# AN EVALUATION OF THE TEACHING STRATEGIES OF AN ADULT EDUCATOR

BY

# CHARLES NAIDOO (202000228)

Submitted in partial fulfillment of the requirements for the

Degree of MASTER OF EDUCATION
In the School of Adult and higher education at
The University of Kwazulu- Natal

SUPERVISOR: Professor John Aitchison

January 2007

#### **Declaration**

I, Charles Naidoo, declare that this dissertation represents original work that has not been previously submitted in any form to any University. Where use has been made of the work of others, this has been duly acknowledged and referenced in the text.

Signed: Lnaidoe

Date: 18 - 04 - 01

# Acknowledgements

I would like to thank my supervisor, Professor John Aitchison for his guidance and support. Thanks to my family for their sacrifice, support, patience and understanding. Thanks to Kogie Doorasamy for her willing assistance.

# **ABSTRACT**

This research is a case study. The study investigates the teaching strategies currently utilized in the adult education classroom; ascertains the reasons for the use of such strategies and recommends teaching strategies that could be used in order to improve instruction.

The research was conducted at an adult learning centre. In pursuit of his objectives, the researcher aimed to answer the following key questions:

- What teaching strategies are currently being utilized in the classroom?
- How effective are these teaching strategies in meeting the learning needs of the adult learners?
- How do these teaching strategies relate to existing literature?

Data was collected primarily by engaging in the observation of actual teaching in the classroom. Structured interviews were conducted with the educator and learners concerned in order to confirm the classroom observation findings.

Although the findings from this study are problematic to generalize, the findings will give us a better understanding of teaching strategies. This understanding could be useful to:

- Educators of adult learners with a view to improving their practice.
- Researchers in the field of education.
- Textbook writers and curriculum development specialists.
- National and regional policymakers.
- Anyone who has an interest in education.

This study is guided by the theory of andragogy as expounded by Knowles. This theory is relevant because it informed the study as to how best teaching and learning of adults can be undertaken.

Findings from this study reveal that the teaching strategy most frequently used are the mass instruction strategies. The lecture method is most frequently used. This method is made interactive with the incorporation of discussions, recitations and the use of questioning. Individual instruction and group instruction strategies are used to a limited extent.

# TABLE OF CONTENTS

CHAPTER ONE	INTRODUCTION	<b>PAGE</b>
1.1	Introduction to the study	1
1.2	Motivation for the study	1
1.3	Purpose of the study	2
1.4	Research audience	3
1.5	Limitations of the research	4
1.6	Research design	5
1.7	Background and context	6
CHAPTER TWO	LITERATURE REVIEW	
2.1	Definition of terms	7
2.2	Past research findings	8
2.3	Choosing teaching strategies	9
2.4	Teaching strategies of the future	12
2.5	The learning needs of the learners	14
2.6	Adults' motives for learning	17
2.7	Relationship of instructional strategies to	
	learning techniques	18
2.8	Learning strategies and cognitive	
	development	20
2.9	Evaluation of teaching strategies	23
2.10	The theory of Andragogy	25
2.11	Teaching methods	31
2.11.1	Mass instruction	32
2.11.1.1	The lecture method	32
2.11.1.2	Socratic method	33
2.11.1.3	Demonstration	34
2.11.1.4	Forum	35
2.11.2	Individualized instruction	36
2.11.2.1	Projects	37
2.11.2.2	Assignments	38
2.11.2.3	Learning contracts	39
2.11.2.4	Self-directed learning	40
2.11.3	Group instruction	41
2.11.3.1	Brainstorming	41
2.11.3.2	Group discussion	43
2.11.3.3	Co-operative learning groups	46
2.11.3.4	Role playing	47
2.11.3.5	Case study	49
2.11.3.6	Fish bowl	51
2.12	Conclusion	52

<b>CHAPTER</b>	THREE	METHODOLOGY	
3.1		Introduction	53
3.2		Theories on research	53
3.3		Preparation for research	59
3.5		Data collection tools	61
3.6		Documentary sources	67
3.7		Data analysis techniques	68
3.8		Measures adapted to ensure validity and	
		reliability	70
3.9		Ethical issues	71
3.10		Conclusion	72
CHAPTER	FOUR	FINDINGS	
4.1		Introduction	73
4.2		Educator characteristics	73
4.3		Leaner characteristics	74
4.4		Arrangement of the classroom	74
4.5		Teaching resources	74
4.6		Lesson observations	75
4.7		Teaching methods	82
4.8		Commentary	83
4.9		Learner's learning needs	82
4.10		Relationship of teaching strategies to literature	89
4.11		Conclusion	91
CHAPTER	FIVE	ANALYSIS OF FINDINGS	
5.1		Introduction	92
5.2		Analysis of teaching strategies	93
5.3		Analysis of themes	100
5.4		Relationship of findings to Knowles Theory of	
		Andragogy	106
5.5		Conclusion	109
CHAPTER	SIX	CONCLUSION AND RECOMMENDATIONS	5
6.1		Conclusion	110
6.2		Recommendations	111
REFEREN	CES		114
APPENDIX		A1 Classroom observation schedule	
		A2 Interview schedule: Educator	
		A3 Permission to conduct research	
		A4 Consent form	
		A5 Interview schedule: Learners	

# Chapter One

# INTRODUCTION

#### 1.1. Introduction to the Study

The aim of this chapter is to provide a general introduction to the study. Included in the discussion are various issues pertaining to the study. These include the motivation for the study; the purpose of the study; research approaches and methods and the location of the study. The key concepts in the study are outlined. The research audience and the limitations of the study are explained.

The researcher believes that a discussion of the above aspects in an introductory chapter of this nature is positively useful to the reader since it provides an overview of the study. A preview of what could be expected in later chapters helps to generate interest and sustains focus in the study.

#### 1.2. Motivation for the Study

This study is the outcome of the researcher's personal interest in the teaching of adults. The researcher has observed that some educators use teaching strategies that are different from others. The researcher has also observed that learners display a distinct difference in the way they learn. In this study, I aim to examine how the various teaching strategies meet the learning needs of the learners.

This study has been prompted by many developments in education over the past decade. In South Africa, a large number of the people are illiterate. Some have never attended school while others have dropped out of school even before completing the primary phase of education.

The provision of adequate education opportunities for all its citizens is the responsibility of the government. According to the National Ministry of education, our system of

education must "open gates of learning and culture to all, and ensure that... human resources and potential are developed to the full." (Department of education 1995:157:79) The government therefore faces a major challenge... "to facilitate equitable access to schooling and its benefit to all its people." (Department of education 1995:157:57).

#### 1.3. Purpose of the study

Teaching is a complex and demanding task. Teaching strategies are central to the teaching process and active learner participation is absolutely essential in order to promote learning. Walklin (1990) contends that when designing teaching and learning strategies, the educator is required to structure and organize learning so that learner related factors such as need, ability, interest, previous experience and their learning techniques are taken into consideration. Given this understanding, the researcher set out to examine the adult educators teaching strategies, especially those that promote active learner participation.

Miller (1972) has identified many reasons for evaluating teaching strategies. Improved instruction is the most important reason. The most effective method for this is formative evaluation which involves data collection for the purpose of improved instruction. The degree of achievement by the educator can be appraised. Future learning needs can be diagnosed. Desired behaviors by learners can be clarified and reinforced, undesirable behavior can be eliminated.

Teaching strategies are important. The educator should be able to use effective strategies based on the learner's desired level of learning. These teaching strategies, when appropriately selected, can lead to learning at higher levels of cognition or can shift the focus from cognitive to affective, psychomotor or integrated learning. (Bloom1956:60).

The objectives of this study are:

- to investigate the teaching strategies utilized by the adult educator;
- to evaluate these teaching strategies against existing literature on teaching strategies

- to explore the reasons why these strategies are being used;
- to recommend teaching strategies with the aim of improving instruction.

In pursuit of these objectives the researcher addresses the following key questions in his research:

- What teaching strategies are currently being utilized in the classroom?
- How effective are these teaching strategies in meeting the learning needs of adult learners?
- How do these teaching strategies relate to existing literature?

These questions were considered to be pertinent and needed to be addressed in view of one of the ideals of the national department of education: 'The curriculum, teaching methods and textbooks at all levels and in all programs of education and training should encourage independent and critical thought, the capacity to question, enquire, reason, weigh evidence and form judgments, achieve understanding, recognize the provisional and incomplete nature of most human knowledge and communicate clearly'. (Department of education 1995:357:22)

#### 1.4. Research audience

According to Mouly (1978, cited in Cohen, Manion and Morrison 2000:40) 'research is best conceived as the process of arriving at dependable solutions to problems through the planned and systematic collection, analysis and interpretation of data. It is the most important tool for advancing knowledge, for promoting progress and for enabling man to relate more effectively to his environment, to accomplish his purpose and to resolve conflicts.'

The above statement implies that researchers do not work in vacuum. They have an obligation to communicate their findings to those members of society who have an interest in the investigation.

The possible audience for this study is researchers in the field of adult education. Educators of adult literacy classes would benefit with a view to improving their teaching practice and methods of presentation. Curriculum development specialists and textbook writers who prepare materials for adult education classes will benefit by refining their methods of presentation. Policy makers, who design adult education policies, will also benefit.

In addition this research is available to the public, to anyone who has an interest in education. Adult educators play a crucial role in the classroom. Access to this report may contribute to some changes or even improvements in the planning and implementation of daily classroom activities.

#### 1.5. Limitations of the research

This research, like many other is bound to have limitations. However the value of the research is not diminished by the fact that there are limitations, but actually enhanced by reporting such limitations.

The classroom observation is restricted to certain periods during the year when tests and examinations are not written. This is inclusive of the months of June and November when examinations are in session. The classroom observation is by appointment with the educator concerned. The educator may prepare thoroughly for the particular situation. Learners may be prompted and prepared by the educator for the observation lesson. The time for the observation lessons are restricted to five o' clock to eight o'clock in the evenings. Lesson observations during other times of the day may yield different results.

A researcher with his own values and perspective may have a strong influence on the data collected. The researcher is acknowledging that it is impossible to observe and record everything that occurs in the classroom, agrees with Ball (1984:70) when he states that: 'for everything noticed, a multitude of other things are forgotten. Great parts of the real world, experienced by the observer, probably the greater part, are selected out ...'

Only one educator was observed in the classroom. It is difficult to make generalizations based on the findings of this one educator.

The data furnished in the classroom observation and interviews are treated with circumspection as the researcher was aware of the possible inclination of some respondents to create a favorable impression. The researcher also realized that the potential of the classroom setting as the main source of data could be diminished as a result of prior arrangements made with regard to classroom visits.

Moreover the researcher was conscious of the fact that the educator and learners had considerable potential for sabotaging the attempt to research them. Attempts were therefore made to gain the trust and active co-operation of all respondents by explaining the reasons for the study. The confidentiality of the data was assured and the primary interest of the research was explained.

The limitations imposed on the generalize ability of this study may be derived from the research design and research procedure. The researcher believes that despite the limitations, this research has the potential to make a trustworthy contribution to our knowledge of classroom teaching strategies.

#### 1.6. Research Design

The research focuses on a case study of an adult educator. The educator teaches at an adult learning centre. The educator's lessons will be observed in the classroom. The lesson observation will be recorded on a lesson observation schedule. The educator will be interviewed after the lesson observation in order to confirm what has been observed. Learners will also be interviewed in order to ascertain whether their learning needs are fulfilled.

The focus of this study is the utilization of the teaching strategies of an adult educator. The researcher would have liked to have investigated the teaching strategies of all academic learning areas taught at the adult learning centre. In view of time constraints,

this study was limited to four learning areas. The learning areas were representative of different fields of study (Languages, Natural Science, Social science and Life orientation). This will give the researcher a reasonable overall picture of the teaching strategies used.

#### 1.7 Background and Context

South Africa's past is characterized by separate and unequal education. One of the ways of addressing the inequalities is to encourage adults to be literate by attending Adult Basic Education and Training classes. Learners and their employees have certain expectations about adult literacy classes and they are disillusioned when these expectations are not met.

On an individual level, literacy empowers individuals and makes them more confident, able and assertive. According to Lyster (1992) adults who are taught to read and write gain the power to control their own lives within a social and an economic context because they no longer have to rely on others to read and write for them. Public adult learning centers have a vital role to play in empowering these individuals.

My study is located in the Province of Urban KwaZulu-Natal in South Africa. The study is concentrated in the city of Durban and in the suburb of Newlands West. I chose this research site because it is both convenient for me to travel to this site and I also have an in depth knowledge of the community.

I chose a case study approach because it would enable me to undertake an in-depth study of an educator and her teaching strategies. I chose this particular educator because of her qualifications and experience in the field of adult literacy. The educator in the case is the coordinator of the adult learning center and has experience of teaching adults for eight years.

# **CHAPTER TWO**

#### LITERATURE REVIEW

#### Introduction

This chapter is a review of the current literature on teaching strategies. The terminology associated with teaching strategies will be explained. Past research findings will be explained. The various factors that need to be taken into account when planning teaching strategies are elaborated upon. Some of the teaching strategies of the future are explained. The learning needs and the adult's motives for learning are expounded upon. This provides insight to the adult educator when choosing teaching strategies. Finally, an understanding of the learning and the cognitive development of the learner provides the educator with insight and understanding of the adult learner.

This study is guided by Knowles theory of andragogy as expounded by Knowles. This theory and its relationship to this study are explained. Finally, a theoretical background to all the teaching methods mentioned in this study is explained.

#### 2.1. Definition of terms

The Chassell Dictionary of the English language defines strategy as a long term plan aimed at achieving a specific goal. The word strategy, according to Verduin (1977:57) is borrowed from the military. Armies have developed strategies to accomplish military objectives. An instructional strategy is a plan for attaining learning objectives. In teaching and learning, strategy is concerned with the way in which content is presented in the instructional environment. It includes the nature, scope and sequence of events which provide the educational experience. A teaching strategy is a broad category of classification. For the purpose of this study, teaching strategies include mass instruction, individual instruction and group instruction.

The teaching strategy is made up of methods and techniques which will ensure that the learner does in fact reach the objective. The general definition of method according to the Chassell Dictionary of the English language is an orderly, systematic logical arrangement or order of doing. According to the Oldham's dictionary of the English language,

teaching methods are the various ways of communicating knowledge, values and skills to the learners. These "methods", include for example, the lecture method, discussion method, project method and Socratic methods. Teaching methods are primarily concerned with the most appropriate presentation of lesson material in any given circumstance.

The term "technique", means specific operations within a particular method. It is a particular way of carrying out an operation. This means that techniques are peculiar to a chosen method of instruction. For example, educators using the Socratic method of instruction would use techniques which differ from those techniques used by an educator utilizing the method of group work. Techniques are the tools of the educator. Knox (1977:142) defines teaching technique as a more comprehensive term embracing the more general requirement of class management, such as securing of attention, maintenance of order and class control.

According to Verner (1962 cited in Seamen 1989:42) it is through specific strategies, selected by the facilitator, that the learner or participant becomes involved in the learning process. If the strategy is effective, the participant should be stimulated to continue learning in the future.

#### 2.2 Past research findings

Research by Davies (1993:156) into the range of teaching techniques available revealed that the range was endless. These include interactive television and computer-based learning, videodiscs, questioning techniques, mentorship, group techniques and distance learning strategies.

Although the variety seems endless, there are only five broad classes of teaching methods involved. They are the lecture, demonstration, the lesson, discussion and independent study. The lesson is the principle method of teaching adults. Once an instructor has mastered the lesson method, it is relatively easy to experiment with other alternatives.

The most significant shortcoming of early studies, according to Dunkin (1974:180), is that these studies avoided looking at the actual process of teaching in the classroom. In the typical study, some causative factor, for example teaching methods, room size or curriculum innovation was studied against some criterion of teacher effectiveness. According to Gage (1970 cited in Dunkin 1994:188), the crucial events within the classroom, the point at which teachers, learners, tasks and equipment come together and at which results must be determined, was ignored.

#### 2.3. Choosing appropriate teaching strategies

Walklin (1990:121), is of the contention that the formulation of teaching strategies requires the teacher to answer a number of questions. These include what is expected from the teacher and learner; who are the learners and how best the subject matter can be presented. To decide on a particular method without attempting to answer such questions will make the task of the teacher considerably harder and the results less satisfactory.

Teaching strategies may be defined as a plan of action in order to achieve the intended outcomes of the lesson. Teaching strategies emerge as a result of the interactions of the elements of the teaching-learning exchange.

Knowing one's own philosophy of teaching and learning can help the educator to identify the purpose of an instructional event and to choose his or her teaching strategy for that event. Teaching strategies contain the 'key' to information exchange. In the presentation method, the educator passes on the information to the learner. In an experiential method, the educator exposes the learner to certain experiences. Discovery methods suggest that the learner ultimately holds the knowledge but must discover it through some guided activity.

A mass instruction method such as a lecture, according to Bligh (1972 cited in Brookfield 1986:112) may be used in presenting information in a short twenty minute period.

Research by Bligh (1972 cited in Brookfield 1986:114), indicate that the lecture is of little importance if the educator is promoting critical thinking or encouraging learners to become flexible in their attitude. An hour long transmission of information without opportunity for questions, discussion of case study and no attempt to make connections with audience is therefore poor facilitation. Educators who ignore participatory techniques will find that learners are not being engaged with ideas, skills and knowledge being presented.

Educators need to know how to use the various methods by adapting them to different situations. The educator is allowed to bring personal beliefs, values and philosophy of teaching and learning to the application of the method. Heimlich (1994:74) is of the contention that knowing the method does not guarantee success. Careful consideration must be given to a number of factors. These are the learners, the educator, the organization and the content. The inter-relationships of needs determine the specific strategies to be employed. Instructors, learners and organizations have preferences about what strategy would serve their needs most effectively.

Once the most appropriate strategy is decided upon, there are different ways to understand the facilitating of teaching and how each corresponds to learning. According to McCarthy (1986 cited in Knowles 1988:215) the three strategies are the directing mode, the enabling mode and the collaborating mode. The directing mode calls for the facilitator to define and structure the content; structure the activities which will constitute the learning process; provide feedback and reinforcement to learners and provide encouragement and guidance when necessary. The enabling mode calls for educators to act as a catalyst by providing content and resources. The educator acts as co-enquirer with the learners. They provide support, guidance and encouragement. In the collaborating mode, the learners and educator, share as co-learners in the discovery and creation of meanings and values. This works best with material in which all learners have a stake through which they can grow individually and as members of a team. Negotiating processes should result in a group consensus.

Some interesting conclusions are being made regarding the interaction of what we learn and the strategy by which we learn. Chang (1983 cited in Seaman 1989:154) insists that information is always acquired through one activity or another, symbolic or actual and stored in a form or conditioned by the activity in question. This means that the same information learned in a lecture, in a discussion or a laboratory is remembered differently dependent upon the strategy used to learn.

Walklin (1990:214) found that individual problem solving and personal investigation are effective techniques of achieving behavior change in the individual. Personal meaning is involved and the change in behavior will be personal. Within the framework of these techniques, the person may pursue areas of personal meaning, seek out alternative solutions and make decisions that seem appropriate. Activity learning with hands-on experience is an appropriate method of changing behavior. Some of the more important techniques used are explanations, questioning, and drill.

The teacher should be able to use effective strategies based on the learners desired level of learning. 'These strategies when appropriately selected, can lead to learning at higher levels of cognition or can shift the focus from cognitive learning to affective, psychomotor or integrated learning.' (Bloom 1956:121)

Learners learn best in environments which support the use of both holistic and analytic cognitive styles. Holistic approaches involves focusing on the global aspects of the subject before examining the various parts, then moving back and forth between the whole and its parts. 'These approaches provide opportunities for learners to integrate thoughts and feelings, theory and practice, concrete experiences and generalized representation of experiences.' (Mackeracher 1996:149).

Teaching methods facilitating the holistic cognitive style include: consciousness-raising; journal keeping; group discussion; case studies; experiments; simulations; field placements and the like. Other methods which facilitate the holistic behavior include cooperative and collaborative learning structures such as small groups and learning

partnerships help to equalize power relationships among learners and between learners and facilitator. Cooperative evaluation techniques encourage all learners in a small group to account for their own learning and for the learning of others. Shared leadership includes sharing responsibility for listening, validating experiences, synthesizing ideas and facilitating interpersonal interactions.

An understanding of the elements involved in good teaching can assist in choosing effective teaching strategies. What makes an effective teacher? Certainly knowledge of the topic and effective strategies for learning activities are vital but these vary with the situation. Flanders (1970) suggests that the most important elements are the relationship between the teacher and learner.

#### 2.4 Teaching strategies of the future

According to Galbraith (1991:26) the surge in energy for experimentation and innovation in adult education methodology has been due to the fact that the consciousness of practitioners has been raised because adults differ from children as learners therefore different methods from those of traditional pedagogy would be likely to be more effective with them.

According to Bates (1985 cited in Jarvis 2004:27) the nature of the relationship between how technologies present and organize knowledge and cognitive learning is unclear. It is likely that current and future research findings will influence how adult education will be delivered. Obviously, over the years changes in technology may influence changes this relationship.

Some critical issues contain implications for teaching strategies in adult education in the future:

Firstly Galbraith (1991:402) contends that 'adult educators need to employ a variety of teaching strategies in order to address the learning needs of an increasingly diverse adult clientele. It will be imperative to deliver instruction using many strategies.

Teaching strategies that emphasize collaborative learning as well as individualize

Secondly, in accordance with Garrison (1987 cited in Galbraith 1991:402) 'advances in artificial intelligence will provide greater individualization of instruction through information technologies. Furthermore, unless future research provide more information about how to match appropriate technology and method, the responsibility rests with the learner in selecting those methods that best fit their characteristics.'

Thirdly, according to Brookfield (1986 cited in Galbraith 1991:402) 'teaching techniques that stress collaborative learning, problem solving and critical and reflective thinking will increase in importance.' The discussion method is an ideal method to facilitate critical thinking.' (Marsick and Watkins 1986 cited in Galbraith 1991:402). They suggest that critical reflectivity can best be taught through methods that provide simulation experiences including case studies and role play.

Fourthly, 'the group will become an important vehicle due to changes in the workplace.' Smith (1987 cited in Galbraith 1991:402). They recommend that 'group process skills such as teamwork, leadership and participation will help individuals to become better group members.' Smith (1982 cited in Galbraith 1991:402). They further recommend that these skills be developed using simulation experiences that focus on specific skills.

Fifthly, Ayers (1980 cited in Galbraith 1991:403) contends that 'computer assisted instruction will increase in importance. Although computer assisted instruction will be used to individualize instruction, adult educators will develop ways of making it more collaborative.' These methods include tutorial, drill and practice, problem solving, gaming, simulation, inquiry and dialogue.

Sixthly, educators will develop methods designed to evaluate available information sources. In accordance with Barrows (1987 cited in Galbratih 1991:403) 'the use of exercises or discussions in which individuals critique a resource they have used, reflect on its accuracy, reliability, and overall usefulness will be one way to achieve this goal.'

Seventhly, adult educators will concentrate on helping adults become better managers of

their learning. According to Smith (1987 cited in Galbraith 1991: 403) 'the following methods can be used to make adults learn more effectively: diagnose their learning strategy and provide feedback; the keeping of logs and journals; providing exercises to reflect on the purpose of their learning strategies; conducting critiques and providing relevant theoretical information through lectures and assigned readings.'

Lastly, Tobin (1987 cited in Galbraith 1991:403) is of the contention that the 'development of learning management skills will be supported by computer software that will help adults learn while making them aware of their own learning processes. This software will help adults become more independent in their learning and assist them in selecting methods that suit their preferred ways of learning. No single method is likely to dominate, diversity will be the hallmark.'

The emergence of an information society has implications for learning and the educational system. Teaching strategies will be increasingly important because information rather than raw materials will be the basis of the economy. 'Knowledge will be treated as an article of commerce.' Marchello (1987 cited in Galbraith 1991: 396).

Heimstra (1987 cited in Galbraith 1991:393) is of the view that society is characterized by rapid and pervasive change. Social, demographic, economic and technological forces shape adult educators' future. Some of the social and demographic trends affect adult education teaching strategies. Basic academic skills, problem solving and decision making abilities are becoming important in the workplace.

#### 2.5. The learning needs of the learners

Brookfield (1986:373) is of the contention that 'the educator cannot ignore the learner's needs and the expressions of preference.' It is just as misguided for the facilitator to completely repress his own ideas concerning curricula and effective methods and to compete for control over these. Within this model, educators should engage learners in these choices in order to establish motivation and promote validity of the experience and materials. Gravett (2005) holds a different view from that of Brookfield. She is of the

opinion that the perceived needs of learners cannot and should not determine the course content and educational processes. The reasons furnished for not falling into the trap of meeting the needs of adult learners are twofold. Firstly, teaching to meet needs may condemn learners to staying within their own familiar and comfortable, narrow ways of thinking and acting. Secondly learners' perception of needs and educators' perceptions may differ.

'The process of determining learning needs should therefore be a negotiated transaction between learners and the educator and also employers in work related programs.' (Brookfield 1986:219). A needs analysis should be conducted to ascertain the gap in the learner's current and desired proficiencies as perceived by the learners and others. A needs evaluation at organization level might involve an analysis of organizational maintenance, efficiency and culture.

When considering teaching strategies, the adult learner's needs must be considered. Adults learn in different ways. Knowles (1984) is of the opinion that teaching strategies must take account of such parameters as ability, interest, motivation, difficulty, group mix and physical and intellectual handicaps. No single theory can cope with every aspect of group needs, 'But a teacher armed with a good knowledge of learning principles will be better placed to make a conscious choice of teaching strategies than one who does not have such an understanding'. (McCafferty 1980 cited in Walklin 1990:72). To some extent learning characteristics are related to level of ability, age, social class, previous education and many other factors that affect learning styles. However adult learner's come to class for a myriad of reasons and there is no way of classifying learners in terms of precise similarities and differences in learning characteristics.

Solomon (1993: 141) notes that 'learners are seekers after meaning, they are not information processors.' The characteristics with which we usually examine the learners often relate to the process of information seeking rather that the process of learning.

Lovell (1987 cited in Heimlich 1994:142) suggest that individual learning skills; social

learning; personality differences and cognitive styles; individual differences in age, experience, motivation and self-perception are factors that make each learner unique.

Adults perceive the information presented to them in many different ways. Postman and Weingarten (1969 cited in Davies 1993:41) discuss early perception studies and conclude that how people perceive comes from within them-their previous experiences and their formal schooling. These studies state that when we present information to a group of fifteen learners, there is a good chance that what we say can be perceived in fifteen different ways. This implies that as educators we cannot assume that how we perceive something is how everyone will perceive it.

In accordance with Smith (1982 cited in Knowles 1984:167) learners need a general understanding about learning and its importance in order to develop a positive attitude and motivation to learn. They need basic skills such as reading, writing, mathematics and listening skills to be able to perform in learning situations. Learners need to understand their personal strengths and weaknesses as learners, as well as their preferences for learning situations and environments. They need the skill to perform in three learning processes, that is, self-directed, collaborative learning and institutional learning. Self-directed learning requires highly developed skills such as planning; directing and monitoring one's own learning. Collaborative learning requires strength in teamwork and interpersonal skills. Institutional learning requires basic study skills such as note-taking, writing and test taking.

Pentland (1977 cited in Knowles 1984:128) found that learners wanted to learn on their own. This is because learners want to take control of the learning process. The control resides with the learners and educators respond to those felt needs. This assumes that the learner is fully aware of his needs. He can accurately assess the learning required. The learner is motivated enough to engage in any learning needed.

Knowles (1984:47) describes adult learners as being self-directing, as deriving only positive benefits from experience, possessing great readiness to learn, as voluntarily entering an educational activity with life-centered, task-centered or problem- centered orientation to learning, as being internally motivated. They take responsibility for themselves. Adult educators have been devising strategies for helping adults to make the transition from being dependent learners to being self-directed learners. This learning is limited by what the culture permits. In many societies culture does not encourage the development in some groups of people, for example, married women in many parts of the world.

Brookfield (1986: 131) is of the opinion that 'adults learn best in environments fostering the development of trust, attachment, validation and mutuality.' Most adults respond better to environments supporting relational learning. A relational learning environment utilizes small groups to foster the development of trust, attachment and mutuality. Learners are allowed to share experience and knowledge comfortably and to connect with other learners and their facilitator.

Language is the characteristic feature of communication and is the means by which thought processes are manifested. Communication skills are the essence of effective teaching and learning. Communication is an integral part of expressing, presenting and exchanging ideas between educator and learners.

#### 2.6. Adults' motives for learning

Adults tend to be more motivated towards learning that helps them solve problems in their daily lives or result in internal payoffs. They will be motivated to learn if the new material will help them solve a problem or issue that is important to their lives. This internal need satisfaction is the potent motivator. This needs satisfaction includes the quality of life and self-esteem. They need to know why they need to learn something before undertaking to learn it. According to Wlodowski (1985 cited in Knowles 1998:149) 'motivation to learn is the sum of four factors.' Learners want to be successful;

they want to feel a sense of choice in their learning; they want to learn something of value and they want to experience learning as pleasurable.

What are the learning motives of adults? Aslanian and Bricknell (1990 cited in Galbraith 1991: 345) contend that 'the majority of adults participate in learning because of some trigger event in their lives, such as divorce, a new job, retirement or some similar major event.' This correlates with the research findings of Meizrow (1991). Just preceding or immediately after a trigger event is prime time for people to seek learning. The majority of adults participate in learning because of the relationship to their vocation. They seek promotion, want a different job or keep up to date to retain their existing job.' The adults' focus of learning is based frequently on some external circumstance.' (Spear and Macker 1981 cited in Galbraith 1991:356). Houle (1968 cited in Galbraith 1991:27) identifies three kinds of learning motives for adults:' activity orientated; goal orientated or learning orientated.'

Botsman (1975 cited in Galbraith 1991:27) found that 'men and women gave different reasons for learning.' The motives for males were employment related. In contrast women gave social, personal improvement and religious reasons. Much of adult learning is focused on some immediate perplexing condition or circumstance. The challenge to the educator is to discover the problematic element that will arouse and maintain the interest of adult learners regardless of their motives for learning. Bricknell (1980 cited in Galbraith 1991:28) also notes that 'a life transition is a motivating factor that causes adults to learn for example a change in vocation.' The decision to participate in learning is a result of their volition.

#### 2.7. Relationship of instructional strategies to learning techniques.

Literature on adult learning provides extensive investigations into ways in which adults take in information; select certain information for further processing; use meanings, values, skills and strategies to solve problems, make decisions and create new meanings. Knowles (1984:134) is of the contention that each adult has personally preferred learning techniques for processing information and for learning, as well as personal traits and

levels of ability. Each adult is both similar to and different from every other adult in ways which vary for preferred learning techniques, types and levels of ability. Every group of adult learners therefore will be heterogeneous in nature. Each individual within the group will be a complex mixture of style and ability.

Research by Smith (1982) also indicates that people learn in different ways and have different learning techniques. Smith (1982:47) defines learning techniques as the individuals characteristic way of processing information, feeling and behavior in learning situations. As educators we can provide variety in our teaching strategies, hoping to accommodate a diversity of learning technique preferences as possible.

'There is a difference between the characteristics work, group grading, self evaluation, un-obstructive observation, participation grading and time to reflect. They dislike timed tests, computer assisted instruction and debates.' (McCarthy 1986 cited in Knowles 1994:214) Assimilative learners like comments on paper tests, written tests and essays, multiple choice questions and the collection of data. Convergent learners like field trips, hands on activity and skill orientated evaluation. They dislike memorization, written assignments, group work, grading and peer evaluation. Accommodative learners like interdisciplinary approaches, open-ended questions, assignments and self-discovery projects. They dislike assignments without options, repetition and drills, reflecting and inactivity.

Rogers (1969:23) contends that adults possess set patterns of learning and each learner learns according to particular aptitudes and experience. The pace of learning of each adult also varies. In those instances where they have direct experience with the subject matter, they tend to learn faster. When they have less experience, they tend to learn slowly. There is a wide range of learning strategies within the group and the educator needs to devise techniques to allow each learner an opportunity to exercise his learning strategy. Mersick (1976 cited in Knowles 1984:200) advises that adult educators should not assume that a group of adults of the same gender and age with similar social, economic, occupational and educational characteristics will share common learning techniques or abilities.

Knowles (1984:203) identifies three general types of learning technique preferences:

- Language learners prefer to hear language or see language. They are best at remembering and using information in word forms.
- Numerical learners prefer to hear or see numbers. They are best at remembering and using information in a numerical form.
- Auditory- visual- kinesthetic learners prefer to learn through personal experience and need combined stimuli. They need to manipulate material and be totally involved or they may not be able to keep their minds on the learning tasks.

Davis (1993:213) contends that not only does personal history influence perception, it also influences what people do with new information; how they organize it and how they relate new information to previous information. As teachers we must take into account the personal history of both our participants and ourselves.

Davis (1993:303) explains that differences in learning techniques of adults are difficult to figure out. As adult educators, if we could get a clear description of the processes involved in adult learning, if there were psychological laws governing the learning of adults then it would be relatively easy to design curricula which would produce most effective learning in the least possible time. The only way in which we can study learning is through interpretation and action.

#### 2.8. How does the learning strategy relate to cognitive development.

Piaget (1971 cited in Galbraith 1991:30) claimed after extensive observation and experimentation, that his theory of the structured development of the cognitive capacity of the mind has universal applicability. In other words that all children, because they are human, passed through the three principle stages of development that he defined as: the sensory-motor period from birth to eighteen months; the concrete operational period from eighteen months to eleven years; the formal operational period from eleven years onwards.

Importantly, from the point of view of adult learning, is the claim that all people by late adolescence inherit the same fundamental cognitive structure and capacity. Piaget describes this as the capacity to solve problems in the mind without having to manipulate and carry out concrete experiments to work out the solutions. He called this logicomathematical thought or formal operational thought and saw this as the foundation of all adult thought and learning.

There are great differences between the ways in which different individuals and groups put this capacity to use. The reason why some people learn faster and better than others is they have developed their logic- mathematical thought in more effective and productive ways.

A criticism of Piaget's work is that his observation rests on individual children. What is missing is the family who make up the children's world. The human being is primarily a problem-solver and in particular children are dependent on the assistance of adult caregivers.

Researchers like Arlin (1975 cited in Galbraith 1991:31) began to question Piaget's work concerning the attainment of the formal operations stage. Several researchers including Song (1983 cited in Galbraith 1991:43) discovered that a sizable proportion of their subjects failed to meet formal operations criteria. The implications of this research provide support for the premise that age alone does not guarantee attainment of formal operational stage abilities. Thus educators of adults should be wary of educational practices that are heavily biased towards formal operations.

Thus though it has been shown that the development of formal thought is largely dependent on the influence of secondary and post-secondary institutions, it is not universal. Cognitive development during adulthood must take place in response to some of the following conditions and needs:

- adults must transfer knowledge from one context to another, most often from one training context to another, most often from a training context to an applied practical

context. Transferability involves the recognition of new instances in which knowledge and skills can be applied, a form of contextual intelligence and learning not accounted for in formal operational thinking. (Kolb 1984:74)

- adults are called on to develop specialized knowledge and skills. This specialized knowledge becomes an integral part of one's self and one's personal model of reality.
- adults must be able to identify and formulate problems before solving them or invent questions before answering them. Although these tasks sound simple, many adults, even those in formal education systems cannot do them.
- adult learners must be able to deal with uncertainties and ambiguities. Riegel (1973 cited in Galbraith 1991:16) criticizes the idea that formal operations thinking is the highest stage of formal logic or rational thought.
- most adults work in complex roles and relationships, they must learn to manage the interactions and conflicts among them. Systemic thinking involves cognitive strategies which represent a more advanced stage of cognitive development.
- Adults need to be able to identify, through critical thinking, the assumptions which underlie ideas or systems of ideas (Brookfield 1986:42). Critical thinking calls for the use of cognitive processes allowing one to operate formal thoughts.
- adults need to deal with paradoxical situations. A paradox is when a rule or generalization appears to contradict itself. Post-formal operational thought must allow the adult to develop strategies for dealing with paradox. A paradox can be resolved by moving outside the frame of reference and using new cognitive strategies.
- adult cognitive development involves an expansion of experiential and contextual intelligences by increasing the adults experiential base, expanding the ability to reflect on experience and learn from it.
- adults need assistance in learning skills typifying the post-formal stage of cognitive development. These include: finding and formulating problems; asking questions; recognizing instances in which transfer of skills or knowledge can occur; developing projective images of future possibilities and working towards them; thinking critically; reflecting on action and learning to learn.

Educators of adults have advocated the value of discovering how the student learns most effectively. Keefe (1982 cited in Brookfield 1986:32) defines learning strategies as cognitive, affective and physiological traits that serve as relatively stable indicators of how learners perceive, interact with and respond to the learning environment. Cognitive aspects include such characteristics as perceptual or sensory strengths, perceptual techniques and information processing habits.

Research by Heffer (1986 cited in Brookfield 1986:213) established that cognitive aspects do affect how well adults learn under various circumstances. Affective traits include preference for structure in the learning environment, interaction with teachers as peer learners and approaches to dealing with content as well as subject matter to be studied.

Attempts to match learners with certain learning strategies with teachers of similar characteristics have not always resulted in improved learning. It seems that knowledge of learning characteristics and guidance from an instructional leader can help learners make a more effective approach to learning (Belisle 1987 cited in Seamen 1989:214). Thus assessment of learning techniques can be important to a formative evaluation of a teaching-learning situation.

#### 2.9 Evaluation of teaching strategies.

In accordance with Seamen (1989:124) four major elements of the teacher-learner interaction need to be evaluated, that is, the learner, teacher, content and situation. Evaluation of the learner starts with discussions of the test construction and grading practices. When evaluating teaching, it is productive to look at learning strategies and learner self-evaluation. Observation of learner progress is an integral part of teaching. In accordance with Seamen (1989) learner progress may encourage teachers who pay little attention to the learning events of their students to adopt a more learner-centered approach. Checking on errors of learners can provide feedback on the teaching-learning process. Sharing observation findings with adult learners is another way of perfecting the

techniques. This can help teacher and learner develop their understanding of the learning process. Insight into observational skills can be gained by questions asked by learners.

Scriven (1977 cited in Skager 1977:41) distinguishes between formative and summative evaluation. They have an important influence in the way those responsible for evaluation conceive of their professional roles. Formative evaluation is concerned with the improvement of an ongoing educational activity. It implies direct involvement on the part of the evaluator, it is informal and emphasizes feedback to those who are responsible for developing and implementing teaching strategies.

#### 2.10. The theory of andragogy.

The theory of andragogy is relevant because it informed the study as to how best the teaching and learning of adults can be undertaken.

"The theory of andragogy as advocated by Malcolm Knowles is the art and science of helping adults learn." (Jarvis 2004:126). In this theory there are five assumptions about what constitutes andragogy:

- self concept: ( as a person matures his self-concept moves from one of being a dependent personality towards one of being a self directed human being)
- experience: ( as a person matures he accumulates a growing reservoir of experience that becomes an increasing resource of learning)
- Readiness to learn: (as a person matures his readiness to learn becomes oriented increasingly to the developmental tasks of his social roles)
- Orientation to learning: ( as a person matures his orientation towards learning shifts from one of subject centeredness to one of problem centeredness)
- Motivation to learn: ( as a person matures the motivation to learn is internal)

The first two assumptions suggest, adults are self-directing in heir own growth and development and have accumulated experiences that set them apart from others. Facilitating learning experiences thus requires knowledge of goals and needs of the individuals involved.

The overall goal of education is helping the person to become the best he is able to become. Among adult educators, Knowles is a prominent advocate of this goal of adult education. It is the mission of adult educators, then, to assist adults in developing their full potential. Andragogy, the art and science of helping adults learn is a framework for facilitating this end.

Knowles philosophy of education is characterized as follows:

' by a concern for the development of persons, a deep conviction as to the worth of every individual, and faith that people will make the right decisions for themselves if given the

necessary information and support. It gives precedence to growth of people over the accomplishment of things when these two values are in conflict. It emphasizes the release of human potential over the control of human behavior.' (Boud 1987 cited in Knowles 1984:37).

Knowles sees the focus of adult education as upon individual growth and development. This emphasis strongly influences his view of the nature of the curriculum or content of adult education, the roles of the educator and learner, and the instructional process. The question that underlies content selection is a consideration of the source of knowledge. For those who see the aim of adult education as personal development, the source of knowledge is experience itself. The 'knowledge' one gleans from content depends on one's own experiences, goals, interests, attitudes, and beliefs. Knowles maintains that content itself is unimportant; what is crucial is the "effects upon the learner."

The responsibility for learning is placed on the learner. The learner is free to learn what he or she wants to learn in the manner desired. The role of the educator is that of facilitator, helper, and partner in the learning process. The educator not only provides information, he must create the conditions within which learning can take place. Knowles proposes andragogy, a technology of learning especially suited to adults in which the educator is facilitator who aids adults in becoming self-directed learners. The educator serves as a resource person by encouraging learners to set their own goals.

While group activity is the teaching strategy favored in bringing about individual growth, Rogers specifies several other methods of instruction. He advocates student contracts, simulation games, and even programmed instruction, especially that which addresses affective as well as cognitive dimensions.

Andragogy happens to have a strong relationship with the modern curriculum framework in South Africa referred to as outcomes based education. In outcomes based education, the responsibility for learning is placed on the learner. The learner progresses to learn at his own pace. The educator is the facilitator of this learning and helps the leaner to

achieve the prescribed outcomes. Andragogy is similar to outcomes based education in that the learner is also responsible for his own learning. The aim of outcomes based education is to transform learners into critical thinkers and self-directed learners. The aim of andragogy is to transform adults into self-directed learners. This curriculum framework is widely accepted as an answer to problems associated with traditional didactics of a teacher as authority not facilitator of learning. Outcomes based education recognizes the importance of learners, so does andragogy where adults have to be respected for their maturity and responsibility to make decisions on what they learn. In outcomes based education, learners are responsible for their learning, "andragogy leans heavily towards learner freedom (versus teacher authority), promoting self-direction and personal autonomy." (Pratt in Merriam 1978:22).

#### 2.10.1 Learner centered teaching

Knowles (1984 cited in Jarvis 2004:128) has written about the principles of andragogy that when incorporated into a teaching approach for adults is likely to enhance learning. Adult learning is enhanced when:

- learner's perceive that the learning process and outcomes are relevant to their own purposes.
- there in a group setting which allows for the inter-play of ideas and hence the potential for 'building' on the combined resources of the group.
- learning is viewed as an evolutionary process that requires time and patience, and
  where one accepts that goals and directions that emerge may change as people
  become clearer about what it is they want to learn.
- learners are treated as self-directing, responsible people who are encouraged to
  take an active role in decision making, planning and implementation of learning
  activities. Such an approach assumes that adults have a rich accumulation of
  experiences which can be tapped in the learning process.
- learners are encouraged to trust themselves, to draw from their experience as a source of knowledge and to integrate their personal meanings with external knowledge.

- the learning climate fosters self-esteem, interdependence, freedom of expression,
   acceptance of differences and freedom to make mistakes.
- evaluation of learning includes self-evaluation,
   that is, the learner's assessment of what he or she has learned and feedback from others.
- people are encouraged to be active and to learn through doing, particularly when emphasis is placed on reflecting on the meaning of what people have experienced.
- it is recognized that some learning cannot be predicted or planned. Some goals, therefore, may initially be ambiguous.
- learners discover their preferred learning techniques. As people become more
  aware of how they learn and become exposed to other ways of learning they can
  redefine and modify their own techniques and seek ways of becoming more
  competent and responsible learners.

To apply these assumptions about conditions that enhance learning to a teaching model, facilitators might find it useful to structure their activities around five key concepts. These concepts include the use of an emergent design, the development of a supportive climate, the definition of the meaning of 'content' and the encouragement of reflection and critical self-assessment.

#### 2.10.2 Emergent design

In order to enhance relevance and make use of the experiences of the learners, it is important to relate new knowledge to their existing knowledge. Learners should be encouraged to participate in the design of activities to help meet their learning needs. The course content should be determined after a needs assessment survey. They should be assisted in determining their own needs and goals.

#### 2.10.3 Interdependence

The opportunity to learn from peers is central to a learner-centered approach. The generative capacity of the group is likely to exceed the creative capacities of individuals. Much effort is directed towards building group cohesiveness. In a climate of trust and

mutuality, learners try out new ideas and behaviors. They have access to feedback and to learn from the differing viewpoints of others.

#### 2.10.4 Developing a supportive climate

Climate setting is important because of the emphasis on class participation. Techniques must be developed to promote trust, respect and caring among group members, and sufficient class time allocated for activities that build supportive relationships. The facilitator seeks to model respect, caring, self-disclosure and openness to feedback in his or her interactions with the learners. A tone of informality should permeate through the physical settings and the educator's manner and approach to the learners.

#### 2.10.5 Defining content

Expanding learner's views of what constitutes course content and knowledge is the key to the use of the learner-centered approach. To help learners respect their own experience as a source of knowledge, facilitators suggest learning strategies, for example, laboratory learning, experiential learning and field experiences that encourage learners to engage in activities that generate experiences about which they can then reflect and conceptualize. Learners use these ideas in combination with other sources of existing knowledge about particular concepts to 'learn' the course content.

#### 2.10.6 Reflection and critical self-assessment

The crucial element in the discovery of personal meaning is reflection. Reflection implies a consideration of experience and ideas. It can occur passively by allowing things to surface or it can be structured by using discussions with others, journals, self-assessment exercises or reading or a combination of these activities. Learners are encouraged to sort through their experiences and ideas and to develop frameworks for organizing and labeling them. They are encouraged to assess the extent to which their own frameworks could be generalized by discussing them with others, by further reading, by writing and by testing out their practical implications.

#### 2.10.7 Commentary and Critical Evaluation

The theory of andragogy as proposed by Knowles (1980) distinguishes the field from other areas of education, especially childhood schooling. Andragogy became a rallying point for those trying to define the field of education as separate from other areas of education. It stimulated controversy, debate and critical analysis.

Hartree (1984, cited in Merriam 1978:273) was not clear whether Knowles had presented a theory of learning or a theory of teaching, whether adult learning was different from child learning. Hartree (1984) is of the opinion that Knowles does not establish a unified theory of learning in a systematic way.

Brookfield (1986) argues that three Knowle's assumptions are problematic when drawing inferences for practice. Self-direction is more a desired outcome than a given condition, and being problem centered and desiring immediate application can lead to a narrow, reductionist view of learning. Brookfield finds only the experience assumption to be well grounded.

More recent critiques have pointed out that in its focus on the individual learner, the socio-historical context in which learning takes place is virtually ignored. There is no awareness that the person is socially situated and to some extent the product of the socio-historical and cultural context of the times; nor is there any awareness that social institutions and structures may be defining the learning transaction irrespective of the individual participant.

A few studies have focused on the relationship between andragogical assumptions and instruction. Beder and Darkenwald (1982 cited in Merriam 1978:276) asked teachers who taught both adults and pre-adults if their teaching behavior differed according to the age of the students. Teachers reported viewing adult students differently and using more andragogical techniques. Gordham (1995 cited in Merriam 1978:276) found no differences in how a particular teacher instructed adults or pre-adults, although teachers claimed that they did treat the two groups differently.

Despite these differences in opinion, practitioners who work with adult learners, continue to find Knowles's andragogy, to be helpful for better understanding adults as learners. The implications for practice that Knowles draws for each of the assumptions are also considered to be good instructional practice for all ages, especially adults. Thus, we see andragogy as an enduring model for understanding certain aspects of adult learning.

## 2.11 Teaching methods.

Learner's incentives to learn are influenced to a large extent by the educators teaching methods. Even if one learner does not learn what we believe we have taught, then we have not learned how to teach that learner. The responsibility rests, ethically and pragmatically, on the shoulders of the educators. This implies that learning requires both desire and effort. Teachers cannot make learners learn but can create conditions to promote learning by judiciously selecting appropriate strategies. The three broad categories of teaching methods will be explained, namely, mass instruction, individualized instruction and group instruction.

When selecting instructional methods, one has to determine whether one aims to get across information or knowledge; develop a skill or performance; change attitudes or values or combine all of the aspects above. The next step is to determine what kind or level of knowledge, skill or attitude must be learned. The educator must then decide whether exposition or discovery methods are most suitable. Other constraints such as target population, group size, time, resources, expectations and norms must be considered.

# 2.11.1 MASS INSTRUCTION

Mass instruction is also known as whole-class instruction. This strategy involves imparting knowledge to the learners, directly by the educator or by means of educational media. The teacher assumes the dominant role in this teaching strategy. The learners are passive and the rate of learning is determined by the educator. Within the context of mass instruction a number of teaching methods are utilized, some of which are discussed below.

# 2.11.1.1 The lecture method

## 2.11.1.2 Presentation

Formal lectures usually take the form of one-way communication initiated by the educator. The educator talks to the group of learners for the duration of the lesson. A lecture is commonly used to explain a problem, describe a process or introduce a topic to a group of learners. This method is useful when a lot of information has to be presented for examination purposes.

# 2.11.1.3 Advantages

According to Bligh (1971, cited in Jarvis 2004:160), lectures are efficient for passing on factual information and simple conceptual learning. According to Beard (1976, cited in Jarvis 2004:161), they are economical in terms of staff use and time. Facts and ideas are presented rapidly.

# 2.11.1.4 Limitations

The problems that the lecturer or educator is faced with is adjusting to individual speeds of comprehension, preparing for unknown audiences and maintaining attention and interest where there is little learner participation or activity to maintain such interest.

Because of the one-way communication, formal lectures make it difficult for the learners to give feedback to the lecturer and hence, there is little direct check on what learning is taking place. One of the strongest criticisms of this method is the fact that it makes learners passive. There is little opportunity for feedback or further exploration.

Furthermore, it is argued that learners may have a short attention span and cannot focus

is the most ineffective method of learning. It calls for advanced learning skills on the part of the listener. It involves concentration over time, adaptation of the learning images and the use of trial and error learning. It is not possible to cater for all the learning needs of the learners using this method.

On occasion, a lecture does have value when summing up of previous discussions or when introducing an overview of a new area of study. According to Davies (1972 cited in Rogers 1996:140) adults prefer the lecture method because they do not want to reveal their level of knowledge or understanding of the topic and feel threatened if their lack of comprehension will become apparent. Beard (1976 cited in Jarvis 2004:161) asserts that the syllabus may be covered quickly by this method but it is difficult to ensure that learning actually occurs during presentation.

## 2.11.1.2 Socratic Method

# 2.11.1.2.1 Presentation

This method consists of the teacher directing a logical sequence of questions at the learners, so that they are enabled to respond and to express the knowledge that they have. The questions are aimed at encouraging learners to think.

In accordance with Pitout, Smith and Windell (1992:41), the questions must range from basic, easy questions to more difficult questions and should gradually lead the learners to greater understanding of the learning content.

The Socratic method involves much more than the use of questions in teaching. It consists of four steps, namely:

- asking the learner to make an initial proposition in response to the teachers questions.
- using a series of probing questions to challenge the learners thinking and cause perplexity.
- getting the learners to admit that he does not know whether the initial proposition

is true, and finally,

- getting the learner to formulate a correct response. (Hyman 1974:131)

According to Hyman (1974), the method demands relatively long interchanges between learner and educator. The learner cannot be led to an evaluative or definitional inconsistency in one or two statements.

#### 2.11.1.2.2 Limitations

In the classroom situation, this method may generate boredom in the majority of learners since they are not directly involved. This problem can be overcome by involving the whole class in the questioning. Clark and Starr (1991:25), contend that this method has shortcomings when the questions are spread around the classroom, it may be difficult to build up the desired sequence.

The Socratic is a demanding teaching method. The educator needs to be thoroughly prepared. Learners may experience discomfort as a result of the questioning. Educators could assist by maintaining a friendly and supportive environment and not humiliating or discouraging learners.

#### 2.11.1.2.5. <u>Advantages</u>

This it is a useful method to employ especially in teaching adults since it utilizes both their store of knowledge and their experience of life. If used with skill, this method does 'create' knowledge. Another advantage is that learners are always actively involved in the learning process.

## 2.11.1.3 **Demonstration**

#### 2.11.1.3.1 Presentation

The demonstration is one of the most frequently used approaches to skills teaching. The teacher shows the learners how a specific procedure is undertaken. This is a teacher-centered method with some learner participation. Effective demonstrations should be

rehearsed. This is so because educators may not have analyzed their own techniques sufficiently in order to be aware of all the correct procedures to produce effortless action.

Learners should practice immediately after the demonstration and they should be encouraged to ask and answer questions. Belbin and Belbin (1972 cited in Jarvis 2004:157), suggest that if the skill is broken down into a number of discrete stages and that the demonstration is performed slowly in subsequent training sessions. It is possible for learners to acquire skills rapidly.

## 2.1.1.3.2 Advantages

A demonstration can save time and talk and can be used with a variety of group sizes. It is easier to witness a demonstration than to listen to a talk. Explanations are clear during a demonstration. Polanyi (1967 cited in Jarvis 2004:157) contends that educators have tacit knowledge which they cannot articulate. Practical knowledge is complex and it can be mimed out using the demonstration method.

## 2.11.1.4 Forum

#### 2.11.1.4.1 Definition

The forum is defined as a "a form of public discussion in which participants seek to explore a problem by means of questions, answers and brief statements under the guidance of a skilled facilitator." (Wager and Arnold 1965, cited in Seamen 1989:140). A forum is a lecture followed by an open discussion.

# 2.11.1.4.2. Presentation

The forum encourages a two-way communication. A forum begins with an orientation to the topic and procedures. Participants should be encouraged to think deeply about the problem to be discussed. Participants should know the objective of the forum and the rules for discussion should be outlined. The purpose is to reach a group goal rather than satisfy individual needs. The main activity is a speaker-listener exchange. At the close of the lecture, the participants direct questions to the speaker. The objective of this questioning period is for clarification and understanding.

The traditional method of opening the floor to questions without preparation is unsatisfactory. The learners should be briefed before the lecture on the kinds of questions they might keep in mind, even perhaps supply them with a few sample questions. An outline could be prepared by the speaker of important aspects of the lecture. The lecturer could pause at appropriate parts of the lecture in order to give the participants an opportunity to reflect and note down any questions they wish to ask. It is useful to have a system prepared for referring difficult questions to an appropriate resource person.

# 2.11.1.5 Advantages

Advocates of the forum site social and educational advantages of these methods. John Studebaker (1935 cited in Galbraith 1991:283) argued that the forum is a means whereby one can redevelop the ability to discharge ones responsibilities as citizens of a democracy, to learn while molding the new economic order. Bryson (1935 cited in Galbraith 1991:284), saw the forum as a method of dealing with controversial questions in politics, economics and public affairs. The strength of the forum is it allows all group members to be actively involved in the learning situation. The format provides formative feedback allowing all participants to recognize how they are communicating to others and what concerns are affecting the interaction. It allows participants to apply information to their own situations and let others know their opinions on common concerns.

#### 2.11.1.6 Limitations

The limitation is that some comments that are relevant to individuals will be irrelevant to the majority. Secondly, in spite of the intended procedure intended to encourage participation by all, a few can dominate a forum.

#### 2.11.2 INDIVIDUALIZED INSTRUCTION

The characteristic feature of this teaching strategy is the learner-centered nature of the approach in which the learners work at their own rates. The strategy is designed to cope with the needs of individual learners, their learning techniques and pace of learning. The educator acts as a guide. Learners on the other hand accept responsibility for their own

learning. The methods include assignments, computer assisted learning, learning contracts, experiential learning, practical, self-directed learning and projects. Some of these methods will be discussed below:

## 2.11.2.1 **Projects**

# 2.11.2.1.1 Presentation

Projects are appropriate for individual and group teaching. If a group project is set, account must be taken of each learner's social skills. Walklin (1991:58) contends that when a group leader is appointed, it should be borne in mind that successful leaders are more intelligent than other group members and self-confident extroverts. They have a high rate of participation in group discussion, to integrate group activity and to be task orientated. In the event of a snag, they suggest group co-operation and consensus. The procedure is the same whether the project is assigned to individual learners or a group of learners. Educators need to exercise greater circumspection in guiding individual learners in the selection of projects.

## 2.11.1.2 Advantages

The learner's task is to locate and organize the learning resources he requires. The individual project allows for variations in individual tasks and is flexible in timetabling and in the curriculum. This method trains learners in independent study and the use of their judgment. Feedback is individual and occurs after completion of the project. This method enables the learner to follow the sequence of the learning cycle; engaging them in an analytical approach to the problem; discussing the title and collecting data.

Learner's behavior has been grouped by Bloom (1956 cited in Walklin 1990:58) into cognitive, affective and psychomotor. The teacher can develop each of these abilities by means of project work. Projects can be set either as an individual task or a small group undertaking. The cognitive domain will embrace such processes as identifying key factors inherent in the problem, seeking information relevant to the problem and finding a solution to the problem. This domain also includes the ability to plan and implement a scheme of work and the ability to communicate the contents to other group members.

The affective domain provides for the development of latent aptitudes such as perseverance, leadership and creativity and the ability to provide teamwork spirit. The psychomotor domain includes design work and practical work involved in working on assembling project components.

# 2.11.2.2 Assignments

#### 2.11.2.2.1 Presentation

Assignments consist of writing an essay, a case study or a research project. An assignment may have a more practical application. Students may be asked to produce a teaching aid or some piece of equipment relevant to their course.

# 2.11.2.2.2 Advantages

An advantage in producing media is that adults bring to their learning their own interests and skills, these may be used to the benefit of the learning process. There are many skills involved in assignment writing. Learners are engaged in an analytical approach to the problem; they collect data to construct an argument in response to the analysis; they plan a structure in which they reveal the results of their reflections and evaluations of the data collected; reaching conclusions and testing them against wider reality. The preparation of the written assignment is a method of learning and setting assignments is a technique of facilitating that learning.

The advantage of the educator setting the assignment is that they ensure that the questions cover the whole course and the standard of the questions asked is similar. The assignment constitutes a medium through which teachers and learners engage in dialogue.

Feedback is an important component of assignment writing. Tutors may use the Socratic technique of assessment whereby the strengths and weaknesses are highlighted by means of questions. Learners are enabled to reflect upon their own writing and reach conclusions of their own. This may be more beneficial to their self-image and self-

esteem. The questions facilitate a continuous process of learning, didactic comments inhabit the learners from continuing to pursue ideas in the assignments they have written. According to Jarvis (2004:180) the didactic method should play a less significant role in assessing assignments. The tick or cross is less useful and only serves as agreement or disagreement on the part of the tutors. Jarvis (2004:178) explains that assessment of assignments is a subjective process affected by handwriting, length and writing style. The other variable is that tutors may not be competent in assessing assignments.

## 2.11.2.3 Learning contracts

#### 2.11.2.3.1 Definition

A learning contract is an agreement between the learners and the tutor. This contract covers a range of areas. A contract consists of five sections. According to Lindquist (1975 cited in Galbraith 1991:135) these include the learning objectives; learning resources and strategies; target date for completion; evidence of accomplishment and evaluation of the learning.

#### 2.11.2.3.2 Presentation

This is a useful method of teaching but can become time consuming if the classes are large. The contract may be a written one or an informal agreement. If the contract cannot be kept, then it is the responsibility of the parties concerned to re-negotiate the contract.

Knowles (1986 cited in Jarvis 2004:180) supported this method because it enables adults to become self-directing in their learning. Knowles (1980) has outlined four basic assumptions underlying the use of learning contracts about the adult learner. These include:

- Their self concept moves from being dependent to being an independent selfdirected human being.
- They accumulate a growing reservoir of experience that can be used as a resource for learning.
- Their readiness to learn is linked with the developmental tasks of their life roles.

Their time perspective towards learning shifts from postponed to immediate application and from subject centeredness to performance based.
 (Knowles 1980: 44)

This method recognizes learning as an individual process and learners have different experiences and motivations. Classroom teaching is not always an effective individualized process.

# 2.11.2.3.3 Advantages

A learning contract according to Smith (1982 cited in Galbraith 1991:139) is a means whereby adults can individualize their learning, and reconcile their own individual initiative and commitment with the expectations of the school, employers and supervisors.

The flexibility of the approach makes it suitable for many learning experiences. The learner is in control of the learning process. Learning contracts allows the development of instructional design skills by the learner.

# 2.11.2.4 Self-directed learning

According to Heimstra (1991 cited in Jarvis 2004:184) self directed learning might be regarded as a teaching technique and a development from andragogy. Knowles (1991 cited in Jarvis 2004:184) 'regarded self-directed learning as one of the manifestations of andragogy and a vital element in the understanding of self-directed learning.' This underlies the idea that the individual is an autonomous learner.

Candy (1991 cited in Jarvis 2004:184) has argued that" however free the leaner appears to be within the framework of an educational institution, there is still a residue of teacher influence so he distinguishes between autodidaxy and self-directed learning." Candy (1991 cited in Jarvis 2004:184) regarded autodidaxy as self-directed learning outside the educational institution in which the learner's autonomy is retained. The following are some of the characteristics of autodidaxy:

\_ the leaner conceives goals and policies independent of pressure from others;

- the learner exercises freedom of choice and action;
- the learner reflects rationally;
- and the learner has self mastery.

Candy recognized the threat of individual autonomy. It is only with distance education that the learner is free and autonomous. But distance learning institutions are very centralized and there in no genuine learner autonomy in this form of education either. The learner is not free and autonomous since the curriculum is structured by the institution.

According to Rogers (1996) some learning episodes are aimed at a solution of a particular problem. Even if the learning is part of a long-term and developing interest, the individual self-directed learning is directed towards a particular goal to be achieved. The learners' do not start with the simple and move to the more difficult. They tackle the problem at the level at which it occurs in their lives. Such episodes are aimed at immediate rather than future application. Few attempts are made by the learner to draw general conclusions from the particular instance being learned. Once the situation has been resolved, the learner brings the process of investigation to a close.

# 2.11.3. GROUP INSTRUCTION

The term group instruction as applied to classroom practice refers to the use of the grouping of learners for educational purposes. The characteristic feature of this teaching strategy is that learners not only sit in groups but also work in groups. This leads to interactions and interdependence among learners and provides opportunities for cooperation. As in the case of individualized instruction, instructional media are used for instruction.

# 2.11.3.1 Brainstorming

#### 2.11.3.1.1 Definition

Bergevin (1963 cited in Jarvis 2004:166) defines brainstorming as an intensive discussion in which the quality of ideas produced have the potential to solve the problem. This method is ideal for groups which wish to collectively generate ideas or solve a problem.

Davies (1971 cited in Jarvis 2004:166) contends that good quality ideas are produced. The construction of a list of ideas and possible solutions may be seen as an initial stage in the process.

### 2.11.3.1.2 Presentation

In a brainstorming session, all members of the group offer their ideas on a particular issue or problem. The facilitator should set a climate that will encourage the generation and expression of ideas. The facilitator tries to maintain a constant flow of ideas. There are three rules for brainstorming: all suggestions are accepted; no criticism of any suggestion is allowed and everyone must share any idea that even seems remotely appropriate. The ultimate goal is for the group to interact and produce the largest possible pool of ideas related to the topic. Capturing all ideas is a problem. The use of two or three recorders with a chalkboard or flip-chart can help. The tape recording of the session may be appropriate.

At the end of the session, all the ideas are analyzed. The next phase is that of processing the ideas and reflecting on their appropriateness for the particular issue or problem. If some consolidation and ranking of suggestions is desired; a modified Delphi technique could be used. In the Delphi technique, the ideas generated during the brainstorming session are analyzed in small groups. This generates further discussion. Each participant indicates the ideas that they consider most important. Feedback and discussion is allowed. Small groups may be assigned one or more of the ideas for analysis.

# 2.11.3.1.3 <u>Advantages</u>

The strength of this method is that it encourages all members of the group to offer their ideas. The construction of a list of ideas, or possible solutions may be seen as the initial stage in the facilitative learning and teaching cycle. According to Davies (1971 cited in Davies 2004:166) this method is an aid to creative thinking and decision making. The interaction in this method elicits new ideas. This is a strategy for getting many ideas out before a group. It encourages participants to think beyond their traditional approaches to solving problems.

Well run brainstorming sessions draw out ideas too divergent to be suggested through other techniques. Brainstorming relies on ideas suggested by individuals to stimulate thinking by other group members.

#### 2.11.3.1.4 Limitations

There is no quality control as the ideas produced are undirected. The experiences and motivation of the individual group will affect the number and type of ideas generated. Because of the emphasis on creative explorations; many ideas may not be useful, only later discussion and analysis can determine the feasibility of the ideas. Members of the group can dominate the process by their suggestion on the first few ideas which can set a direction for thinking. There is no guarantee with this method that all relevant ideas will be mentioned or that creative ideas will be suggested. There is little evidence to suggest that the quality of ideas produced by brainstorming is superior to those made by individuals working on their own. There is substantial empirical evidence that brainstorming is a very poor way of generating ideas. Its value is in gaining participation and not in generating innovative ideas.

#### 2.11.3.2 Group discussion

## 2.11.3.2.1 Definition

The use of group discussion implies activities in the educator and learners work cooperatively to consider, examine or investigate the various sides of a question, topic or problem. According to Curzon (1990:14) this method assumes a willingness by learners to share ideas in a classroom which is less teacher centered than when the lecture method is used.

# 2.11.3.2.2 Presentation

Discussions can begin by the presentation of facts, problems or demonstrations; a description of a situation or an explanation of an event, either by the educator or learners. Bergevin (1963 cited in Jarvis 2004:168) is of the opinion that a good discussion topic should meet four criteria, "it must: interest all group members; be possible for

participants to acquire sufficient information to discuss it meaningfully; be clearly worded and understood and alternative points of view should be suggested." Adult learners may opt out of the discussion if it is not interesting and of relevance to them. To initiate a discussion, a teacher should ask 'how' and 'why' question, relevant to the topic under discussion. (Clark and Starr 1991:261). The seating arrangement of learners also contributes to the exchange of ideas during a discussion. A discussion has a better chance of being successful if learners sit in a face-to-face arrangement rather than face-to-back arrangement as in a traditional classroom.

The quality of the discussion depends on the skill of the educator in initiating and guiding it. Progress is assured if the teacher creates a supportive atmosphere in which all learners feel free to think and interact with the educator without 'fear of embarrassment'. (Clark and Starr, 1991:262)

# 2.11.3.2.3 Role of the educator

The educator should create a relaxed atmosphere. The ease of conversation is reduced by lack of tension, feelings of inequality, doubts and resentments. The setting should be one that allows people to be at ease. The educator should become sensitive to the views and circumstances of each member. A practical measure is to provide opportunities for introductions and contact between class members. The problem facing all class leaders is the tenancy to make him the central figure, the dominant figure through which questions are directed and from whom every alternate contribution is expected.

## 2.11.3.2.4 Advantages

A discussion is useful since it promotes understanding, independent thinking and an assimilation and retention of material. This is due to the opportunity afforded to develop and establish concepts instead of simply receiving and accepting ideas and facts transmitted by the teacher. (Hyman 1974:77). The face-to-face interaction helps build interpersonal relationships. It enhances learner involvement and improves communication skills. The problem-centered discussion is one in which the group has a task to perform, which may be set by the tutor. The outcome of this approach is that it

enhances analytical thinking; the ability to make decisions and to evaluate them. The discussion method encourages learners to accept responsibility for their own learning; it assists learners to develop a sense of teamwork.

One of the merits of discussion is the fact that people already possess information, feelings, interests and beliefs which influence the learning process. Its importance lies in the way it impels learners to participate instead of being passive learners.

In a discussion, learners react more fully to the subject matter confronting them, they have to think and formulate views about it. Most human beings learn better in social contexts than as isolated persons. The learning is mutually reinforced. With the discussion method, the educator can obtain a much closer knowledge of his learners and their problems. Distortions can be corrected, he can gain feedback which will help in the planning of his class program.

#### 2.11.3.2.5 Limitation

Legge (1971, cited in Jarvis 2004:168) is of the opinion that the only weakness that may arise from the discussion method is the failure of the educator to use the method with skill. Learners sometimes have no previous knowledge of the subject matter. If the class is inarticulate with little oral expression, discussion may be dreary. In general discussion tends to be time consuming and slow in achieving educational objectives.

Another weakness is the ease of verbal exchange of facts is unlikely the best way of learning practical activities. Few will find discussion useful for learning crafts, cooking or driving. Discussion is suited to subjects concerned with controversial issues. Most of the weaknesses result from the failure of the educator to use the method with skill.

#### 2.11.3.2.6 Conclusion

In conclusion, the discussion method has become a popular teaching method. All discussions should conclude in a final summary. Learners may serve a helpful role of keeping a record of the discussion as it progresses and in drawing up the final summary.

#### 2.11.3.3. Co-operative learning groups

### 2.11.3.3.1 Definition

Slavin (1995:46) states that co-operative learning refers to a variety of teaching methods in which learners work in small groups to learn academic content. Learners are expected to help each other and to discuss and argue with each other. The identifying characteristic of this teaching method is positive interdependence and learners rely on each other in pursuit of a common goal. Interaction is promoted. Group members accept responsibility to complete assignments, fulfill instructional objectives and ensure that all other group members complete their learning tasks. Although group members may engage in different roles, the contribution of every member is essential to ensure a common group achievement.

## 2.11.3.3.2 Advantages

This method promotes interaction. Learners participate in frequent face-to-face interactions used to encourage and support team members. Learners are also able to analyze and clarify concepts and provide feedback to others. Interpersonal and small-group skills are encouraged. Learners placed in groups can only collaborate if the task demands consensual learning and unifies the group activity. Educators need to teach and ensure that learners learn teamwork skills to help them co-ordinate their efforts and achieve common goals. It is important for members to establish and maintain good working relationships; trust one another; communicate clearly; resolves conflict and encourage and support peer participation and respect differences of opinions.

Group processing is a reflection on a group session to describe what actions are helpful and unhelpful and make decisions to continue change. (Johnson and Johnson, 1994:34). The purpose is to evaluate teamwork with a view to improving outcomes. Groups that excel in subject-matter mastery and work co-operatively are identified and celebrated.

#### 2.11.3.4 Role playing

#### 2.11.3.4.1 <u>Definition</u>

Role play is similar to socio-drama, it has educational aims. It can be employed when tutors wish learners to experience something about which they are cognitively aware. It should be used naturally and students should feel that what they are doing fits naturally into a planned learning experience. Rogers and Lovell (1973 cited in Jarvis 2004:172) state that it makes for a smooth, easy introduction to the technique, if at first role playing is enacted by the educator. Usually role playing is a brief episode acted from one's life or from the role for which an individual is being prepared.

# 2.11.3.4.2 Methods of role play

There are three common patterns in role play. In a single role play the majority of learners observe whilst the play is enacted. This is a characteristic of socio-drama aimed at forming attitudes and values. In multiple role play, learners are divided in groups. Each group enacts the play so that all learners are participants in one role or another. The key role is taken by all learners in turn. Leaning occurs through performing, observing and comparing performances.

The purpose of role play is not to solve problems but to provide data for group discussion or identification of behavior. The aim of role play is not to develop expertise in acting, as many learners as possible should be given a chance to go through a role play.

The educator has to explain the roles at the beginning of the exercise and the objectives. The educator should set the right climate for the role play. There are three orientation processes important to the role playing strategy. Besides setting the climate, trust should be established among group members. The participant should be orientated to the specific role play being used. This includes clarifying the learning objectives; defining the characters involved and setting the scene in which the action is to take place. Role play should be followed by discussion and provide reinforcement to the experiences gained. The participants should be taken out of their roles at the conclusion of the session.

# 2.11.3.4.3 Value of role play

Stock (1971 cited in Jarvis 2004:173) contend that role play encourages active participation and enables problems of human behavior and relationships to be presented. Rogers and Lovell (1973 cited in Jarvis 2004:172) also indicate that learners of any ability can be involved. This helps break down social barriers, motivates learners to learn and it may be therapeutic. Many learners feel reluctant to participate. It is useful for the educator to leave them to respond in some other way.

In accordance with Callahan and Clark (1988:142) role play is used to clarify attributes and concepts; demonstrate attitudes; deepen understanding of social situations and plan and try out strategies for solving problems. Role play is useful for developing and improving interpersonal skills in learners. Learners should have some choice in how much to participate. They can decide to volunteer or be part of a group large enough to reduce the pressure on any one individual.

Role play is used for social and human relations education. The purpose of role play is to place learners in a simulated relationship with a view to widening their understanding of a particular problem or situation or changing their attitudes or practical skills.

Role play encourages active participation and focuses attention on specific, concrete application of the concepts or skills under consideration. It is a flexible method and can be redirected even during the actual conducting of the role play.

The learner's interactive skills are developed. Learners may participate as role players or observers, depending on the objectives of the role play. Learning by imitation is promoted whereby the observers identify with the actors and the way they behave. During the briefing session, observers comment on the performance of role players. Learners develop skills of analysis and evaluation. Their skills are perfected by repeating the role play and during debriefing sessions.

Role play is conducive to demonstrating principles that may be abstract or upon which a group has difficulty concentrating. Thus it can provide common experience important to collaborative efforts to analyze a situation.

### 2.11.3.4.4 Limitations

In terms of limitations, not all content and certainly not all levels of cognitive objectives are suited to role play. The main challenge to facilitators of role play activities is to guard against stereotyping of roles and consequent generation of stereotypic answers to problems.

Concerns about adverse emotional impact upon participants have led to many published warnings about potential hazards of role play with adults and have resulted in the reluctance on the part of some teachers to use the strategy.

#### 2.11.3.4.5 Conclusion

There are difficulties, in some instances in relating role play to reality. Role play cannot be predicted precisely so learning outcomes may vary.

# 2.11.3.5 Case Study

## 2.11.3.5.1 Definition

A case study is an in-depth study of a problem or situation. The case study method refers to a method of instruction based on real life examples. The case may be real or simplified and presented to the group in order to arrive at a solution. When simplifying the case, one should not lose the realism of the case.

#### 2.11.3.5.2 Case study methods

The case study method has been adapted in many different ways to the needs that are not shared by its original designers. Variations include changing the method of presentation, using abbreviated cases. Learners receive a written statement of the class session. The educator spends an hour presenting the case and answering questions. Learners meet in small groups to discuss the situation. Each learner writes an analysis of the problem and

suggests a solution. The educator collects the reports and presents a historical solution to the problem. A general discussion is then held in order comment on the learners' solutions.

A variation of this method is a technological presentation. A case is presented in a audiovisual package. The second stage is a group discussion in which learners identify the problem and relate them to their own life experience. In the third stage, learners investigate the problem and make some decision relevant to their experience of it. In the final application action is taken to carry out the decisions. Sample learning activities include a personal inventory, role play, surveys, job interviews and action plans.

# 2.11.3.5.3 The role of the educator

The educator has the role of presenting the basic case description and some of the data. The educator may withhold data until the learners discover the need and request the information. Though the educator may intervene to review progress, questioning the approach of learners, he should not suggest an approach or actually solve the case. The educator acts as a referee, rather than an instructor.

# 2.11.3.5.4 Value of the case study method

Case studies contribute to a reader's understanding of complex social situations by discussing and providing insights into the problem under study. According to Merriam (1988:48) a case study can bring about the discovery of new meaning, extend the reader's experience or confirm what is known. Case studies can evaluate the worth of a project, establish the reasons for success or failure and discuss, summarize and document the complexities of a problem. Decision making skills are fostered.

The group process method required in a case study analysis is important as these skills are critical to success in real life. Munoz (1981 cited in Galbraith 1991:243) highlights the importance of social skills in the case study method. Wales and Stager (1978 cited in Galbraith 1991:243) developed a guided design approach which outlines the steps within

each phase of the group work to reward cooperation, develop collaborative skills and help the group during each step of the process.

#### 2.11.3.6 Fish bowl

### 2.11.3.6.1 Definition

The fishbowl method involves group members in observation of one another. It derives its name from the analogy of people observing the activities of fish within the controlled environment of an aquarium or bowl.

## 2.11.3.6.2 Presentation

The format for this method is to have a group of learners in the centre debating and discussing an issue. Another group of learners sit around them on the outside. The outer group, observe the debate and provide feedback during the plenary discussion. A variation of this method is to allow members of the outer circle to become part of the discussion. They tap the shoulder of a fellow learners' and exchange places. This is a useful variation and allows learners to participate and follow the debate. It is useful to place a time limit. Learners discuss some insights gained from observing and interaction. It is possible for educators to join the discussion if necessary.

The observers may be assigned to watch for a certain type of behavior, to listen for a specific type of content, or observe certain group members. The observers will provide feedback to the group after their activity. The feedback can relate to physical behavior or communication of patterns to the quality of ideas expressed.

The facilitator must be clear about the purpose of the fishbowl. If communication patterns of individuals are to be observed, the active group must be put through an exercise that encourages a variety of communication exchanges by each member. Observers must be given specific individuals or patterns to observe and be told what to look for.

#### 2.11.3.6.3 Advantages

The major purpose of the fishbowl is to provide feedback concerning the processes that go on within a learning activity. Regardless of the number of active participants, the strategy fosters group discussion and interaction in the evaluation of the activity.

# 2.12. Conclusion

A review of current literature on teaching strategies reveals that much research has been compiled on the topic. In order to assist the educator in his choice of teaching strategies, the educator needs to understand the learner's learning needs, his motives for learning and how the process of learning unfolds itself.

Most educators underestimate the number of different teaching strategies available to choose from. Research by Rogers (1996) suggest that when teachers feel unsure of themselves, threatened by inexperience, by new materials, by lack of time or self-doubt, they frequently revert to those strategies they were taught. Educators should identify different methods, experiment with them and select those that seek to suite them and the learners. They need to practice until they can use them effectively. They can try out unfamiliar methods. Educators can learn more while they are teaching.

Considering the range of available teaching strategies, adult educators should constantly review their planning and preparation in order to ensure a high degree of compatibility between content needs and teaching techniques, particularly as the level of content rises. Educators should be sensitive to the fact that as the content level changes, appropriate adjustments in teaching strategies are necessary. Feedback from learners could be helpful in determining a need for change in teaching strategy. Trying our new teaching strategies may stimulate the learners and also the educator.

The teaching strategy must take into account the expressed needs of the learners; the character and strength of motivation in relation to varying degrees of individual capacity; the extent and nature of previous education and the practical possibilities of time and place.

# CHAPTER THREE

# **METHODOLOGY**

## 3.1 Introduction

There are many different definitions of research but all have one idea in common, which is that research is a systematic process wherein we know more about something than we did before engaging in the process (Simpson 1995:2).

Bless and Higson-Smith (2000:64) have named three aspects of research;-

- 1. The methodology, which will either be qualitative or quantitative.
- 2. The reason for the research, which will either be to increase human understanding of an aspect of society or to solve a particular problem within society.
- 3. The demands of the research question which will dictate if the research is exploratory, descriptive, correlated or explanatory.

The purpose of this research project was to investigate the teaching strategies used by an adult educator and to also explain why these teaching strategies are being used. The purpose is basically explanatory.

This chapter discusses research methodology that was used in this research. It discusses the research instruments and various procedures used in data collection and analysis. This is achieved by reviewing the theories on research; preparing for research by choosing and designing the research tools; piloting the research tools; using various techniques to analyze the findings and taking into consideration certain ethical issues.

## 3.2 Theories on Research

#### 3.2.1 Research Paradigm

My research falls within the interpretive paradigm. The interpretive perspective leads to what has become known as naturalistic research. Naturalistic research is conducted in natural, uncontrived, real-world contexts with the researcher not being intrusive. (Cohen, Marion and Morrison 2000: 139). The setting is the classroom. The researcher examines the situation from the viewpoint of the participants. In the interpretive

approach, no data can be 'objective'. This research is underpinned by the idea that people's behavior is very context dependent.

# 3.2.2 Qualitative versus quantitative research.

Quantitative researchers collect facts and study their relationship. They use techniques that produce generalizable conclusions. Researchers who adapt a qualitative perspective are more concerned with people's perceptions of the world. They question whether a 'scientific' approach can be used when dealing with human beings. However there are occasions when qualitative researchers draw on quantitative techniques and vice versa.

Lincoln and Guba (1985:140) have outlined different assumptions in qualitative compared to quantitative research. The first is that in quantitative research, the nature of reality is assumed to be single, tangible and fragmentable whilst in qualitative research it is multiple and socially constructed. Secondly in quantitative research, the role of the researcher and researched is independent whereas in qualitative research, it is interactive.

Quantitative research methodology uses measurement to compare and analyze variables, it is represented by numerical data, qualitative research makes use of descriptive language to record and interpret data.

I chose qualitative research methods because they are especially suited for investigations in social science fields such as adult education and training because we want to improve practice. "The improvement of practice comes from understanding the experiences of those involved" (Merriam et al 1995:97)

# 3.3 Qualitative research methods

Merriam and Simpson (1995:103) state that the three well known qualitative research methods are ethnography, case study and grounded theory.

#### 3.3.1. Ethnography

Ethnography involves the study of behavior in natural settings and the researcher cannot have adequate knowledge of social behavior until he or she understands the world in which the subject lives. Merriam (1995: 104) believed that every social group has something distinctive about it, and the best way for the researcher to understand the subject is to become part of the natural setting. The term ethnography covers the methods and techniques used to collect the data, as well as the written record, which is the end result of the data that has been collected.

The procedures used in ethnographic procedures are participant observation, in-depth interviewing, life history, documentary analysis and investigation diaries which all involve participating within the culture under investigation. An ethnographer will also interview people and evaluate documents.

# 3.3.2 Case Study

# 3.3.2.1 Definition

A case study concentrates on a single phenomenon and looks at all variables within a single unit. Yin (1994:179) has written that "in general case studies are the preferred strategy when 'how' or 'why' questions are being posed when the researcher has little control over events when the focus is on a contemporary phenomenon within some real life context."

This study is a case study of one adult educator. Case study research involves in-depth, intensive enquiry reflecting rich and lively reality of the case. The uniqueness of the case study method is that it examines a particular event, situation or phenomenon which the researcher selects to understand in depth. Although the study focuses on a specific instance, it can illustrate a general problem or situation.

I chose the case study approach in order to arrive at a detailed, in-depth understanding of the educator and her teaching strategies in the classroom. This case study allowed me the opportunity to look into a 'real life' situation and a close up view of what exactly occurs in the classroom. Insight will be provided into the educators thinking and her methods of presentation. I will also gain insight into the reasons for the educator's methods of presentation. My leading research question is to gain an understanding of the teaching strategies utilized in the adult education classroom. This question will be answered by observing the educators lessons in the classroom. In order to ascertain the effectiveness of the educators teaching strategies in meeting the learning needs of the learners, the learners will be interviewed and they will be observed in the classroom learning situation. This will allow me to test the effectiveness of the educators teaching strategies. The effectiveness of the teaching strategies could then be compared to the Theory of Andragogy.

## 3.3.2.2 Purpose

The purpose of the case study is to explain why things happen as they do and to generalize from a single example, an in-depth investigation of the patterns that emerge. The purpose is to explain why certain teaching methods are used in a given context.

In accordance with Cohen, Manion and Morrison (2000) a case study strives to portray 'what it is like' to be in a particular lived experiences of thoughts and feelings for a situation. Researchers often use a case study method when tackling educational studies. Case studies use both qualitative and quantitative data and usually employ a variety of data collection methods and sources.

## 3.3.2.2.1 Features of case study research.

The first step in conducting a case study is to select the case to be studied, the raw data must then be collected and organized and the final step is to write the case study narrative. Merriam and Simpson (1995:109) state that in a case study, the object of study is looked at a whole and because the researcher is concentrating on something specific, it is possible to identify all of the processes, which are involved. It could be useful in providing additional information for a larger study and it offers a lot of information, which could be used to solve problems or to change policy. In a nutshell, a case study focuses on a particular situation the end product is a description, which will add to the

readers understanding of the phenomenon. It is inductive in that the researcher makes use of vague hypotheses or hunches to guide the research. The research is not formally structured and once data has been collected and analyzed, tentative explanations are offered.

Qualitative case studies are based on inductive reasoning. Concepts, hypotheses and generalizations are derived from an examination and analysis of data collected. A characteristic feature of the nature of case studies is the discovery of new knowledge and understanding rather than verification of hypotheses formulated before the commencement of the study.

The case approach is studied as a whole or system. The parts of the case, that is the educator, the learners, the classroom environment and the educational background of the learners and educators are studied in a dynamic relationship to each other. Such a relationship is fundamental to a case study where the temporal and spatial boundaries are constructed and where the relationship between the different parts and people involved are necessary for a full understanding of the case. This relationship includes the curriculum studied and their relationship to each other.

The end product of a case study is a rich, "thick description" of the phenomenon studied. The description is usually qualitative and makes use of prose and literary techniques instead of numerical data to describe and analyze phenomena and report findings. Case study reports can incorporate visual material, for example, photographs and newspaper articles, and also include statements which express the opinions of respondents in their own words.

Yin (1984:48), recommends that a case study be deliberately used to cover contextual conditions believing that these may be highly pertinent to the phenomenon of study. In this case study a number of lessons will be observed between five o' clock and eight

o' clock in the evenings. The place of observation is an adult learning centre in Newlands West in Durban. The conditions include the study of adults in an Adult basic education and training class at level four.

## 3.3.2.2.2 Generalizing results of a case study

Generalizable results are not a necessary outcome of a case study research. The findings might be informed by the particular context and location of the case. Evaluative case studies, provide educational decision makers with information that will help them to decide the merit and worth of policies, programs and institutions.

Bell (2000:142) identifies the limitations as the difficulty of cross-checking information in all cases. The case study might be strongly influenced by the particular sources consulted and might turn out different with the use of other sources and methods. The particular bias of the researcher is likely to influence the case studied.

The researcher studied the teaching strategies of the educator in four different learning areas. The research design focuses on subunits as well as larger units of analysis. The smaller or minor units of analysis were the resources used by the educator.

#### 3.3.3. Grounded Theory

Grounded theory according to Merriam and Simpson (1995) is the development of theory. Merriam and Simpson (1995:112) state that "as an exploratory methodology, grounded theory is particularly suited to investigating problems for which little theory has been developed. The explanation of an area of human interaction or social process emerges from a grounded theory study as credible, substantive or formal theory." Grounded theory is thus a method of generating and constructing theory. In a grounded theory study, one is constantly comparing groups in order to identify similarities and differences and to categorize the data. The categories are then tested by collecting data from different groups.

According to Bell (1999:9) grounded theory has been criticized for being undisciplined and impressionistic. It must be borne in mind that the researcher is formulating the theory through constant comparison and must ensure that methods of data collection are recorded. Records must also be kept of the methods of coding and how the categories and hypotheses emerged from the data. The onus is on the researcher to research the theory thoroughly to make it credible.

# 3.3 Preparation for research

#### 3.3.1 Permission

The research was conducted at a public adult learning center. Permission was obtained from the Deputy Director: Adult Education Department of the Kwazulu-Natal department of education. Permission was also obtained from the regional coordinator of adult education of the Newlands region. After receiving permission from the Deputy Director, arrangements were made to visit the research site in order to meet with the principal of the Adult Learning Center. Arrangements were made to observe the learners in the classroom and interview the educator.

# 3.3.2 Sampling

One female adult educator was selected for the case study. The educator was selected according to her educational qualifications and experience in Adult education and training. She is also a qualified school teacher in mainstream education. The educator completed a one year certificate in Adult Basic Education and Training with the University of South Africa. The other educators teaching at the adult learning center were qualified to teach in the mainstream but they were not qualified adult education educators.

Five learners from the same class were also selected to be interviewed. This sample consisted of two males and three females. They were selected because they are competent in the English language. The educator indicated that these learners were fluent in English. These learners are also used as group leaders by the educator during the group discussion sessions. The selected learners possess some knowledge of the problems and difficulties

encountered by others in the group. The selected learners are also over-achievers in the classroom. They were interviewed using a structured interview schedule. Learners were interviewed individually. By interviewing learners individually, more information could be gleaned and the learners did not depend on each other for information.

The educator was observed over a period of one week. Four one hour lessons were observed in four different learning areas. The educator was interviewed after each lesson observation to confirm what was observed.

#### 3.3.3 Background to research site

Cresswell (1994:119) defines sites as the places where data can be collected from respondents and maintains that they must be convenient to the respondents. An adult learning center was selected because this was a convenient place to observe the adult educator and the learners.

The ABC public adult learning centre was established in 2000 in Newlands West in Durban. It is situated in a state primary mainstream school. The school caters for grades one to seven. Adult learning classes are conducted in the afternoons. The public adult learning center caters for adult basic education and training from level one to level four. Adult basic education and training level one is equivalent to grade three in the mainstream and level four is equivalent to grade nine in mainstream education. The center not only caters for learners from Newlands West but also serves learners from the nearby Lindelani and Kwa Mashu townships. The centre is administered by the Kwa-Zulu Natal department of Education.

The part time personnel consist of one coordinator and eight part time educators. Classes are conducted from 17:00 to 20:00 from Mondays to Thursdays. The enrolment of learners is as follows:

ABET level one and two 21 Learners

ABET level three 17 Learners

ABET level Four 15 Learners

#### 3.5 Data collection tools

A case study design will be used to investigate the teaching strategies utilized by the adult educator. The tools used to collect data will be structured classroom observation; interviews with the educator and learners and documentary evidence, in an adult education context.

## 3.5.1 The interview as a research instrument

According to Behr (1988:150) the interview is a direct method of obtaining information in a face-to face situation. The interview is sometimes preferred, especially when it involves complex topics or where the investigation concerns matters of a personal nature. The researcher believes the interview, in this study, made responses given through the lesson observation more authentic and valid.

The interviewer has the opportunity of giving a full and detailed explanation of the purpose of the study to the respondent; and to ensure that the latter fully understands what is required of her. The interview is more flexible in approach because the researcher can clarify the questions further and the respondent has a chance to ask for more clarification on the questions.

It must be pointed out though that complete flexibility of approach, particularly where information is sought from people, can result in bias. To obviate this problem, interviews can be structured. In this research the structured interview was used. The interview was conducted after the lesson observation. The respondent responded positively to the questions. In some instances, clarification of the question was requested.

# 3.5.1.1 Types of research interviews

According to Behr (1988:157) research interviews are classified according to their purpose and design. In terms of purpose, interviews seek either objective information in the form of facts, or objective information in the form of attitudes, beliefs and opinions. In terms of design, interviews can be either structured or unstructured. The information requested in this research was mainly in the form of facts, attitudes and beliefs.

### 3.5.1.2 Structured interview

Behr (1988:151) maintains that a structured or standardized interview is one in which the procedure to be followed is determined in advance. This therefore means that, an interview schedule is prepared in which the pattern to be followed, the wording of questions and instructions and the method of coding the answers are detailed. The researcher's purpose in conducting the interview is to confirm what has been observed in the classroom particularly the teaching strategies used in the lessons.

The structured interview thus has its own demerits. The preparation of the interview schedule is a laborious task, however, on a positive note, it minimizes the degree of errors due to differences in technique of different interviewers.

### 3.5.1.3 Unstructured interview

The unstructured interview consists of a series of questions to be asked which are also prepared beforehand, but the interviewer is permitted to use his or her discretion and to divert from the set questions as well as their order of presentation as the situation demands.

The unstructured interview does have its own limitations too. It is difficult to compare the data obtained from various respondents so as to arrive at reliable generalizations. However, an experienced interviewer can use this approach to a great advantage.

This research used the structured type of interview to elicit precise information for it was prepared beforehand and interviewees had to respond to specific questions.

# 3.5.1.4 Conducting an interview

Behr (1988:152) contends that the interviewer has to establish rapport with the interviewee. To achieve this, the researcher can assure the respondent that information required for the research is confidential and will not be used for any other purpose.

Behr (1988:152) is of the contention that the interviewer should have the following characteristics:

- He or she must be pleasant and restrained in his or her manner;
- He or she must be a good listener and avoid interjections;
- He or she must not be distracted by irrelevancies;
- He or she must avoid giving any hints by his or her facial expressions, tone of
  voice or use of implied questions which suggest the kind of answers he or she
  would prefer to give.

The respondent when interviewed, was in a face-to-face interaction. A friendly and pleasant atmosphere prevailed. The respondent responded positively to the questions.

## 3.5.1.4 Recording the interview data

The researcher must keep the record of the interview. This was done by taking down full written notes during the interview. This may be time-consuming. The use of tape recording becomes a very convenient method in this regard. Tape-recording provides not only a complete and accurate record of the entire interview, but it also preserves the emotional and vocal character of the responses. The tape-recordings can be replayed and a written record made. The researcher took full notes during the interviews.

The following are some of the questions asked during the interview with the educator: (Refer to appendix A2)

- 1. What learner needs do you take into account when preparing your lessons?
- 2. How do you make use of your learner's previous knowledge?
- 3. How do you foster leadership development in your teaching?
- 4. In what circumstances do you make use of group teaching methods?
- 5. How are the learner's progress evaluated?
- 6. What are the learner's motives for learning?

The following interview questions were directed at the learners: (See appendix A5)

- 1. What are your motives for attending ABET classes?
- 2.1 Do the teaching strategies used by your educator lead to a better understanding of the content? Why?
- 2.2 Which teaching strategies do you like best? Why?
- 2.3 What alternative teaching strategies should your educator use?
- 3. How does your study of ABET assist you in the workplace?
- 4. What assessment techniques does your educator make use of?
- 5. Should the assessment techniques be changed? Why?

## 3.5.1.5 Advantages and disadvantages of interviews

Although interviews do seem to have a better chance to elicit honest information from the respondents than the written questionnaires, they do have some disadvantages.

### 3.5.1.6 Advantages of interviews

Some of the advantages of interviews presented by Behr (1988:154) are the following:

- They are helpful in eliciting honest information;
- The interviewer has a chance of rephrasing the question;
- The interviewer can stimulate the interviewee if she or he shows lack of interest;
- They can be standardized or structured;
- They can be used to validate information obtained through other instruments;
- People are better able to express their views verbally than in writing.

The interviews with the educator and learners helped to contribute to my findings and answered my key questions. By means of the interviews I was able to ascertain the teaching strategies used by the educator and the reasons for their use. By interviewing the learners, I gained insight into their learning needs and the effectiveness of these teaching strategies.

### 3.5.1.7 Disadvantages of interviews

Some of the disadvantages of interviews presented by Behr (1988:154) are the following:

- It may be time consuming;
- The flexibility approach of interviews may result in bias;
- The respondent may be intimidated by the presence of the interviewer;
- They do not provide a chance of anonymity to the respondents;
- Coding and analyzing of interviews can be difficult for novice researchers.

## 3.5.2 Structured observation

### 3.5.2.1 Purpose

Observations are a primary source of data collection in doing case study research. Data collected from observing phenomena, listening to people talk and interact is useful. Structured observations will be used by the researcher in order to monitor classroom events. The aim of my research is to determine the teaching strategies used by the educator and to also find out whether these teaching strategies meets the learning needs of the learners. The structured observation has a valuable part to play in collecting information on behavior in naturally occurring situations such as the social interaction amongst learners and educators. This behavior can only be observed in an actual classroom.

The educator will be observed over a period of four days conducting lessons in English, Natural science, Life skills and Social science. The three stages of the observation include recording the event in a systematic manner, coding the event into categories and lastly analyzing the event.

This method was chosen over others because observed incidents are less predictable and there is freshness in the data collection often denied by other methods. Cohen et al (2000:142) argue that observation enables the researcher to gather data on physical settings, the human settings, the resources used and the interactions that take place.

# 3.5.2.2 Objectivity and reliability

Objectivity and reliability are more problematic with structured observation. To overcome this I will introduce myself to the participants and explain my reason for observing the class. The only way to be truly objective is to have a co-researcher observing the same event. Results can be compared and agreements met. Observations are also limiting as there are many aspects of life that cannot be observed. Beliefs and attitudes cannot be observed. Structured observations are selective since the attributes are predetermined.

This method of data collection is beset with issues of validity and reliability. The very presence of an observer in the classroom may cause the educator and learners to behave differently. The researcher was seated at the back of the classroom. The researcher decided on this position so as not to disturb the learners .This did not work as the learners often glanced back at the researcher. They were curious to know what the researcher was recording. According to Silverman (1993, cited in Cohen et al 2000:145), in a non-intervention observer situation, researchers inhabit the world they are researching, their presence may not be neutral, the presence of the researcher in the classroom exerts a powerful influence on what takes place.

## 3.5.2.3 Observation schedule. (Refer to appendix A1)

An observation schedule was used consisting of a prepared list of attributes which is thought by the researcher to be relevant to the topic being researched. The observation schedule draws the attention of the researcher to relevant factors and enables him to record the information quickly and systematically. A rating scale was used to ascribe judgments of behavior. The scale units were expressed in terms of quantitative techniques.

The following were some of the competences observed during the classroom observation:

- 1. Do learners understand the relevance of the topic to their lives?
- 2. Does the educator encourage the development of critical thinking and problemsolving?

- 3. Does the educator make use of classroom discussion?
- 4. Are learners actively involved in the learning process?
- 5. Does the educator provide feedback to the learners?
- 6. Does the educator make use of self-activity methods?
- 7. Does the educator communicate clearly to the learners?
- 8. Does the educator use different teaching methods in order to cater for the learning techniques of the individual learners?
- 9. Is the free exchange of ideas encouraged?
- 10. Is the development of knowledge, skills and attitudes evident?

### 3.5.2.4 Advantages of structured observation

This method of data collection is useful to supplement the information gained by the use of other methods which in this case is the interview. The observer is in a position to supply information such as feeling, tone and the socio-emotional context which the camera cannot supply. There is flexibility as to what is observed. The observer can watch aspects of the situation that the camera cannot reach. It is difficult to anticipate where important aspects are likely to occur.

Both the interview schedule and the observation schedule were piloted before use in the classroom. My colleague, who is an adult educator, volunteered for his lesson to be observed in the classroom. He was also interviewed, using my interview schedule after the observation of the lesson. After the pilot study, amendments were made to the draft observation and interview schedules.

### 3.6 <u>Documentary sources</u>

The educator's daily journal entries, learner's workbooks, policy documents and case studies were the primary sources of information. Secondary sources include reference books, journals and periodicals, newspaper reports and internet sites.

## 3.7 Data analysis techniques

There are several procedural techniques for analyzing qualitative data. Analytic induction, constant comparison, typological analysis and enumeration are valuable tools for the qualitative researcher to use in analyzing data.

### 3.7.1 Analytic Induction

Analytic induction is in opposition to statistical methods of data analysis. Le Compete and Preissle (1993 cited in Cohen et al 2000:151) suggest that the process is akin to several steps set out below:

- Data is scanned to generate categories of phenomena;
- Relationships between categories are sought;
- Working typologies are written on the basis of the data examined;
- These are refined by subsequent cases and analysis;
- Negative and discrepant cases are sought to modify, enlarge or retract the original theory.

Denzin (1970 cited in Cohen et al 2000: 151) uses the term 'analytical induction' to describe the broad strategy of participant observation as set out below:

- A rough definition of the phenomena to be explained is formulated.
- A hypothetical explanation of the phenomena is formulated.
- One case is studied in the light of the hypothesis with the object of determining whether the hypothesis fits the facts in the case.
- If the hypothesis does not fit the facts, the hypothesis is either reformulated or the phenomenon to be explained is redefined, so that the case is excluded.
- Practical certainty may be attained after a small number of cases have been examined but the discovery of negative cases disproves the explanation and requires a re-formulation.

 The procedure of examining cases, redefining the phenomenon and formulating the hypothesis is continued until a universal relationship is established.

Constant comparison can proceed from the moment of starting to collect data, to seeking key answers and categories to discerning recurrent events or activities in the data that become categories of focus, to expanding the range of categories. This process can continue during the writing up process so that a model or explanation of the phenomena can emerge that accounts for fundamental social processes and relationships.

### 3.7.2 Constant Comparison

In constant comparison, data is compared across a range of situations, times, groups of people and a range of methods. The process resonates with the methodological notion of triangulation. Glaser and Strauss (1967 cited in Cohen et al 2000:151) suggest that the constant comparison method involves four stages:

- Comparing data that are applicable to each category;
- integrating these categories and properties;
- bounding the theory;
- setting out the theory.

The data obtained from the observation schedule and the interviews were scanned in order to generate themes. Relationships between the themes were sought. By means of constant comparison, the relationship between these findings and the theory of Andragogy is sought.

The findings from this study contributed adequately towards answering my key questions. The findings gave me a thorough insight into the teaching strategies used by the educator, the interaction of the educator and the learners, the physical setting of the classroom and the type of learning resources used by the educator. The interview with the learners however produced scanty information. This is so because the learners answered mainly in one word answers, due to their lack of ability in expressing themselves.

However the combined responses of the five learners helped to answer my key question adequately.

### 3.7.3 Typological analysis

Typological analysis is a classifying process wherein data is put into groups. There are significant issues in addressing reliability, trustworthiness and validity in the research.

### 3.8 Measures adapted to ensure validity and reliability

The success of this study depends to a large extent on the availability of the researcher to elicit the desired information from respondents. Researchers must therefore gain the confidence of participants before the data-gathering process commences so as to secure their co-operation in providing the data required.

The researcher in the present study ensured that all participants, especially the learners and the educator were fully informed of the study involved. They were encouraged to express their views without fear since anonymity was guaranteed. A pseudonym was used for the research site and participants were not identified by names throughout the study. These procedures were adopted to protect the rights of participants and uphold the promise of confidentiality.

In addition to obtaining the trust of participants, a researcher has a responsibility to the research audience to produce a study that is trustworthy. The measures outlined by Yin (1984: 134) guided the researcher in formulating and adopting certain procedures to address issues of validity and reliability. The close link between internal validity and reliability is explained by Guba and Lincoln (1888:171) as follows: 'Since it is impossible to have internal validity without reliability, a demonstration of internal validity amounts to a simultaneous demonstration of reliability.'

In attending to the problem of internal validity and reliability, the procedures to be followed in the selection of participants; the criteria used for the selection of the site; the data collection methods and the mode of data analysis are explained.

The researcher adapted 'a strategy of triangulation', using more than one method of data collection and analysis. This technique allows for triangulation or cross-checking of data and therefore enhances the internal validity and reliability of findings. With regard to multiple methods, Denzin (1982 cited in Merriam 1988:69) states: 'the rationale for this strategy is that the flaws of one method are often the strengths of another, and by combining methods, observers can achieve the best of each, while overcoming their unique deficiencies.'

A variety of questions were asked using a particular method. For example in the interview, the researcher included a range of questions based on mass instruction, some based on individual instruction and others on group methods. Classroom observation and interviews were used to verify the teaching strategies used by the educator.

'Qualitative research, because of its apparently subjective nature' (Cohen et al 2000: 241) is sometimes considered as untrustworthy. Furthermore, the researcher acknowledges the fact that an investigators 'perspective' colors what is perceived, recorded and reported. But in spite of this, the researcher is confident that the procedures adapted during the research process have helped yield data which could be described as valid and reliable.

### 3.9 Ethical Issues

## 3.9.1 Access and Acceptance

Permission to carry out the research was sought at an early stage. A detailed correspondence was sent to the Deputy Director of adult education. It outlined the topic of research, design, methods, guarantee of confidentiality, analysis and dissemination of findings. My intention to protect the anonymity of research participants and to keep the research data confidential was also outlined. The question of anonymity was addressed by excluding the name of the educator in all research instruments used in collecting data and the school was given a pseudonym in order to protect their identification. Before entering the classroom for observation the permission of the coordinator was always

sought. The researcher explained to the participants that the research will be of benefit to all adult educators.

Participation of subjects in the research was through informed consent. Participants signed consent forms. According to Cohen et al (2000: 350) informed consent refers to 'the procedures in which individuals choose whether to participate in an investigation after being informed of facts that would likely to influence their decisions'. My initial visit to the school was used to explain the various aspects of the research. Subsequent visits were used to negotiate access to the classroom.

## 3.10 Conclusion

The success of a research project is determined to a large extent by the quality of data collected. In the present study, the collection of data proved to be unproblematic. All participants co-operated willingly. My original plan devised for the selection of the site and participants and the data collection methods proved to be successful. The key questions guided the researcher in planning the presentation of data.

The importance of ethical considerations in research is highlighted and the steps taken by the researcher to address these issues are outlined. The measures adopted by the researcher to obtain valid and reliable data are also outlined.

# **CHAPTER FOUR**

## **FINDINGS**

## 4.1 Introduction

The findings listed below are drawn from interviews and classroom observations of the educator. The educator was first observed in the classroom and then interviewed in order to confirm the findings in the lesson. The educator in the case study concerned teaches Natural science, English, Life orientation and Social science at Adult basic education and training level four. Adult basic education and training level four is equivalent to grade nine in mainstream education. The learning areas offered at this level are: Language, literacy and communication; mathematics; social science; natural science; management and economic science; arts and culture; technology and life orientation.

I have observed the educator teaching English; Natural Science; Life Orientation and Social Science.

### 4.2 Educator characteristics

Educator: Female

Age: 35 years

Subjects taught: Natural Science; English; life orientation and Social Science.

Teaching experience: 12 years

The educator teaches in the mainstream during the day. (grade 4)

Academic qualifications in subject: Matriculation

Professional qualification: Certificate in Adult Basic Education. (UNISA)

University Education Diploma (Senior Primary)

The educator has not completed a University degree but has a three year University Education diploma specializing in Senior

Primary education.

### 4.3 Learner characteristics

Size of class: 15 adult learners.

Composition of class: two males and thirteen females. All learners have Isizulu as their

home language and English as their second language.

Their ages range from twenty three to forty two years.

## 4.4 Arrangement of the classroom

The size of the classroom is fifty square meters. The educator rearranges the classroom before the commencement of the lesson. The desks are arranged in groups of four, in a rectangular pattern. Learners work in groups of three to four. The educator rearranges the learners and includes one learner who is proficient in English in each group in order to assist other learners. The group discussions are conducted in Isizulu and the report back is in English. The learner who is proficient in English leads the discussion and reports back on behalf of the group. There is an informal atmosphere in the classroom. Learners are encouraged to ask questions and participate in the discussions. The views of all the learners are respected and discussion takes place in a friendly manner.

### 4.5. Teaching resources

There are no charts on display in the classroom pertaining to adult basic education and training. There are charts pertaining to the mainstream class. The educator makes use of the lecture method together with group discussion in most instances. She makes use of the chalkboard, textbooks, newspaper articles and worksheets are used. No standard laboratory equipment is available for the teaching of natural science. The educator improvises equipment. Plastic bottles, straws, cups, detergents and household chemicals are used. There are no computers available. Television and video is not available. Drawing paper and newsprint is supplied by the educator.

### 4.6 Lesson Observations

Critical question one: What teaching strategies are currently being utilized in the classroom?

The following four lessons were observed by the researcher:

### 4.6.1 Lesson observation one

Date: 24 July 2006

Learning area: Social Science (a combination of Geography and History)

Topic: The Earth

Objective: To show the relationship between the earth, moon and sun.

### Observation.

The lesson commenced fifteen minutes late due to the late arrival of the learners. Most of the learners are employed and they make use of public transport to come to the learning center. The educator waited for the learners to arrive. While waiting, she jots down information on the chalkboard pertaining to the lesson. The educator does not ask learners for an explanation for their late-coming. No register of the learners is available in the classroom. The composite register of learners is kept in the office.

The educator spoke in English during the major part of the presentation of the lesson. The educator explained certain aspects of the lesson in Isizulu. The educator used rubber balls to show the size and relationship between the earth, sun and moon. The movement of these celestial bodies was demonstrated by the educator. Her attempt to portray these celestial bodies as three dimensional entities was successful. After the demonstration, learners were called up to the front of the class to repeat the demonstration and to explain the movement of these celestial bodies. Learners asked questions during the demonstration and the educator responded to these questions.

The interaction between the educator and learners was predominantly educator led. Part of the lesson was characterized by chorus answers to the questions posed by the educator.

75

The interaction between the educator and learners was predominantly educator led. Part of the lesson was characterized by chorus answers to the questions posed by the educator. Learners were grouped and were given a list of questions to answer. They had to draw a diagram showing the position of the sun, moon and earth. The learners responded to the questions with short answers. The lesson was recapped and a summary was drawn up on the chalkboard. The learners copied the summary into their workbooks. The educator signed the learner's workbooks as a record of their attendance. Learners enjoyed the lesson and understood the concepts taught.

The teaching methods used by the educator were the lecture, demonstration and questioning.

### 4.6.1.1 Reasons for the use of the teaching methods

The educator was interviewed after the lesson observation. She furnished the following reasons for the use of her teaching methods. The <u>lecture method</u> was used because the educator mentioned that the learners were still grappling with the English language and they required simple and concise explanations in order to understand the concepts taught. The lecture method allows the educator to explain the tasks that the learners need to complete during the self activity session. The educator explained that the lecture method allows the educator to recap the previous lesson and also to recap the current lesson.

The educator is of the opinion that the lecture method is more productive and efficient keeping in mind that time and resources are limited. She finds this method effective. The effectiveness of the method is assessed by the learner's performance in tests and examinations. The educator was trained in the lecture method during the completion of her teachers diploma.

The educator made use of the <u>demonstration</u> method. The educator mentioned that since the movement of the celestial bodies is a three dimensional occurrence, the demonstration method is the most effective method of explaining this movement of the celestial bodies.

Learners will not be able to understand this concept by a two dimensional drawing that is in the textbook. It is easier to explain by means of a demonstration than by any other method of presentation. The educator studied this method of presentation during her training as an educator.

### 4.6.2 <u>Lesson observation Two</u>

Date: 25 July 2006

Learning area: Natural Science

Topic: Renewable and non-renewable resources

Objective: Appreciation of our natural resources.

### Observations

The lesson commenced on time. There was no roll call of learners. The educator wrote down a case study of one of the learners on the chalkboard before the commencement of the lesson. The educator explained the terms renewable and non-renewable resources with the use of examples. The furniture was re-arranged and learners were then placed in groups of four and each group was asked to compile a list of renewable and non-renewable resources. There were three groups. Each group chose their own group leader to report back. Group discussions followed.

All learners in the group contributed to the task. The group leader compiled a list of all the resources. Learners were able to list all the resources. During the report back session, the educator complied a list of all renewable and non-renewable resources on the chalkboard. Learners were then asked to form sentences with these words. This was done orally. Learners compiled short sentences. An example of one of these sentences is "I recycle newspaper." Learners were then asked to complete sentences in their workbooks using the list of words.

The educator then went on to discuss the case study with the entire class who were still seated in groups. The learner mentioned in the case study is a member of the class. She

77

recycles renewable resources for cash and earns a living from this. The learner explained how she obtains newspaper and cans. Her collection methods were explained. She also explained how she disposes of these cans and newspaper.

The learner was able to pay the school fees of her children from her earnings. A discussion followed on where to recycle paper and cans and the amount of cash earned from this.

A list of difficult words was written on the board. Learners were asked to pronounce the words in chorus and then form sentences with them in their workbooks.

The teaching methods used by the educator were the lecture, group work, discussion, reading and the case study. The lesson was successful and the learners understood the concepts taught.

### 4.6.2.1 Reasons for the use of the methods.

The educator, when interviewed, explained that the <u>case study</u> method was used because it was based on a real life example of one of the learners in class. Learners were exposed to a problem which is a method of earning a living by recycling renewable resources. They had to come up with a solution. It allows learners to reflect and discuss the case study. The educator mentioned that one of the objectives of the curriculum is to promote critical thinking and problem solving. The case study method fulfills these objectives. The educator learnt this method of instruction during her training as an educator.

The educator, when interviewed, mentioned that she made use of group work because it allows the learners to socialize and to exchange ideas. Learners were allowed to investigate various aspects of the question. All learners in the group have an opportunity to participate in the group discussion. The educator is of the opinion that learners develop confidence in themselves by participating in the group discussion.

The reasons furnished for the use of the <u>lecture method</u> is the same as 5.6.1.1 above.

4.6.3 Lesson observation three

Date: 26 July 2006

Learning Area: Life Orientation

Topic: Art and craft

Objective: To empower the learners with the craft of beadwork.

Observation:

The educator demonstrated a method of making patterns using coloured beads. Learners were then given various patterns which were in magazines. Learners had to choose a pattern for their beadwork or develop their own patterns. Learners worked in groups and developed their own patterns. They then used beads in the pattern. The learners were told to continue with this task during the next life orientation lesson.

The educator then discussed the prospect of doing beadwork as a form of earning a living. The costing of the completed beadwork was discussed. There was a discussion on how to market the beadwork at flea-markets and at stores. The relationship between beadwork and the Zulu culture was discussed.

The teaching methods used by the educator during this presentation were the demonstration, group work and discussion. The learners enjoyed the lesson. They were empowered in the craft of beadwork.

4.6.3.1 Reasons for the use of the teaching methods

The educator, when interviewed, mentioned that she used the <u>demonstration method</u> because it was the most appropriate method in order for the learners to gain an understanding of the processes involved in beadwork. Merely explaining the process of beadwork would be difficult for the learners to grasp. The demonstration made the process easy to explain. The educator mentioned that this was a method that she learnt from her colleague.

79

The reasons furnished for the use of the group discussion method is the same as 5.6.2.1 above.

4.6.4 Lesson observation Four

Date: 27 July 2006

Learning area: English

Topic: Verbs

Objective: Learners were able to construct sentences using verbs.

To develop the learners' skills in reading, writing and speaking.

Observation

The lesson started with a prayer and a rendition of the national anthem. The educator commenced the lesson by explaining the function of the verb in a sentence. Sentences were written on the chalkboard with the verbs underlined. Learners were them asked to supply a list of verbs which were written on the chalkboard by the educator.

Learners were then placed in groups of four. There were three such groups. The educator allocated a list of five words to each group. The groups had to form sentences using these words. They had to write these sentences in their workbooks. During the feedback session, the sentences were written on the chalkboard by the learners. Learners then read the sentences in chorus.

The educator recapped the lesson by explaining the importance of the verb in the sentence. The lesson method was used which was made interactive with questioning and discussion. Learners were actively involved in the lesson.

The teaching methods used by the educator were the lecture, group work and reading.

80

### 4.6.4.1 Reasons for the use of these teaching methods.

The <u>lecture method</u> was used in order to explain the function of the verb in the sentence. The lecture, according to the educator, allowed her to provide concise instructions for the completion of the learner's tasks. The lecture method also allowed the educator to recap the lesson.

The educator, when interviewed mentioned that she made use of group work because it allowed the learners to converse freely with each other. This is an important objective in the teaching of English. She also mentioned that this was a method that she was taught during her training as an educator.

The educator also mentioned that time constraints impede her from engaging in individual instruction. The time frame of one hour only allows the educator to engage in group learning methods. The limited learning resources are also a factor that impedes her from using individual methods of instruction. She is of the opinion that the provision of computers will improve instruction and also promote individual instruction.

### 4.6.5 Commentary

The educator uses a variety of teaching methods and presentation techniques within a single lesson presentation. Mass instruction strategies, especially the lecture method are used most frequently. The lecture method is used in combination with other methods such as group discussion. Learners are kept active during the lesson by engaging in reading, discussion and written tasks.

Projects are assigned to learners which are completed during instruction time. Individual projects include mainly beadwork, sewing and artwork. Short assignments are assigned which include preparation of debates, speeches and additional reading on prescribed topics. The reading material is supplied by the educator. Assignments involving research are not assigned to learners because of the lack of learning resources.

Dramatization is used in the teaching of English, mainly to act out characters from prescribed readers. This is a method that the educator claimed to have used, the educator did not observe this method in use. Paired learning is a method used in natural science in order to discuss solutions to a problem.

## 4.7 Teaching methods used by the educator.

The following is a list of all the teaching methods used by the educator. Some of these methods were observed by the researcher while the educator claimed to have used other teaching methods.

	English	Natural	Life	Social Science
		Science	Orientation	
Mass	Lecture	Lecture	Lecture	Lecture
Instruction				
	Demonstration	Demonstration	Demonstration	Demonstration
	Forum	Forum		
Individualized	Discussion	Discussion	Discussion	Discussion
Instruction				
	Projects	Projects	Projects	Projects
	Assignments	Assignments	Assignments	Assignments
	, , , , , , , , , , , , , , , , , , , ,	,	Paired learning	
Small group	Discussion	Discussion	Discussion	Discussion
Instruction				
	Co-operative	Co-operative	Co-operative	Co-operative
	learning	learning	learning	learning
	Role play	Role play	Role play	Role play
	Fish bowl	Fish bowl	Fish bowl	Fish bowl
	Paired learning	Case study	Case study	Case study
	Dramatization		Dramatization	

### Commentary

Some of the teaching strategies and methods listed above were observed by the researcher during the lesson observation. Other teaching methods were extracted from the educator's journal during the interview. The most frequently used method was the lecture method which was adapted to the lesson method. The lesson method was used together with small group discussion. Projects and assignments are assigned to the learners once a term per learning area. These tasks are completed in the classroom and the assessment forms part of final promotion mark. Dramatization is used in the teaching of English mainly to depict characters from the prescribed readers and also to depict social situations such as an interview by means of short sketches.

The mass instruction method is most commonly used. It is not used exclusively. Lectures are made interactive by the incorporation of discussions, recitations and the use of questioning. The inclusion of these methods enables the learners to be more active in the lesson. Although some educators express concerns with regard to the methods used, most educators, like the educator in this research, continue as they have done before. The educator tends to use the teaching methods that were utilized by her educators. The dilemma faced by many educators is described by Mullan (1995:387-388) when she states that:

"I felt that... the syllabus would be covered... if I digressed far into active learning strategies... The major issue for me was that fewer topics can be covered by heuristic methods than by instruction.

Examination pressures dictate that a wide variety of topics must be taught and while I wish to develop better critical and analytical skills in my pupils, I also needed to ensure that the subject content was adequately covered... I felt under pressure to concentrate on examination results, so I was often forced to adopt a more content-centered approach, where the pupils learned mainly by memorization rather that by investigation for understanding. The time factor also resulted in a tendency to provide answers, when the learning process seemed to be too slow.

The inclination was to hurry and adopt a more didactic approach, allowing

the pupils to become a passive rather than an active recipient."

It has been observed by the researcher that very little differentiation of instruction occurs for academically advanced learners and culturally diverse learners in the classroom. The method that is used for individualized instruction is mainly one-to-one instruction. This usually occurs during class time when other learners are engaged in the application exercise, at the end of the lesson or during the activity session, the lack of differentiation may be due to many factors, for example:

"... Our own long histories as students in one-size-fits classrooms, and our own experiences as practitioners of one-size-fits all instruction, our general lack of pre-service and in-service preparation in teaching academically and culturally diverse learners, teach-to-test mandates that cause us to drag all learners through the same content, over-dependence on text-driven curricula."

(Tomlinson, 1995:66)

Group instruction is used on a more regular basis in the teaching natural science. The shortage of equipment, especially in the laboratory, has forced the educator to use group instruction. Several useful methods of group instruction, for example, peer tutoring, group discussion, group projects, self-discovery methods and role play are being used occasionally. An interesting example of peer tutoring is the use of learners who are conversant in English and Isizulu to assist Isizulu first language speakers with English. The benefit of using Isizulu in English classes was supported by a study by World Bank (2002) which demonstrates that learners who acquire literacy in their mother tongue and transition gradually to the dominant language perform better academically than learners who study in the national language.

Group work is not well organized and implemented. The educator displays a lack of knowledge in co-operative learning and learners are not gaining maximum benefit with the use of this method. Group work is only used to engage learners in a discussion. This

method is not used for problem solving. No new information is produced from the group work sessions. The report back is mainly in the form of one word answers.

The educator makes use of a limited amount of educational resources in her teaching. The resources most commonly used by the educator are the chalkboard, textbooks and worksheets. Computers are not available. The educator is thus unable to make use of computer assisted learning.

# 4.9. Critical question Two: How do these teaching strategies meet the learning needs' of the learners'?

## 4.9.1 Interview with learners

Five learners were interviewed. The following questions formed part of the interview:

- 1. What are your motives for attending the ABET course?
- 2.1 Do the teaching strategies used by your educator lead to a better understanding of the content?
- 2.2 Which teaching strategies do you prefer? Why?
- 2.3 What alternative teaching strategies should your educator use?
- 3. How does the ABET course assist you in the workplace?
- 4. What assessment techniques does you educator make use of?
- 5. Should the assessment techniques be changed? Why?

The learner's motives for attending the course are to gain employment. Four of the learners indicated that they wanted to complete the course in order to communicate properly both at the workplace and in everyday life. By communication they meant improved skills in reading, writing and speaking. Two of the learners indicated that they had changed their jobs and wanted to improve their qualifications. One of the leaners interviewed mentioned that he wanted to complete the course I order to gain a promotion at his workplace.

All the learners interviewed, were in favor of the teaching strategies of the educator. They understood the subject matter conveyed and are familiar with the teaching strategies of the educator. They prefer a variety of presentation techniques within a single lesson.

Four of the learners preferred the group discussion method used by the educator. The discussions allowed them to voice their opinions freely and their viewpoints were respected by all learners concerned.

Five of the learners preferred computer assisted instruction. This would allow them to keep abreast of modern developments. Television and video is another preferred method of instruction. This according to the learners will make learning more exciting.

All the learners interviewed were positive that the course assisted them in the workplace. It assisted them in written and oral communication. Their reading skills were enhanced which assisted them in the workplace.

The assessment techniques used by the educator are tests, written examinations, oral presentations and assignments. All learners wanted the assessment techniques to be changed. They wanted the written public examination to be done away with. This should be replaced with continuous assessment tasks.

## 4.9.2 Previous experience of the learners.

The educator takes into consideration the learner's previous experiences when preparing lessons. The educator states that the first consideration when preparing lessons is the prior experiences of the learners. The learners are from under-privileged backgrounds and all the learners have no formal schooling. Most of the lessons observed, take into consideration the experience of the learner. New knowledge is related to the learners' previous experience.

In the natural science lesson the educator was discussing renewable and non-renewable resources. The educator used the experiences of one of the learners as a case study.

The learner in question recycles resources and earns a living from this. In accordance with Knowles (1984:84), each learner brings a range of experiences and knowledge more or less relevant to the task at hand. They posses a set of values, established prejudices and attributes and knowledge more or less relevant to the task at hand. When this experience is devalued or ignored, by the teacher, this implies a rejection of the person, not just the experience.

### 4.9.3 Communication

The educator communicates in a manner that is audible and appropriate to the level of language understood by all learners. All the learners in the class are Isizulu first language speakers. The educator also makes use of learners who are proficient in English to assist less proficient Isizulu first language speakers. The educator communicates with clarity of purpose and is able to achieve her stated outcomes for the lesson.

The learners use short, simple sentences to communicate. Their knowledge of English is limited and their main aim in attending the class is to communicate in English. Basil Bernstein (1971:42), refers to the 'restricted code' which is 'context bound'. In the 'restricted code' use is made of short, simple unplanned sentences. This limits the scope of expression. In accordance with Bernstein (1971:42), where English is the learner's second language, the creative use of the mother tongue should be encouraged as this is likely to reinforce learning.

The educator makes use of close ended questions. There in no elaboration of the answers presented by the learners. Effective communication is achieved between the educator and learners resulting in a good rapport between learners and the educator.

### 4.9.4 Livelihood Training

The livelihood component forms part of most of the subject matter taught. In natural science the educator taught a lesson on renewable and non-renewable resources. There was a detailed discussion on how resources can be recycled for cash. A list of recyclable resources was compiled by the learners. One of the learners was already recycling

resources for cash and was earning a living from this. Her experiences were used as a case study. Lessons in life orientation include beadwork and sewing. Learners earn a living from these activities. Lessons in life orientation include costing of items and how to keep a record of profit and expenses. Lessons in English help learners to communicate and keep records of their transactions.

### 4.9.5 Motivation

From the lesson observations, learners understand the relevance of the topic to their lives. They are actively involved in the lesson. Feedback is frequent. This motivates the learners to further learning. The learners motives to learn include wanting to further their education; improving their communication skill; not being cheated especially when dealing with money and gaining promotion in the workplace. All of these motives increase their motivation to learn.

### 4.9.6 Development of attitudes and skills

Leadership development is fostered by the appointment of group leaders during group work sessions. Learners are held responsible for their own learning when the educator is absent from the classroom.

Respect for members in the group is encouraged by accepting the opinions of others.

Respect for culture and national identity is fostered by means of prayer and the rendition of the national anthem. Conflict management is promoted by healthy debate and arguments are conducted in a non-threatening manner.

The skills of reading, writing and speaking are promoted across all learning areas. There is a free flow of ideas in the lessons. Discussion is encouraged in all lessons and the learners actively answer questions.

Self-directed learning is fostered by assigning homework and assignments to the learners. They are also given reading tasks as homework. This homework includes problem solving.

# 4.10 <u>Critical question three:</u> How do these teaching strategies relate to existing literature?

### 4.10.1 Choice of teaching strategies.

The educator chose certain teaching strategies in accordance with her outcomes. The factors that were considered in her choice were the learners' level of performance; their previous experience and the knowledge, skills and values that she aimed to achieve. The choice of teaching strategies by the educator forms part of her training as an educator. This correlates with Walklin (1992:5), findings wherein he states that the educator should answer certain questions when planning his teaching strategies. These questions include taking into consideration the learners' desired level of learning.

Walklin (1992:5), is also of the opinion that teaching strategies must take account of such parameters as ability, interest, motivation, difficulty, group mix and physical and mental handicaps. McCafferty (1980), also concurs that the learners level of ability, age, social class and previous education should be taken into account.

The demonstration method was used by the educator for skills teaching. This method as used for teaching beadwork and sewing. These findings are in accordance with the research findings of Belbin and Belbin (1972, cited in Jarvis 2004:157) who found that the demonstration is most frequently used in skills teaching.

The group discussion method was frequently used by the educator. Learners were able to share their ideas and collectively pool their resources. This was skillfully achieved by the educator. The venue was re-arranged in order to facilitate group-work. The educator also re-arranged the groups. One competent English learner was placed in each group. The use of the group discussion method formed part of her training as an educator. The educator created a supportive atmosphere and guided the discussions.

These findings concur with that of Clark and Starr (1991:143) who contend that the educator plays a vital role in guiding the discussion and supporting the learners.

Interpersonal relationships were built with face-to-face interaction. The learners also respected the opinions of the group.

Thus existing literature concurs with my observations in the classroom on the educators teaching strategies.

## 4.10.2 <u>Variety in teaching strategies.</u>

The educator makes use of a variety of teaching strategies and methods of instruction. These strategies range from mass instruction to individual and group instruction. In the natural science lesson she used the lecture method together with group discussion and questioning. A case study was also presented during this lesson.

Galbraith (1991:403) contends that adult educators need to employ a variety of teaching strategies in order to address the learning needs of an increasingly diverse adult clientele. Smith (1982) indicates that adults learn in different ways and have different learning styles. Educators must thus provide variety in their teaching approaches.

Thus my research findings are in accordance with existing research findings on the use of a variety of teaching strategies.

### 4.10.3 Experience

The educator made use of the learners' experience in her lessons. New information was also related to the previous experience of the learner. The educator made use of a case study in the teaching of the natural science lesson. This case study was drawn from the experiences of one of the learners why earns her livelihood from recycling renewable resources.

In accordance with Knowles (1996) as a person matures, he accumulates a growing reservoir of experience that becomes an increasing source of learning. My findings concur with the research of Knowles.

### 4.11 Conclusion

Although the lecture method is commonly used, it is not used exclusively. The lecture method is made more interactive. The inclusion of these methods has a beneficial effect in making some of the learner's more active in lessons. However, many learners continue to be essentially passive.

Time constraints impede the educator from attending to individual learners. Preparing learners for tests and the public examination, restricts the educator from using certain teaching strategies such as individualized instruction. Mass instruction is used in order to cover the syllabus within a restricted period f time in order to prepare learners for the examination.

The use of learning resources is restricted. A variety of resources would ensure that the classroom atmosphere is inviting and learning becomes more interesting. Computer-assisted instruction will help the educator in providing quality individual instruction.

The observation schedule and the interview schedule were useful tools in collecting the required data. The researcher believes a recording device would enhance the data collection process.

## **CHAPTER FIVE**

## ANALYSIS OF FINDINGS

### 5.1. INTRODUCTION

The purpose of data analysis is to come up with reasonable conclusions and generalizations based on preponderance of data. (Merriam 1988:130). In the analysis under consideration, four lessons were observed in four different learning areas. This meant pooling of results across the learning areas selected and the grouping of teaching strategies into categories according to their frequency of use or as mentioned or discussed.

The analysis of data in a case study is based on 'pattern-matching logic' (Yin 1984:103). This mode of analysis involves comparing the teaching strategies utilized with the pattern predicted in the theoretical framework. In addition the reasons for choosing and using certain teaching strategies are explored.

### 5.1.1 Evaluation of findings

"Evaluation is the application of research skills in order to determine the worth of an educational practice." (McMillan and Schumacher 1993:518). The diversity of evaluation research is reflected in the large number of 'models' that are currently being used. These models include: objective-orientated; consumer-orientated; expertise-orientated; decision orientated; adversary-orientated; naturalistic and participant-orientated. (McMillan and Schumacher 1993:525). The approach used in this study may be described as naturalistic-participant, since the researcher:

- Makes use of class visits and direct observation and interviews in the collection of data.
- Utilizes a multiplicity of data resources.
- Recognizes the significance of the context in which evaluation is done.
- Uses inductive reasoning.

The purpose of this evaluation is to assess the merits of the teaching strategies utilized by an adult educator and to make recommendations based on the findings. The generalizations and conclusions drawn from this case study will become the overall generalizations and findings of the research study.

### 5.2. Analysis of teaching strategies

As explained earlier, the teaching methods were categorized into three groups, that is, mass instruction, individual instruction and group instruction.

### 5.2.1 Mass instruction

The educator did not make use of the <u>lecture method</u> as prescribed by the literature. The lecture method was adapted to what the educator calls the lesson method. During her one hour session, only fifteen minutes was used to introduce new concepts and explain the activities that the groups will engage in during the group discussion. Communication was a two-way-process. Learners responded to questions asked by the educator. Group leaders reported back after the group discussions. There was an abundance of feedback from the learners in the form of questions and report backs from group discussions. The educator was able to check on the learning of the learners. The educator adapted the lecture method and made the teaching more interactive by questioning, group discussion and feedback.

This is in contradiction with the literature on the lecture method which states that the limitation of lecture method is that there is little feedback or room for further explorations and there is no check on the learning that takes place. I am in agreement with Rogers (1996:144) who is of the contention, that the lecture method is the most ineffective method of learning when one-way-communication is used. Learners were not passive but were involved in active learning. According to the educator, "I find the lecture method useful and effective." Thus the educator modified the lecture method in order to make learning more effective.

The <u>Socratic method</u> of instruction was not used by the educator in her presentation of lessons. The educator, when questioned, did not have any formal knowledge of this method.

The <u>demonstration method</u> was used by the educator in the teaching of beadwork. The various steps in the method of beadwork preparation were broken down into discrete stages when presented. Learners designed their own patterns. They were shown how to make a pattern of their choice. Learners were given the opportunity to practice immediately after the demonstration. The educator was on hand to correct any mistakes made by the learners.

The educator used the demonstration method for the teaching of a skill. This lesson was observed by the researcher. The skills were presented sequentially and the skill was practiced immediately after the presentation. During the lesson, the learners acquired psychomotor skills. These skills included hand and eye co-ordination. The method was effective in acquiring the desired outcomes. The demonstration made clear what would otherwise be vague and meaningless. The method of presentation, used by the educator, concurs with the literature on the demonstration method.

The <u>forum</u> is not used frequently by the educator. This is in accordance with the information gained during the interview. The educator claimed to have used this method, it was not observed by the researcher. When used in the teaching of English, this method is used to generate discussion on topical issues, for example 'the use of television opposed to the use of printed media in reporting.' The educator introduces the topic. Learners are directed as to the type of questions to be asked. The objectives are outlined by the educator. The educator values the comments and opinions of all learners. This method of presentation concurs with the literature on the use of the forum.

### 5.2.2 Individualized instruction.

Individualized instruction is used to a limited extent by the educator. The researcher observed <u>one-to-one discussion</u> during the English lesson. The researcher's findings reveal that the use of individualized methods of instruction would be relevant in order to assist learners who are less proficient in the use of the English language. The promotion of individualized instruction would enable learners to work independently. Time constraints and the lack of learning resources such as computers are limiting factors that impede the educator from using individualized instruction.

The educator assigns individual and group <u>projects</u> to the learners. The researcher had an opportunity to examine completed projects. These projects are offered in Natural science, English and Social science. For natural science, the learners were asked to make a water purification device. The learners bring resources from home. These projects are completed in the classroom. Feedback is in the form of a percentage and occurs after the completion of the project. The project is corrected by the educator. The educator makes suggestions as to how to improve the project in writing. This method of instructions allows learners to work independently and also as a team. The method used by the educator is in accordance with the literature.

Assignments are assigned in English, Natural Science, life orientation and social sciences. The researcher browsed through completed assignments. The assignment consists mainly of writing an essay, for example, learner's had to write an essay on "my family" as part of their English assessment. Reference sources for the assignment are limited to newspaper articles and textbooks which are supplied by the educator. The topic is assigned by the educator. There is no choice in the topic assigned. Feedback is in the form of a mark together with positive comments as to how the assignment can be improved.

This method, used by the educator is not precisely in accordance with the literature. Firstly, the assignment is restricted to the writing of essays, there is no case study or research project. These techniques are appropriate to the adult basic education and training level four class. The assignment has little practical application. Its purpose is mainly to enhance the learners writing skills. The educator supplies some verbal feedback to the assignment. Written feedback is also supplied. This was observed by the researcher by browsing through completed assignments.

The essay does not reflect the learners own interest and skills since there is no choice in the topics given. Learners are not involved in an analytic approach to the assignment since there is no problem given for them to solve.

Clearly there are insufficient resources to provide individualized instruction for each learner. For this reason, educators are forced to settle on common tasks that in some instances prove too easy for some and too difficult for others. This can lead to problems such as boredom on one hand and frustration on the other hand.

Learning resources in the classroom are restricted to textbooks, newspapers articles and worksheets. There are no computers. Besides the lack of resources, there are constraints imposed with the use of individualized instruction. Examinations at various points in the school process, whether given by the teachers, school or external authority place constraints on what is to be learned at any given level. Learners are expected to learn from a set of materials and a teacher. Learners are expected to accommodate to the instructional characteristics of the educator and the learning material selected by the educator. The learner is expected to learn what the educator emphasizes in the instructional material.

When the educator is free of these constraints, we may search for what is termed learning experiences of the individual.

In accordance with Tyler (1950) a learning experience is a highly individualistic experience, while we are attempting to account for variation in the learning of something that two or more learners are expected to learn at the same or different times under relatively similar conditions.

One of the approaches to individualized instruction is to use modern technology such as computers. If learners can work individually at the computer, it is possible to create tasks that with graded levels of difficulty will enable each learner to begin at an appropriate level and progress at ones own pace. Computers will allow more advanced learners to push their limits rather than be held back.

### 5.2.3 Group instruction

Group discussion is a method frequently used by the educator. The topic or question is assigned by the educator. The researcher observed a lesson in natural science on the topic "renewable and non-renewable resources." Learners were given the task of compiling lists of renewable and non-renewable resources. Learners worked in groups of three to four. The seating arrangements were such that the learners were in a face-to-face interaction. The informal atmosphere created in the classroom is conducive to group discussion. There was a free flow of ideas. The educator creates a supportive atmosphere which is free of 'embarrassment'.

In my findings, the educator presented no choice of topic. The topic does not interest all learners. Learners are not given the choice of opting out of the discussion. Alternative points of view are taken by the educator. During the discussion, the educator was not made to be the dominant figure through which questions were directed as the literature suggests. The discussion groups were self-contained and each group shared their ideas and looked on the group leaders for guidance. These discussion groups ran independently

without control from the educator. Learners took responsibility for their own learning and teamwork and inter-personal relationships were developed. Learners were able to establish concepts on their own instead of receiving ideas from the educator.

The discussion was useful in promoting understanding of the topic. It made for independent thinking and assimilation and retention of material. This was evident during the recapitulation of the discussion session. The learner's communication skills were enhanced during the discussions. Each learner contributed to the discussion and they had to express themselves accordingly. This is in accordance with the literature.

Learners had to prepare themselves for the discussion. They were given reading material one day before the lesson. They had some knowledge of the topic. This impelled them to participate in the discussion. During the discussion session, the educator gained a better knowledge of the learners and their problems. Passive learners were encouraged by the educator to participate in the discussion. Incorrect information was corrected by the educator and the educator gained important information that would be useful in planning future lessons.

In accordance with the educator, the group discussion method 'forces learners to be active in the learning process.' This method was skillfully used by the educator. Her stated outcomes which were to enhance the communication skills and knowledge of the learners were achieved. I am in disagreement with the view expressed by Legge (1977:34) who states that the group discussion method tends to be time consuming and slow in achieving educational outcomes.

<u>Co-operative learning</u> was used in the teaching of English. The learners shared their ideas on the topic of "verbs." The group leader was responsible for compiling a list of resources. Learners were reliant on each other for information.

The finding in my research are similar to the views expressed by Slavin (1981:134), wherein he states that learners work in small groups in order to exchange academic content. Learners assist each other and there is a positive interdependence of the learners in pursuit of a common goal. The group leader accepted responsibility for the completion of the task. In addition the contribution of all members is essential for the completion of the task.

The use of this method has enhanced interpersonal skills. Learners were able to clarify concepts and learn from each other. There were signs of good working relationships and trust. Learners were able to improve their communication skills by conversing with each other. Difference of opinion was respected. The outcome of subject matter mastery was achieved. A number of techniques for encouraging co-operative learning seem to minimize the likelihood of over competitiveness. Learners working in cooperative groups demonstrate superior problem solving techniques compared to working individually or in competitive groups. (Johnson 1980 cited in Sansone 2000:293). All these advantages of the co-operative learning method are in accordance with the relevant literature.

The <u>case study approach</u> was used in the teaching of natural science. The case study was drawn from a real life example being one of the learners in the classroom. The learner recycles renewable resources for her livelihood. The educator presented the case description. The case contributed to an understanding of a social problem being poverty and how it can be overcome. The case brought about new meaning to the listeners. They were presented with the incentive of improving their lives. This finding is in accordance with the research compiled by Merriam (1988:48) in which she states that a case study can bring about the discovery of new meaning, extend the readers experience or confirm what is already known. The learner in the case study had to make a decision to fight poverty and carry out her decision. This enhanced the decision making skills of the other learners. The analysis of the case study gave learners an opportunity to exercise their critical thinking skills which is essential in real life.

The findings in my research are in accordance with the literature on the case study approach.

### 5.2.3.1 Conclusion

The predominant teaching strategy utilized by the educator is mass instruction. The balance of the time is devoted to the group discussion method.. The educator justifies mass instruction in terms of efficiency and economy. The major task facing the educator is the completion of the syllabus within a prescribed time.

With the small class size, the use of more individualized methods of instruction would enable learners to better cope with their learning. Individualized methods will also promote independent learning. The teaching methods most popularly used are group discussion and discussion in pairs.

### 5.3. Analysis of themes

### 5.3.1 The experience of the learners.

During the interview the educator stated that she draws on the learner's background and culture when preparing lessons. When selecting teaching strategies, the educator consciously takes into consideration the previous experience and knowledge of the learners. This is apparent during the interview when the educator stated that "I consider the previous knowledge, language and level of the learner when preparing lessons." This is also apparent in my lesson observation when the educator makes use of the learner's experience. For example, during the lesson on art and crafts, the educator drew on the culture of the learners by making use of patterns that are related to the Zulu culture. All learners in the class follow the Zulu culture.

Meizrow (1991:42) explains that experience is necessary to the process of critical reflection and transformative learning. Fostering reflective and transformative learning should be the cardinal goal of adult educators. Critical thinking in accordance with

Meizrow (1991:45) can be fostered in the curriculum by offering the learners activities such as critical thinking assignments; class discussion; learner-self assessments and support.

Transformative learning, according to Tennant (1991, cited in Meizrow 1991:46) can be developed by the educator linking the learner's explanations to their prior experiences. An example of transformative learning in this context is the instance of the educator using the case study of one of the learners who recycles renewable resources for her livelihood. It is possible that other learners may reflect on this incident and also follow the example of the learner in the case study in order to transform their lives.

### 5.3.2 Motivation

From my interview with the learners, their motives for learning are to communicate effectively in English; to be promoted in the workplace and wanting to further their education. Motivation on the part of the learners is an important aspect due to the fact that without learners valuing new content, there is little hope for retention or transfer to the workplace. The educator explains the purpose of the topic before actually teaching the lesson. For example, the educator first explained the purpose of learning about beadwork, which can become a form of livelihood, before actually teaching the lesson. In this way, the learners were motivated to learn.

The adult motivation to learn, according to my findings correlates with the findings of Meizrow (1991:44) who is of the opinion that adults participate in learning because of some trigger event in their lives, such as a divorce, a job, retirement or some similar event. The majority of learners participate in learning because of the relationship to their vocation.

The learning that adults value most is those that have personal value to them. For example, the learners were taught the importance of a verb in the sentence. They understood that by learning this, it would help them in their communication. From the lesson observation, learners found difficulty in expressing themselves with the use of

verbs. The learners persisted with the task and were eventually successful, with the assistance of others. Vroom (1974, cited in Ames1984:24) on the other hand posits that the individual's motivation to learn is the sum of three factors:

- Valence: the value a person places on the outcome.
- Instrumentality: the probability that the valued outcomes will be received given that certain outcomes have occurred.
- Expectancy: the belief a person has that certain effort will lead to outcomes that get rewarded.

Learners will be motivated to learn when they believe that the new material and the learning will help them with a problem or issue that is important in their life. Because each learner brings a slightly different assortment of meaning to any given situation, one can expect differences in motivational patterns. However, past experience alone does not determine present meaning.

From my lesson observations, those learners who were assigned leadership roles during the group discussion sessions, were very active within the group. They encouraged others to complete the tasks and provide responses to questions. The group leader was very eager to provide feedback to the educator on the assigned task. According to Maehr (1974 cited in Ames 1984:137) the role that an individual plays in a group is accompanied by different expectations for achievement and such expectations are followed by different expectations for the participants collectively and accompanied by varying levels of expectations. For example persons who are assigned leadership roles or who are accorded higher status are likely to exhibit higher performance levels. (Maehr 1974 cited in Ames 1984:136) "Learners have been known to show more achievement motivation when they are assigned leadership roles than when they are merely followers." (Ames 1984:136).

The study of motivation is a study of behavior. Persistence is a behavioral pattern that forms the basis for motivational inferences. In a classroom, the learners tendency

to stick to a task without being distracted is often what we used to infer that the adult is 'highly motivated."

During my lesson observation, I found the lesson on beadwork to be most interesting and challenging to the learners. They had to think of creative ways of designing their own patterns. This was a challenge to some of them.

An important feature of any teaching-learning situation is task design. Several features of the task affect the meaning that the task has for the learner. The task may elicit personal investment. Some tasks are more attractive, such as the task on beadwork, interesting and inherently motivating than others. Tasks that possess a certain optimum level of uncertainty and unpredictability tend to be generally attractive. Novelty, new information and a challenge appears innately attractive to learners and increase motivation. A challenge to the educator is to create challenging learning environments in the classroom.

According to information gained during the interview with the educator, learners are assessed by means of class tests, projects, assignments and the external examinations set by the department of education. Their performance is assessed once a term. This assessment counts towards fifty percent of the final mark. The balance of the fifty percent is derived from the final examination.

Performance appraisal is an important factor in motivation. According to Ames (1984:45) placing emphasis on tests and the teacher's evaluation of performance can have a negative effect on motivation. Valuation conditions tend to affect the individuals definition of the goals implicit in the task. External evaluation may foster a kind of competitive atmosphere.

#### 5.3.3 Communication

During my observation of lessons, the educator communicates clearly both in English and Isizulu. She is understood by all the learners. The learners respond to the educator's questions in short simple sentences or phrases. For example, when the educator asked "What is a verb?" The learners responded by saying "action word".

Learning occurs in the classroom through communication of meaning by means of words, pictures, or action. Words are given meaning; pictures are interpreted in meaningful ways. The process of communication is threefold: the speaker encodes the meaning in words; the words are spoken, or transmitted through some other medium; the learners decode the message or they interpret the communication for themselves.

Learners have the experiences mediated to them through a variety of means. This is communicated to them by the educator or by means of educational media. This secondary experience is often linguistic; it occurs through normal conversation; listening to lectures and any form of dialogue during group discussions.

Reading material and pictorial communication is classified as secondary experience. The meaning communicated through this medium in someone else's, not that of the learner's. The learners have to provide meaning to this medium of communication by reflecting on their own experiences. There is always a need for critical, reflective learning. This form of communication occurs extremely frequently in the adult education classroom since it was traditionally thought that theory was to be applied to the practice.

Learners have a record of their written work. This consists of notes copied from the chalkboard, classroom tasks and lists of commonly miss-spelt words. This serves as an attendance record whereby the educator signs the workbook at the end of the lesson. This recorded information is used by the learner to study for tests and the examination. The educator sees its purpose primarily as the acquisition or recording of information.

Marking of written work in the classroom is seen primarily in terms of assessment. The educator makes corrections in the workbook of the learner. Assignments completed by learners are not corrected but merely assessed. A mark is allocated to each unit of work completed. Errors are corrected by the educator or the learner. The educator does not interpret the writing in terms of the cognitive development of the writer. The educator corrects technical errors and does not concern herself with the thinking and learning skills of the learners.

The educator sets written work concerned with the learner's attitude to the task and is aware of the audience to be addressed and the range of choices available. The educator publishes the learner's work and uses it as a basis for future teaching. Learners work is displayed on the notice board. The range and type of writing permitted by the educator is small. Writing consists of constructing short sentences in English, the copying of notes from the chalkboard for natural science and social science and the writing of short paragraphs for English. This information was gleaned from the learner's workbooks.

Most learners in the class find writing more difficult that speaking. This may be due to the fact that they get less practice in everyday life. Research by Sutton (1981:23) indicates that the writing of assignments is made even more difficult because educators underestimate how complex the process of mastery is and because insufficiently varied tasks are set.

The range of assignments is narrow, also exclusively designed to test what has been learnt. Educators should look at writing differently. They need to decide whether language is being used for the 'transmission' or 'interpretation' of knowledge and does the writing have a clear function and a definite audience. The 'interpretation' view implies that learners have to 'interpret' knowledge in order to possess it, by trying to express it in their own way.

The educator is aware that the second language learners have the intellectual ability but not the language competence to follow examination courses. Simplification of the

language alone will not help the learner with the language development in the long term. What is required is a structured approach to the language content.

According to Krashen (1982 cited in Inglis 2000:133) 'adults have two distinct ways of developing competence in a second language, namely acquisition and learning.' In 'natural' language, children acquire proficiency painlessly with increasing accuracy and fluency. The language acquisition process is subconscious. No conscious attempt is made to teach the rules or grammar of the language. This natural process is termed acquisition. In contrast to the ease with which children acquire their first language, adults experience difficulty with becoming proficient in a second language. In Krashen's view, this is because adults try to learn a language rather than acquire it.

The implication of Krashen's study for classroom practice is that a language development environment which establishes a safe, non-threatening atmosphere and draws on relevant meaningful and authentic contexts and use, will promote second language acquisition than one that is not characterized by these features.

#### 5.4 Relationship of findings to Knowles Theory of Andragogy.

From my lesson observations, the source for most lessons is experience itself. For example, the educator in her natural science lesson discussed a case study of one of the learners who earns a living from recycling renewable resources. The aim of the educator for drawing from personal experiences is one of personal development of the learners. This contradicts the educator's earlier actions when she marks the assignments in a technical way and ignores the personal development of the learner. Knowles (1996, cited in Jarvis 2004:126) contends that the question of content selection is a consideration of the source of knowledge. The educator sees the aim of education as personal development and hence derives knowledge from the experiences of learners themselves.

The responsibility to learn is placed on the learner. The educator acts as a facilitator or resource person. In her English lesson, that I observed, learners were grouped and assigned various activities like writing sentences using verbs and drawing up lists of

verbs. Learners were free to learn in the manner desired. The educator's role was that of a helper and she created the conditions for learning to take place. This correlates with Knowles (1976 cited in Jarvis 2004:126) theory of andragogy in which he proposes that learners become self-directed learners. The responsibility for learning is placed on the learner.

The curriculum framework used in all public adult learning centre, such as the researchers research site is outcomes based education. This approach is accepted as the answer to the problem associated with traditional didactics with the stress on studying content.

In my findings, all lessons that were observed were facilitated by the educator. The educator did not dominate the lesson nor did she present all the information. The learners partially took charge of their own learning. This is in accordance with the theory of andragogy.

In her teaching, the educator related her lessons to livelihood skills. Her natural science lesson centred around recycling of renewable and resources as a form of livelihood. In her life orientation lesson, learners were taught the art of beadwork as a form of livelihood. In accordance with Knowles (1984, cited in Jarvis 2004:128) "adult learning is enhanced when learners perceive that the learning process and outcomes are relevant to their own purposes." The learners in the adult learning class are under privileged and education for livelihoods is relevant to their lives.

The educator made much use of group discussion in the lessons observed. The natural science, English and social science lessons were based on group discussion. There was an inter-play of ideas. The combined resource of the group was used. This correlates with Knowles (1984 cited in Jarvis 2004:128) findings when he contends that adult learning is enhanced when there is a inter-play of ideas and he combined resources of the group is called upon. The climate created by the educator during these discussion sessions was

one of freedom of expression and respect for the opinions of one another. This forms part of the assumptions of adult learning in accordance with Knowles (1984).

In all lessons that were observed, learners were actively involved in the learning process. Learners were involved in discussion groups, they provided feedback and were involved in group discussions and answered questions posed by the educator. In accordance with Knowles (1984 cited in Jarvis 2004:128) learners are encouraged to be active and to learn through doing. Emphasis is placed on meaning rather than rote learning.

Learners were encouraged to learn from their peers. They were placed in groups by the educator and encouraged to contribute to group discussion. During the English lesson, learners were deliberately placed in pairs. More proficient English learners were paired with less proficient learners. The educator labeled this as "paired learning." In accordance with Knowles (1984 cited in Jarvis 2004:128) this opportunity to learn from peers is central to a learners-centered approach. They learn from differing points of view, in a climate of trust and mutuality.

The educator re-organized the classroom setting by placing the desks in a rectangular fashion in which there was face-to-face contact. This created an informal classroom atmosphere, the educator encouraged openness to feedback and modeled respect for differing views. This is in accordance with the assumptions of Knowles (1984, cited in Jarvis 2004: 128) on developing a supportive climate for learner participation.

The problem with most institutions is that learners tend to memorize information in order to reproduce it for a test or examination. This is also the case with my research site. Little attention is paid to the learning process, even though much research exists documenting that real understanding is a case of active reconstruction on the part of the learner. Although the educator makes use of discussion methods in her lessons, problem posing and reflection, is not an option. The emphasis is placed on reproducing information learnt for examination purposes.

Re-construction occurs through engagement in problem posing as well as problem solving, inference making and investigation, resolving of contradictions and reflecting. These processes all mandate for more active learners. Rather than being dependent on the institution, learners need to be empowered to think and learn for themselves. Thus, learning needs to be conceived of as 'something a learner does, not something that is done to a learner' (Johnson and Johnson 1994:24).

Although much research has been done in co-operative learning, current education practice does not reflect its use. The potential benefit of using this method in promoting active learning and developing thinking and communication skills makes its use relevant to adult education.

#### 5.5 Conclusion

On the basis of data collected, the researcher recommends that a careful balance of mass instruction, individualized instruction and co-operative group instruction. These should be combined with a selection of most appropriate teaching resources. This means that the educated should use a variety of methods in the lesson in order to cater for the learning techniques of the individual learner.

### **CHAPTER SIX**

#### CONCLUSION AND RECOMMENDATIONS

#### 6.1 Conclusion

My findings reveal that there are a range of teaching strategies at the disposal of the adult educator. The educator makes use of a variety of strategies taking into account the ability of the learners, their background and previous experience. The educator also makes use of a variety of presentation techniques within a single lesson. Her only limitation is the lack of resources, such as computers and television.

Little attention is paid to the learning process. The educator does not engage the learners in problem solving and problem posing, inference making and reflection. These activities will raise the cognitive level of the learners.

Learners are entirely dependent on the educator and the institution for their education. They need to be empowered to become responsible for their own learning.

For the purpose of this research, the researcher found it convenient to identify teaching strategies as mass instruction, individualized instruction and group instruction. Each of these teaching strategies has advantages and disadvantages. Of the three options, mass instruction strategies are being used most often. The other two are used minimally.

On the basis of data collected, the researcher recommends that a careful balance of mass instruction, individualized instruction and co-operative group instruction be utilized. Although much research has been done by Brandt (1989), Slavin (1981) and Millis (1994) into co-operative learning, current classroom practice does not reflect its use. The potential benefit of this strategy in promoting active learning and developing thinking, communication and interpersonal skills, makes its use relevant particularly in the adult education classes.

While mass instruction and individualized instruction can be used to overtake a wide range of educational and training objectives, there are a number of limitations to both approaches. According to Ellington and Race (1993:20) "neither is suitable for achieving the full range of higher cognitive objectives that are coming to be regarded as so important in today's education, and neither can be used to develop the various communication and interpersonal skills that a person needs in order to function effectively as part of a group."

Data collected reveals that no provision is made to cater for learner's differences in ability, except for the occasional use of one-to-one discussions. The use of individualized methods of instruction will help develop the learner's true potential. Individual instruction will enable learners to work independently and at their own pace. This is one of the aims of adult education in accordance with Knowles.

The minimal use of teaching resources and its unavailability at my research site needs to be addressed. Teaching and learning resources provide learners with the necessary stimulation and motivation. Technology and resources can contribute in diversifying the learning environment. Learners could use computers to access information, write essays and store information. The use of pictures and television can change a dull and boring presentation into a lively and exciting classroom experience.

#### 6.2 Recommendations

Based on the findings in chapter five, the researcher makes the following recommendations in an effort to improve the teaching-learning situation in public adult education centers:

- 1. The adult educator needs to take into consideration the learning process when planning lessons. Real understanding occurs when there is active reconstruction on the part of the learner. Reconstruction occurs through engagement in problem posing as well as problem solving, inference making and investigation, resolving of contradictions and reflecting.
- 2. Learners need to take more responsibility for their learning. Rather than being dependent on the institution, learners need to learn and think for themselves. Thus

learning needs to be conceived of as a learner does, not something that is done to a learner.

- 3. The course developers have a role to plan in order to ensure that the content is useful within the workplace. The writing exercises teach formal and informal writing and deal with aspects such as format and tone. It is possible to substitute this content with work related exercises in order to bridge the gap between the classroom and the workplace.
- 4. The educator should customize herself with the learner's vocations. She will then be able to teach in order to suit the learner's needs.
- 5. The learning activities should be multi-sensory aimed at developing skills in reading, writing, oratory, self-discovery, critical thinking and independent study. These learning experiences should develop thinking rather than rote learning.
- 6. Activities such as group discussions, problem solving and analysis are effective in promoting thinking skills and an in-depth understanding of subject content. The focus teaching should be on developing deeper understanding rather than attempting to cover the syllabus.
- 7. There is a need for educators to become aware of advances in educational research. A review of current literature and attendance at workshops and seminars will give educators an insight into recent developments and help refine their instructional techniques.
- 8. Adult educators should not use one particular teaching method for all types of content. It is a questionable practice to adhere to any particular teaching method. Educators must be willing to try new methods and also adapt existing methods to the learners needs. For example, lectures could be made even more interactive by incorporating a number of teaching methods such as group discussion and the Socratic method. The inclusion of these methods will result in greater learner participation.

- 9. Co-operative learning should be utilized on a large scale in adult learning centers. The use of this strategy would promote active learning and help improve interpersonal relationships. A thorough study of co-operative learning would enable educators to plan and implement group work effectively.
- 10. The integrated use of all three teaching strategies in recommended. These could be interspersed by allowing learners sometimes to work individually, sometimes in groups and at other times as a whole class.
- 11. The focus of instruction should not be solely on preparing learners for the examination but rather on the development of skills. The policy of adult learning centers should be revised in order to deal with this crucial aspect.
- 12. Resources should be made available for effective teaching. Computer assisted instruction will promote individual learning. With this approach, it is possible to create programs with graded levels of difficulty that will enable learners to progress at their own pace. This is in keeping with the policies of outcomes based education. More advanced learners will not be held back with this method of individual instruction.
- 13. The emphasis on external evaluation, such as the external examination should not be emphasized. This has a negative effect on the learner's. This is in accordance with Ames (1984:45). The emphasis should be on the process of learning.
- 14. In the adult educator's task design, a challenging learning environment should be created. Tasks should be attractive, interesting and challenging. This will inherently motivate the learner.

# REFERENCES

Ames, R.E.(1984). Research and motivation in education. London: Academic Press.

Andres, Y.M. (1995). Collaboration in the classroom and over the internet. (online). Available http://www.gsn.ong/gsn/articles/article *Collaboration.htm*, 7 January 1998.

Apps, J.N. (1991). *Mastering the teaching of adults*. Florida: Library of Congress.

Atkinson, A.H. and Green, V.P. (1990). Cooperative learning: The teacher's role. *Childhood Education*, 67 (2): 8-11.

Ball, S.J. (1984). Beachside reconsidered: Reflections on a methodological apprenticeship. IN Burgess, R.G. *The research process in educational settings:* Ten case studies. London: Falmer Press.

Barker, G.P. (1995). "Don't work too hard": What message are you sending our children? *Educational horizons*. 73 (4): 160-162.

Barnes, D. (1995). Communication and learning revisited: Making meaning through talk. London: Heinemann.

Beder, H. (1991). *Adult literacy: Issues for policy and practice*. Florida: Krieger publishing.

Behr, A.L. (1988). *Education in South Africa:* Origins, issues and trends: 1952 to 1988. Pretoria: Academica.

Bell, J. (2000). *Doing your research project*. Philadelphia: Open University Press.

Bernstein, B.(1971) "Social class, language and socialization" IN *Current trends in linguistics*. Hague: Mouton Press.

Best, J.W. (1997). Research in education. New Jersey: Prentice Hall.

Bless, C. and Higson-Smith, C. (2000). Fundamentals of social research methods. Landsdowne: Juta.

Bloom, B.S.(1956). Taxonomy of educational objectives. London: Longman.

Blout, N.S and Klausmeier, H.J. (1968). *Teaching in the secondary schools*. New York: Harper and Row publishers.

Boud, D. and Griffin, V. (ED) 1987. Appreciating adults learning: From the leraners' perspective. London: Kogan Page.

Brandt, R. (1989). Cooperative learning. *Educational leadership*, 74 (4): 1-66.

Brookfield, S.D. (1986). *Understanding and facilitating adult learning*. London: Open University Press.

Burton, J.B. (1987). *Teaching thinking skills: Theory and practice*. New York: Freeman and Company.

Callahan, J.F and Clark, L.H. (1988). Teaching in the middle and secondary school: planning for competence. New York: Macmillan.

Clark, L.H and Starr, I.S.(1991). Secondary and middle school teaching methods. New York: Macmillan.

Cohen, L., Manion, L.and K. Morrison. (2000). Research methods in education. London: Routledge Falmer.

Congelosi, J.S. (1992). Systematic teaching strategies. New York: Longman.

Cresswell, W. (1994). *The academic chairperson's handbook*. Nebraska: University of Nebraska Press.

Cross, R. (1976). Adults as learners. London: Jossey-Bass.

Curzon, L.B. (1990). *Teaching in further education: An outline of principles and practice*. London: Cassell Educational Limited.

Daloz, A. (1987) Effective teaching and mentoring. London: Jossey-Bass.

Davis, B.G. (1993). *Tools for teaching*. San Francisco: Jossey-Bass Publishers.

Dunkin, M.J. (1974). *The study of teaching*. New York: Holt, Rinehart and Winston.

Dyer, J.R. (1980). *Understanding and evaluating educational research*. London: Addison-Wesley Publishing Company.

Ellington, H.F. and F. Race. (1993). *Handbook of educational technology*. London: Kogan Page.

Flanders, N.A. (1970). *Analyzing teaching behavior*. London: Addison Wesley.

Galbraith, M.W. (ED) 1991. adult learning methods: a guide for effective instruction. Florida: Krieger Publishing.

Gravett, S. (2005). Adult learning: Designing and implementing learning events: A dialogic approach. Pretoria: Van Schaik.

Harley, K. et al. (2000). *Curriculum studies*. Pietermaritzburg: University of Natal.

Heimlich, J.E. (1994). *Teaching style in adult education*. San Francisco: Jossey-Bass.

Hyman, R.T. (1974). Ways of teaching. New York: J.B. Lippincott Company.

Inglis, F.(2004). Education and good society. Palgrove: MacMillan.

Jarvis, P. (2004). *Adult education and lifelong learning*. London: Routledge Falmer.

Johnson, D.W. and R.T. Johnson (1994). *Learning together and alone: Cooperative, competitive and individualistic learning.* Boston: Allyn and Bacon.

Keeves, J.P. (1988). *Educational research, methodology and measurement: An international handbook.* Canada: Pergamon Press.

Kierstead, J. (1986). How teachers manage individual and small group work in active classrooms? *Educational leadership*, 44 (2): 22-55.

Klevins, C. (ED) 1987. *Materials and methods in adult education*. London: Klevins Publishers.

Knowles, S. (1970). Andragogy in action. London: Jossey-Bass.

Knowles, S. (1980). Andragogy in action. London: Josey-Bass.

Knowles, S. (1984). Andragogy in action. London: Jossey-Bass.

Knox, A. (1977). Adult development and learning. London: Jossey Bass.

Rogers, A. (1996). Teaching adults. London: open University Press.

Kolb, D.A. (1984). Experiential learning: Experience as a source of learning and development. London: Prentice Hall.

Lawman, J.(1984). *Mastering the techniques of teaching*. San Francisco: Jossey Bass.

Legge, D. (1977). *The education of adults in Britain*. London: Open University Press.

Lincoln, Y. and E. Guba. (1985). Naturalistic enquiry. Newbury Park: Sage.

Mariaskin, L. and R. Sofo. (1992). Culturally diverse communities. Kappa Delta PI record. *Fall* 1992: 22-24.

McMillan, J.H. and Schumacher, S. (1993). Research in education: a qualitative approach. London: Jossey Bass.

Mager, R. (1984). Preparing instructional objectives. Belmont: Pitman.

Manning, M.L.(1993). Cooperative learning and the multicultural classroom. *The clearing house*. 67 (1): 12-16.

McAllister, H.C. (1997). Problem solving and learning. (online) available hpp://www 2.hawaii. Edu/suremath/learnl.htm. 27 August 1988.

Merriam, S.B. (1988). Case study research in education: A qualitative approach. London: Jossey-Bass publishers.

Merriam, S.B. and R.S. Caffarella. (1978). *Learning in adulthood*. California: Jossey-Bass.

Merriam, S.B. and G. Darkenwald. (1982). Foundations of practice. New York: Harper and Row.

Merriam, S. and L.Simpson. (1995). A guide to research for educators and trainers of adults. Florida: Krieger publishing.

Mezirow, J. (1991) *Transformative dimensions of adult leraning*. California: Josey- Bass.

Millis, B.J. (1994). Conducting co-operative classes. *To improve the academy*. 13(1): 309-328.

Mullan, A. (1995). The effective implementation of resource-based learning. *British educational research journal.* 21(3): 387-394.

Ornstein, A.C. (2004) Effective teaching. New York: McGraw-Hill.

Piaget, J. (1970). The language and thought of the child. London: Kegan Paul.

Pitout, D.N. Smith, A.G. and Windell, J.H.J. (1992). *Education for secondary school teachers*. Pretoria: Academica.

Rogers, J. (1973). *Adults in education*. London: British Broadcasting Corporation.

Sansone, C. (2000). *Intrinsic and extrinsic motivation*. London: Academic Press.

Seaman, D.F. (1989). Effective strategies for teaching adults. London: Macmillan.

Skager, S. (1977). *Curriculum evaluation for lifelong learning*. New York: Pergamon Press.

Slavin, R.E. (1981). Synthesis of research on cooperative learning. *Educational leadership.* 38 (8): 655-659.

Slavin, R.E. (1995). *Cooperative learning: Theory, research and practice*. Boston: Allyn and Bacon.

Smith, R. (1982). Learning how to learn. New York: Cambridge.

Solomon, L. (1993). *New perspectives in encounter groups*. San Francisco: Jossey Bass.

Stephens, M.D. (1971). *Teaching techniques in adult education*. Bristol: David and Charles.

Sutton, C. (1981). *Communication in the classroom*. London: Hodder and Stoughton.

Tomlinson, C.A. (1995). "All kids can learn": Masking diversity in the middle school. *The clearing house*. 68(3): 163-166.

Verduin, J.R. (1977). Adults teaching adults. London: Learning Concepts.

Vernon, S. (1971). *Teaching and media*. New Jersey: Prentice Hall.

Walklin, L. (1990). *Teaching and learning in further and adult education*. London: Stanley Thornes

Weiner, G. (1987). Gender under scrutiny: New enquiries in education. London: Hutchinson.

Department of education. (1995) Cape Town.

Yin, K.Y. (1984). Case study research: Design and methods. London: Sage Publishers.

# <u>University of Kwa-Zulu Natal</u> <u>Classroom Observation Schedule</u>

Rating scale: 1. Strongly evident 2. Evident

3. Not evident

COMPETENCE  1. Makes use of learners previous experience.		RATING	REMARKS , ,
		1	The background and knowledge of learners is valued.
2. Do learners understand the relevance of the topic to their lives?		/	increased knowledge better communication
3. Encourages the development of critical thinking and problem solving.		3	To a limited extent.
<ol> <li>Teacher in a manner that encourages conflict management skills.</li> <li>(eg. debate, argument)</li> </ol>		2	openeous of others is respected Discussion leads to debate.
5. Makes use of classroom discussion.		/	from learners.
6. Manages different kinds of classroom learning: Individualized Small group Whole class teaching		/ / /	a variety of teaching techniques are used.
7. Learners are actively involved in the learning process.		2	all learners are involved in discussion.
8. Gives frequent feedback to learners.		2	sesson are receped.
9. Makes use of self-activity methods.		1	Reading, assignments,
10. Sensitive to the learners:	e learning needs of Culture	1	
	Previous experience	1	
	Social	2	
	Language	1	

COMPETENCE	RATING	REMARKS
11. Educator establishes good rapport and communication with learners.	1	speaks in both languages.
12. Uses different learning strategies to accommodate learning styles of learners.	1	discussion, questioning, sentence building,
13. Communicates ideas and concepts clearly.	2	learners understand concepts.
14. Free creative activity, self-expression and originality are encouraged.	2	Free flow of ideas.
15. Encourages the free exchange of ideas.	2	learner are encouraged to respond.
16. Revision and consolidation of learning	2	lessons are regaped.
17. Encourages development of: Knowledge	2	, <b>,</b>
Skills	1	
Attitudes	2.	Respect for
		group

# University of Kwa-Zulu Natal Interview Schedule

1. Which of the following teaching strategies do you utilize in the

classroom?

<ul><li>1.1 Mass instruction:</li><li>1.1.1 Lecture method</li><li>1.1.2 Demonstration</li></ul>	E N.S. SS L.O.			
1.1.3 Forum	///			
1.1.4 Socratic method				
1.1.s Other				
1.11.0 @ 11.01.0	Ī			
1.2 Individualized instruction				
1.2.1 Discussion	V V V V			
1.2.2 Projects.	/ / /			
1.2.3 Assignments				
1.2.4 Computer assisted learning				
1.2.5 Self-directed learning				
1.2.6 Learning contracts				
1.2.7 Other				
	I			
1.3 Group instruction	1			
1.3.1 Group discussion	V V V			
1.3.2 Co-operative learning groups	111			
1.3.3 Role playing	/ / / /			
1.3.4 Case studies				
1.3.5 Fish bowl				
1.3.6 Other: PAIRED LEARNING DRAMATIZATION				
2. What learning needs do you take into lessons?  I consider the previous and level of the learn lessons.				
and level of the reas	when preparing			
3. How do you make use of your learners				
3. How do you make use of your learners	s previous knowledge!			
the series of desires the	son vigor starting with			
I revise the previous lesson before starting with the new lesson. I draw on learners background and culture. 4. How do you foster leadership development in your teaching?				
Group leaders are appointed. Learners are renomible.				
for their own learning the educator.	inted. Learners are responsible g in the absence of			

	5. When do you make use of group teaching techniques? These are
	used frequently especially in discussion groups.
	6. How do you foster self-directed learning in your learners?
	I give the learners homework and assignments I give
	them problems eg. how to eape with aids? They read up and some with solutions.
	7. List these factors in order of preference when selecting methods of
	instruction:
9	7.1 3 Your expertise in using various methods.
9	7.2 The learning styles of individual learners.
	7.3 $\frac{2}{}$ The nature of the content to be taught.
	8. How is the learner's progress evaluated?  By class tests projects, assignments and the external examination.
9	9. What are the learner's motives for learning?
	a. Some want to further their education.
	& They want to communicate in English.
	c. They want promotion in the workplace.
	d. They do not want to be cheated by
	at their when dealing with money.
	$\mathcal{G}$

27 Clegdale gardens Newlands West Durban 4051 1 February 2006

For attention: Dr Headly Department of Education Division of Adult Education Private Bag X54323 Durban 4000

Dear Sir

Permission to conduct research.

I am currently completing my masters degree in adult education with the University of Kwa-Zulu Natal. The topic of my dissertation is "The evaluation of teaching techniques of adult educators."

I require permission to conduct research at two adult learning centers. The learning centers are located at Riverdene Secondary School and at Newlands East Secondary School in the Newlands area.

All ethical issues as set out by the university will be adhered to. These include: - anonymity of the institution and the participants will be ensured.

- Participation will be voluntary and consent will be obtained from all participants.
- All responses will be treated as confidential.
- Permission will be obtained from the Principals concerned before entering the premises.
- No disruption will be caused to the classes concerned.
- No recording devices will be used in the study.

I am required to conduct my research during the month of April. An observation schedule an interview will be used to collect the data. I am hopeful that my request meets with your approval.

Yours	Faithfully
Louis	1 aiditally

CONSENT FORM
I (participant) do hereby give consent to (researcher) to participate in his research study.
I am of the understanding that the purpose of the research is to improve the practice of adult educators.
<ol> <li>I am also of the understand that:</li> <li>My participation is voluntary.</li> <li>My responses will be treated in a confidential manner.</li> <li>I may withdraw from the study whenever I deem it necessary without any negative or undesirable consequences to myself.</li> <li>Anonymity will be ensured.</li> </ol>
I fully understand the purpose and consequences of my participation in this study.
Name of Participant: Signature: Witnesses: 1. 2.
Details of Researcher: Mr C. Naidoo Phone: 5781431
Details of Project Leader: Dr I. Baatjies University of Kwa-Zulu Natal Phone: 033 2606186

# APPENDIX 5

<u>University of Kwa-Zulu Natal</u> <u>Interview Schedule: Learners.</u>

1. What are your motives for attending the ABET course?
a To gain employment in the workplace.
b. To be able to communicate il improve
reading, writing and speaking skills
c. To pain promotion in the workplace
1. a Schange in vocation.
2.1 Do the teaching strategies used by your educator lead to a better understanding of the
content? Why?
a. The teaching strategies allows for better
understanding of the subject matter, Seamen
are in favour of the teaching strategies
of the educator. They prefer variety is
teaching strategies.
2.2 Which teaching strategies do you prefer? Why?
most learner (4) preferred the discursion
This method allows them to voice their
points of view and lively discussions
allows them to learn from each other.
2 2 What alternation to a line at a table 2 2 2 What alternation at a table 2 2 2 What alternation at a table 2 2 2 2 What alternation at a table 2 2 2 2 What alternation at a table 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
2.3 What alternative teaching strategies should your educator use?
jul learners prefer computer assisted instruction. The television should be
used as a form of instruction.
3. How does the ABET course assist your in the workplace?
The course helps learners to communicate
better. Their knowledge of numeracy and
natural science helps them in daily life computation
4. What assessment techniques does your educator make use of?
Tests, written escamination oral
presentations and assignments.
70.00
5. Should the assessment techniques be changed? Why?
They should be changed, written exams
should be done away with and replaced
with continuous assessment tasks.