## CHAPTER FOUR

# RESEARCH DESIGN AND METHODOLOGY

'The methods and procedures are really the heart of the research...activities should be described with as much detail as possible and the continuity between them should be apparent.

(Wiersma & Jurs, 2005:416)

#### 4.1 INTRODUCTION

The aim of this chapter is to outline the methodology that was applied to obtain and utilise information data from both primary and secondary sources towards attainment of the research aims (*cf.* 1.2) of the study.

In section 1.3 (Chapter One), the methodology of this study is highlighted. In this chapter an outline of what transpired during the implementation of the methodology is presented. In addition, reports on the precise procedures undertaken in carrying out the research as well as the shortcomings experienced are presented.

This chapter presents the reality about the methodological aspects and procedures that prevailed during the course of the research. This chapter, in addition, presents the reality about methodological aspects and procedures which prevailed during the course of the study.

#### 4.2 AIMS OF THE RESEARCH DESIGN

The aims of any research design are to select or choose and utilise the methods and techniques that the researcher considers imperative to yield a better attainment of the aims and objectives of the study being conducted. There are numerous research methods that researchers can employ for the specific nature and kind of research to be undertaken (DeMarais and Lapan, 2003). There are clusters of factors that implicate the choice of research methods for any given research problem such as, maturity and dynamics of the problem being researched, costs and time (Denzin & Lincoln, 2005: 15).

As such, it is mandatory that a specific research problem should be solved through a relevant research method (Creswell, 2003:47). For these reasons, researchers have to consciously and purposefully select and utilise only those research methods that would permit better, more convenient and successful attainment of specific research aims (Maxwell, 2004:39). This study is not an exception and thus the research method and techniques considered by the researcher to be relevant are presented below.

### 4.3 QUALITATIVE RESEARCH

This study employs the qualitative research method. Patton (2001) indicates that qualitative research methodology involves an interpretative naturalistic approach. This statement implies that qualitative researchers study phenomena in their natural settings, attempting to make sense of, or interpret phenomena in terms of the meanings people bring to them (Patton, 2001: 39; Denzin & Lincoln, 2008). This study therefore seeks primary data from people who are directly involved with the subject in focus. The primary sources of data used in this study as stated in Section 1.3.2 were educators, Senior Management Teams and the parents from former model 'C' schools: one government aided Catholic school, one Section 21 non-profit private school and one township school, all in the Vaal Triangle area.

The educators, Senior Management Teams (SMTs) and parents were interviewed in their natural settings and the data collected were described and interpreted with the following research aims in mind:

- Investigate the nature of challenges that South African educators, Senior Management Teams and parents face in managing the implementation of White Paper 6 on Inclusive Education
- Make suggestions regarding eco-systemic management strategies that could be employed to help educators, Senior Management Teams and parents to develop the necessary capacity to effectively implement and manage the Inclusive Education policy as propounded in White Paper 6 on Inclusive Education.

The research methods utilized for the collection of data are interviews and observations. An independent observer was present during the interviews for ethical considerations.

A sample of 10 %, 120 participants (N=120) of the total population of 1200 (N=1200), comprising of 40 educators (n=40), 8 focus groups of the Senior Management Teams, each had 5 members (n=40) and 40 parents (n=40) from selected former model 'C' schools, private schools and township schools in the Vaal Triangle. These participants were selected from one Former model 'C' school, one government aided Catholic school, one Section 21 non-profit private school and one township school in the Vaal Triangle area. All these schools have 100% black learners. The educators and the Senior Management Team are a mixture of black, white, coloured and Indian races. The parents are mainly black. The selection of the sample was based on the first names on the lists of educators on post level one that school principals gave to the researcher and the Senior Management Team of the schools. The first ten educators on the list were selected from each school. Likewise, the first ten names of parents on the list of learners who were classified as learners who experience barriers to learning were selected for the research. All the participating schools have approximately 600 hundred learners in each school. The participating educators' teaching experience ranges from 4 years to 25 years, their age range is between 28 and 55 years. The parents' ages range from 28 to 60 years.

This research was done using a phenomenological approach.

#### 4.4 PHENOMENOLOGY

According to De Vos, (2003) phenomenology is an approach which aims at understanding and interpreting the meaning that participants give to their daily lives. (De Vos, 2003) regards it as a study that describes the meaning of experiences of a phenomenon, topic or concept as experienced by various individuals. The researcher utilises this approach to reduce the experiences to a central meaning or to the core of the experience being studied. For this to be accomplished, the researcher should go into the 'life world' of the participants and imagine them being in the participants' situation. It is mainly done by using the natural methods of study, analysing the conversations and the researcher's interactions with the participants.

Individuals who have experienced the particular phenomenon being researched must be identified. Data is collected systematically; meanings, themes and general descriptions of experiences are analysed within the specified context.

Van Manen (1990) states that phenomenology as a research method in education tries to 'ward off' any tendency toward constructing a predetermined set of fixed procedures, techniques and concepts that would rule or govern the research project. The description of meaning is a mediated expression and is interpretative of life experiences. Interpretations of life experiences are made by using some type of text or symbolic expression. A phenomenological text is descriptive because it names something and through that, points to something. It aims at letting something show itself, with the assumption that the meaning of lived experiences is hidden. A good phenomenological description is collected by lived experiences and a recollection of lived experiences (Van Manen, 1990; De Vos, 2003). In addition, personal experience is a starting point in phenomenology. Research of this nature focuses on a particular situation or event. A description of experiences is given without offering casual explanations or interpretative generalizations of experiences (Van Manen, 1990; De Vos, 2003). The process of the descriptive production of lived experiences as suggested by Van Manen is that:

- the experiences lived must be thoroughly described, avoiding as much as possible casual explanations, generalisations or abstract interpretations;
- the experiences must be described from the inside as it were;
- the focus is on a particular example or incident of the object of the experience;
- examples of experiences, which stand out vividly, are focused on;
- attention is paid to how the body feels, how things smell or smelled, how they sounded or sound; and
- beautifying accounts with fancy words or flowery terminology should be avoided.

In this study, no casual explanations have been given. The information collected is from the actual people that lived the experiences of the phenomenon being studied.

## 4.4.1 Empirical phenomenological research

According to this approach, the researcher returns to the experiences of participants' stories in order to obtain comprehensive descriptions. The descriptions then provide the basis for a reflective structural analysis to portray the essences of the experiences. To start with, the original data is comprised of 'naïve' descriptions obtained through open-ended questions and dialogue. The researcher then describes the structure of the experiences based on the reflection and interpretation of the research participants' stories (Van Manen, 1990; De Vos, 2003; Denzin & Lincoln, 2008).

## 4.5 DATA COLLECTION

Information was needed to address the problem of this research on eco-systemic management strategies for inclusive schools and phenomenological interviews were found ideal for this study. The interviews were audio taped with the permission of the participants so that everything that the participants said could be preserved. The field notes were also written in a detailed manner. The interviews were transcribed as soon as possible after each interview in order to ensure as much relevant data was recorded. The researcher held back all preconceived ideas which could have contaminated the data collection. The phenomenon was to be understood through the voices of the participants (Creswell, 1998: 52; Holliday, 2007).

As Merriam (2002; Creswell, 2003) suggest that observations make it possible to record behaviour as it is happening and that the researcher learns about behaviours and the meanings attached to them through observations, data in this study was also collected through observations.

### 4.6 AIMS OF THE INTERVIEW

Different authorities in the field of qualitative research, including \$hank (2002:13) and Creswell (2003:18), recommend the use of interviews in research.

The aim of the interviews used in this research was to obtain primary information from the participants who were selected to participate in the study. Due to the nature of the study, the researcher wanted to:

- ask numerous open-ended questions;
- record verbatim the answers given by the participants;
- accord the participants opportunities to say what they think and to do so with great richness and spontaneity; and
- generate or attain an improved response rate by interviewees and by so doing enhance the quality of the study.

Not only was the researcher interested in what the participants had to say, but also in how and why they said them.

### 4.7 CONSTRUCTION OF THE INTERVIEW SCHEDULE

The instrument used in this study is an interview schedule (see Appendix A, B, C, D). As stated in Section 1.3.1.4, unstructured interviews were conducted. The researcher decided to conduct interviews with educators, Senior Management Teams of schools and the parents of learners from one former model 'C' school, one government aided Catholic school, one Section 21 non-profit private school and one township school.

The interview schedule consisted of only two key questions which focused on:

- the challenges that educators and Senior Management Teams face in managing learners in Inclusive Education classrooms; and
- obtaining information from parents regarding the learner holistically.

A case history form was formulated to code the required information as the parents elaborated on the life of the learner. These questions were formulated specifically to address the research questions posed in section 1.1.

The interview schedule lead to the attainment of the aims of the study as stated in Section 1.2, namely to:

- investigate the nature of challenges that South African educators, Senior Management Teams and parents face in managing the implementation of White Paper 6 on Inclusive Education; and
- suggest eco-systemic management strategies that could be used to help educators, Senior Management Teams and parents to develop the necessary capacity to effectively implement and manage the Inclusive Education policy as propounded in White Paper 6 on Inclusive Education.

Although several measuring instruments have been devised to obtain information on the challenges experienced by educators, Senior Management Teams and parents regarding inclusion, these instruments were designed overseas. As a result of a peculiar situation in South Africa none of these measuring instruments were completely suitable and appropriate for use in this investigation. It was thus decided to construct a distinctive unstructured interview schedule, which could be used to measure challenges that educators, Senior Management Teams and parents face in implementing Inclusive Education in the context of South African schools.

# 4.7.1 Modus operandi of interview

Lists of participants were compiled per school. The researcher obtained the contact details of the participants and contacted them telephonically and *via* fax to notify them of their selection as well as to request for their participation in the study. The researcher outlined and discussed with each interviewee the interview procedure as well as all ethical considerations. On their acceptance to participate in the study, appointments were arranged with on dates and times that suited them. All participants gave the researcher their lunch time hours. The parents were interviewed when it was convenient for them, either at home or at the learners' schools. After the appointments were made, the interview schedule (see Appendix A, B, C, D) was sent to the participants either via e-mail or fax in order to afford them an opportunity to familiarise themselves with the content of the interview schedule before the meeting time (De Vos, 2003).

On the appointed date and time, the researcher met with the interviewees and conducted the unstructured interviews (see Appendix A, B, C, D). In many of these cases, both parties met for the first time at the interview meeting, which started with

an introduction of themselves and then the purpose of the interview. During the interview, the questions on the interview schedule were used as primary questions and depending on the answers of the respondents, follow-up questions were raised by the interviewer. The purpose of the follow-up questions was to gain clarity and more information or understanding regarding the responses of the participants on the matter(s) being discussed. This technically means that some interviews lasted longer than others. The approximate time allocated per interview was one hour.

Though there is an overriding perception that the presence of recording devices in an interview session may deter participants from expressing their opinion freely, Berg (2003) maintains that the interviewer should sufficiently explain the purpose of the recording to the participant. Consequently, a pocket tape recorder was used to capture the proceedings with the interviewees' permission.

At the beginning of the interview sessions, the researcher affirmed the purpose of the interview and gave assurance that all the views gathered from the participants would be respected and treated confidentially. Interviewees were given an opportunity to ask questions regarding the procedure and the conducting of the interviews. After every uncertainty was clarified, the researcher started asking the questions included in the interview schedule. The interview meetings ended with an expression of thanks and appreciation for the interviewees' participation and contribution to providing answers to the questions of the research.

# 4.7.2 Thematising

The word theme comes from the Latin word *thema*, which means, "What is laid down". In other words, a theme is placed and it is tied to a position, a value and meaning. Themes in a phenomenological research approach may be understood as the structures of experiences. According to Van Manen (1990; De Vos, 2003) a theme is the experience of focus, of meaning, of point; it is not an object one encounters at a certain point or moment in the text. A theme is not a thing. It is a form of capturing the phenomenon one is trying to understand (Van Manen, 1990; Creswell, 2003; Denzin & Lincoln, 2008).

Van Manen (1990) and Creswell (2003) argue that doing human science is to be involved in creating a text in order to come to grips with the structure of the meaning

of the text. This is done in terms of meaning units, structures or themes. A reflection of lived experiences then becomes a reflective analysis of the structural or thematic aspects of the experience. They state the three processes for isolating thematic statements as follows:

- The sententious or holistic approach.
- The selective or highlighting approach.
- The line by-by line or the detailed approach.

These approaches guide different views of the text. The difference lies in how the particular lenses look at the specific aspect being examined. The first approach is general and it seeks an overall understanding of the meaning of the text. The second approach focuses on the phrases or the sentences that stand out in the text. The third approach closely examines the text sentence-by-sentence (Van Manen, 1990; Berg, 2003).

'Perhaps, the most difficult part of the thematising process is determining the difference between universal or essential qualities of a theme and those that are more incidentally related to the phenomenon. To determine the universal or the essential quality of a theme, the researcher needs to discover aspects or qualities that make a phenomenon what it is and without which the phenomenon could not be what it is. The structuring of meaning with themes sets the stage for the process of bringing speech to something' (Van Manen, 1990; Shank, 2002).

In this study, structuring the meaning with the themes changed the words into something. For example, poverty was classified under socio-economic challenges. It made the phenomenon of investigating the nature of challenges that South African educators, Senior Management Teams and parents face in managing the implementation of White Paper 6 on Inclusive Education come to life. It was a 'Eureka' feeling and themes made it easier to classify the words in the stories of the participants' experiences.

#### 4.8 DECODING OF THE DATA

The interview data was recorded on audiocassettes. As such, the researcher had to:

- play back each tape in a chronological manner as the interviews had been conducted;
- listen to all the tapes very carefully; and
- transcribe the information on the tapes.

The researcher transcribed the audiocassettes *verbatim* using paper, this means that the data will be presented as the participants gave it.

In order to ensure validity and reliability of the data decoding, the researcher used two university academics to verify the accuracy of the data decoding. Denzil and Lincoln (2005: 34) and Shank (2002: 26) among many uphold this research technique in literature.

#### 4.9 DATA ANALYSIS AND INTERPRETATION

Strauss and Corbin (1998:9; Denzil and Lincoln, 2005) explain that the analysis phase of data in qualitative research involves a process of comparison of data and the identification of patterns between instances and individuals. The data analysis of this research was done according to this process. The data that was captured during interview sessions is presented *verbatim*. As such, the data collected was analysed and interpreted simultaneously.

Furthermore, the data was organized according to the sequence of the interview schedule. For every question included in interview schedule, the problems and successes indicated by the participants were analysed and interpreted

#### 4.10 ETHICAL MEASURES

Groenewald (2004) developed a specific informed consent agreement form based on Bailey (1994) in which it is shown how to gain informed consent from participants. Participants must be informed of the following:

- They are participating in research.
- The purpose of the research.

- The procedures of the research.
- The risks and the benefits of the research.
- The voluntary nature of the research participation.
- The participants' right to stop participating in the research at any time.
- The procedures used to protect confidentiality.

(Arksey & Knight, 1999; Kvale, 1996 quoted by Groenewald, 2004).

In this study, the researcher adhered to the above suggested consent agreement.

#### 4.11 CONCLUSION

In this chapter, the research design is presented. The purpose of this chapter is achieved by outlining the methodology that is used to obtain and utilise information from both primary and secondary sources towards the attainment of the research aims (*cf.* 1.2) of the study.

In this chapter an outline of what transpired during the implementation of the methodology is given. In addition, reports on the precise procedures undertaken in carrying out the research as well as the shortcomings experienced are presented.

This chapter presents the reality of the methodological aspects and procedures that prevailed during the course of the research. It presented the reality about methodological aspects and procedures which prevailed during the course of the study.

Chapter Five presents the analysis of the data.