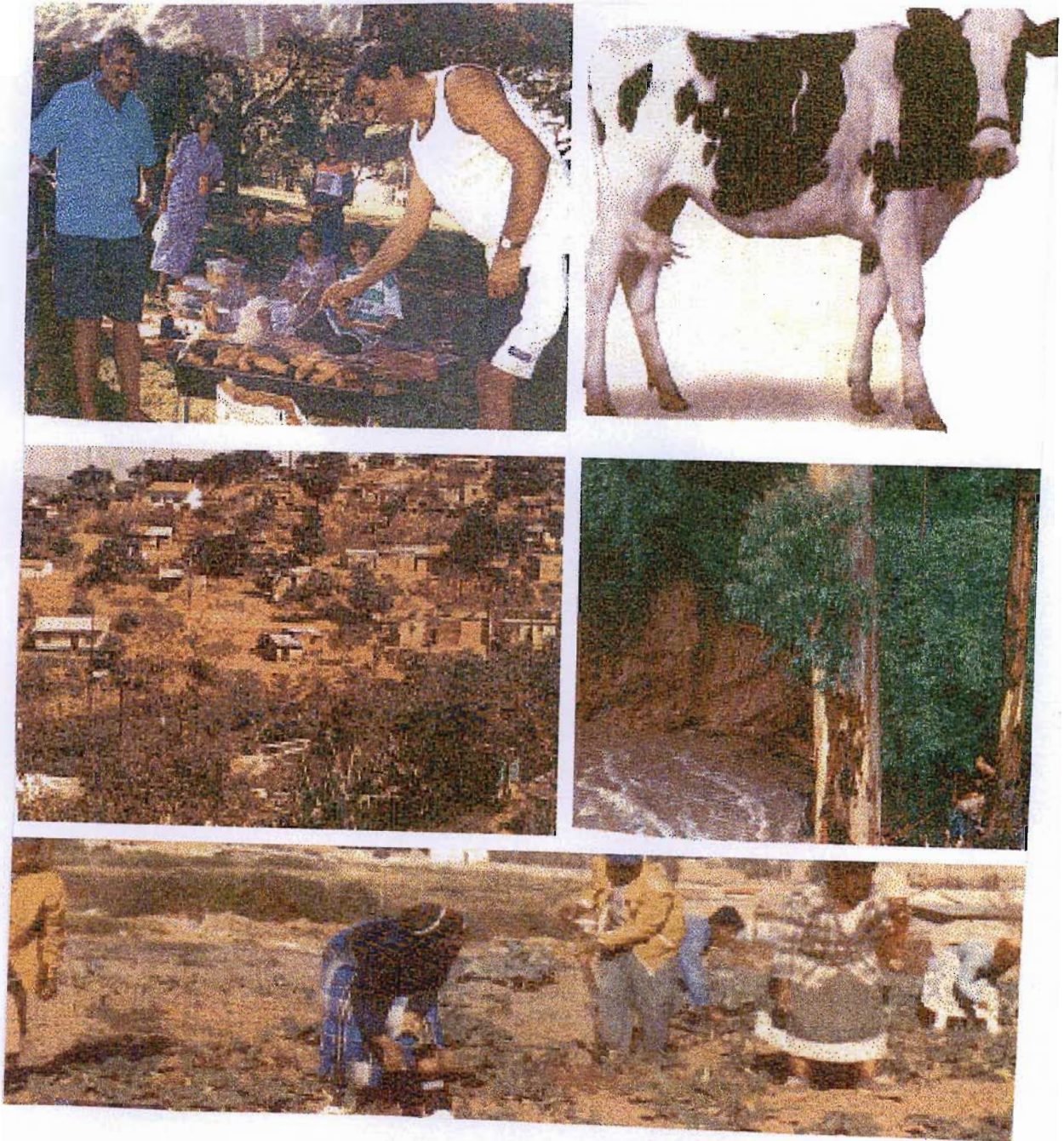


Plate 3 Vital resources for environmental education

Resources within the community

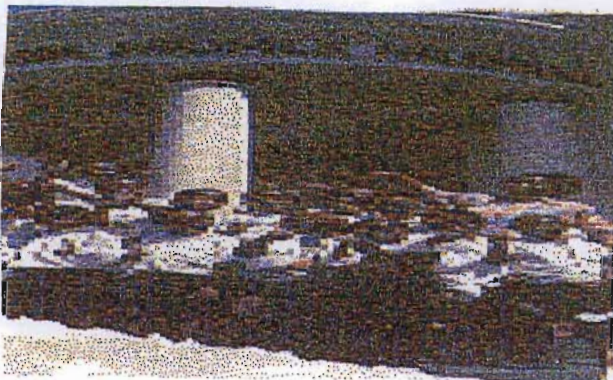
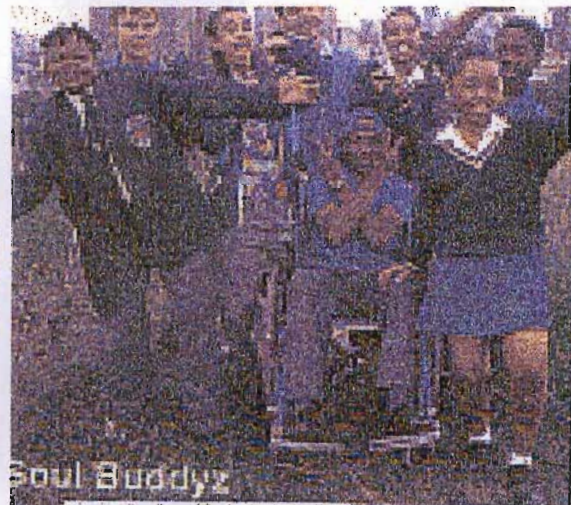
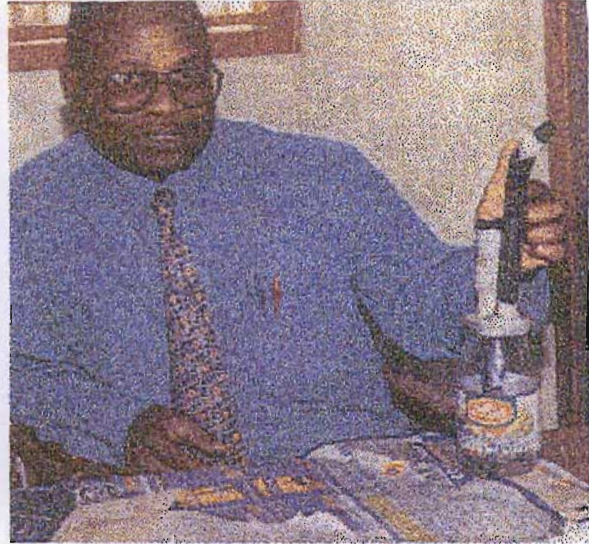


Plate 4 Potential resources for teaching and learning used in and out the classroom situation

Now we are going to look at how these resources enhance learning and teaching in outcomes based education

2.4.1 RESOURCES FROM THE MEDIA

These are electronic media. They are commonly known as hardware. The term hardware denotes technical equipments like computers. Hardware is the “gadgetry” used in Audio -Visual media presentations. Examples of these electronic media are computers, radio's, televisions, video camera and much more. These resources are usually housed in resource centres. Resource centres refers to the places where sources are stored, and that forms a fixed point of references with regard to the users utilization of a source (Ellington, Percival and Race, 1993).

2.4.2 USING RADIO AS A RESOURCE

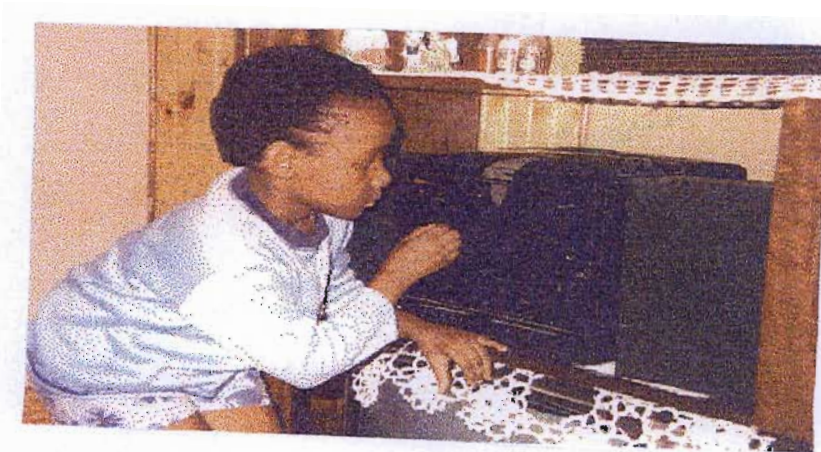


Plate 5 Radio as a resource

Radio is a medium for all people. It has been referred to as the "Theatre of the Mind" because it has a personal and unique character. According to "Krouse (1999)" if radio drama is called the "Theatre of the Mind" then education radio must certainly be the classroom of the mind. The "mind classroom" spans South Africa, taking a multi-faceted and multi-cultural approach to learning through radio, the most transportable of media. Even Mokadi of Marulana Primary School in Tembisa who is teaching grade two uses radio lesson programmes to involve her learners in the learning experience in a novel way (The Teacher, Puisano, 1999).

In many South African schools, radio and tape recorders are more accessible than television. Even if your school does not have one, you could use your own tape recorder. It is easier to use a tape programme than live radio broadcasts in the classroom because you are not bound to the live broadcast time and you are able to listen to the recordings before you use it. Learners can listen to the tape again if they did not understand something.

Using radio as a resource allows learners to hear the language spoken in a real context, most often by first language speakers. The language they are learning could be isiZulu, isiXhosa, English, Afrikaans and so on. This is important since learners often find it difficult to follow a conversation in a second language outside the classroom because.

- ❖ the language in the classroom is often more slowly than that which is used in normal conversation,

- ❖ learners are not used to different people speaking the language with different accents,
- ❖ the language style in the classroom is often different to how people speak in real life. In normal conversations people use contractions like won't and did not make false starts and say things which are not important to the message. This can be confusing if you are not used to listening to this type of speech (Educator's Guide, 1999).

The radio helps learners to understand that language is spoken in different ways in different situations. The way in which you speak to the school teacher is different from the way in which you speak to a friend. Different programmes on the radio make this point. The news reader uses formal language, while the person hosting a talk show where people can phone in with their views, will be more informal. Learners can also practice their note taking skills, choosing the most important points as they are listening to short excerpts from the radio.

Using the radio as a resource actually boosts their egos and confidence unlike television. Radio also develops imagination because learners must visualize what they hear. Radio provides quality instruction and teacher capacity is developing enormously. Radio programmes often have interviews with people who are experts in their field and this can add to learners knowledge on a particular topic. Interviews are useful programmes to record. Learners will learn more about the topic under discussion as well as be immersed in the language they are learning. They could listen to the types of questions which the

interviewer asks, and then use those questions as a model for when they do their own interviews.

2.4.3 USING TELEVISION AS A RESOURCE



Plate 6 Television as a resource

Children spend lots of their time watching television. American children watch on average of 3-5 hours of television per day which is 24 hours per week. Even Buckingham (1985) asserts that children today spend more time watching television than they spend in school. It exerts a very powerful influence on their ways of thinking about the world.

Using television as a learning resource develops new knowledge. There are some very useful and interesting programmes on television that can add a new dimension to learning. Some of those programmes are Yo.TV, Take 5, and Liberty Life Learning channel. Programmes show visuals of places that learners may never have seen and things which may be completely new to them like the magnified solar system. Television develops critical skills. Learners need to

develop their critical skills to evaluate what they are watching and to recognise what messages are being sent by television programmes. It is a fun visual way of learning which learners enjoy. The key is not to allow learners to watch passively as they do at home but to make them active and involve them with the programme. The type of programme the teacher shows depends on the outcomes he wants the learners to achieve.

A number of educational programmes are broadcast on television and have been developed for all the different phases of learners, that is the foundation, intermediate and Senior Phases and for secondary school level. Many of the programmes provide support for the implementation of Curriculum 2005. There are also programmes on early childhood development. There are also ordinary programmes which we watch on television everyday. Teachers can choose some of these programmes as learning resources for learners for example news broadcasts, documentary programmes on animals and programmes on science and technology.

An example of a learning area can be Language, Literacy and Communication (LLC). It is important that learners become media literate so that they can think about the messages that the media send. There are a number of activities that the teacher can do to develop learner's critical skills. For example, the teacher can tape a number of advertisements and get learners to think about the audience being targeted and how they can tell this. The teacher can also tape an

advertisement for the same product from two different channels and see how these differ from each other.

According to the law, anyone is free to record SABC radio and television programmes for his / her own personal use. This implies that teachers may record radio and television programmes for educational purposes as long as teachers are not doing so for profit. It is easier to work with pre-recorded video tapes than with live television because you can pause or rewind the tape and you are not bound to the broadcast time. Recorded programmes must be shown for educational purposes.

Research has affirmed the importance of television in the communication of information, ideas, skills and attitudes and it deserves serious consideration as a resource which enhances teaching and learning in Outcomes Based Education.

2.4.4 USING COMPUTERS AS A RESOURCE



Plate 7 **Computer as a resource**

Computers and the internet offer many possibilities for learning and teaching. This is why the researcher thinks that it will be useful to deal with computers as a resource. Computer skills are becoming more and more essential in the job market. It is vital that all learners know at least how to use a word processor so that they can type and produce documents. CD-ROM's present information in interactive and exciting ways on the computer. You can print out information to use in your lesson or if your school has enough computers, learners can find the information for themselves. There is much educational software available that assists learners in almost all the learning areas. You need to go to a computer store to find out what is available.

One of the biggest sources of information accessible through a computer is the internet. Anyone can find almost any information on almost any topic on the internet. Teachers can use that information in their lessons or they can get their learners to access the information. The internet is a world-wide collection of interconnected computer networks. If the computer is connected to the Internet, you can communicate with any other computer, which is connected, regardless of where it is in the world.

This means that you can find information and pictures about museums, libraries, art galleries and much more. Anyone can put information onto the internet provided he is connected. There are two ways of finding information on the internet. You can find information if you have the address of a particular website or you can use a search engine to find on a particular topic. The name of that

unique address is called Uniform Resource Locator (URL). An example of the URL is <http://www.microsoft.com> or <http://www.mweb.co.za> where the first part of URL is http, which is one of the standard protocols and then followed by the name of the server (Marcus, 1997). Useful Uniform Resource Locator (URL) addresses for teachers are: -

<http://www.eb.com> – For encyclopedia Britannica online. The following sites give reviews of the latest CD-ROMs in the subject, research database, discussion groups with other teachers, lesson plan ideas and other useful hints

<http://www.historyteacher.com>

<http://www.scienceteacher.com>

<http://www.mathsteacher.com>

<http://www.artteacher.com>

<http://www.englishteacher.com>

Many provinces also have a schools network which contain the home pages of different schools, information on educational happenings, links with teachers, and useful sites to visit. For example, <http://www.kzn.school.co.za>

<http://www.wcape.school.co.za>

<http://www.jhb.school.co.za>

<http://www.pta.school.co.za>

<http://www.fs.school.co.za>

Although the computer as a resource can be used in many ways in educational programmes, there are some of the areas where it proves most effective in the instructional process. For example, in drill and practice, tutorial and dialogue, simulation and games.

❖ Drill and Practice

The student sits at a specially designed electric typewriter which is connected to a computer by telephone lines. He identifies himself by a code number and his name. The machine types out the question and the student responds (Shelly, Cashman and Waggoner, 1998).

❖ Tutorial and Dialogue

The subject matter is literally taught by the computer programme. Explanations are given orally through audiotape and needed visuals presented in cathode ray tubes as in television. The student responds on a typewriter keyboard or by pointing on the screen with a light pen. The computer reacts to students response by talking to him (Shelly, Cashman and Waggoner, 1998).

❖ Simulation and Games

Simulations are condensed learning exercises specifically designed to represent vital real life activities by providing learners with the essence or essential elements of the real situation without its hazard costs or time constraints. Simulations are realistic imitations. They are frequently planned in the form of

competitive games to increase motivation and interest (Shelly, Cashman and Waggoner, 1998).

Educational simulations and games, like all other well organised learning experiences, must have carefully designed and clearly specified objectives. Simulation and gaming increases motivation and self-confidence and can accommodate students of different ages and levels of maturity.

Although computers open the possibility of educating the students completely by individualised programmes its chief limitation lies in the fact that it is prohibitively costly. Computers may also inject a non-human quality into educational programmes.

2.4.5 USING NEWSPAPERS AND MAGAZINES AS A RESOURCE



Plate 8 Newspapers and magazines as resources

Newspapers and magazines have featured in classrooms for many, many years, and they are excellent resources. Even Matthews (1999), a manager of the Print Media In Education (PMIE), who promotes the use of newspapers and magazines in the classroom, strongly believes that this is the ideal way to encourage teachers to adopt the outcomes based approach to their teaching.

Newspapers play an important role in the teaching of values. The new education system requires that we inculcate into our children values like democracy, peace, “*ubuntu*”, nation building and so on. But that is a bit difficult to teach without references to contemporary materials that learners can relate to. Lesson about “*UBUNTU*” and Nation building can be concretised by using for example “The Sowetan’s Nation building competition on annual events that celebrates people who are making a contribution towards the betterment of their communities. Newspapers and magazines can be used in the classroom to reinforce those values because they often talk strongly about issues that have to do with values.

Newspapers provide a valuable resource for language teachers and learners alike. Language learners find newspapers motivating because they offer information. Equally importantly, for many they provide one of the more obvious keys for opening up the foreign society, its pre-occupations, its habitual ways of thought and its prejudices. Malay (1994) states that language teachers tend to use newspapers in three ways

- ◆ To develop various language competence including reading, comprehension and grammar / vocabulary work,

- ◆ To focus on aspects of the target society and its culture,
- ◆ To stimulate discussions of issues raised by articles. Many language teachers have used them to help their learners develop media literacy skills-being able to understand and criticise messages in magazines, newspapers, television, radio and advertisements. These skills are important because learners are exposed to media messages ever day. They need to know how to evaluate what they see and hear. Newspapers offer a very wide range of highly creative and original activities which could be applied to almost any article or extract.
- ◆ They provide teachers with valuable resource for using the article of their own choice. Newspapers are used as stimulus for activities rather than as texts for comprehension and exploitation. Therefore it is important to give learners the confidence to tackle newspapers and in particular to help them find their way around them and establish a working familiarity with their content. In the classroom, the aim of using newspapers is: -
- ◆ To get learners first reading newspapers and then working with what they have found in the reading. It deals with up-to date and relevant information (Malay, 1994).

Newspapers and magazines bridge the gap between the outside world and the classroom and can be used to encourage learners to think critically and ask questions about what is written and why. They contain a very wide variety of text types, and an immense range of information. Learners who succeed with

newspapers are those who acculturate and therefore learn more successfully. They can be used effectively not only in better endowed schools but also as an inexpensive resource in many of the disadvantaged schools.

Newspapers and magazines can also be used to achieve outcomes in a range of Learning Areas. For example, in Human and Social Science (HSS). Newspapers report history as it is happening. The teacher can get learners to follow the development of a particular story over a few days. They can cut out the articles about the United Nations and this will help learners to understand what the organisation is doing in our world today. It helps them to link learning to the real world.

In Language, Literacy and Communication, newspapers and magazines are ideal language learning resources that allow learners to practise different language skills for example skimming and scanning. They also contain examples of different types of language such as factual information, opinions, stories and advertisements. Learners can analyse an editorial column and decide which are facts and which are opinions.

2.4.6 USING TEXTBOOKS AS RESOURCES

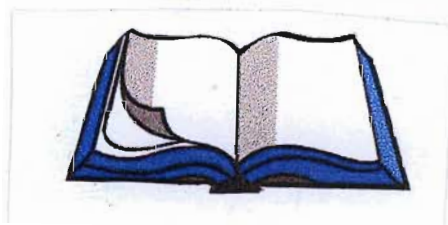


Plate 9 Textbooks as resources

Textbooks are basic resource found in most South African schools. New textbooks have been developed to help learners achieve the outcomes of curriculum 2005, but this does not mean that teachers cannot use other textbooks as well. Teachers can still use old textbooks in the outcomes-based classroom but they might use them differently. Traditionally, teachers and learners read through the information presented and then answer the questions. Often these questions require learners and teachers to remember the information.

Therefore, the new curriculum demands that learners do more than simply learn information. Learners need to apply what they learn. One way of ensuring this is to ask the questions that help learners develop their thinking skills. Textbooks are well known as resources that help in developing thinking skills.

(Lorenzen, Online, 2001)

Textbooks usually form bases of stimulating class activities. For example, if teachers want to give learners some homework, they can easily refer them to the textbook. The textbook provides learners with different ideas, which are sometimes different from that of teachers. With those new ideas they can supplement the teacher's information and refer learners to other sources. Textbooks are also helpful to those learners who want to work ahead of their teachers because the textbook tends to become a more reliable source than written notes. With the book, the learners critique their notes from their teacher. (Govender, 1998). Teachers need to start encouraging learners to develop their

thinking skills beyond remembering things. We need to ask learners to use information to solve problems and ask them to apply their knowledge to their own lives.

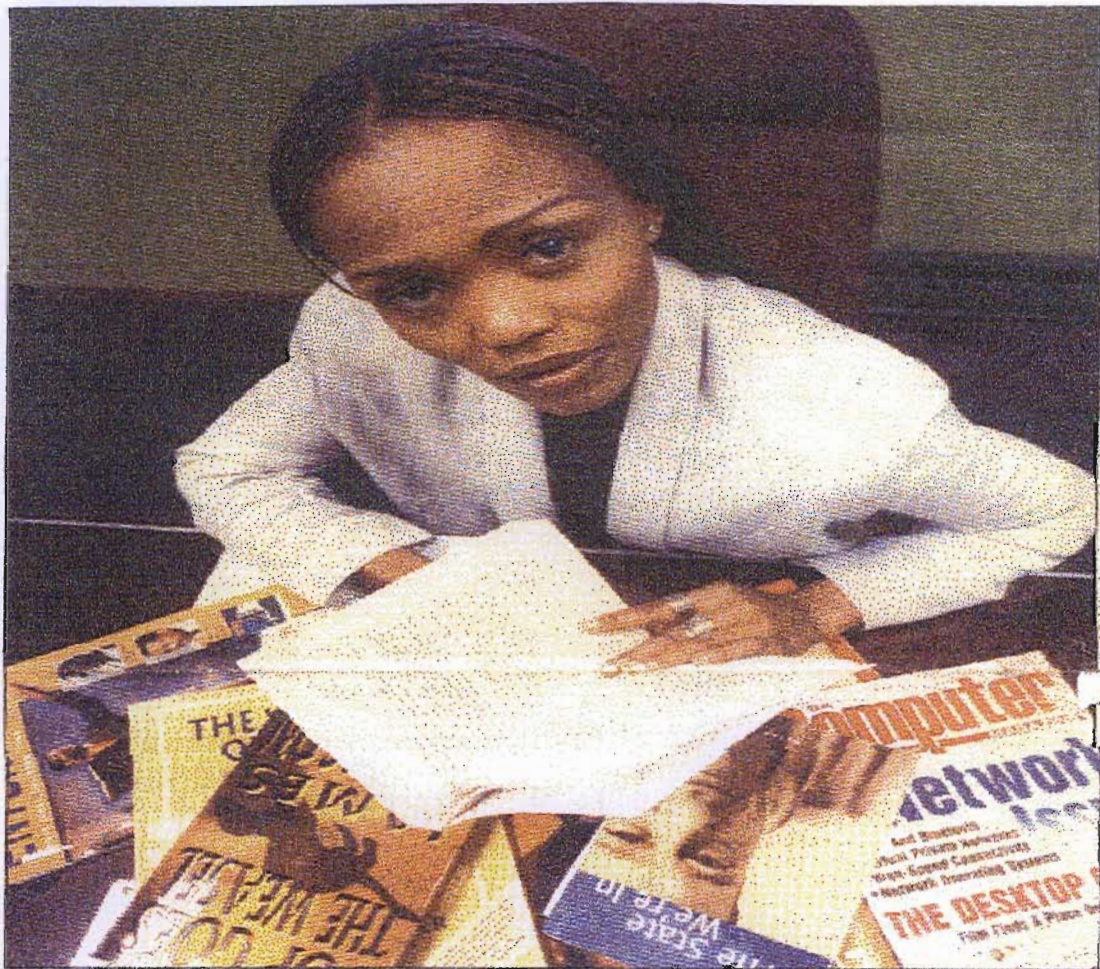
Therefore, listening, looking and talking are the first vital stages in children's reading development and lay the early foundation for good reading habits. Talking about the pictures is the first step in involving learners in the pages of a book, especially if the subject or story can be related to their own familiar world. When learners can relate the matter in the book to their own experience, this can be used as a starting point for introducing new knowledge whether it is counting, getting to know colours or finding out how other people live.

Gradually learners will develop their listening and concentration skills as well as a sense of what a book looks like. Soon they will learn how a book works, that you turn the pages from right to left and read the story from left to right on a double page.

They will start to realize that the mark on the page has a meaning and that it relates to the pictures.

Once learners have grasped these basic essentials, they will develop strategies for decoding the text such as matching words and pictures and recognising the rhythm of the language in order to predict what comes next. Soon they will start to take over the role of an independent reader, handling and looking at books even if they cannot yet read the words.

Most important of all, learners should realize that books are a source of pleasure. This stems from their reading sessions which are times of mutual enjoyment and shared experiences. It is then that learners find the key to becoming real readers. Teachers must ensure that, they check and find out about the latest information in the textbooks, as most textbooks are incomplete. They must use textbooks as teaching and learning resource not as the teaching aid that replace teachers (Lorenzen Online, 2001).



JACQUI MOFOKENG, Miss South Africa 1993, personnel consultant now venturing into information technology: 'My philosophy is that one has to exercise one's mind, body and spirit. When it comes to the mind, reading is the best way to keep active and alert. Reading provides you with great entertainment — you can create your own images and see movies being played out in your head. It's also very important to keep ahead and know what is happening in the world around you. One of the best ways to do this is by reading newspapers and magazines'

Plate 10 Promoting the importance of reading to the learners

Teachers can use different levels of questioning with any type of printed material that learners use, for example newspapers and magazines articles as well as with textbooks. Those different levels of questioning are: -

- *Knowledge* (remembering): - Learners simply recalls or recognises information as it was presented.
- *Comprehension* (understanding): - Learners are able to re-organise and interpret information.
- *Application* (solving): - Learners uses information to solve a problem.
- *Analysis* (analysing): - Learners are able to identify reasons and make inferences based on several pieces of information.
- *Synthesis* (creating): - Learners creates an original plan, proposal, story or designs.
- *Evaluation* (judging): - Learners offers an opinion based on evidence and judges the merits of an idea (Educators Guide 1999).

As the new curriculum states that learners should be able to identify and solve problems by using creative and critical thinking as well as to be able to collect organise, **analyse and critically evaluate information**, one way of helping learners to achieve the competencies is to ask open-ended questions. Teachers can also develop extra activities to the ones given in a textbook to help develop learners thinking skills.

Most important, teachers need to encourage learners to think critically and to question what they read rather than to simply accept what is presented to them.

Concerning ideas on questions and developing new activities for a textbook teachers should consider the following points: -

- ❖ If people are presented in stereotypical ways, like only boys doing science experiments, teachers need to point out to their learners. He / she may ask them why for instance, the book has not shown girls doing experiments.
- ❖ Teachers can note the words which learners may not know and help them to understand those words.
- ❖ It is important to understand the context and the background of the learners in the classroom. This helps learners to relate what they are learning to what they already know and have experienced.
- ❖ Sometimes information is easier to understand if it is pictorial like a picture, a diagram, or a table. If it is not presented in the textbook, teachers can use more than one textbook for a section of work. Having two or more books on the same topic will help teachers to see different ways of presenting the information.
- ❖ Teachers can also supplement the textbook with other resources. For example, a map will show learners the position of the place they are learning about. Newspapers and magazines can provide a local and current perspective on a topic (Educators Guide 1999).

As most of us have grown up with the idea that if something is in printed form, it must be correct. We need to realise that people who write textbooks cannot know everything about a topic. Textbooks reflect the values and attitudes of the people who wrote them as well as the social values of the time they were written in. We

need to consider the content in the textbook and to question information that discriminates against a particular group of people.

For example, some science textbooks show only boys rather than girls doing experiments. Therefore, we need to encourage our learners to think critically and to question what they read, rather than to simply accept what is presents to them. Teachers must consider the following features as guidelines for recognising good educational textbooks.

These are some features teachers could look out for in good educational texts.

They should: -

- ❖ build new knowledge on what learners already understand and know;
- ❖ use language that is easy for the learners to understand;
- ❖ use examples which make the knowledge relevant to the learners lives'
- ❖ ask questions which promote critical thinking and problem solving;
- ❖ encourage a "hand-on" approach to learning;
- ❖ have activities which incorporate reading, writing, listening and speaking;
- ❖ have activities which go beyond the boundaries of the classroom, for example, activities which encourage community work, field work collection of data and research;
- ❖ encourage learners to think about their own values and attitudes;
- ❖ acknowledge that there are diverse cultures and beliefs in our society;
- ❖ avoid gender and racial stereotypes;

- ❖ present different views on an issues where possible and encourage learners to make an informed choice;
- ❖ present information in interesting ways which will encourage a love for learning;
- ❖ present information in the form of pictures, diagrams and tables and not only in text form (Educators Guide 1999).

Therefore, teachers and learners in Outcomes Based Education must learn to share books together no matter in which grade. Taking for example the Foundation phase especially in grade one, learners can look at the pictures and talk about the subject or story.

2.4.7 RESOURCES FROM WASTE



Plate 11 Models made from waste materials like tins and old wire

Everyday we throw away piles of rubbish. A lot of it, for example plastics and glasses, bottles and aluminium cans, take years to decompose. This waste cannot be burned for it would pollute the atmosphere and so most of the time it is dumped in large holes called landfills. These slowly poison the water and ground around them. Recycling is done and it means re-using some of that waste either by collecting it before it is thrown away or by sifting through rubbish and finding what can be re-used. Therefore, protecting the environment is central to Curriculum 2005. One of the Critical Outcomes states that learners will be able to “use science and technology effectively and critically, showing responsibility towards the environment and health of others.”

Using waste as a resource in OBE promotes an awareness that the earth's resources are scarce and should be carefully used and re-used. It is free and can be collected and sold. Waste as a resource encourages learners to be creative and imaginative in building new things. It can be used across all levels and Learning Areas in almost any context and it encourages the development of hands-on practical skills. For example, in Language Literacy and Communication (LLC) a fun language learning activity can be performed where learners have to play the detectives using waste items and put these into plastic bags. They can find a variety of items and make sure they are clean and dry. Then the teacher can give each group of learners a bag and tell them that this is a bag of rubbish thrown out by a family (Bertram and Johnstone, 1998).

The groups task is to discover who is in the family and information about them, such as what jobs they do. For example, there may be a box of baby cereal in the bag which tells you there is a baby in the house. This task gives learners the opportunity to practice speaking together and to learn new words. Teachers can also ask learners to collect a range of biscuit and cereal boxes, empty tins and discuss how the language and design of these labels encourages people to buy them (Bertram and Johnstone, 1998).

For grade one the letters of the alphabet can be cut out of old cardboard, coloured or pasted with coloured papers and placed on the walls. Alternatively, the letters of the alphabet can be cut from newspaper headings. These can be used to familiarise learners with the shapes of the letters and to brighten up the classroom.

In *Technology*, scrap motor engines and other components can be collected from old mechanical workshops to show learners the reality of how a motor vehicle works. A range of different engines can be collected to show the different principles and working mechanisms or learners can build a simple mine shaft headgear using wire, old cool drink cans, string and an old cotton reel or something similar to wrap the string around.

In *Mathematical Literacy, Mathematics and Mathematical Sciences (MLMMS)* bottle tops can be useful counters. Learners can collect them from a tea room, bar, shebeen or restaurant. They can make a simple abacus by using wire and a

shoe or tomato box. An abacus can be used to help learners with addition and subtraction skills, and to develop their numeracy skills.

For more senior levels, they can build model bridges and structures such as the Eifel Tower, to demonstrate the importance of geometry in engineering. They can also use old wood, matches, pieces of wire or tins to do so. Teachers need to emphasise how important things like isosceles triangles are to the strength of structures and how important right angles are to the building of these structures.

In *Human and Social Sciences*, learners can make papier mâché models of famous battle scenes, settlements and urbanisation. They could build a model of the natural environment with flat lands, marshlands, water, transport and hills, and then design a settlement out of it. Objects such as bottle tops, match boxes and cans can be used to represent houses and factories. Different kinds of houses can be built using cardboard, grass, mud, and wood. This will teach younger learners about the different kinds of houses that people live in, and the materials that they are made from (Bertram and Johnstone, 1998).

In *Natural Sciences* papier mâché models of a volcano or a range of mountains can be built and painted. This will help learners to understand the scientific principles behind these features much more effectively. In scientific experiments it is not always necessary to have pipettes, burettes and measuring beakers. Old cardboard or polystyrene cups and straws can work just as well for some experiments.

Even a range of laws of physics and chemistry can be demonstrated by building models out of waste. It is always most beneficial if these models imitate real-life working objects, such as the torches, fans and houses. In many cases waste might need to be supplemented with materials such as electrical wiring, switches and batteries (Bertram and Johnstone, 1998).

In *Arts and Culture*, learners can use old socks and paper bags to make puppets. They can paint faces on them and place their hands inside and use their thumb as the lower jaw and their four fingers as the upper jaw. A more complex puppet can be made by taking an old paper bag, filling it with waste paper or plastic, and placing an old cardboard toilet roll in the mouth of the bag. The bag should be tied around the toilet roll to make a neck. Features can be glued, drawn or painted onto the face. Learners can make up dialogues and role play with their puppets or use the puppets to act out the characters in a book.

Waste can be used creatively to make furniture and decorations for plays. Old cardboard boxes can be cut and coloured to make the shapes you need. For example brick walls, trees or plants. You could build a whole set for a play or just a few small props to help the actors. Learners can also use waste to make some musical instruments, rattles by filling cans or bottles with sand, seed or gravel. Drums can be made out of paint tins (Bertram and Johnstone, 1998).

2.4.8 RESOURCES FROM THE EVERYDAY ENVIRONMENT

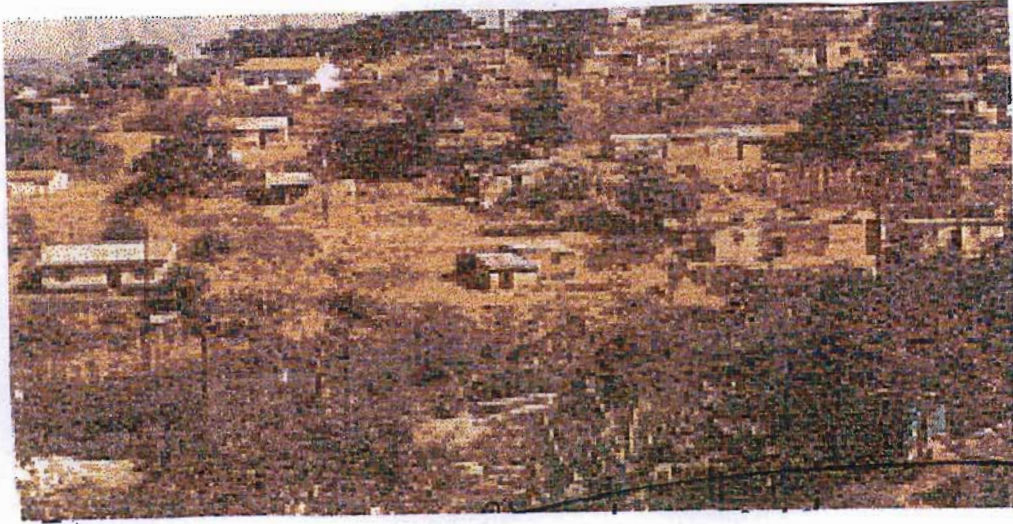


Plate 12 Resources from the everyday environment

People usually think of the environment as the natural things around us, like trees, grass, rivers, and mountains. But the environment can also be the built environment which surrounds us like roads, houses, shops, butcheries and factories. All schools are built in a particular environment. This may be a rural environment with a river nearby and cattle and grass grazing or it may be a more urban environment with lots of buildings, cars and traffic. No matter what kind of environment the school has teachers and learners can make use of it as a learning resource (Hall, Holomisa, Sekete and Weber, 1999).

Teachers and learners can use the environment as a resource because it is easily accessible and a vital resource for environmental education. Learners need to know how to take care of the natural environment and how the built environment can impact on the natural environment. The new curriculum has a

strong emphasise on learners demonstrating and understanding the inter-relationship between people and the natural environment. Learners can develop the skills of observing accurately, collecting data and writing up their observations.

Learners think about real-life problems like pollution and start to identify various solutions. It is important that learners develop an awareness of and a commitment to play an active role in conserving our environment (Hall, Holomisa, Sekete and Weber, 1999).

Teachers and learners can use the environment as a resource in various learning areas. For example, in Human and Social Science (HSS) learners can use the school building to practise drawing maps to scale. They can pace out the length of the buildings and draw a plan of the school in small groups. Discussions in groups can follow after completing an activity.

Learners can interview people in the community about how the local environment has changed over the last few decades. Interviewing skills are important for learners when they need to gather information from people. They could ask questions like: -

- ❖ Are the many more people are there in the community?
- ❖ Are there more houses, traffic, litter, pollution in the air, and enough water?
- ❖ What effects do these have on the natural environment? (Hall, Holomisa, Sekete and Weber, 1999).

Learners can also go on a “treasure hunt” to find a list of items such as a smooth pebbles, rough stones, a compound leaf, a pine cone and a weed. They can draw a list which is appropriate for their environment. This increases learners awareness of the environment. They can also demonstrate simple concepts such as the displacement principle using an old container filled with water and adding a stone. Even planting a garden in the school grounds is an excellent way to raise awareness about the environment. This allows learners to find out how things grow under what conditions, what type of soil is better and how much water is needed (Hall, Holomisa, Sekete and Weber, 1999).

Even in Language, Literacy and Communication (LLC) the natural environment is an excellent stimulus for writing stories, rhymes and poems. Learners can look at nature like flowers, listen to the wind in the trees and write a poem or story in response to these things. After finishing an activity, learners could discuss their views and ideas in groups sharing information based on their activities. As everyone has his / her own point of view about certain issues. To illustrate this, teachers can ask learners to think about how these people would see a forest: -

- an industrialist who wants to build a sawmill in the forest;
- a conservationist who is looking after the forest;
- a community who live near the forest;

Learners could discuss these ideas in their groups or work individually.

The following is a sample of an activity that can be used by grade four learners in Natural Sciences (Bertram and Johnstone, 1998).

Learning Area: - Natural Sciences

Phase Level: - Intermediate or Senior

Topic: - Testing river water quality

Aim: -

- 1) Learners will develop the important scientific skills of observing and recording data.
- 2) Make learners aware of the need to conserve the earth's resources.
- 3) Help them to develop an action plan to do so.

Resources: 1. A nearby river or stream
2. Exercise books or diaries to record observations

Method: - 1. Learners work in small groups of three to four
2. Use typed instructions to follow an activity

Instructions: - A. River quality observations

At the river look for evidence of: -

- Litter, dead animals, plastic, paper, cans, cartons
- Sewage and animal faeces
- Waste water from household washing
- Factory effluent (oil)

- Soil erosion like muddy water

B. Colour and smell test

Collect a glass jar of water from the river.

Note: the colour and the odour

C. Group discussion

Discuss their observations in their groups and answer the following questions: -

- Is the water fit for human consumption?
- Is the river bank intact, with the natural vegetation firmly rooted in it, to provide flood and erosion control?
- Is the river polluted and degraded? To what extent?

(Bertram and Johnstone, 1998).

D. Judge the condition of the river and identify its quality, using the table below.

0% - 19%	20% - 39%	40% - 59%	60% - 79%	80% - 100%
Entire river severely polluted and degraded	Serious pollution and degradation identified	River polluted but is still able to clean and sustain itself.	Minor enrichment problems identified	Not polluted supports natural plants and animal life

Table 1 Testing river water quality

Once learners have decided on the quality of river water, they may decide to make plans about how they could clean up the river, if necessary. In groups, they could come up with the best ideas for tackling the problem and then share their ideas with the rest of the class. (Water is life: A hand-book for teachers, 1999)

2.4.9 RESOURCES FROM THE COMMUNITY

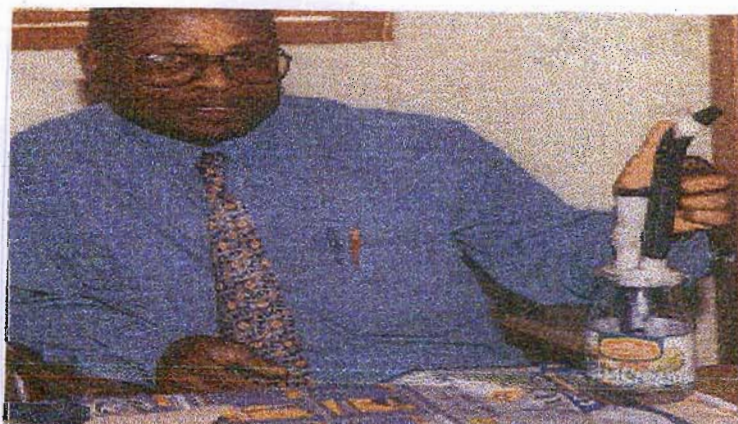


Plate 13 **Teacher as a resource**

Education is about people. Learners, parents and community members are all important potential resources for teaching and learning and sometimes are overlooked as resources for learning.

2.4.9.1 USING LEARNERS AS A RESOURCE



Plate 14 Learners as a resource

The past education system often assumed that learners had little or no knowledge and believed that they went to school to be filled with knowledge from the teacher or from the textbook. The new curriculum however recognizes that learners come to school with many skills, and their own experience, ideas, and knowledge. Learners from different backgrounds can share their knowledge, life experiences and learning with their peers and the teacher. This is particularly relevant when there are children from different backgrounds for example rural and urban or a variety of cultures. Learners can role-play their life experiences with their peers of different backgrounds. Role-play is a method where learners play the role of another person in a situation (Bertram and Johnstone, 1998).

Role-play develops learner's imaginations and their ability to empathize or to see a situation through someone else's eyes. It is also an excellent way to develop

learner's confidence in speaking. It is the process of communication and acting out that is most important. Role-play can be in the form of an interview where the learner plays the role of a famous person either from the past or the present. For example, one learner can be the interviewer and one can pretend to be King Shaka or King Cetshwayo talking about their battle plans. King Shaka and King Cetshwayo were Zulu Kings.

Using Technology as a learning area for role-playing, learners can role-play a famous invention such as Alexander Arawam Bell's discovery of the telephone in front of the class. In Language, Literacy and Communication (LLC) if learners are learning a second language they can role-play different situations to practice and expand their vocabulary, for example an interaction between a shopkeepers and a customer. Learners can also act out new words that they are learning. For example when learning prepositions, they can all stand next to their desks or put their chairs under their tables. When learning adverbs they can all walk quietly or noisily in the classroom or they can do this activity outside the classroom. In Life Orientation (LO) learners might also feel freer to discuss issues concerning sexuality if they are role-playing in groups. This could also be a useful format to use in A+DS education (Bertram and Johnston, 1998).

Groups could also be given the task of researching and role-playing religious rites of the world's major religions. One learner could be a narrator to explain the important points. Even a useful life skill for older learners who will soon be entering the world of work, is to role-play job interviews. This could be done in

groups with some learners acting as a panel of interviewers and others as job applicants.

In Economic and Management Science learners can role-play a dispute between workers and management at a factory. This can effectively bring economics alive. They can also role-play an interview with the Minister of Finance or the Deputy of the Reserve Bank on certain issues. This will not only encourage learners to follow local economic trends, but also to understand how and what influences them (Bertram and Johnstone, 1998).

2.4.9.2 USING PEOPLE AS A RESOURCE



Plate 15 People as a resource

Parents and community members can help to show how different learning areas are relevant to life after school. They can share their knowledge, skills, and life experiences with learners. This will help them to become actively involved in

education. Teachers can ask a wide range of people to come and talk about their jobs. This will help learners to get a broad view of the different jobs they could pursue after school. Teachers can also ask people who have started their own business to talk to learners about the importance of creating their own jobs. Even parents of learners may be invited in school and share their interesting stories which they know like fairy tale stories.

Therefore, learners can play an active part in their own learning, through methods such as role-play. They have a wealth of knowledge, ideas, opinions and skills, which can be drawn on and developed in their learning.

2.4.9.3 USING COMMUNITY MEMBERS AND SPECIALISTS AS RESOURCES



Plate 16 Community members and specialists as resources

Community members and specialists also constitute as resources in the teaching and learning context. Therefore, learning in the new curriculum should be closely linked to the real world. Thus it makes sense to draw on some of the knowledge and experience of senior members of our communities and specialists in given fields. Teachers can consider the following points when they want to collaborate their teaching using community members and specialists as resources.

(Bertram and Johnstone, 1998).

- They could ask a wide range of people like technicians, professionals, entrepreneurs to come to school to talk about their careers. This helps learners to get a broad view of the different careers they could pursue after school. Professionals like quantity surveyors, engineers, and accountants could talk about how important mathematics is in their day-to-day lives.

- Leaders of religions in the community could talk about the different religions to promote understanding and respect for different beliefs.

- Invite older community members to recall important historical or social events. Community members can be vital to language learning particularly since much of the traditional language usage is being replaced and forgotten. This link with the community helps bridge the gap between home and school and promotes the involvement of parents and grandparents in a learner's education. Community people are also essential to maintaining an understanding of traditional cultural practices.

- Health care workers and social workers can give learners important advice about topics and issues such as child abuse, AIDS and hygiene. Even Asmal (1999) in his eleventh priority which underlines all priorities has a strong emphasize that “ We need to deal urgently and purposefully with HIV / AIDS emergency in and through the education and training system”. Guided discussions can help to place these issues in perspectives (Bertram and Johnstone, 1998).

2.5 IMPORTANCE OF USING RESOURCES IN OBE

Schramn et al (1967) asserts that, a pupil will learn from any medium that is television, radio, computer, newspapers, textbook, film or others. Therefore, using resources in Outcomes Based Education exposes learners to context and content as well as stimulate a variety of cognitive processes and encourages active participation. Resources provide learners with learning stimulus and evoke learner’s responses.

According to Masterman (1982) media are important shapers of our perception and ideas. They are “Consciousness Industries” which provide not simply information about the world, but ways of seeing and understand it. Resources provide learners with meaningful messages emphasize vital issues and draw learner’s attention to important discriminations and generalisations. According to Mehra (1985) resources are of much importance because they: -

❖ Provide freshness and variety

This is amongst the most important contribution of resources to teaching and learning. Variety and change are a must in any school or sphere of life. When these are lacking, we may lose interest in a particular learning area, boredom might overcome our desire for learning. Monotony can be a powerful deterrent to learning. A change of style and pace refreshes learning. Therefore, resources expose learners to multiple contexts and content as well as stimulates a variety of cognitive processes (Mehra, 1985).

❖ Encourage active participation

Learners participation in the classroom may occur in various forms. Learners may heighten their sense of involvement by engaging in stimulating, provocative discussions after watching televised programme or listening to an educational radio programme. This involvement enables learners to make immediate use of their learning as they apply it to meaningful ways to new situations and unexpected events. Gage (1963) stated that "active response and feedback procedures were needed by the less motivated, slower learners in learning the more difficult portions of the material."

❖ For imparting quality education

Because of advance planning and involvement of experts available in the area of study, mediated teaching imports quality education to an unlimited number of learners. Mediated education enables the use of the best teacher available in the

area. For example, computers are being used these days for various purposes, such as teaching, learning and analysis and interpretation of data, because data analysis through computers is more reliable, dependable and time saving (Mehra, 1985).

❖ Heighten motivation for learning

Resources can do much to motivate learners, as well as a result of which education becomes emotionally stimulating as well as intellectually rewarding (Mehra, 1985).

❖ Appeal to learners of varied ability

A systematic use from varied resources can make learning areas clear and appealing to learners from diversified backgrounds and varying abilities. Thus resources can increase learning for not only the learner who reads and writes easily, but also for the learner who is not verbally gifted. Thus styles of varied learning experiences should be provided through a school learning centre to serve the needs for all learners (Mehra, 1985).

❖ Give needed reinforcement

A well-known ability of resources is to provide reinforcement that is the meaningful rewards for learning. The best reward is often the one that the learner finds within himself. Learners obtain such reinforcement in their learning when they find out how well they are doing and discover ways in which they can improve their performance (Mehra, 1985).

❖ Widen the range of learners experiences

The learner cannot increase his capacity until he is called upon to deal with a wide range of new experiences. The more extensive the learners experiences, the broader and more meaningful will be his ability to generalize and his powers for developing meaningful concepts (Mehra, 1985).

❖ Assure order and continuity of thought

Concept development is not a random accumulation of diversified experience. An order, a logic must be implicit in his process. A well prepared television programme presents its learning area in a logical, carefully structured fashion. The clarity and concreteness of the best instructional resources can increase a learner's sense of pattern in the experiences he observes and he develops an awareness of an ordered system and meaningful combinations among the elements that go on to make up this world (Mehra, 1985).

❖ Improve the effectiveness of other resources

Variation in methods of learning may help to hold and stimulate the learners attention. A system of diversified approaches to instruction can often top learners learning styles and preferences that are not brought to light by a single resource. Multiple resources can provide a rich variety of sensory experience to amplify and reinforce the concepts that have been presented in a textbook (Mehra, 1985).

Resources promote a mood of mutual understanding and sympathy in the classroom and bring about significant changes in learners behaviour. It makes learning meaningful over a wide range of learners abilities and provide needful feedback that will help the learner to discover how well he has learned.

2.6 PROBLEMS RESOURCES SOLVE IN OBE

Multiple resources are being used to do an extra-ordinary variety of educational and developmental tasks. They are being used to help improve instruction at every level that is primary, secondary, higher education, and even in pre-schools. Resources are used to promote mastery and stimulate young children symbolic play. Even Bowman (1988) stated that "Children can enjoy learning about technology and with technology through playful interaction."

Resources increase thinking, reasoning and problem solving and provide a dynamic landscape for learning. It facilitate language use, language development and concept development. It enables learners to progress at their own speed and makes provision for review and revision. It also provides learners with an ongoing check on progress.

Media specialists in helping teachers to be resourceful in their teaching are using resources. Resources are being used to help carry adult education and developmental activities into the community.

Nowadays, resources are being used to solve educational problems namely, resources from the media (television, computers, newspapers and radio), resources from waste (plastic and glass, bottles and aluminum cans) resources from everyday environment (trees, rivers, mountains, roads, houses) and resources within the community (technicians, professional and entrepreneurs).

Today, resources play an important role in teaching and learning by improving education especially OBE and Curriculum 2005 and making our education interesting. For example, computers are used for educational purposes both in commercial fields as well as in schools.

2.7 CONCLUSION

This chapter is devoted to the review of literature on the use of resources in Outcomes Based Education. It also explores a discussion on the theories underpinning OBE such as social constructivism, pragmatism, critical theory paradigm, systems approach and the theory of teaching to transgress. Other main issues are concepts such as OBE, resources, and outcomes in OBE, learner-centred approach, how do teachers use resources in OBE and why do they use resources in OBE.

Having discussed the main issues of this chapter, the implementation of OBE in schools has led to the oft-repeated cry about the lack of learning materials and resources. This resulted in the backdrop of OBE in piloted areas in South Africa.

As our new education paradigm, OBE requires teachers to use available resources; teachers need to involve themselves in the production and creation of educational resources so as to realize their educational potential. Therefore, lack of resources in the teaching and learning context led both to teachers and learners demotivated about their teaching and learning.

There is essential need of adequate resources in education and training.

Resources must be seen as a means of deeping, enriching, and broadening the curriculum through providing first hand experience. The availability of resources **makes** it possible for teachers to realize different learning outcomes and improving instructions in different learning areas. Learners become actively involved in the learning context as well as stimulation from a variety of cognitive processes. Using resources in OBE help in developing interpersonal and communication skills.

This leads to learners developing a positive reinforcement in learning when they find out how well they are doing and discover ways in which they can improve their **performances**. It also increases learner's capabilities in their spheres of life.

Therefore, one may conclude that we cannot afford to exclude resources in most activities of education. The next chapter gives a detailed description of research techniques and data sources and other main issues that the researcher will use for collecting the data for the study.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

One of the most important steps in the research plan is to select the sample. The formulation of the research design entails the specification of the sampling. The sample actually represents the population and provides variables that will be used as basics for answering the research question or testing hypothesis.

Check → Grinnell (1993) refers to sampling as the selection of some units to represent the entire set from which the units were drawn. If the selection is carried out in accordance with the requirements of sampling theory, the data obtained from the sampling should quite accurately pertain to the entire set.

3.2 SAMPLING METHOD

For the purpose of this study, the researcher will use a purposeful sampling by *the teachers in the schools* targeting three different Folweni Primary Schools, which implemented Outcomes Based Education in their teaching and learning contexts. The reasons for selecting the purposeful sampling is that, it increases the utility of information obtained and that the sample chosen is likely to be knowledgeable and informative about the phenomena investigated, and it may yield much insight about the topic. Therefore, purposeful sampling requires that information be obtained about variations amongst the subunits before the sample is chosen. Some qualitative researchers view sampling processes as dynamic, ad hoc, and phasic rather than static. Patton (1990) also highlighted that purposeful sampling

in contrast to probabilistic sampling is selecting information – rich cases for study in depth, when one wants to understand something about those cases without needing or desiring to generalize for all such cases.

3.3 RESEARCH SUBJECTS / PARTICIPANTS

The research subjects / participants are participants from three Folweni Primary Schools located in Folweni township. The targeted phases are: - Foundation phase (grade one to grade three) and the Intermediate phase (specifically grade four). These subjects are chosen from the entire teacher-learner population in three different sites using purposeful sampling. The following table represents the teacher – learner population from the three different sites.

Sites / Schools	Learner population	Teacher population	Grades
Hlengisizwe	1449	38	1 - 4
Masuku	316	7	1 - 3
Mklomelo	853	22	1 - 4

Table 2 Teacher-learner population

The following table represents the research subjects for the entire study.

Schools / Sites	Grade	Learners as participants	Teachers as participants
Hlengisizwe	1 - 4	126	4
Masuku	1 - 3	97	3
Mklomelo	1 - 4	120	4

Table 3 Research subject / participants for the study

3.4 STUDY TYPE

This study is conducted in the form of case study in each school. The reasons of selecting this form of a study are that: -

- Case studies are appropriate for exploratory and discovery-oriented research.
- They provide a detailed description and analysis of processes or themes voiced by participants in a particular situation.
- Case studies are used for its flexibility and adoptability to a range of contexts, and processes.
- They provide some of the most useful methods available in educational research.
- Case studies are appropriate in evaluation studies when the programme or innovation must be systematically studied before more structured design can be developed.

- They are appropriate in large-scale research projects that involve a number of research specialists. (McMillan and Schumacher, 1997)

The researcher has selected this method of a case study in order to get a more realistic account of teachers and learners experiences in using resources in Outcomes Based Education. Therefore, using this method, which is interactive, open and informal, will allow the participants feel more comfortable in sharing their views and ideas about the research topic. Even Campbell (1993) states that qualitative case study designs regularly contradict the process expectation and are convincing and informative, have a probing and testing power and validity for pick up unanticipated effects missed by those structured approaches. Therefore, the ethical values will also guarantee individual privacy of human subjects. (Leedy, 1993)

3.5 SITES VISITS AND TIME FRAME

Two weeks ✓

Three Folweni Primary Schools located in the township of Folweni area are sites chosen by the researcher to conduct the study. Limitation on these sites are due to the geographical factors of Folweni Township. For example, in 1980, the Umbumbulu Chiefs as their own properties owned Folweni Township. This led to the late development of this township by Durban Metro. The following table represents time frame of sites visit.

Sites / Schools	Grades	Time - frame
Hlengisizwe	1 - 4	April 2 – 12
Masuku	1 - 3	April 17 – 26
Mklomelo	1 - 4	May 7 – 17

Table 4 Time frame of sites visit

The researcher will spend approximately twenty seven (27) days on sites to collect data for the study. Approximately nine (9) conservative days were spent on each site. Before conducting this study on sites, the researcher will inform participants about the purpose of the research study and give assurance of the confidentiality of the data collected. The researcher will also establish a good rapport and trust with the groups. This helps the researcher to become oriented to the sites and gain a sense of totality of the setting for purposeful sampling.

When collecting this data from the different sites, the researcher will considered the following research phases, namely: -

3.5.1 PHASE 1: PLANNING

The researcher will locate and gain permission to use the sites. To plan for the study, the researcher will analyze the problem statements and the anticipated research questions, which focus the data collection efforts (McMillan and Schumacher, 1997).

3.5.2 PHASE 2: BEGINNING DATA COLLECTION

The researcher develops a way of organizing, coding and retrieving data for formal data analysis. The researcher obtains data primarily to become oriented to the field and gain a sense of the "totality" of the setting of purposeful sampling. This phase includes the first days in the sites in which the researcher establishes trust and good rapport with individuals and groups to be observed. The researcher prepares transcripts of field notes for data gathering and adjustments are made in the interviewer's techniques for establishing rapport and trust and the order and phrasing of questions during the interviews (McMillan and Schumacher, 1997).

3.5.3. PHASE 3: BASIC DATA COLLECTION

In the basic data collection phase, the observer begins to "hear" "see" and "read" what is going on, rather than just listening, looking around or scanning documents. The researcher continues to make choices of data collection strategies and informants. Tentative data analysis begins as the researcher mentally processes many ideas and facts while collecting data. Initial working conceptualizations and descriptions are transformed and summarized. As initial patterns emerge, the researcher identifies ideas and facts, which needs collaboration in the closing phase (McMillan and Schumacher, 1997).

3.5.4. PHASE 4: CLOSING DATA COLLECTION

Data collection draws to a close as the researcher leaves the field or conducts the last interview. In qualitative research, there is no prior date for the end of data

collection as one might have in quantitative studies when a certain percentage of completed questionnaires are returned. Therefore, ending data collection is related to the research problem and the depth and richness of the data collected. The researcher gives more attention to possible interpretations and verification of the emergent findings with key informants, and the removing interviews. The researcher senses that further data collection will not yield any more data relevant to the research problem (McMillan and Schumacher, 1997).

3.5.5. PHASE 5: COMPLETION

Completion of the active data collection phase blends into formal data analysis and the construction of meaningful ways to present the data. Data analysis begins with a construction of the facts as found in the researcher-recorded data. The researcher reconstructs initial diagrams, time charts network, diagrams, frequency lists, process figures and others to synthesize a holistic sense of the totality, the relationship of the parts to the whole.

The researcher asks a range of questions of the recorded data as he or she slowly induces conceptual themes and possible interpretations. Data analysis and diagrams are essential before the researcher can make interpretations (McMillan and Schumacher, 1997).

3.6 DATA SOURCE AND INSTRUMENT OF GATHERING DATA

In order for the researcher to implement the research plan, the researcher has to decide upon the methods / techniques which he / she is going to adopt in order to gather data.

Data is collected from the documents such as books, journals, and teacher guides, handouts from lectures and through searching in the Internet. In most cases, the researcher collects data personally from the participants involved in the study. Much of the researcher's time will be spent in locating documents with specialized bibliographies and indexes and in analyzing the sources. The researcher will spend approximately six months in collecting data from the documents. The following table represents time frame of data collection.

Months	Year	REVIEW
August to	2000	Literature review and data collection
March	2001	Data collection and analysis

Table 5 Time frame of data collection

3.6.1 INSTRUMENTS OF DATA GATHERING

For critical question one, (What is Outcomes Based Education?) and for critical question two, (What are resources?), the researcher uses the record analysis and observations to collect data. This includes prescribed books, journals and Internet information from computers. The information is easily accessible to the researcher because she forms part of the study.

For critical question three, (How do teachers use resources in Outcomes based Education?) and for critical question four, (Why do teachers use resources in OBE?), the researcher use interviews and observations as she will be involved directly with participants. According to TUBBS and Moss (1994) " Interviewing is often defined as a conversation with a purpose". Interviewing is more targeted towards accomplishing a specific purpose.

The researcher focus on small group interviews. Which three or more members of a group exchange verbal and non-verbal messages define small group communication as the process in an attempt to influence one another (TUBBS, 1992). Small group communication creates a social environment in which group members are stimulated by the perceptions and ideas of each other and one can increase the quality and richness of data through a more efficient strategy than one on interviewing.

The reasons for using interviews is that, interview techniques are flexible and adaptable and can be used with many different problems and types of persons

such as those who are illiterate or too young to read and write. Responses can be probed, followed up, clarified and elaborated to achieve specific accurate responses. Interviews also allows the researcher to note a non-verbal as well as verbal behavior in face to face interviews and the interviewer has an opportunity to motivate the respondent. This results in a much higher response rate. To mitigate the disadvantage of interviewing, the interviewer should thought of as a neutral medium through which information is exchanged. This will have no effect on the perception or answers of the respondent (McMillan and Schumacher, 1997).

To increase accuracy of the interview, the researcher will allow the respondents an opportunity to check the interviewers' perceptions. This will help in building a positive relationship between the interviewer and the respondent. Therefore the researcher uses semi-structured questions to allow flexibility on the respondents' response. These questions will be fairly specific in their intent. As the respondents respond to questions, the interviewer will record the answers using a tape recorder. The reason for using a tape recorder is that, taped answers ensures completeness of the verbal interaction and provides materials for reliability checks.

Information is collected completely and objectively. As the respondents taking time to co-operate, the interviewer will end the interview in a positive manner by thanking the respondents and allow time for the respondents to make comments or suggestions regarding the interview in general.

interview schedule will be determined in advance. Arrangements will be made by researcher with school's administration to interview teachers and learners.

During the process of conducting the interviews, the researcher will play the role of being a participant observer. Wolcott (1988) distinguishes three different participant styles, namely, active participant, privileged observer and limited observer. The researcher will operate as an active participant observer to collect data for critical questions especially question three and four. It is possible because she has a job to do in the setting in addition to the research.

For the triangulation of data that is collected by other instruments, the researcher will use questionnaires.

For many good reasons, questionnaires are the most widely used technique for collecting data from subjects. Questionnaires are given to each individual who participated in the study after the interview has been conducted.

The questionnaires are prepared in order to measure facts, motivation and knowledge. This means that the different types of questions that are being used are factual, motivation and knowledge questions.

Both the open and closed form of questions are used in order to allow each and every respondent to respond at least to certain questions. The open types of questions are included specifically to capture the respondent's ideas spontaneously in his / her own words. On the other hand closed questions are

included in order to focus immediately on details. Fourie of Technikon South Africa (TSA) (2000) observed that most of population has the intellectual ability to answer the closed types of questions. Therefore, these questions may even accommodate the respondents who are shy, who do not have much time and those who do not express their opinions easily. They are less time – consuming and can capture idiosyncratic differences. Using questionnaires will assist researchers to elucidate teacher and learner attitudes, their views, biases, opinions, interests and values based on the purpose of the study (Ely et al, 1991).

3.7 GRAPHICS AND TABLES

Graphics and tables are used for data analysis and presentation. The researcher use a descriptive narration as the study is more on qualitative approach. The reason for using a descriptive narration is that, it portrays events as a series of incidents, a process from beginning to conclusion (McMillan and Schumacher, 1997).

3.8 CONCLUSION

This chapter gives a detailed description of how the study is conducted. The main issues are sampling method, type of the study, research subjects, time frames and site visits, data source, instruments of gathering data and analysis strategies. The researcher used purposeful sampling as a sampling method of choosing the research subjects for the study. Research techniques / instruments

used to gather data are interviews, observation and questionnaires. The researcher used semi-structured interviews in order to allow in depth collection of data. In depth data is achieved because it provides an opportunity to probe and expand the respondents responses and it allows the researcher to alter the sequences in order to probe more deeply.

For triangulation of data, researcher uses the questionnaires. These questionnaires are used to assist the researcher to elucidate teacher and learner attitudes, their views, biases, opinions, interests and values based on the purpose of the study. Both open and closed form questions are used in order to allow each and every respondent to respond at least to certain questions. Therefore data collected by using the above mentioned research techniques / instruments are useful to the researcher during the analytical stage to answer the stated critical questions based on the purpose of the study.

Therefore, it is very important for the researcher to examine the technique used in the study before collecting the data for the research study. But this depends on strengths and limitations of each and other considerations. Therefore techniques used must capture the richness and complexity of behavior that occurs in natural settings from the participant's perspectives.

The next chapter discusses the detailed research findings of the study.

CHAPTER 4

RESEARCH FINDINGS

4.1 INTRODUCTION

After the data has been collected from the sample the next step is to analyze the data. Data analysis involves summarizing data into themes and categories using procedures recommended by Miler and Huberman (1984) Goetz and LeCompte (1984) and Patton (1980). The constructions of these categories was influenced by Shulman's (1987) theory of a knowledge base for teaching.

The goal of the analysis is to discover patterns, ideas, explanations, and understandings. Specific data elements have to be organized and then synthesized to derive the pattern and ideas that will form the basis of the conclusion. A thorough analysis requires three steps: - organization of the data; summarizing the data, and the interpreting the data. Observations, interviews and questionnaire analysis techniques result in a great amount of data that must be summarized and interpreted. Therefore, it must be critically examined and synthesized (Schulman's, 1987).

The researcher will use a descriptive narration, as the study is more on the qualitative approach. The reason for using a descriptive narration is that, it portrays events as a series of incidents, a progress from beginning to conclusion (McMillan and Schumacher, 1997). The study will be organized by sequence and different participants perspectives of the entire process used in research study. ...

4.2 SHORT DESCRIPTION OF FOLWENI

Folweni is located in KwaZulu Natal, in the Durban Metro area. It is divided into four sections namely, section *A*, section *B*, section *C* and South Gate where Toyota employees lived.(appendix 1)

Folweni started as an informal settlement under the King Makhanya of Umbumbulu. This place was known as Umbumbulu Reserve where soldiers were kept during the wars. It is well known for its sugar-cane fields. Inhabitants of this area were people from Malukazi area. They live in tents and in mud houses. This was caused by lack of physical infrastructures such as proper housing, road access, sewerage, schools, telephones and others.

People fetch water from the rivers. They spend most of their time on farming, ploughing the land and planting fruit and vegetables. They were farmers with heard of cattle, goats, sheep and hens. This was their way of earning their living.

In 1990, Folweni was in a state of turmoil. This was caused by political, social and economic factors. People were killed in numbers due to political intolerance. Even crime, poverty, violence and unemployment ruined the whole of Folweni area. Majority of people migrate to other areas for security purposes.

In 1994 Folweni was officially recognized as a township. The Durban Metro start paving the way of establishing basic infrastructure requirements for the community such as water supply, sewerage, electricity, proper housing, road

access, telephone lines and others. The Durban Metro projects pave some employment to the community. Community members are now enjoying some privileges of having a community clinic, community hall sponsored by Red Cross Company, a learning centre for adults where they acquire skills such as baking, sewing and others as well as churches, schools and playgrounds with soccer, netball facilities, and other equipments.

Even though, Folweni needs a multipurpose centre with recreational facilities such as shopping centres, gymnasium, resource centres, schools offering various skills for learners, computer centres to provide community members with computer skills and other skills. This multipurpose centre will serve the needs of the community members and pave the way of employment.

4.3 SCHOOLS AT FOLWENI

According to Brooks, G, and Brooks, M, G, (1993) it is universally recognized that the main objectives of any education system in a democratic society is to provide quality education for all learners so that they will be able to reach their full potential and meaningfully contribute and participate in their society throughout their lives. For every school at Folweni, the culture and ethos are conducive to the delivery of quality education. But teachers overcome some barriers and hardships in their teaching and learning environment because of social and economic factors.

For effective and productive teaching and learning in schools, workshops are being run in schools which aim at building a positive perception of education by focusing on findings, recognising and publicising examples of best practice. These workshops are being run by various committees in schools in meeting the schools, teachers and learners needs. Examples of these committees are; staff development committee, COLTS committee, appraisal committee, psychological and counseling committees, fundraising committee, burial committees and others. Teachers in other schools are provided with the support and in-service trainings, which enable them to develop a supportive environment for learning and development. Schools are trying hard to provide a safe learning environment for learners and a safe working place for teachers. The problem facing the schools at Folweni is the lack of proper facilities and resources to enhance teaching and learning context.

But teachers are working hard to provide a fertile learning environment and learners are working effectively in groups and are taking responsibility for their own learning. For example, teachers engage learners in research projects and learners make use of available resources for their research projects. Therefore, learners are provided with the environment that encourages them to become critical thinkers, problem solvers and effective communicators. Learners are able to demonstrate their learning achievement and competence in whatever manner most appropriate to their abilities.

As the South African School's Act (1996) states that, schools must be democratically governed or managed, participation management in schools is beginning to be democratic. For example, a decision making is not only based on the principal's will of power, but that they all work hand in hand with the management staff, teachers, parents and school's governing bodies. This allows a better information flow and creates an atmosphere in which all members feel a sense of ownership.

There is also a move towards a more flexible and less hierarchical structure, which means that responsibility is shared. Leadership in schools is about developing participants not wielding power. Leadership in schools have become a process of building and developing, participation and collaboration.

A culture of teamwork and brainstorming is taking place in schools. As schools are teaching in an environment of outcomes based education, teachers plan their learning activities together, raise critical issues pertaining that phase organizer and are involved in a dialectical exchange of ideas. Therefore, imagination and creativity is much greater and learning in schools is learner-centred. There is an improvement in teacher's pedagogical skills. For example, a growing awareness of what is required in creating a learner-centred learning and related activities.

As schools have the potential to serve as means of health education, teachers are valued and provided with the support and in-service training necessary to enable them to develop a supportive environment for learning and development.

Schools namely, Hlengisizwe, Masuku and Mklomelo, serve as an entry point for health intervention. Even the health officers visit schools to render and give lectures based on personal hygiene, abuse, especially child and drugs abuse, HIV / AIDS as well as other health precautions are some of the topics explained.

Schools also participate in an Environmental Awareness projects. Schools collect used cans, bottle, tins, old magazines and newspapers, and ensure keeping their schools clean and tidy. One of the schools where the researcher conducted the research, became one of Folweni Health promoting centres of learning, which is a centre that is constantly strengthening its own capacity as a healthy setting for living, learning and working. Health officers launched projects in this center to uplift Folweni community members about the importance of health hygiene and correct measures of health diet at home and within the community members who suffers from poverty.

Concerning security in schools, there is a lack about security in schools. Majority of schools buildings are not fenced but painted and renovated and made conducive to teaching and learning. Only Hlengisizwe Primary School, which has a tight security, monitored by Nathie Security and Company. This security company runs and secure the schools buildings against thieves. The school is responsible for paying the company.

Looking at the learning space in schools, there is a shortage of learning spaces. There are no enough classrooms to accommodate learners. Learners are

overcrowded in the classrooms. Even other teachers share classrooms. There are not enough learning materials like desks, chairs, tables and benches. Learners sit in threes in desks even if they are doing their activities in class. Others go to an extent of kneeling down on the floor and do their projects. Therefore, there is a need of developing proper infrastructures for effective teaching and learning in schools.

4.4 RESOURCES AND FACILITIES IN SCHOOLS

The problem facing these schools are the lack of adequate educational technology equipment and facilities to enhance outcomes based education in schools. There are no hardware like computers, televisions and photocopying machines, no resources centers, electricity, learning materials such as desks, tables, chairs and benches. Learners sit in threes and in fours and share one desk in the classroom. The only primary school that has at least some educational technology equipment is Hlengisizwe Primary School. There is one computer, a fax machine, a photocopying machine, television and a radio.

These resources are of no value to teachers and learners because classrooms have no electricity. Only the principal's office, which has access to electricity.

Teachers rely on prescribed textbooks provided by the Department of Education as well as the stationary, which includes packs of exercise books, pens, rulers, crayons and rubbers. Some teachers rely on library corners in their classrooms in enhancing teaching and learning in classes. Even though there are no adequate

educational technology equipment, the researcher noticed that, teachers were flexible and open to change in their classrooms. Teachers make use of available resources in enhancing outcomes based education in schools and their methods of teaching are learner-centred than teacher-centred.

Teachers make use of print media like newspapers, magazines, books, cartoons, audio media like radios which uses batteries as well as non-projecting media like posters, chalkboards, pictures and charts. Teachers also rely on resources like waste, environment and community. All these are means for relating learning to life and change learners expectations of what happens in the classroom. Learners are at the center of the learning process and teachers ensure that the chosen resources for their activities serves their teaching and learning goals.

4.5 CASE STUDIES

Case studies were conducted in three Folweni Primary Schools namely, Hlengisizwe, Masuku and Mklomelo for a period of one month, one week. Eight conservative days were spent in each site by the researcher for in-depth data collection. The targeted phases were the Foundation and Intermediate Phases. Two days in each grade (grade one, two, three and grade four) were spent by the researcher for in-depth data collection.

Case study one had one hundred and twenty six [126] learners and four [4] teachers who were subjects / participants for the study. (Sixty-eight [68] African

female learners, fifty eight [58] African male learners and four [4] African female teachers).

Case study two had one hundred and twenty [120] learners and four [4] teachers who were subjects / participants for the study. (Fifty-five [55] African female learners, forty two [42] African male learners and four [4] African female teachers).

Case study three had ninety seven [97] learners and three [3] teachers who were subjects / participants for the study. (Fifty [50] African female learners, forty two [47] African male learners and three [3] African female teachers).

Case studies conducted were answering the critical questions for the study. The critical questions are: - "Why do teachers use resources in Outcomes Based Education? And "How do teachers use resources in Outcomes Based Education?"

4.6 CASE STUDY ONE

Case study one was conducted at Hlengisizwe Primary School at Folweni. Hlengisizwe is one of the biggest primary school at Folweni with the enrolment of one thousand, four hundred and forty nine (1449) learners, thirty-eight (32) teachers and six (6) management staff. There are twenty eight (28) classrooms, a kitchen, and two offices for the principal and the management staff.

The following table represent the number of classrooms, teachers and learners per grade.

GRADE	Grade R	Grade 1	Grade 2	Grade 3	Grade 4
No. of grades	4	5	3	7	9
No. of learners	199	294	203	304	499
No. of teachers	8	5	3	7	9

Table 6 Numbers of grades, teachers and learners in school

Hlengisizwe is situated at a section at Folweni Township. The vision of the school is to instill self-discipline to their learners so that they can become creative, skilled, confident and responsible citizens who can think critically and work independently. The school's educational mission statement is to implement the culture of teaching and learning by offering quality education, taking into consideration learners opinions, creating a good learning atmosphere, and involving all stakeholders who have the best interest of education at heart.

Hlengisizwe is a resourced school. There are hardware like computer, television, radio, photocopying machine and a fax machine. These resources are housed in the principal's office. There is no resource centre for housing these resources. The school has electricity but only the principal's office that has access to electricity. Classrooms are not installed with electricity.

Therefore, hardware are of no use and value in the teaching and learning environment. Teachers rely on textbooks, chalkboards, newspapers sponsored by Daily News and Sunday Times. Teachers also use resources from waste, community and environment to enhance their teaching in school.

In an interview session, one of the teachers highlighted that, they use community members as part of their effective resource in school. For example, they invite leaders of different religion to visit the school in order to promote understanding and respect of different beliefs like Reverend Khuzwayo of Ukhozi Radio Station who is well known as "Chicken Peri-Peri. Even the health care workers from Bhekimpilo Clinic do visits the school to give important advices about issues and topics such as child abuse, drug abuse, personal hygiene and other health precautions are some of the topics explained.

As resources are an important part of planning meaningful learning activities, during the observation session, the researcher noticed that, Hlengisizwe teachers spent their time with their learners making models, designing plans, trying out ideas and applying knowledge in different contexts as well as understanding what they actually do when practising their hands on skills. For example, in the Intermediate Phase, learners were able to design models of communication. The following plates represent different models of communication.



Plate 17 Old ways of communication

Learners represents drums and wagons as old ways of communicating with one another. Models of wagons are made from old wire, strings and bottle tops (resources from waste). Models of drums are made from old tins, cardboard boxes (resources from waste) and sticks wrapped by papers (resources from the environment and resources from waste).

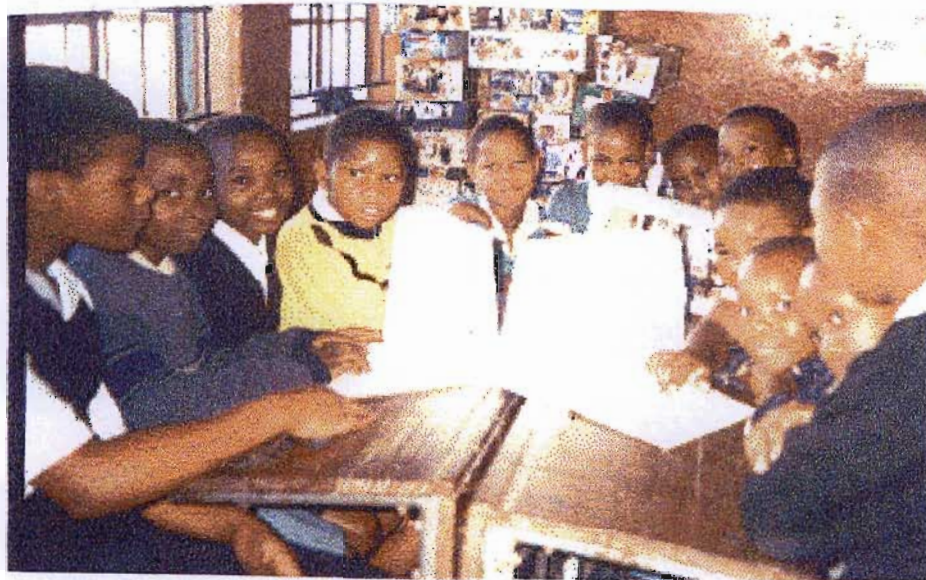


Plate 18 Modern ways of communication

Learners are showing models of computers and television. Computer models are made from cardboard boxes and papers (resources from waste). Television models are made from cardboard boxes, magazines and wood (resources from waste and resource from the environment).



Plate 19 Models of telephones

Learners are showing models of telephones. Telephone models are made from egg-shells containers and ice-cream sticks (resources from waste).



Plate 20 Letters as resources for communication

Learners are showing the addressed envelopes with letters and stamps as means of modern communication.

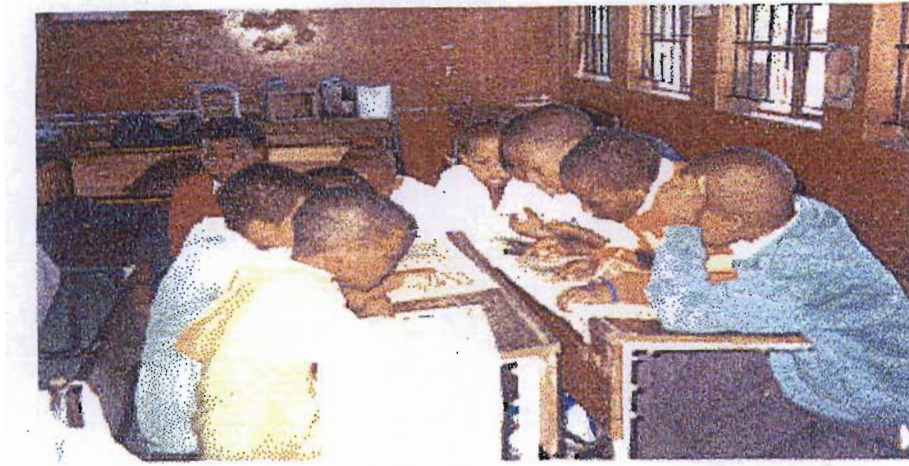


Plate 21 Newspapers as resource of communication

Learners are reading newspapers as means of familiarizing themselves with outside happenings of the world. Learners are practicing both skimming and scanning skills.

In an interview session, one of the grade four teachers highlighted that, she uses print media like newspapers for various projects and activities like the weather focus and language development and learners find newspapers more interesting because it offers interesting, relevant, topical and varied information. She also stated that she uses newspapers to reinforce and teach values since our education system requires that we inculcate into our learners values like democracy, peace, humane (ubuntu), nation building and so on.

Even Ms Doncabe, who is the teacher in the Foundation Phase stated that (in the interview) she used stones and sand (resources from the environment), bottle tops and tins (resources from waste), to model drums and to make clinking rattles. Learners use these models during dramatization session.

She also stated that (interview), she used cardboard boxes as waste materials to model letters of the alphabets and learners coloured them with different paints and stick them on the walls. The alphabets plays a very important role in familiarizing learners with the shapes of the letters and to brighten up the classroom.

The following plates represents different models and designs made by the Foundation Phase learners at Hlengisizwe Primary School.



Plate 22 Models made from waste resources

The above plate (22) shows models of people made from toilet paper rolls, white paper and coloured with paint. Plate (22) shows also the models of faces made

from paper plates, beans seeds, egg-shell containers, wool, magazines and a chart paper. There are also models of houses drawn and coloured by paint. .



Plate 23 Models made from waste resources

Leamers are showing models of suitcases for carrying their lunch boxes, pencils and rubbers. These models are made from egg-shells containers, and a strip of a chart paper, and painted with different painting colours.



Plate 24 Resources from waste and from the environment

Plate (24) represents stones and sands (resources from the environment) tins, paints and bottle tops (resource from waste) used by learners to model drums. Tins are filled with stones and sand to make rattles. Bottle tops are fixed on a string to make a clicking rattle. Learners used these models in cultural dancing and in story-telling sessions.

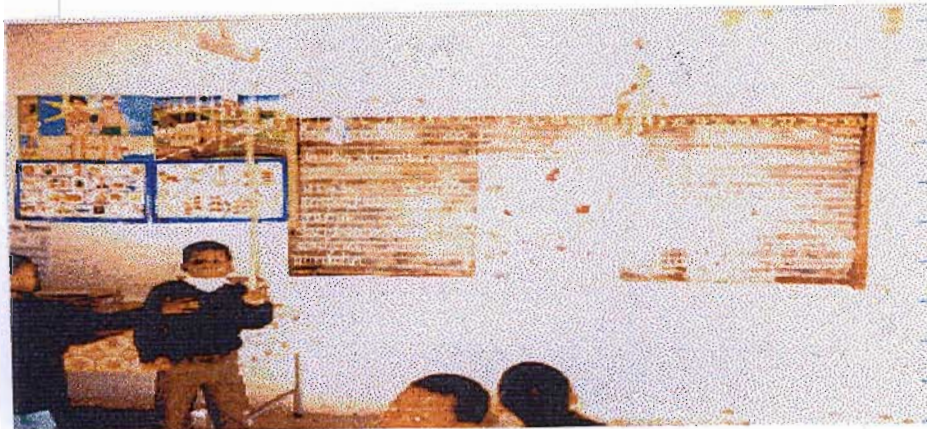


Plate 25 Non-projecting media like posters, charts and chalkboard

Plate (25) represents non-projecting media used by teachers and learners in enhancing their teaching and learning in class.

Therefore, the researcher noticed that learners at Hlengisizwe work collaboratively with their teachers using the available resources to enhance their teaching and learning in the environment of outcomes-based education. This exposes learners to multiple contexts as well as stimulating a variety of cognitive processes and varied learning experiences centers to serve the needs of learners and enrich learners learning and makes learning fun to all learners. Teachers highlighted the need and provision of resources and facilities to enhance outcomes based environment in school.

4:7 CASE STUDY TWO

Case study two was conducted at Mkomelo Primary school. Mkomelo is situated at Folweni in B section. It is the neighbouring school of Hlengisizwe Primary school. Their enrolment in school is eight hundred and fifty three (853) learners, twenty two (18) teachers and four (4) management staff. There are fourteen (14) classrooms and one principals office. The following table represent number of classrooms per grade and the number of learners and teachers in each grade.

GRADES	Grade 1	Grade 2	Grade 3	Grade 4
No of grades	4	3	3	4
No. of learners	252	164	190	247
No. of teachers	6	3	3	6

Table 7 Number of grades, teachers and learners in school

The vision and the educational mission statement of the school is to promote the culture of learning and teaching and to provide relevant and quality education to learners and ensures that they hold high moral values.

Mklomelo is an under resourced school. There are no hardware like computers, television, radios, photocopying machines and others. There are prescribed textbooks and stationeries like exercise books, rulers, pen and pencils supplied by the Department of Education. There is no electricity installed inside the classroom. Only the principals office which has access to electricity. There is no resources center. There is a shortage of learning materials such as desks and chairs.

Even though there are no hardware in schools, like computers, the researcher noticed that, teachers use available resources like newspapers, magazines, chalkboards, posters, cartoons, resources from the environment, waste and resources from the community. In an interview session, teachers highlighted that,

they use available resources in enhancing their teaching and learning in outcomes based environment. These resources assists them in designing meaningful activities like research projects for the learners and they encourage their learners to use available resources in their research projects.

As the new curriculum has a strong emphasis on learners demonstrating an understanding of their inter-relationship between people and the natural environment, Ms Mlaba highlighted that, (in an interview) they also use excursions as part of meaningful resources in outcomes based education in their school. She pointed out that excursions broaden the horizons of the learners, and they are vital part of the curriculum and of the learners overall education at school. Therefore excursions offer learners a range of practical experiences, which Fardouly (1994) states that learners can use them to move through to greater heights of learning. Learning through experiences ensures that learners observe, think, analyze, synthesize, evaluate and apply what they have learnt to their lives in general.

Even Bonwell and Elson (1994) stress the point that educators should look at strategies where learners are more engaged in doing things and thinking about what they are doing than passively engaging in the classroom.

Ms Mlaba highlighted that on excursions learners are on a first hand basic, engaging with what is before them that is different from what goes on in a traditional setting like school. Even Valdez, Nowakowski and Rasmussen (1994) also stress that the role of learners is to explore and interact with their

environment and their physical world. Therefore, excursions enable learners to become their own producers of knowledge which is relevant to their realities. When learners participate in out of the classroom programmes, they begin to take responsibility for their own learning thus enrich their educational experiences and the researcher also believes is vital in this twenty-first century.

Teachers at Mklomelo Primary highlighted that, (interview) using resources in outcomes based education provide a fertile learning environment and learners are working effectively in groups and are taking responsibility for their own learning. Learning becomes learner-centred because learners are engaging in research tasks and involved in a dialectical exchange of ideas in the classroom context. Teachers also highlighted that, provision of enough resources and facilities in schools should be taken into consideration and the development of appropriate infrastructural networks must be one of the first priorities the government must attend too in all schools.

4:8 CASE STUDY THREE

Case study three was conducted at Masuku Primary school. Masuku is situated along the highway road of Umbumbulu at Folweni in B section. The vision and the mission statement of the school is the same as Hlengisizwe Primary school. Their enrolment in school is three hundred and sixteen (316) learners and seven (7) teachers. There are four classrooms. There is a no staff-room, even the principal does not have an office. The following table represent the number of classrooms , learners and teachers in each grade.

GRADES	Grade1	Grade2	Grade3
No. of Grades	2	1	1
No. of learners	123	103	90
No. of Teachers	3	2	2

Table 8 Number of grades, learners and teachers in school

Masuku is an under-resourced school. Resources which are available are inadequate except the prescribed textbooks and stationeries which are provided every-year by the Department of Education even though it reaches school after the first term of the year. There are no educational technology equipment such as television, radio, computers photocopying machines and others. Even the school does not have a resources-centre.

The infrastructure of the school is not conducive to teaching and learning. There is no electricity, not enough learning space for learners and classrooms are overcrowded. Out of four classrooms, two classrooms have no doors. Even the windows are broken. The school faces burglary. In an interview teachers stated that, doors are stripped by community members, even the learning materials such as desks, chairs and table are stolen by the community members. Learners share desks and sits in three's and in four's in one desk. School buildings are not fenced and lacks security.

Teachers rely on textbooks and chalkboard as resources of enhancing their teaching and learning. The researcher noticed that, (observation session) teaching and learning is teacher-centred and less learner-centred. Even teachers highlighted that (in an interview) they struggle to teach under such conditions that prevails in school. Therefore, teaching and learning in school is not effectively resource-based. Even learners do not practise the hands-on skills like creating different models based on the learning activities designed by teachers. Teachers lack skills, confidence, effective training of using other resources to enhance outcomes-based education in their teaching and learning context.

4.9 CONCLUSION

Chapter four summarizes the research findings of the study. The main issues discussed a short description of Folweni township, schools at Folweni, resources and facilities in schools, and three different cases studies.

The researcher noticed that the targeted schools for the study namely Hlengisizwe, Masuku and Mklomelo are under-resourced schools. Schools lack various facilities of teaching and learning in the environment of outcomes based Education. Lack of education technology equipment, electricity, learning spaces, learning materials, and resource centres are contributing factors which needs urgent attention by the Department of Education.

Teachers rely on resources like waste, environment, community, textbooks, chalkboards, posters, and newspapers. But teachers are working hard to provide a fertile learning environment for their learners. Teachers engage their learners in excursions, which are resources from the environment, even in the educational research projects. They encourage their learners to use available resources in their activities as well as in their research projects. This helps learners in developing a positive attitude for their learning and enables them to discover ways in which they can improve their performance. Teachers also highlighted that (interview) they use available resources in school in designing the learning activities and in enhancing OBE. Therefore, resources are one of the pathways in which teaching and learning can become truly democratic, open and enjoyable. Learners learn to be enquiring interested young learners- setting out on the road of life-long learning. This re-emphasises the role of the learner in education with the teacher as a mediator.

The following chapter discusses the detailed analysis of the research study.

CHAPTER 5

5 DATA ANALYSIS

5:1 INTRODUCTION

Data analysis is based on the data collected by means of questionnaires, interviews and observations. Observations and interviews were conducted first before completing the questionnaires. (Appendix 2 and 3). Questionnaires were divided into two sections. The first section had to do with the demographic details of the respondents and the second section had to do with the answering of the questions related to the study.

Out of eleven (11) teachers in three schools, only eight (8) teachers who responded accurately by filling the questionnaires correctly and out of three hundred and forty three (343) learners, only three hundred and twenty seven (327) responded accurately by filling in the questionnaire.

5:2 QUESTIONNAIRES (APPENDIX 2 and 3)

5:2:1 SUMMARY OF TEACHERS DEMOGRAPHIC DETAILS

The following table represents the demographic details of teachers who participated in the study.

Gender	Percentage	Age	Experience	Race	Language
Female	100%	30-55yrs	6-29years	Africans	Zulu and Xhosa

Table 8 Teachers demographic details

5.2.2 QUESTION ABOUT RESOURCES

As resources are one of the pathways by which teaching and learning can become truly democratic, open, and enjoyable, the following table (table 10) represents different resources used by teachers in their teaching and learning contexts.

TYPES OF RESOURCES	WASTE	ENVIRONMENT	COMMUNITY	T/BOOK	CHALKBOARD
HLENGISIZWE	90%	85%	60%	70%	55%
MASUKU	45%	52%	40%	90%	100%
MKLOMELO	65%	70%	55%	85%	80%

Table 10 Types of resources used by teachers in schools

For effective teaching and learning in schools, resources play an important role as useful tools for teaching and learning and helps learners to get to the heart of information, ideas, and concepts more quickly.

Table ten (10) indicates that ninety percent (90 %) of teachers at Hlengisizwe Primary School rely on waste resources in enhancing their teaching and learning in schools, eighty five percent (85%) on resources from the environment , sixty percent (60%) on community as a resource, seventy percent (70%) on textbooks as resources from the media and fifty five percent (55%) on chalkboard as a resource.

At Masuku Primary, forty five percent (45%) of teachers rely on waste resources in enhancing their teaching and learning in school, fifty two percent (52%) on resources from the environment, forty percent (40%) on community as a resource, ninety percent (90%) on textbooks as resources from the media and on hundred percent (100%) on chalkboard as a resource.

At Mklomelo Primary, sixty five percent (65%) of teachers rely on waste resources in enhancing their teaching and learning in school, seventy percent (70%) on resources from the environment, fifty five percent (55%) on community as a resource, eighty five percent (85%) on textbooks as resources from the media and eighty percent (80%) on chalkboard as a resource.

5:2:3 QUESTIONS ABOUT METHODS

As there are many methods of education and training, ranging from teacher-centred, subject centred to learner- centred, the following table (11) represents different methods of teaching and learning used by teachers in schools.

TEACHER CENTRED	GRADING	LEARNER CENTRED	GRADING
Telling	FAIR	QuestionandAnswer	GOOD ✓
Textbook	FAIR	Brainstorming	GOOD
Chalkboard	FAIR	Discussion	GOOD ✓
		Discovery	GOOD ✓
		Project Method	GOOD ✓

Table 11 Methods of teaching and learning

According to Branch (1995) the notion of a learner- centred paradigm is intended for professional design that encumber limiting , didactic, passive, singular modes of teaching and move towards an alternative designs which facilitate active, multi- functional, inspirational situated approaches to learning. Therefore table eleven (11) indicates that teachers rated learner- centred method good. “ Learner – centred methods are good because they challenge learners to think critically about what they do in groups, in their research projects, as well as in their meaningful activities. Learners get an opportunity to apply whatever, theory given to them by the teacher into practice”.

Teachers also rated teacher- centred methods fair. “It is easier to accommodate increased numbers of learners as a teacher can attempt to provide a range of different learning situations for the learners all designed to match the type of material / resources being covered and the level and sophistication of learners. Many learning activities may certainly involve a considerable proportion of individual or small group work, but the teacher remains firmly at the center and his or her experience with such learners is vitally important”

5:2:4 QUESTIONS ABOUT LEARNING AREAS

The learning areas have replaced the traditional subjects. For each learning area there is a set of outcomes based on the critical outcomes, which give the most important outcomes of learning associated with the particular learning area . The

following tables (12 and 13) represent the learning taught in the three schools.

Table (12) represents the learning areas taught in the Foundation phase.

FOUNDATION PHASE
1. Literacy
II. Numeracy
III. Life- skill

Table 12 Learning areas for the Foundation phase

The following table (13) represents the learning areas taught in the Intermediate Phase.

INTERMEDIATE PHASE
I. Language, Literacy and Communication: LLC
II. Mathematical Literacy, Mathematics and Mathematical Science: MLMMS
III. Human and Social Science: HSS
IV. National Science: NS
V. Technology: TECH
VI. Art and Culture: AC
VII. Economics and Management Science: EMS
VIII. Life Orientation: LO

Table 13 Learning areas for Intermediate Phase

5:2:5 ANALYSIS OF DATA FROM TEACHERS

The following summaries the responses of teachers on the use of resources in outcomes based education.

5:2:5:1 Teachers use available resources like newspapers, Magazines, Chalkboard, Textbooks, Waste and others to assists learners to see things in different points of views.

5:2:5:2 Teachers stated that resources makes teaching and learning fun, and enjoyable. Learning becomes a sheer pleasure for everyone and learners learn to share ideas and work on their own pace.

5:2:5:3 Teachers also stated that, resources helps them in drawing attention to learners, arouse their interest, and to stimulate the humoristic nature in learning; Learners become active participants rather than passive participants waiting to be filled with knowledge and skills.

5:2:5:4 Teachers use resources in designing meaningful activities for learners. They engage their learners in projects which leads learners in developing a positive attitude to their learning and enables them to discover ways in which they can improve their performance in school. Therefore resources empower learners who are capable of making independent, analytical and creative judgment about their learning.

5:2:5:5 Using resources in OBE enables them to become facilitators of the learning process rather than dominating it and selecting what is to be learnt and their teaching methods changed from teacher-centred to learner-centred even though some of them are still dominating the learning environment in their classrooms. They are no longer authoritarian figures in their classrooms but they work collaboratively with their learners in achieving the desired outcomes.

5:2:5:6 About 25% of teachers still believe that textbooks and chalkboard are the effective and meaningful resource in teaching and learning, meaning that they lack skills and confidence of integrating other resources in their teaching and learning context. Thus this leads to learners not developing the full range of thinking, communication, problem solving, and hands-on skills practice.

5:3 SUMMARY OF LEARNERS DEMOGRAPHIC DETAILS

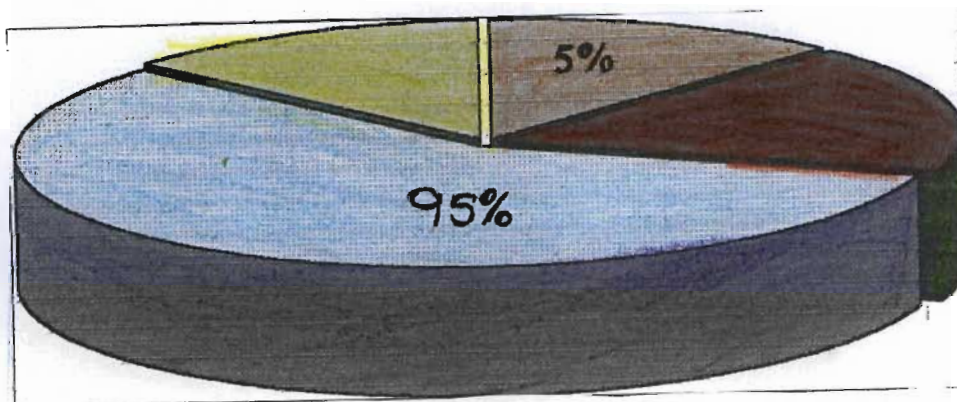
The following table represents the demographic details of learners who participate in the study.

GENDER	PERCENTAGE	AGE	RACE	LANGUAGE
Females	63%	6-10yrs	Africans	Zulu
Males	37%	6-11yrs	Africans	Zulu

Table 14 Learners demographic details

Out of ninety five percent (95%) learners, eighty five percent (85%) learners know their demographic details, six percent (6%) did not know their demographic details and four percent (4%) missed out the columns and recorded their names only.

5:3:1 SUMMARY OF LEARNER PARTICIPATION.



Graph 1 Summary of learner participation

95% are learners who participated in the study.

5% are learners who did not participate in the study.

5:3:2 RESOURCES KNOWN AND USED BY LEARNERS IN SCHOOLS AND AT HOME.

The following table (15) represents the percentage of resources known and used by learners in school and at home.

RESOURCES	PERCENTAGE
Television	65%
Video Cameras	45%
Radio	100%
Nurses	100%
Priests	100%
Waste materials	100%
Magazines and Newspapers	75%
Computers	25%
Resources from the environment	100%

Table 15 RESOURCES KNOWN AND USED BY LEARNERS IN SCHOOLS AND AT HOME.

Table Fifteen (15) indicates that sixty five percent (65%) of learners listen and watch television at home, forty five percent (45%) know video cameras and watch video cassettes, one hundred percent (100%) knows nurses at hospitals, clinics, homes, even at school, one hundred percent (100 %) know various waste materials and also bring them to school like tins, magazines, cardboard boxes, and others, seventy five percent (75%) use magazines and newspapers at home even at school in their research projects, twenty five percent (25%) know but are not too familiar with computers and one hundred percent (100%) know resources from the environment like trees, animals, roads, houses and others.

5:3:3 ANALYSIS OF DATA FROM LEARNERS

The following summarizes the responses of learners on the use of resources in Outcomes Based Education.

5:3:3:1 Resources enables learners to learn different things ranging from content to skills. Content is seen as means to an end, the being the critical autonomy. Therefore there was a more wider and open course content between teachers and learners. Both of them were involved in dialogue on all aspects of course content.

5:3:3:2 Resources empowered learners to be capable of making independent, analytical and creative judgment about their learning.

5:3:3:3 Using resources in outcomes based learning encourages learners to be active participants rather than passive learners waiting to be filled with knowledge and skills.

5:3:3:4 Learners were involved in research tasks and in meaningful activities. This encourages them in developing research skills, thinking, communication and problem solving skills.

5:3:3:5 Some learners did not develop their full range of thinking, communication, and problem solving skills. The reason being the lack of skills and confidence from teachers in integrating resources in their teaching and learning contexts. especially those teachers who used textbooks and chalkboard as resources of enhancing their teaching and learning in schools.

5:4 LIMITATIONS AND CONSTRAINTS


The limitation and constraints of this study are as follows: -

5:4:1 Being the researcher, I have played a dual role of being a researcher and an educator as the study also focused on my school. Therefore, the time factor was also one of the limitations.

5:4:2 The study was limited to only three primary schools at Folweri. The reason being the geographical factors as well as the duration of conducting the research.

5:4:3 Financial problems was also another contributing factor since money was needed for the supply of questionnaire and interview schedules. (Appendix).

5:4:4 Money for traveling and other equipments such as video camera was needed for conducting this study.



5:4:5 Another major constraint was met during the interview sessions. Teachers and learners gave the researcher some responses they thought the researcher wanted to know. This led to socially desirable answers which actually did not form part of the study. Therefore, generalizability was a major problem.

5:4:6 Some teachers felt uncomfortable during the research study. The reason being that some teachers felt that the researcher will display their skepticism about change in their teaching and learning content. Other reasons are kept a secret by the researcher since they are very sensitive.

5:5 CONCLUSION

Based on the data collected and analyzed by the researcher, the researcher concludes by saying that, teachers in schools struggle with basic resources and facilities. Lack of resources and proper facilities like electricity, learning spaces, resources centers and others hinders the better progress in schools.

Teachers use waste, community and environment as resources of enhancing Outcomes Based Education in schools. Some teachers use textbooks and chalkboard as effective and meaningful resources. This led to some teachers not developing effective skills and confidence of integrating resources in their teaching and learning environment.

The researcher also noticed that, some teachers were working hard to provide a fertile learning environment with few resources and their methods of teaching

changed from teacher-centred to learner-centred approaches. Teachers engage their learner in many projects like collecting cans and encourage them to use available resources in their educational research projects.

Engaging learners in research projects opens up the doors to a new class of capabilities and enables teachers to become facilitators rather than dominating it and selecting what is to be learnt. Using resources in outcome based environment exposes learners to multiple context as well as stimulating their cognitive processes.

Therefore adequate resources are essential in education and training institutions. Resources must be seen as means of deepening, enriching and broadening the curriculum. Teachers must not use resources to update their methods, to entertain, to keep learners occupied or because resources seems to apply to a certain topic in a curriculum. Resources must provide learners with learning stimulus and evoke learners responses. The availability of resources and facilities will make it possible for teachers to realize different learning outcomes and improving instructions in different learning area.

To sum up, teachers, learners, and other stakeholders must be involved in the provision of educational potential.

CHAPTER 6

RECOMMENDATION AND CONCLUSION

6.1 INTRODUCTION

At the heart of the transformation process lies a need for technology-enhanced learning. Therefore, resource-based learning is of vital importance in any education and training institution. Empowering teachers, learners, school management teams, and school governing bodies in using various resources in any teaching and learning context, will assist in improving the quality of learning process in a variety of learning context.

This chapter evaluates the summary of the report in order to help readers who do not have time to read the whole report. It also includes specific and practical suggestions of what can be done to improve the use of resources in Outcomes Based Education.

6.2 RECOMMENDATIONS

6.2.1 TO THE DEPARTMENT OF EDUCATION

Provision of resources and facilities in schools should be taken into consideration in order to deliver quality life-long learning to all learners. A variety of resources and facilities for basic education to all learners within educational institutions should be made available and accessible. The users of resources should be involved in the planning and allocation of resources and have the authority to manage and re-allocate resources. This will improve access to higher levels of

education, facilitate job creation and will ensure that larger numbers of people are skilled in relation to the development of the economy.

6.2.2 TO THE MAJOR PHYSICAL INFRASTRUCTURE PROVIDERS

As there is a need for the development of appropriate infrastructural networks in schools such as telecommunications systems, electricity, technological hardware and others, the major physical infrastructure providers must ensure that every teaching and learning site should be able to enhance its work with the advantage made possible by electricity. Therefore electrification of all schools by non-governmental organizations such as Escom and Telkom must be met as a prerequisite in education and training, before technology-enhance learning can play a useful role in solving the country's educational problems. Therefore, structured relationship must be established between the Department of Education and major physical infrastructure providers in order to focus on providing physical infrastructure to all site of learning.

6.2.3 TO THE GOVERNMENT TRAINING INITIATIVES

They must ensure that workshops and seminars are organized to assists teachers in accurate and relevant ways of using resources in outcomes educations. This will stimulate both teachers, learners, school management teams, and school government bodies in taking greater responsibilities in developing teaching and learning contexts which are fluid and dynamic changing spheres of life.

6.2.4 TO THE TEACHERS

Teachers must upgrade themselves in various educational institutions such as colleges, universities and others with various skills necessary to maximize the use of various resources in OBE. Teachers must be able to respond flexibly and sensitively to the needs of their learners and to deploy various resources which are flexible in use in the classroom context. Teachers must not use resources to update their method to entertain, to keep learners occupied or because resources seem to apply to a certain topic in the curriculum. Teachers should aim to understand the nature of their learners' experiences in using the sources rather than assume that they already know about it.

6.2.5 TO THE EDUCATIONAL INSTITUTIONS

Educational institutions must help teachers develop their own ability to learn. It must help them develop higher-order skills such as how to manage resources for learning, how to pose questions to the learners, and how to meet special learning needs. Therefore teachers need intensive exposure to resource-based learning and the integration of technology into the learning process in various educational institutions. Teachers must have interest in using a wider range of resources to design learning activities. They need to improve their pedagogical skills; for example, they need to be aware of what is required in creating a learner-centred environment in terms of related activities.

6.2.6 TO THE PRINCIPALS, SCHOOLS GOVERNING BODIES AND THE DEPARTMENT OF EDUCATION

As schools have a major problem of security like fencing the school to safeguard their least resources, this makes things difficult when this schools go out to ask for sponsors. Even the employed security in schools are not fully armed, this makes the conditions in schools to become worse. Therefore strong links between the department of education principal and a school governing bodies is of vital importance to ensure strong security in schools. They must interact with some non-governmental organizations like Telkom for sponsors in paying the security in schools.

6.3 CONCLUSION

This study took about twelve (12) months. It involved three hundred and forty three (343) learners and eleven (11) teachers in three different schools namely Hlengisizwe, Masuku and Mklomelo.

The results of the questionnaires, observations and interviews indicated that schools lack basic resources and facilities. Teachers use available resources such as waste, environment, community, textbooks and chalkboards as resources to enhance Outcomes Based Education. This led to some teachers not developing effective skills and confidence of integrating other resources in their teaching and learning contexts which leads to some teachers not developing their full range of communication, thinking, and problem solving skills.

As resources play a vital role in enhancing Outcomes Based Education in any teaching and learning context, teachers must be equipped with the necessary and relevant skills of using various resources in outcomes based education. Now, it is possible to say that, using resources in OBE exposes learners to multiple context as well as stimulating a variety of cognitive processes. Resources help learners in developing a positive attitude for their learning and enables them to discover ways in which they can improve their performances.

As we have moved from the post-apartheid system of education to a process of change which is democracy where education should be equal to all learning context, therefore equal education should mean equal resources, facilities, and equal infrastructural networks to all learners of various or different backgrounds.

Therefore this topic is important for all education and training institutions in order to be in line with the new system of using resources in Outcomes Based Education.

APPENDICES

A map of Folweni area



TEACHERS QUESTIONNAIRE

The purpose of this questionnaire is to investigate about the use of resources in Outcomes Based Education. You are asked to honestly fill in this questionnaire. All information obtained will be used for the research purposes. Please do not write your name.

A: DEMOGRAPHIC DATA

Kindly make a tick in the appropriate space below:

GENDER	Male <input type="checkbox"/>	Female <input type="checkbox"/>
Home language	Zulu <input type="checkbox"/>	Xhosa <input type="checkbox"/>
Age Group	25-35yrs <input type="checkbox"/>	Above <input type="checkbox"/>
Qualifications	Diploma <input type="checkbox"/>	Degree <input type="checkbox"/>

Name of school

SECTION B

Give your opinion in relation to each of the following statements.

1. What learning areas do you teach in class?

2. What resources do you use in class? Mention briefly

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3. How do you use resources in an OBE context? Explain how.

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4. Do resources intergrate with other learning areas? Explain how.

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5. Why are resources important in your teaching context? Explain briefly.

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6. Do your learners enjoy using resources in OBE?

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7. What activities do your learners enjoy best? List some

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8. Has your teaching methods changed because of OBE. If so, how?

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Thank you for the time spent completing this questionnaire.

RESEARCH INSTRUMENTS

QUESTIONNAIRES

LEARNERS QUESTIONNAIRE

The purpose of this questionnaire is to investigate the use of resources in Outcomes Based Education. You are asked to honestly fill in this questionnaire. All information obtained will be used for research purposes. Please do not write your name.

A: DEMOGRAPHIC DATA

Kindly make a tick in the appropriate space below:-

Gender : Male Female

Home Language : Zulu Xhosa Sotho

Age Group : 7 - 9 Yrs 10 - 12 Yrs Above

Grade : 1 2 3 4

Name of School :

SECTION B:

Give your opinion in relation to each of the following statements.

1. What learning areas do you learn in class?

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2. What learning resources do you use in your learning areas?

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3. Do you collect cans, bottles, newspapers, cardboard boxes and other waste materials at school.

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4. Do you enjoy your learning activities in your groups using various resources in OBE.

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5. Do your teachers take you out on excursions?.

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6. How do you feel about being outside the school environment

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7. Do you watch television at home

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8. What educational programmes do you watch on television.

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9. Do you read comics in newspapers

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10. Do you listen to the radio's educational programmes.

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11. Do you visit libraries and why do you go there?

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12. Do you know computers.

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THANK YOU FOR THE TIME SPENT COMPLETING THIS QUESTIONNAIRE.

INTERVIEW SCHEDULES

TEACHERS INTERVIEW SCHEDULE

The purpose of this interview is to allow educators to reflect on their experiences of using resources in Outcome Based Education. It is also designed to gain insight into educators notions of various resources.

- 1. How do you feel about your school.**
- 2. What learning areas do you teach in class**
- 3. How is your relationship with your learners in class**
- 4. What resources do you use when working with your learners during the teaching and learning context**
- 5. Do your learners enjoy learning in school**
- 6. Do you engage them on excursions**
- 7. How do learners feel about using resources in Outcomes Based Education**
- 8. Do you think resources in Outcomes Based Education can help learners and teachers in teaching and learning context.**
- 9. What do you think are the perceptions of your colleagues concerning the use of resources in Outcomes Based Education**
- 10. What resources do you think should be provided in school by the Department Of Education to back up OBE in schools**

THANK YOU FOR PARTICIPATING IN THIS INTERVIEW

LEARNERS INTERVIEW SCHEDULE

The purpose of this interview is to allow learners to reflect on their experiences of using resources in Outcomes Based Education

- 1. Do you love your teachers?**
- 2. How do you feel about your learning environment at school?**
- 3. What learning areas do you learn and do in class?**
- 4. Do you enjoy your learning in school?**
- 5. What learning resource do you use in class?**
- 6. Why do you use them?**
- 7. Do priests, nurses, parents and other people visit your school?**
- 8. Do your teachers take you out on excursions?**
- 9. What kinds of models can you make using various resources in school?**

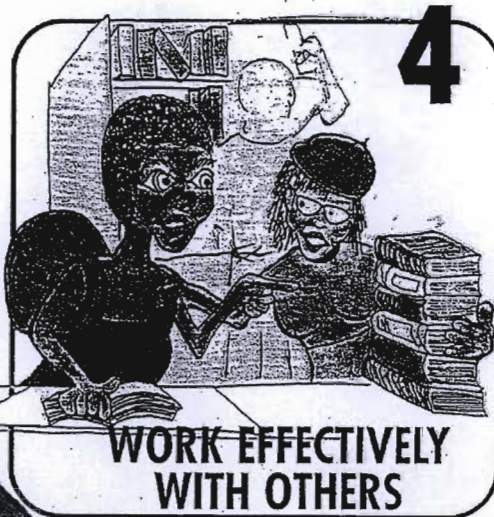
Thank you for participating in this interview

CURRICULUM 2005

SOLVE PROBLEMS



2



4

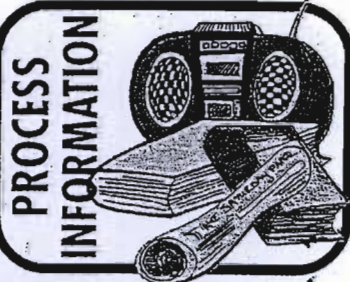
WORK EFFECTIVELY WITH OTHERS



3

ORGANISE AND MANAGE YOURSELF

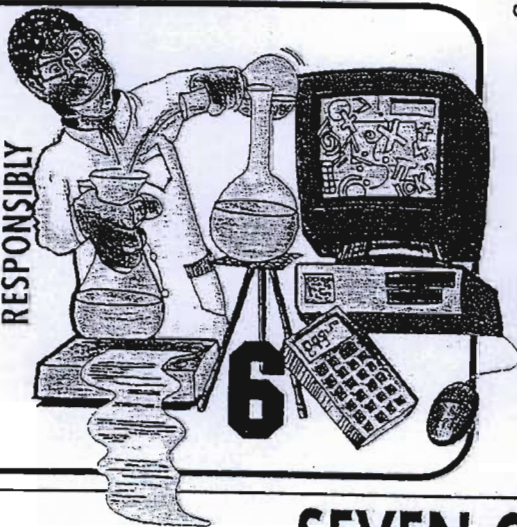
5



PROCESS INFORMATION

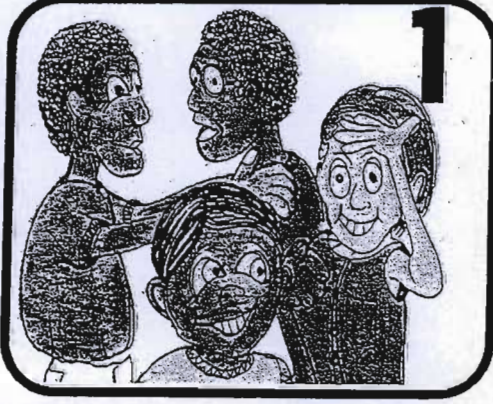
- 1: Communicate effectively using visual, mathematical and/or language skills in the modes of oral and/or written presentation;
- 2: Identify and solve problems by using creative and critical thinking;
- 3: Organise and manage themselves and their activities responsibly and effectively;
- 4: Work effectively with others in a group;
- 5: Collect/analyse, organise and critically evaluate information;
- 6: Use science and technology effectively and critically, showing responsibility towards the environment and health of others;
- 7: Understand that the world is a set of related systems. This means that problem-solving contexts do not exist in isolation.

USE SCIENCE & TECHNOLOGY RESPONSIBLY



6

COMMUNICATE EFFECTIVELY



1

POLITICS
ECONOMICS
TECHNOLOGY
ENVIRONMENT
COMMUNITIES

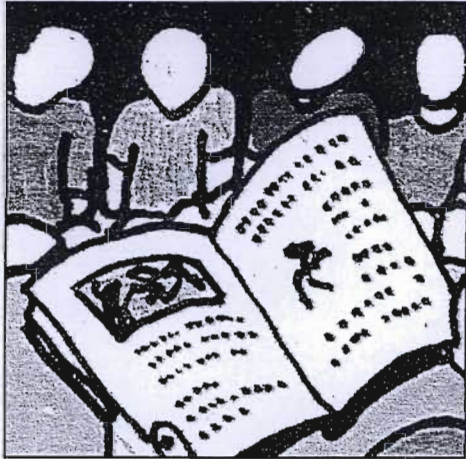


UNDERSTAND RELATEDNESS

7

SEVEN CRITICAL OUTCOMES

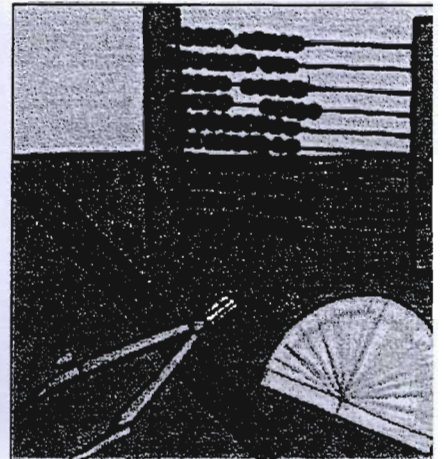
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Language, Literacy and Communication



Economic and Management Sciences



Mathematical Literacy, Mathematics and Mathematical Sciences

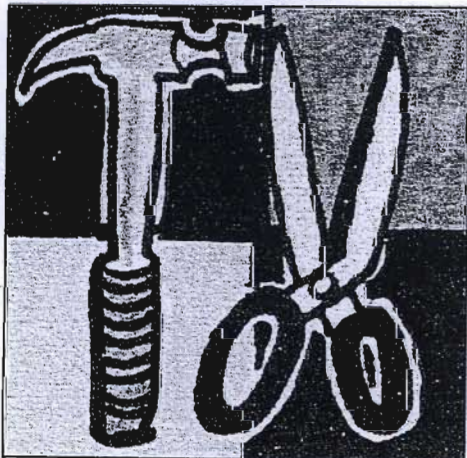


Life Orientation

LEARNING AREAS



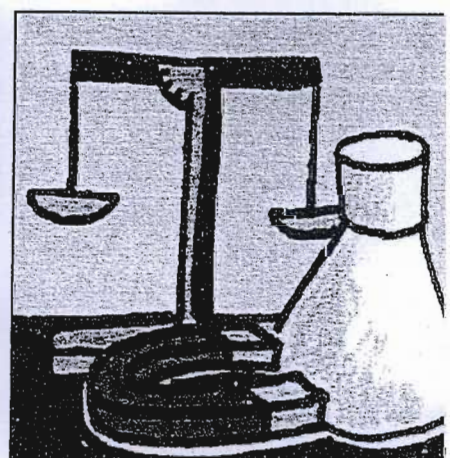
Arts and Culture



Technology



Human and Social Sciences



Natural Sciences

Clockwork Courage!

C Criticos, UND

Introduction

The peaceful demise of apartheid and the country's first democratic elections is regarded as one of the 20th century's social miracles. Nelson Mandela or Madiba as he is affectionately known - is the hero who is most strongly associated with this miracle. Mandela is often called upon to cast his "Madiba magic" - to resolve political crises and to spur national sports teams to victory. One area where even the "Madiba magic" has had no power is education - education is in a crisis, teachers are dispirited and pupils are disillusioned as the revolutionary fervour of Peoples Education has evaporated. Evidence of parents' impatience with the government's efforts to replace apartheid education can be seen in the record growth of private schools and colleges.

In part, the slow pace of change in education is due to the monumental challenge of dismantling the apartheid education system and replacing it with a non-racial and equitable system. To this end, enormous strides have been made in the constitution and policy for a more equitable and appropriate education system. But implementing the blueprint to resolve the "education crisis" and undo the apartheid legacy is proving more difficult than formulating the plans.

Curriculum, resources and learning spaces can each be regarded as crucial components in the implementation of the new post-apartheid education system. In my report I will highlight some of the landmark developments and principal features which characterise these components of education.

The common response to our crisis has been to abandon hope or look for some outside intervention such as foreign aid or a wonder technology (like the internet). The courageous and less common response has been to find solutions in the teachers and pupils and in local everyday resources.

So, my report is a story about courage - it is about people who have declared war on inappropriate education and who have relied on their wits and basic resources as weapons. They have few allies and cannot afford sophisticated technological weapons in the education battle.

The clockwork Paradigm of Technology

I have brought along an invention that is manufactured in South Africa to illustrate the paradigm of educational technology that is taking root at home. This wind-up radio is an ingenious combination of technologies which span many centuries and now make it possible to use radio communication in areas without electricity or where the people can not afford to purchase batteries. Sixty turns of the radio's handle will store enough energy to give you over one hour of listening. UNESCO and other aid agencies have extensively used it for the last few years. Long after you have forgotten the detailed argument of my presentation you will still remember the clockwork radio and its illustration of the principles of technology which I have called the *clockwork paradigm of technology*.

The clockwork radio offers us a tangible metaphor for technology, which we can apply in most applications of development and technology transfer in education. A few months ago we were engaged in a conference that attempted to envision education in South Africa in the 21st century - a paper presented by development consultant, Philip Christensen, in which he sketched the need for dual character technology for our region. He described two different types of educational technology - 2 types to suit the wide diversity of need the country - a high tech and a low tech technology

A Clockwork Solutions

Rather than wait for new textbooks a number of teacher organisations and non-governmental organisations have helped teachers and learners develop their own materials and to use indigenous knowledge and local communities as their laboratories. On such example is the School Water Action Project (SWAP) in which children develop skills associated with ecology and environmental responsibility as they undertake an audit of water reserves. SWAP co-ordinator Rob O'Donoghue leads groups of young students on his bicycle that is equipped with a laptop, GPS system and a cellular telephone to upload field data recorded by students from the spreadsheet to the SWAP home page.



Folding mountain bike equipped with laptop, GPS, Cell Phone and Radio with integral power generator.

In this project the students are starting to develop some of the skills of citizenship and local action at the same time as they refine their biological skills.

Resources

The Challenge

With most provincial departments of education short of funds - schools books and other essential materials have not been supplied to schools. The worst hit by these shortages is schools in rural and poor areas.

A Clockwork Solution

Using inexpensive items such as newspapers and household chemical - students and their resourceful teachers are able to develop valuable learning resources. In addition to the utility of these resources the teachers and students learn additional development and creative skills. In the previous example, which I gave about the SWAP project the pupils use, inexpensive microbiological fields kit for conducting water tests normally reserved for the high tech laboratory. (O'Donoghue, 1998)

In the water audit notes students are reminded about indigenous knowledge on water purity and this is contrasted scientific knowledge.

**CALL TO ACTION: MOBILISING CITIZENS TO BUILD A SOUTH AFRICAN
EDUCATION AND TRAINING SYSTEM FOR THE 21st CENTURY**

Statement by Professor Kader Asmal, Minister of Education,
Tuesday 27 July 1999.

Priority 9: We must deal urgently and purposefully with the HIV/AIDS emergency in and through the education and training system

This is the priority that underlies all priorities, for unless we succeed, we face a future full of suffering and loss, with untold consequences for our communities and the education institutions that serve them.

The Ministry of Education will work alongside the Ministry of Health to ensure that the national education system plays its part to stem the epidemic, and to ensure that the rights of all persons infected with the HIV virus are fully protected.

In touch with the world by print

Jeff Mathews is using newspapers and magazines to solve the problem of a lack of materials while encouraging learners' imaginations and promoting their awareness of the world, reports **Pat Dooms**

LACK of textbooks in the past was sufficient reason for both teachers and students to go on strike. Not anymore, says Dr Jeff Mathews, manager of the Print Media in Education (PMIE), a division of the Print Media Association of South Africa (PMA). The problem can be solved. "Newspapers and magazines can be used as valuable material in the classroom."

"Even the current concern by students and teachers about the lack of materials relating to the envisaged outcomes-based education is something newspapers and magazines can address," says Mathews. One area in which he believes the print media can play a particularly significant role is in the teaching of values.

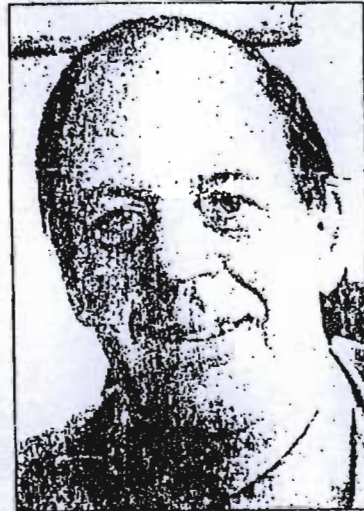
"The new education system requires that we inculcate into our children values like democracy, peace, *ubuntu*, nation-building and so on. But that is a bit difficult to teach without reference to contemporary material that students can relate to.

"For example, one of the topical issues in the media today is what's happening in Zaire. The stories being written about Zaire lend themselves to valuable

tions such as "Why is there a major political problem in Zaire?", "Is it ideal for one man to hold presidency for three decades? If yes or no, why?", "Why does South Africa seemingly have more interest in seeing peace and stability in Zaire?" These kinds of questions can unravel many issues that relate to democracy and peace, believes Mathews. Lessons about *ubuntu* and nation-building can be concretised by using, for example, the *Sowetan's* nation-building competition — an annual event that celebrates people who are making a contribution towards the betterment of their communities.

It is hard for a teacher to talk about *ubuntu* or building a nation because these are concepts. But when students read an article about someone who is providing shelter for former street children and providing for their education — *ubuntu* and nation-building — then it will be easy for them to relate to these concepts. And this is how the print media can be practical in the classroom, he says.

With these examples, it should not be difficult to convince sceptical people that using newspapers and magazines in the class-



Read newspapers: Jeff Mathews PHOTO: SIDDIQUE DAVIDS

rooms, while providing a rounded education — in that they have news and features on politics, sports, consumer issues, education, business, and so on — entertain and inform at the same time. This makes learning so much more fun.

Only through the print media can "learners receive details of the 30-second announcements heard on the evening news. Only through newspapers can they get the local news of the school, community and neighbourhood. Only through newspapers can they get to know in detail what is happening in the society they live in. Newspapers and magazines connect us to the world."

They are the only textbooks that are "completely consumable instructional tools. They

they will need for a lifetime. They should learn more about the world in which they live and will work as adults — to cultivate an awareness of the changes going on around them every day.

They need to learn the attitudes and values which will enable them to live full and productive lives. Newspapers and magazines can equip them to do this.

Mathews says he strongly believes in "values in education". "I think one of the problems with our education system in the past was that we put emphasis on knowledge and missed out on values and attitudes.

"If you look at our new Constitution, it is very strong on democratic values like tolerance, non-violence and respect for other people's rights. Newspapers and magazines can be used in the classroom to reinforce these values because they often talk strongly about issues that have to do with values."

Apart from illiteracy, one of Mathews's concerns is South Africa's level of A-literacy — defined as the practice of not reading by those who can read. There is a tendency by illiterate people of only listening to radio or watching television for their news and never reading a newspaper. That can have adverse effects on a nation's

reading because it is such a basic ingredient in the life of any society.

Himself a man of words and letters, Mathews has written widely and his publications include works on the Anglo-Zulu War of 1879, history methodology books and many papers on the skills-based approach to teaching and learning.

He started his career as a high school teacher, lectured at a college of education, became a history subject advisor and then a superintendent of education in charge of humanities subjects. He is enthusiastic about promoting the use of newspapers and magazines in the classroom because he believes this is the ideal way to encourage teachers to adopt the outcomes-based approach to their teaching.

He says newspapers and magazines can be used effectively "not only in better endowed schools but also as an inexpensive resource in many of the disadvantaged schools".

Having heard of, and visited, countries where print media in education initiatives are succeeding, Mathews says similar initiatives in the country have a great

future. This is more so because "South Africa is unique in that"

Reading for pleasure

To become expert readers, children need to spend time mastering the skills involved, write MYRNA MACHET and ROSEMARIE LINDNER

CHILDREN become proficient and fluent readers by reading. The more time they spend reading, the better they become at it.

Until they have developed a certain level of proficiency, it is difficult for children to find pleasure in the activity. It is therefore essential that they spend a great deal of time learning and practising reading.

Reading is still the foundation for all the subjects taught at primary and secondary schools, for this reason it is important that children are good readers and understand what they are reading.

If children enjoy and can choose what they read, and if reading is done in a non-threatening environment, it becomes easier to tempt them to read.

Teachers can encourage reading by introducing a free voluntary reading programme. Many teachers are reluctant to put time aside for free voluntary reading because they do not feel that time spent just reading in class is as beneficial as time



spent doing other activities such as grammar or spelling.

However, research carried out overseas as well as in South Africa proves that a free voluntary reading programme can improve children's grammar, reading and comprehension more than time spent on conventional language lessons.

A free reading programme requires teachers to have a set time every day in which children read. It doesn't matter what they read, as long as they do read — and they should be allowed to read whatever they like, even comic books.

The time put aside for this activity need not be more than 15 minutes a day, but it must be done on a regular basis and children must understand that this

time is specifically for reading and not for catching up with other work.

In addition, it is a good idea for the teacher to spend this time reading too.

The reason for this is that very often we say to children that reading is important but we do not show them this by reading ourselves. Reading time in the class should be reading time for everyone, including the teacher. In this way, the teacher acts as a role model.

This type of programme has a positive effect on children's affective development, as it is an informal, "stress-reduced" environment in which storybooks can be enjoyed and learners can develop an enthusiasm for reading and the written language.

Research shows that younger children may be more easily motivated to do free voluntary reading and may benefit more than older children. However, this does not preclude introducing reading programmes to older children, who can become involved in schemes such as Readathons and paired reading, either with younger children, as a community project or in group work with their peers.

Prizes may also be offered as an extra incentive to encourage children to participate.

It is a good idea to have a classroom collection of books for children to read. The reasons for this are as follows:

- The books have been pre-selected so the teacher knows they are of the right level for the children;

- The books are easily available and there are always books there for children to continue with if they have finished the book they were reading;

- Children enjoy reading books that their peers recommend or that their friends have already read; and

- There is no excuse for a child not to have a book to read.

Many schools do not have the luxury of a classroom collection. This problem can be addressed by:

- Arranging for block loans from a nearby library;

- Encouraging children to bring books to share with friends;

- Asking parents to donate a book on the child's birthday. This can have the child's name and birthday date inscribed in it; and

- Cutting out children's stories and articles published in newspapers and magazines. These could be mounted on cardboard and covered with plastic to ensure that they remain usable for a reasonable period.

Parents and caregivers can read at home as well. Irrespective of the age of the child, a certain time should be set aside each day which is family reading

time. Parents or caregivers should also sit down and spend the time reading quietly together with the children.

Many boys regard reading as unimportant or something that only girls do. The reason for this is that it is usually the mother who reads to them when they are small. Teachers in the early grades also tend to be women. As a result young boys often do not have any male role models who encourage a love of reading. Fathers therefore need to take special care to make time to read with and to their children.

It is vital to give children every opportunity to practise and improve their reading skills. They are not going to become readers unless the important people in their lives — such as their parents, caregivers and teachers — encourage them to find the time and give them reading matter to practise these skills.

If you want your children to value reading you have to show them it is important by spending money on books, spending time reading to and with them, and encouraging them to spend time reading.

Only by doing these things can we build a reading nation and a culture of reading.

● For more information about

www.sundaytimes.co.za/education

PUTTING KIDS AT LIBERTY TO SUCCEED



Appendix 11

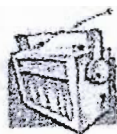
JUNE 1982

- ▶ WHO WE ARE
- ▶ E-MAIL US
- ▶ SUBSCRIBE
- ▶ ADVERTISE

Johannesburg, South Africa. July, 1999

- ▶ MAIN INDEX
- ▶ THE TEACHER
- ▶ BACKCHAT

Radio education alive and kicking



Popular radio lessons have reduced absenteeism at school, reports NICOLE TURNER

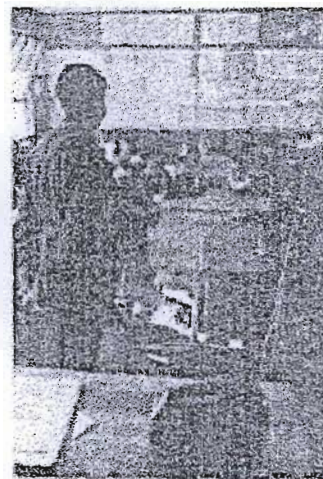
RELATED ARTICLES

[*The classroom of the mind reaches into every corner](#)

AS the sun begins to stream through the windows of Marulana Primary school in Tembisa, grade 2 teacher Patricia Mokadi winds up a Freeplay radio, and the daily 9am English lesson begins. The pupils are all intensely focused on the radio as familiar music blares into the classroom. Then suddenly they burst into song. "Hello, how are you?" they sing, shaking hands with their neighbours vigorously, bright smiles on their faces.

The lesson is being broadcast from Tembisa Info -- the community radio station -- to over 300 classes in 42 schools, helping grade 1 and 2 pupils learn through lively interaction with English in Action lessons.

The lessons are developed and recorded by the Open Learning Systems Trust (Olset) and are designed to implement the learner-centered, outcomes-based goals of Curriculum 2005. Besides developing listening skills, *English in Action* involves both teachers and pupils in the learning experience in a novel way.



A medium for all people: Schools with hardly any resources -- not even electricity -- can still access the learning potential of educational radio programmes

photo: kenneth muller

The classroom of the mind reaches into every corner



SABC radio sees education as an integral part of its service, writes

Matthew Krouse

If radio drama is called the "theatre of the mind", then educational radio must certainly be the classroom of the mind.

The "mind classroom" spans South Africa, taking a multi-faceted and multi-cultural approach to learning through radio — the most

transportable of mediums. But however wide the radio broadcast net seems to span, and however accessible it is, radio is seen as television's country cousin.

Yet no other medium has the ability to communicate with people from remote areas about immediate issues affecting them, in their own languages. Presently there are 10 public service stations on fm, broadcasting in the following languages: isiXhosa, sePedi, chiVenda, xiTsonga, isiZulu, seSotho, seTswana, siSwati, siNdebele, and Afrikaans.

The educational content of these are controlled by the SABC but, according to the cor-

poration's head of educational radio Fakir Hassan, "education content has needed to be decentralised, and education must not be marketed as a separate product. It must be seen as an integral part of the public service".

As a result, stations don't break transmission for special educational content. Indeed, research has shown that where transmission was broken for special educational content listeners would switch off. The SABC has therefore infused radio with education, appointing special producers in regions responsible for making content relevant to their targeted audiences.

SABC radio's central educational unit develops educational content with partners like the Department of Education at provincial and national levels. Scripts are written in English and are then sent to the regional stations for translation and production. On this basis programmes have been produced in these eight key areas: civic education (including recent voter education and aspects of adult basic education); health and the environment; com-

merce and finance; early childhood development; curriculum support; science and technology; educator development; and youth and culture.

The curriculum support programmes run in the afternoons are directed at senior primary and junior high levels and are 15 minutes long. These are a lot more formal than youth cultural awareness programmes that aim to draw youngsters back to their cultural roots. Obviously, cultural programming has the advantage of being able to use drawcards like music to keep listeners transfixed.

Like television, competitions provide further incentive for listeners to tune in, and the SABC gives away wind-up radios on all stations.

With the divide growing between those who have technology and those who don't, the SABC is aware that people in outlying areas are finding less access to the multimedia boom. In their drive to meet these excluded people's needs, the SABC tries to cater for everyone, including care-giving grandmothers.

Edutech Puisano

Supporting education through technology

www.teacher.co.za

<http://education.pwv.gov.za/teli>

April 2001

theTeacher

Your Guide to Education

Teacher



The Teacher

size size

small post-out

The best way to lead a school

RESEARCH PAGE Arts and Culture in Grade 7

The Internet in education

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The month's book

The new arrival

What's new in the classroom

What's new in the classroom

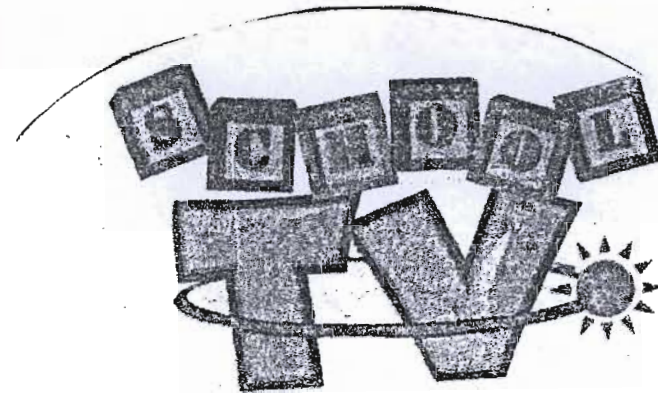
What's new in the classroom



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The Sunday Times wishes to thank the Telkom Foundation for its generous sponsorship of copies of readRIGHT into 100 under-resourced schools

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UMNYANGO WEMFUNDO NAMASIKO
DEPARTEMENT VAN ONDERWYS & KULTUUR

Ikheli Locingo :
Telegraphic Address :
Telegrafiese Adres :

KWAZULU-NATAL DEPARTMENT
OF EDUCATION AND CULTURE
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Private Bag : Ulundi
Private Post Office : 3838

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Ucingo : 035 87343659
Telephone :

Imibuzo :
Enquiries : Mrs E. O'Riordan
Navra :

Usuku :
Date : 15 December 1999
Datum :

25 JAN 2000
MALGATE BUILDING
DURBAN
DURBAN SOUTH REGION

Inkomba : 10/4/1
Reference :
Verwysing :

TO: All Heads of Section at Head Office
Regional Chief Directors
Chief Directors
Chief Superintendents of Education

KZN Circular No. 94.... of 1999

INVITATION TO OBSERVE COMPUTER TRAINING

1. You may remember that the World Bank funded a project in KwaZulu-Natal which supplied five schools and a training centre with computer laboratories. We are now commencing the 2nd part of the training for the teachers and wish to invite you to visit the venue at any time that suits you. We feel that it would be of great interest to you to gain some insights into the most advanced use of Information and Communication Technologies in previously disadvantaged schools. Similar training will be taking place early next year when we commence the Telkom project in which 131 KZN schools will be involved.
2. The following details will help you to observe this training in action.
Date : 10—14 January 2000
Venue : SACOL Pietermaritzburg Campus/ Computer Lab
(previously Natal College of Education)
Time : 8h00-17h00 daily
3. We would really appreciate your visit as it would be of great motivation to both our teachers and trainers.


DR M.A.M. JARVIS
SUPERINTENDENT- GENERAL: KZNDEC

PROVINCE OF
KWAZULU-NATAL

ISIFUNDAZWE
SAKWAZULU-NATAL

PROVINSIE
KWAZULU-NATAL

DEPARTMENT OF HEALTH

UMNYANGO WEZEMPILO

DEPARTMENT VAN
GESONDHEID

DURBAN

DURBAN

DURBAN

TEL : 9079079

PRIVATE BAG
ISIKHWAMA SEPOSI
PRIVAATSAK

: X 014
: MOBENI
: 4060

FAX : 9071958

ENQUIRIES :

DATE :

REFERENCE :

IMIBUZO : Z.M.MAKHANYA

USUKU : 28/06/00

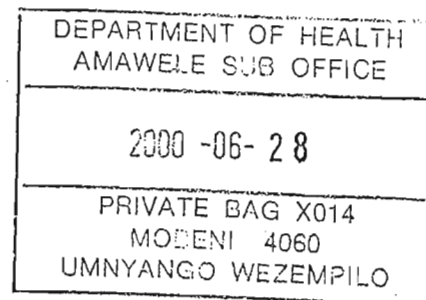
INKOMBA : 8/2/6

NAVRAE :

DATUM :

VERWYSING :

Rotary Club
107 Silveton Road
Berea
DURBAN
4001



FOR ATTENTION : MR P. THORNTON

Dear Sir,

**UMBUMBULU ENVIRONMENTAL HEALTH AWARENESS PROJECTS :
SCHOOL BEAUTIFICATION PRESENTATION : FOLWENI : 2000/06/19**

Umbumbulu Environmental Health Services and on behalf of the Department of Education & Culture express it's gratitude for your being continually enthusiastic to sustain the above-quoted project since the last five years.

Support in kind of the hereunder prizes was highly appreciated, i.e.

Mklomelo C.P.	1 st prize	Floating Trophy + R300
Hlengisizwe J.P.	1 st runner-up	R200
Ntwenhle S.S.	2 nd runner-up	R100

We humble apologise for all the inconvenience caused, hence this has taken so long to come in place.

May we take this opportunity to wish you & your company to grow from strength to strength to support health awareness projects.

Yours sincerely
Z.M. MAKHANYA



.....
CHIEF ENVIRONMENTAL HEALTH OFFICER

- C.C. 1. The District Head Office : For Attention : Mr Van Reinsberg
2. The Principal of schools : Mklomelo C.P.
Ntwenhle S.S.
Hlengisizwe J.S.
3. The Chairperson : School Governing Body
4. The area councillor.



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



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

HEAD OFFICE

ULUNDI

ULUNDI

Address: 2nd Floor
Ikhell: Administration Building
Adres: King Dinizulu Highway

Private Bag:
Isikhwama Seposi:
Privaatsak:

Private Bag X04
Ulundi
3838

Telephone: 035-8797529

Ucingo:
Telefoon:
Fax: 035-8797522

Date: 25/02/2001

Uku:
Datum:

Enquiries
Imibuzo Dr H.P. Gumede
Navrae:

Reference:
Inkomba:
Verwysing:

**TO: REGIONAL CHIEF DIRECTOR
DIRECTOR: EDUCATION SUPPORT SERVICES
PGSES REGIONAL CO-ORDINATOR
DISTRICT MANAGER
SUPERINTENDENTS OF EDUCATION MANAGEMENT
PRINCIPALS OF SCHOOLS**

SURVEY:- LEARNERS WITH SPECIAL EDUCATION NEEDS (LSEN)

1. In order to redress past imbalances in the provision of LSEN programmes, the service delivery of the Psychological, Guidance and Special Education Services has to be structured such that it ensures equitable distribution of resources to all learners in the province.
2. The intention of the survey is to conduct a needs analysis of Learners with Special Education Needs so that relevant and appropriate support systems can be established.
3. For the purposes of this survey, please indicate only those learners who have learning difficulties in the mainstream as indicated in FORM 1.
4. Ensure that you indicate on FORM 2 names of specialist educators e.g educators with courses and or qualifications in remedial education, special education, etc.
5. The following forms are attached:
 - Form 1: Survey of Learners with Special Education Needs
 - Form 2: Survey of Specialist Educators.
6. Please mail/fax completed forms by 15 March 2001 to:

Psychological Services
P/Bag 04
ULUNDI
3838
Attention: Dr. H. P. Gumede


7 SUPERINTENDENT GENERAL



DURBAN SOUTH REGION:

ISIFUNDA SASENINGIZIMU: NETHEKU

DURBAN SUID STREEK

Address : Malgate Building
Ikheli: 72 Stanger Street
Adres: Durban
4001

Private Bag : Private Bag X54330
Isikhwama Seposi : Durban
Privaatsak : 4000

Telephone : (031) 3270911
Ucingo :
Telefoon :
Fax : (031) 3270244 523

Enquiries :
Imibuzo : M. MAGUBANE
Navrae :

Reference :
Inkomba :
Verwysing :

Date :
Usuku :
Datum :

Dear sir/madam

ELITS (Education library, Information and Technology Services) would like to invite 2 educators and 2 learners from your school to a training to be conducted by:

1. Umsinsi Press - Writing storybooks
2. SACTWU - Edu-Peg

For educators - 15 August 2001
For learners - 16 August 2001

VENUE – ADAM HOC RESOURCE CENTRE

TIME - 8H30

N.B. Please bring

1. a pencil
 2. A4 blank paper (about 10 sheets)
- If possible also bring*
3. a rubber
 4. pencil sharpener
 5. crayons

Your co-operation would be highly appreciated.

Yours faithfully



M. MAGUBANE



S. LOMBO (CHIEF EDUCATION SPECIALIST)

FIRST OF THREE WORKSHOPS

DATE: Monday, 27 August 2001
TIME: 09h00 - 14h00
VENUE: English Language Educational Trust (~~see above details~~)
TOPIC: Introducing Zikhulise Materials
THINGS TO BRING:

4th Floor JHI Bld
369 Smith Street
DURBAN

- Stationery to make own notes.
- A lesson plan of a traditional type (not OBE) lesson that educators are familiar with.
- Zikhulise Educator's Guides with LSMs that Lead Educators should have received through the RAIN distribution system.

SECOND OF THREE WORKSHOPS

DATE: Monday, 3 September 2001
TIME: 09h00 - 14h00
VENUE: English Language Educational Trust (~~see above details~~)
TOPIC: Using and Adapting Zikhulise Materials
THINGS TO BRING:

- Stationery to make own notes.
- Zikhulise Educator's Guides with LSMs that Lead Educators should have received through the RAIN distribution system.
- Koki pens, pencils, rubbers and rulers.

THIRD OF THREE WORKSHOPS

DATE: Monday, 10 September 2001
TIME: 09h00 - 14h00
VENUE: English Language Educational Trust (~~see above details~~)
TOPIC: Making your own LSMs
THINGS TO BRING:

- Stationery to make own notes.
- Zikhulise Educator's Guides with LSMs that Lead Educators should have received through the RAIN distribution system.
- Cardboard, some kind of glue or paste, scissors, Koki pens, pencils, rubbers and rulers.

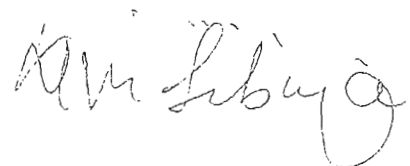
It is essential for the success of the project that all Lead Educators attend. In the *exceptional* case where a Lead Educator cannot come, please can someone else be sent to represent him or her. The replacement person must be prepared to take the absent Lead Educator through what was covered in the workshop.

Please could you let me know whether this training programme has your support. Please could you inform the Lead Educators and their Principals of these workshops as soon as possible. Should you wish to attend please let me know.

Yours sincerely



Julia Reynolds (Mrs)



BIBLIOGRAPHY

1. Ambon, S. & Hooper, K. 1990 Learning with Interaction Multimedia: London Sage Publications
2. American Education Research Association, 1990, Research in teaching and learning .Volume 2New York: Macmillan
3. Asmal, K. 1999 Call to action : Mobilizing citizens to build a South African Education and Training system for the 21st century.
4. Bartz, A. E. 1979 Descriptive statistics for education and the behavioral sciences. Fifth edition, Minnesota, Burgess.
5. Betram, c. Johnstone, M. & Fotheringham, R. 1998. ideas for resourceful teaching editors Guide . Northway.
6. Bonwell, G. & Elson, J. 1994 Co-operative learning and strategies for inclusion. Paul Brooks Publishing Company.
7. Boschee, F. & Baron , M.A 1994. OBE: Some Answers for the Uninitiated Cleaning House 67(4), 193- 1916. ISSN0009-8655.
8. Bhengu, S. M. 1997 Curriculum 2005: Life Long learning . SA Absolutely Media Marketing.
9. Branch, R. C. M. 1995. The role of media in learner-centered instruction. USA Paper presented at the centre for cultural and media studies . Graduate student seminar University of Natal Durban , South Africa.
10. Brooks, G. & Brooks, M. G. 1993 . the case for constructivist classrooms. Alexandra . Paul Brookes Publishing Company.
11. Buckingham, D. 1990 .Watching media learning : Making sense of media Education . London
12. Carr, W. & Kemmis, S. 1986 Becoming critical . Education , knowledge and action research . London. Falmer. Press CH3.

13. Claassen. 1998. Outcomes-based education: Some insights from complexity theory. South African Journal of Higher Education . 12 (21) , 34-40 ISSN 101- 13487
14. Clark, R. E. 1983. Reconsideration research on media review of educational research Vol. 53. No. PG 445 - 459.
15. Criticos, C. & Prinsloo., J. 1991, Media . Matters in South Africa. S. A
16. Criticos, C. 1998. Clockwork courage. UDN AECT Convention. Durban. South Africa.
17. Department of Education, 1995. The white paper on Education and Training in a Democratic South Africa: first steps to develop a new system. Government Gazette 357. Pretoria
18. Department of Teaching Development , Technikon Northern Transvaal, 1994. Guidelines for writing a Research Proposal, 2 May.
19. Ellington, H. Percival, F. & Race, P. 1993 handbook of Educational Technology. USA Nicholas, Publishing Company, New Jersey
20. Ellis,. A.K. Fourts, J. 1993 . Research on Educational Innovations: Eye on Education. New Jersey. ISNN 1-88 30001-05-6
21. Ely, M. etal.1991. Doing Qualitative Research. Falmer Press Ch3.
22. Franrzen, K. 1995. Planning and Production of Educational media. EML Vol. 23 No4 Oslo, Norway.
23. Gallian, L. 1994. A Pedagogic Model of Multimediatly: Educational Media. International Vol. 2.
24. Goetz, L. Le Compete, H. 1984. Qualitative Research for Education (2nd ed.) Boston. Allyn & Bacon, inc

25. Grundy, P. 1993. Resources Books for teachers. Newspapers. Second edition. 44-46p. Hong- Kong
26. Hall, J. Holomisa, K. Seete, P. & Weber, S. 1999. Human Science and Technology. Macmillan.
27. Hooks, B. 1994. teaching to Transgress: Education as a practice of freedom: London Sage Publications.
28. Hungers, B. 1996. Alternative assessment methods: Implications for environment education . ISSN 0256 - 7504.
29. Jansen, J.D. 1997. A Critical Analysis of Outcomes Based Education: UDW. Faculty of Education. Durban South Africa.
30. Juta, C. Curriculum 2205 and Outcomes - BASED Education (online) Available [http://www. Juta. co.za/ academic/ schools/copy/obe-htm](http://www.Juta.co.za/academic/schools/copy/obe-htm): April 18, 2001.
31. Karrison, J. 1998: Public libraries and Outcomes- based Education: Innovation 16 (30-34)
32. Kaufma. Z. 1976. Systems, Systems Approach and the Teachers : National Council of Teachers of English , Urbana.
33. Kennedy, S. D. 1998. Best Bet Internal. USA. Sturley Dunlin Kennedy.
3. Leedy, P.D. 1974. Practical Research: Planning and Design: New York. Macmillan.
35. Lincoln, Y.S. 1993. I and Thou. Method and voice in research with the silenced: M.D. Mclaughlin, K.W.G. Tierney (Eds.) Naming silenced lives: personal narratives and the process of educational change. New York: Routledge.

36. Lorezen, M. Using OBE in the Planning and Teaching of New information Technology (online) Available [www. Lib.msw.ed/lorenze/obe.htm](http://www.Lib.msw.ed/lorenze/obe.htm). April 18, 2001
37. Lubisi, C. [arker, B. & Wedekind, V. 1998. Understanding Outcomes-based Education, Teaching and Assessment. (Learning Guide) SAID/ODU; Cape Town.
38. Malan, A 1997. Excellence through Outcomes: Pretoria . ISBN 0-7986-4799-
39. Malay, A. 1992. Resources book for Teachers Video. Hong Kong.
40. Marlowe, B. A. & Page, M.L. 1998 Creating and sustaining the constructivist classroom: New-Dethc.
41. Marcus,j. 1997. the web explorer's guide SA. Trademarks.
42. Masterman, L. 1980. Teaching about television: London. 7-15 pg.
43. Mathews, J. 1999. In touch with the world by print. Daily Newspaper.
44. Mathews, K. 1999. The classroom of the n.ind reachers into every corner, Daily Newspaper, 3 July.
45. Mcneil, P. 1999. Research Methods. Second Edition, London. Routledge.
46. Media in Education, Module 6, Newspapers in Education. UDW, Faculty of Education, Durban South Africa.
47. Mehra, V. 1995. Education Technology. London.
48. McMillan, J. & Schumacher, S. 1997. Research in Education: A conceptual Introduction. USA.
49. Miler, J. Huberman, S. LeCompte, S. Patton, K, & Shulman, P. 1987. Educaion Research. New York Macmillan.
50. Office of the President . 1995. South Africa Qualification Act No. 58 of 1995. Pretoria.

51. Patton, J. 1990. Research in Education . A. conceptual Introduction. Harper Collins College Publishers.
52. Pollard, K. & Ton, J. 1993. Reflective Teaching in the PRIMARY School. Second Edition. Ablex Publishing Corporation.
53. SAQA Bulletin, Volume 2, Number, August 1998.
54. SAQA Publications, (online) Available <http://www.saqa.org.za/html/publicationshome/htm.March2,2001>.
55. Schramm, J, et al. 1967. The selection and use of instruction media. LONDON Kogan Page.
56. Seels, B.B. & Richey, R. C. 1994. Instructional Technology: The Definition and Domains of the field. USA, Nicholas. Publishing Company New Jersey.
57. Shelly, B. Cashman, T.J & Waggoner, G. A. 1998 Discovering Computer 98; A link to the future, Wide World Web. Westport, Green wood Press.
58. Shulman, P. 1987. Education Research. New York. United States of America
59. Spady, W.G & Marshall, K. 1994 Light, Not Heat on OBE. The American School Board Journal, 181 (November), 29 - 33pg.
60. Spady, W. G.& Marshall, K. J. 1991. Beyond Traditional Outcomes-based Education, Educational leadership 49(2). American Association of School Administration.
61. Spady, W.G 1996.Outcomes-Based Education: Critical Issues and Answers. Arlington, VA: American Association of School Administration.
62. Sunday Times Education Project, 18 June 2000. Reading for Pleasure.
63. Steen, J.V.. 1993. The Effect and Value of Newspapers in Educational Media. International Vol. 29 NO.3 . Master Miller Long man (Pty) Ltd.

64. Sutherland. S. 1991. Children and Books: Chicago.
65. Technology Enhanced Learning Investigation in South Africa. 1996. A Discussion Document. Report of the Ministerial Committee for Development work on the role of Technology that will support and enhance learning. Government Printers.
6. The Teacher, Puisano, 1999. Radio Education alive and kicking. Johannesburg. SA.
67. Trust MIE: 1993. Media in Education: Using Newspapers and Magazines for Effective Learning. A guide for Primary Teachers: Directorate Curriculum Affairs.
68. Trust MIE: 1999. Media in education: Ideas for Resourceful Teaching: Directorate Curriculum Affairs. - Northway ISBN 0 -620-210-1
69. Tubbs, J. 1992. Questionnaires, Design and Use. Metuchen, N. J. Scarecrow Press, INC.
70. Tubbs, J. & Moss, S. 1994. The Interviewing as an Evaluation Tools & improving Educational Research: In learning how to learn. Cambridge University Press.
71. Valdez, J. Nowakowski, K. & Rasmussen, S. 1994. Exploring and Interacting with the Environment. California. Sage Publication.
72. Wolcott, H.F. 1992. Posturing in Qualitative Research. In M.D. LeCompt, W.I. Military & Pressle, J. (Eds), The Handbook of Qualitative in education (3-52pp) New York Academic Press.