

## CHAPTER 4

### THE RESEARCH DESIGN

#### 4.1 INTRODUCTION

It was indicated in Chapter One of this study that a qualitative approach of research will be assumed. This study deviates from a quantitative approach to research where researchers normally focus on measuring the degree to which certain policies have been implemented or verify certain claims in research. This decision to a different approach is informed by the fact that quantitative studies often measure technical compliance of policy implementation without grappling with the issues of why implementation is the way it is. Therefore a qualitative approach is more appropriate in order to be able to understand why policy implementation is the way it is. Smit (2001) says that qualitative research requires the researchers to understand and critically reflect on ideological dimensions. The aim of the study is to understand these very issues of why policy implementation is the way it is and further describe the relationship between policy origination and management practices in FET colleges in Gauteng. In this regard the study is qualitative and located within the interpretive paradigm. According to Smit (2001) to understand policy implementation issues the study will need to understand them through the meanings that policy developers and implementers assign to them. Therefore the interpretive approach will best suite this study.

An understanding of these policy issues on policy implementation makes a qualitative research design apposite. In this chapter I will elaborate on my research design and its epistemological underpinning and discuss the data gathering techniques used to explore the reasons why policy is implemented in colleges the way it is done.

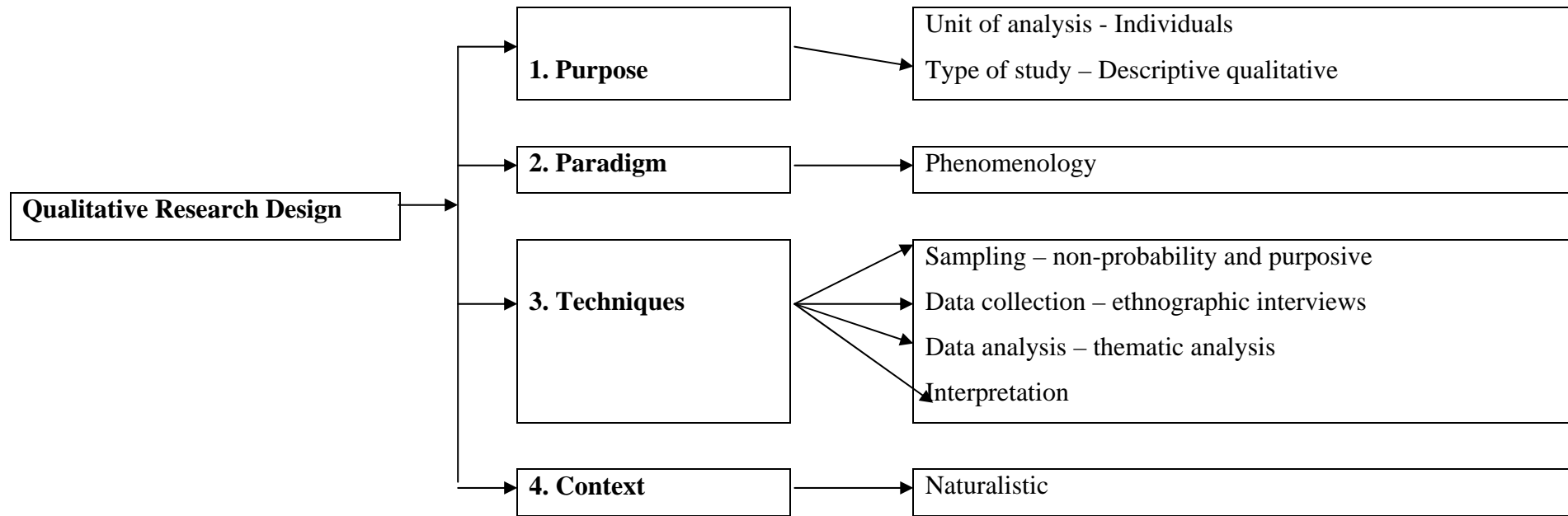
## 4.2 RESEARCH DESIGN

Research designs are used by researchers to answer the research question or questions and according to McMillan and Schumacher (1997:162) a research design refers to a plan and structure of the investigation that is used to obtain evidence in order to answer the research question or questions. Following on McMillan and Schumacher, Terre Blanche and Durrheim (1999:29) indicates that a research design guides “the arrangement of condition for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure”. Terre Blanche and Durrheim (1999:29) tries to further simplify this and says that a research design is simply a bridge between research questions and the implementation of the research. Saunders, Lewis and Thornhill (2000:89) also define a research design as a complete and accurate configuration of a piece of research. According to Saunders, et al. (2000:89; cf. Terre Blanche & Durrheim, 1999:30) a research design describes the kind of evidence to be collected by the research and also state where this evidence will be collected from and how such evidence will be interpreted in order to present good answers to the pre-determined research question. In addition Saunders, et al. (2000:92) indicates that it is important therefore that the researcher outlines a clear strategy on how he/she will go about answering the research question or questions.

The research participants, methods of collecting and analyzing data form the nucleus of the research design. McMillan and Schumacher (1997:33) argue that a good research design or strategy indicates what happens to the participants during research and what methods of collecting data will used. Terre Blanche & Durrheim (1999:29) argues that a clear design strategy and nature of the plan of the strategy is the one that usually distinguishes research from other forms of investigations or studies. Consequently a research design should be able to fulfill the aims of the research.

McMillan and Schumacher (1997:39) argue that qualitative research designs are less structured than quantitative designs. They (McMillan & Schumacher) say that in qualitative designs it is difficult for specific research procedures to be determined in advance but are identified during evolution of the research. Babbie and Mouton (2004:53) state that in this regard qualitative research designs take the insider perspective on social action as its point of departure and build on this. Babbie and Mouton (2004:278) have identified three main types of research designs used in qualitative studies and these are the ethnographic studies, case studies and life histories. In other words qualitative researchers use these research designs to answer their research question in the most relevant and economical way (Terre Blanche & Durrheim, 1999:29).

In brief the research design adopted in this study is qualitative and is summarised in Figure 1 as follows:



**Figure 4.1 Research Design (Adapted from TerreBlanche & Durrheim, 1999)**

### 4.2.1 Qualitative Research

The definition of qualitative research is usually approached from many different angles. Some authors try to define it using data collecting strategies as the basis for their definitions whilst others base theirs solely by contrasting it with quantitative research. Golafshani (2003) is one proponent who defines qualitative research in stark contrast to quantitative research. According to Golafshani (2003:560) qualitative research is “any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification”. Quantitative researchers use statistics to interpret and make sense of research data. It follows then that qualitative researchers do not employ numerical measurements to interpret research data in order to arrive at their conclusions

Whilst many authors differ on the definition of qualitative research, in many ways they agree on the purpose of qualitative research. Babbie and Mouton (2004:278) state that qualitative research focuses on studying human action in its natural context and through the perspective of the actors themselves. Babbie and Mouton (2004:270) emphasize the point that the primary purpose of qualitative research is to describe and understand. Smit (2001) agrees with Babbie and Mouton further say that the primary purpose of qualitative research is to firstly try and understand thereafter describe the social phenomenon from the respondents’ perspectives. Babbie and Mouton (2004:271) further argue that to best understand human attitudes, behaviour and culture the research need to be set in the “*natural setting*” instead of artificial settings of experiments and surveys as applied by quantitative researchers. Gall, Gall and Borg (1996:767) essentially agrees with the above sentiments but further indicate that qualitative research is an enquiry that is grounded in the assumption that individuals construct social reality in the form of meanings and interpretations, and that this constructs tend to be in a state of transition and context bound. What this suggests is that qualitative research is fluid, in other words it is in a state of change all the time.

Thorne (2000:1) is of the opinion that qualitative researchers accept that the goal of science is to discover the truths that exist in the world and to use the scientific method as a way to build a more complete understanding of reality. According to Babbie and Mouton (2004: 272) this method of understanding concepts and events from the actors' point of view help qualitative researchers stay as close and true as possible to the meanings of the actors themselves. Thorne (2000:1) says that qualitative researchers are often more concerned about uncovering knowledge about how the actors think and feel about the circumstances in which they find themselves. This implies that qualitative research allows the researcher to understand concepts and events from the actors' point of view.

In short qualitative researchers agree that the purpose of qualitative research is to explore, understand, explain and describe social phenomena from the participants' perspectives as indicated by Ploeg (1999:2; cf. Key, 1997:1).

As indicated in paragraph 4.3 above ethnographic studies is one type of the research designs used in qualitative studies. The following sections will now focus on ethnography as a qualitative research design.

## **4.2.2 Characteristics of Qualitative Research**

### **4.2.2.1 Qualitative method of data collection**

This study is interested in the manner in which policy developers and implementers perceive policy development at national level as well as policy implementation at college level. The researcher was able to visit these policy developers and implementers at their place of work. Prior to the visit the researcher sent e-mails to participants outlining the purpose of the study as well as a set of pre-determined questions. The purpose of the visits was restated on the day of the interview. This was one of the most suitable ways of gathering data which was carried out through in-depth interviews.

#### **4.2.2.2 Human as instrument**

In qualitative research the researcher is considered as a research instrument. In this regard the researcher and the research subjects becomes the focus when using the human as a research instrument.

##### **The researcher**

In qualitative research the researcher is seen as accomplishing the roles of data collector and culler of relevant information (PeNMJ: etd.uj.ac.za, 2006:3). The researcher is further seen as a facilitator during data collection as he/she partakes in actions that promote the flow of information. The researcher will therefore collected research data by means of qualitative interviews and then analyze and interpret the outcomes..

##### **The research participants**

In this study the research participants are FET policy developers as well as principals of FET colleges in Gauteng. These will be participating in the qualitative research process.

#### **4.2.2.3 Data collection in the natural setting**

Maykut and Morehouse (1994:45) define the natural setting as “a place where the researcher is most likely to discover, or uncover, what is known about the incident of interest”. In other words qualitative researchers should conduct their research in places where they are most likely to investigate the subjects in the context of the problem.

In this study the researcher will in the first instance interview policy developers who work in the environment of policy development. Secondly the researcher will visit principals of FET colleges in Gauteng in their colleges as places where FET policy is being implemented. The study includes investigating the perceptions of principals on the policy development and implementation.

#### **4.2.2.4 An exploratory and descriptive focus**

According to PeNMJ: etd.uj.ac.za (2006:3) the enquiry of qualitative researchers focuses their enquiry on finding out about social events. The outcomes of this study will provide an understanding of power relations from the perspectives of policy developers and implementers

#### **4.2.2.5 Early and ongoing inductive data analysis**

An analysis begins as soon as the researcher has accumulated a subset of data that provides an opportunity for important initial leads to be followed in illuminating the phenomenon under study. The qualitative data analysis is regarded as important and according to PeNMJ: etd.uj.ac.za (2006:4) this kind of analysis is regarded as inductive.

#### **4.2.2.6 Purposive sampling**

The researcher has conveniently selected participants in this study as policy developers and implementers because they have specialized knowledge and experience on the processes of policy development and policy implementation. Policy developers are the actual people who worked on the FET policy and therefore possess a special understanding of this process. Principals who in this case are regarded as implementers are at the forefront of the implementation process of the FET policy. They are in the context and they experience issues around implementation at a practical level.



#### 4.2.2.7 Ethical measures

Neuman (2003:116) indicates that ethics in research denotes the type of research procedures that are morally acceptable or put differently ethics simply refers to ‘what is or is not legitimate to do’. Neuman (2003:110) says that ethics begin and end with the researcher himself or herself. His or her conduct before the research, during the research and after conducting the research is of critical importance to the credibility of the study.

Research should not in any way harm the people being studied. Researchers should always guard against causing embarrassment or danger to participants’ home lives, friendships, jobs, etc (Babbie & Mouton, 2004:522).

Researchers who have access to participants’ identifications should be trained on their ethical responsibilities (Babbie & Mouton, 2004:523). Babbie and Mouton (2004: 523) cautions that names and addresses should not be reflected on documents that are accessible to other people as this can be regarded as bridge of confidentiality.

During data collection, qualitative researchers come into contact with participants who share information and their knowledge on the subject for study. Neuman (2003: 397) indicates that during this period the researcher learns intimate knowledge that the participant or participants give in confidentiality. Neuman (2003: 397) argues therefore that the researcher has a moral obligation towards the participant with regard to information given. Informants in this were assured confidentiality and anonymity. The information they supplied was used for the sole purpose of the study and no other people who are not associated with this study had access to the raw data as supplied by informants.

Secondly, which was indicated to the informants before the start of the interview, anonymity was guaranteed. No specific names that might reveal the identity of the informants was used in this study and the identity will only be known to the researcher.

Having outlined the research design and the important characteristics thereof, the next section will focus on the importance of the research methodology.

### **4.3 RESEARCH METHODOLOGY**

#### **4.3.1 Literature review**

It is important to contextualize the phenomenon under study within a particular theoretical foundation (Vockel & Asher, 1995:435). According to De Vos (1998:64) the aim of literature review is to paint a picture of the nature and the meaning of the problem that the researcher has identified. In addition Creswell (1994:20) says that the purposes of literature review are firstly to expose the researcher to other closely related studies that have been undertaken before. Secondly the purpose is to provide the framework within which the importance of the study being undertaken is formed.

#### **4.3.2 Target population**

Policy developers and implementers are targeted for this study. A number of members of the NCFE who work in Gauteng and the NBI in Gauteng and principals of FET colleges in Gauteng will be targeted. It will be costly to visit members outside Gauteng as the researcher resides in Gauteng.

The informants of this study are policy developers and policy implementers. Policy developers are regarded as a community in the public policy domain and these are the people who participated in the origination of the Further Education and Training policy. These policy developers were selected to participate in the study because they are regarded as having an understanding of the activities of the public FET policy community in South Africa.

While the first group of informants in this study represented a broad community of FET policy developers, each member further represented a sectoral community. These sectors are the National Committee on Further Education (NCFE), the national Department of Education (DoE) and the National Business Initiative (NBI). The purpose of selecting this type of informants was to reveal common understandings related to policy origination as a phenomenon under study.

Policy implementers were selected from a community of managers at FET college level. The decision to select these informants was based on the historical background as well as the size of their colleges.

### **4.3.3 Sampling**

Ploeg (1999:2) says that sampling refers to the process of selecting what to study and focusing on a portion of a population. According to Ploeg (1999:2) researchers make sampling decisions for the explicit purpose of obtaining the richest possible source of information to answer the research question. In qualitative research sampling is generally based on a non-probability and purposive sampling or convenient sampling rather than on probability or random sampling (Ploeg, 1999:2).

This study used what Kelly (1999:380) refers to as opportunistic or convenience sampling. Convenience sampling is used when investigating a rare phenomenon and this study regards the concept of trying to understand and describe the origination and implementation of further education and training in South Africa especially in Gauteng colleges as rare. Furthermore the area of public policy development for the FET college sector is relatively new. In addition there is no history in South Africa around this area and the committees that were involved in the origination of this FET policy were the first in the country and the managers are also the first to implement policy developed in the manner in which the FET policy was developed.

In this study purposeful sampling was used. According to Babbie (1992:167) purposeful sampling allows the researcher to select the sample on the bases of his/her own judgment and knowledge of the population. The researcher in this study believes that the selected sample will provide the information required to answer the research question.

The following criteria were used to select the sample:

- Participants who were involved in the development of the FET policy who were members of either the NCFE or the NBI and being available for interviews
- Participants who are currently holding a principalship's position at an FET college in Gauteng and being available for the interview.

Unfortunately the nature of work of these people does not make them readily accessible. These individuals hold senior positions within different organizations. For an example three of the people interviewed are Chief Executive Officers in their respective organizations. People at this level are engaged with their own organization's responsibilities.

The non-availability of members of these different committees was evident when invitations were sent out to about ninety percent of them and the majority of them indicated their non-availability at the time.

Eventually a small number of informants were available for the study to continue. This is not a rare case in qualitative research. In fact Ploeg (1999:2) indicates that qualitative research normally involves smaller sample sizes and that sampling is normally flexible. Seven cases were taken and participated in the study. Kelly (1999:381) says that experience has shown that between six and eight sources of data are acceptable as they normally yield desired results.

Furthermore the number of the sample was determined by constraints of budgets and time. Members of the National Committee of Further Education (NCFE) are scattered all over the country. For instance one member was stationed in the Western Cape most of the time and another in North West. There was no budget to cover the distances to reach some of the members. Some members indicated that their availability could be well into the following year which by that time this study should have been completed and final submission made. Therefore because of time constraints the researcher had to take the seven available cases and use them to accomplish the set purpose.

#### **4.3.4 Gaining access**

This study visited one individual only in each organization and in this regard there was going to be minimum disruption within these respective organizations. Nonetheless permission was sought from the individual participants to visit them at their place of work. All participants were found to be the ultimate decision maker in their respective sections in their organization. In this regard there were no problems in accessing the informants.

The researcher introduced himself to the participant during each interview and further tried to create a friendly atmosphere during the introductions between the participant and the researcher.

Some of the participants were not available for the interviews but a significant number indicated their availability and granted permission to be visited at their place of work.

#### **4.3.5 Trustworthiness**

Trustworthiness is defined as the believability of the researcher's findings, i.e. all that the researcher has done in designing, carrying out and reporting the research to make the results credible. Smit (2001) says that there are competing claims as to what constitutes a good quality research in social science. According to her (i.e. Smit, 2001) validity and reliability used to be regarded as measures for quality for this type of research but she also indicates that these two terms seem not to be enjoying popularity anymore in terms of defining good and quality research.

Smit (2001) argues that there are modern terms and new terminology with regard to constituting quality research and trustworthiness is one such term. Sandelowski and Barroso (2002:1) indicate that 'scholars across the practice and social science disciplines have sought to define what a good, valid, trustworthy qualitative study is, to chart the history of and to categorize efforts to accomplish such a definition, and to describe and codify techniques for both ensuring and recognizing good studies'. They (i.e. Sandelowski & Barroso, 2002:2) further indicate that after all these efforts, these scholars seem to be no closer to establishing a consensus on quality criteria.

Validity is defined as the degree to which outcomes are accurate and grounded in data (Sowell, 2001: 5). McMillan and Schumacher (1997:404) say that in qualitative research validity addresses two main questions: Firstly do researchers actually observe what they think they observe? Secondly do researchers actually hear the meanings that they think they hear? Geel (2004:111) says that validity is usually the result of truthful answers stemming from correct selection and application of procedures. In other words validity in empirical research is achieved through proper selection and application of procedures that produce the intended outcomes of the research in a systematic manner.

In qualitative studies validity is enhanced through triangulation and triangulation is a method that compels researchers to rise above their personal biases that stem from the use of a single methodology (Babbie & Mouton, 2004:275). Various strategies are used by qualitative researchers to enhance validity but Babbie and Mouton mention triangulation, writing extensive notes, member checking, peer review, reasoned consensus, and audit trial as the most common strategies used for this purpose. This study focussed its attention writing extensive notes during the interviews, as well as member checking for the purpose of enhancing the validity of the results.

With regards to reliability Neuman (2003:184; cf. Smit, 2001) says that reliability in qualitative research means dependability or consistency. Smit (2001) indicates that reliability is viewed as “the fit between what is recorded as data and what has actually occurred in the setting under study”. Smit (2001) further elaborate on reliability and say reliability refers to stability of research over time, the consistency through repetition and the extent to which the research findings can be replicated by another researcher. Neuman (2003:185) contrasts the view of replicating qualitative research. Neuman (2003:185) argues that qualitative researchers using alternative measures will yield distinctive results.

Data collecting in qualitative research is seen as an interactive process and the research setting is always evolving and therefore the replication of results cannot be achieved (Neuman, 2003:185). This point is further confirmed by Saunders, Lewis and Thornhill (2000:251) and they say the findings from using non-standardised research methods such as interviews are not intended to be repeated as they reflect reality at the time they were collected. Therefore it is not the intention of this study to produce results that can be replicated at some other time in future.

Rolfe (2004:2) is of the opinion that any attempt to establish consensus on quality criteria for qualitative research is unlikely to succeed for the simple reason that there is no unified body of theory, methodology or method that can collectively be described as qualitative research; indeed, that the very idea of qualitative research is open to question. According to Golafshani (2003:561) credibility, transferability, and trustworthiness are terms that encompasses reliability and validity in qualitative research. Each of these terms has come to denote validity and reliability of a qualitative study. The concepts reliability and validity are problematic in qualitative research. Lincoln and Cuba (1985:991; cf. Rolfe, 2004:2) include credibility, applicability, dependability and conformability as key criteria of trustworthiness and these are constructed to parallel the conventional criteria of enquiry of internal and external validity, reliability and neutrality, respectively. According to Golfshani (2003:560) the ability and effort of the researcher also renders a qualitative study credible.

Another strategy used in this study to enhance trustworthiness is what is termed transferability. Transferability refers to dense descriptions of processes and procedures used in the study to try and answer the research question (Key, 1997:6). In addition Key (1997:7) defines dependability as dense descriptions of research methods, triangulation, coding and re-coding procedures.



Rolfe (2004:2) states that a study is trustworthy if and only if the reader of the research report judges it to be so. Thorne (2000:5) encourages researchers in qualitative research to ‘articulate their findings in such a manner that the logical process by which they were developed are accessible to a critical reader, the relationship between the actual data and the conclusions about data is explicit, and the claims made in relation to the data set are rendered credible and believable’.

This implies that if processes and procedures of the study are sequentially and logically presented trustworthiness will be ensured. The categorical outline of the research design and the research methods of this study showed the plan that was followed to achieve the aim stipulated in this study. The design and methods as well as procedures used during data collection and analysis were richly described in order to enhance credibility.

This study has attempted to rigorously create trustworthiness so that the results can be credible. Corroboration, openness, member checking and thick descriptions of methodologies of data collection and analysis were used for this purpose. Policy originators’ views and meanings of policy statements were corroborated with policy implementers to check common understanding. Openness was a basic principle in this study. Firstly through openness the researcher wanted to create a free and relaxing environment with the informants. This was firstly done through e-mails that were sent to individual informants. The purpose was to soften any hostilities that could have cropped during the interview process. When informants have developed trust with the interviewer they also give reliable and valid information. Secondly openness is a pre-requisite for research ethics. Therefore this value could not be bridged.

Research techniques are presented in detail in chapter one and also in paragraphs that follows in this chapter. The purpose is to show convincingly how the study unfolded and to indicate that results and conclusions reached are trustworthiness and in line with practice in qualitative research.

This refers to the process of verifying with the informants certain aspects of phenomenon that is under investigation. In this study probing during the initial interviews was used to clarify and verify certain information as supplied by the informants. In addition principals of FET colleges were used to check if the information supplied by policy developers was congruent to their understanding. Member checking was used to ensure that if the researcher has misinterpreted some of the information during the data analysis it could be rectified and then the correct version of events incorporated in the data.

#### **4.4 DATA COLLECTION METHODS**

Data collection in ethnographic studies concurs with data analysis (Thorne, 2000:2). This means data analysis does not commence only after the process of data collection has been finalized. Although this assertion is taken to be true, this study will try to delineate these two concepts separately for the purpose of clarity and to enhance trustworthiness of the study. This section details the data gathering procedure for the research. Interviews were used as a technique to gather research data.

##### **4.4.1 Individual interviews**

Cohen and Manion (1989: 307) says that the interview is “a two person conversation initiated by the interviewer for the specific purpose of obtaining research relevant information, and focused by him on content, specified by research objectives of systematic description, prediction or explanation”. Quoting Maykut and Morehouse PeNMJ (2006:9) states that an interview is the result of a joint effort between the interviewer and the interviewee and is about what they talk together and how they talk with each other. In other words an interview is a planned and structured conversation with specific objectives that must be achieved by the end of the interview.

This study employed the ethnographic interview as a data collection technique and Cohen and Manion (1989:312) observed that this technique is the most common method of collecting data in qualitative studies. In other words the structured interview or what McMillan and Schumacher (1997:447) call standardized open-ended interview was employed. Cohen and Manion (1989:309) indicate that in a structured interview the content and procedures are organized in advance. In this regard a pre-determined interview schedule was prepared and was used to solicit data from the informants. McMillan and Schumacher (1997:447) call this schedule the interview guide. They (i.e. McMillan & Schumacher) say that in this interview guide questions are selected in advance. The interview schedule was constituted by questions extracted directly from the Green Paper on Further Education and Training and 'A situational analysis of FET institutions in the Gauteng Province: Report to the Head of Education'. All questions in the schedules were direct quotations from the two documents and these were addressing policy issues for which informants were directly involved in the origination or implementation (Ploeg, 1999:36; cf. Aronson, 1994:1). Probing was also used during interview to clarify certain responses. According to McMillan and Schumacher (1997:450) probing is a characteristic of in-depth interviews. Babbie and Mouton (2004:289) indicate that using probes during an interview is a useful way to get answers in more depth and without biasing later answers. The type of data that was collected was in the form of interview transcripts collected through open-ended but structured interviews.

Three interview schedules were prepared, each for a specific research community (See annexure 1). One schedule was for informants from the NCFE, the other one for informants from NBI, and the final one was for managers of FET colleges in Gauteng. Informants were interviewed at a place of their convenience (i.e. their place of work) using the interview schedule. Firstly a portable audio recorder was used to record the conversation especially the responses of the informants. Every bit of conversation was recorded.

Secondly provision was made in each interview schedule for interviewer comments. This space could be used during interviews and or after the interview for the interviewer to scribble some comments about the interview. Thirdly the researcher used probes now and then to clarify certain responses.

#### **4.5 DATA PROCESING AND ANALYSIS**

It was alluded to in the previous paragraph that qualitative data collection and analysis are not easily distinguishable from each other as indicated by Thorne (2000:2). In spite of this assertion, this section will try to describe the process of data analysis as applied in this study.

Researchers usually use computer programmes to organize and manage large quantities of data. According to Thorne (2000:2) there are many computer programs that are used to analyze qualitative data. However these programs are essentially meant as aids to help sort and organize sets of qualitative data (Thorne, 1999:2). It is Thorne's (1992:2) assertion that qualitative data analysis requires the intellectual and conceptualizing processes that are essential to transform raw data into meaningful findings. The following paragraphs will focus on these intellectual and conceptualization processes in qualitative data analysis.

This study used a combination of several strategies to analyze data. The purpose of using this approach was to enhance the credibility and trustworthiness of the study (cf. Nieuwenhuis, 2006).

#### 4.5.1 Preparation for data analysis

The following stages as shown in Table 4.1 below were followed in the analysis of data:

**Table 4.1 Qualitative data analysis stages (Adapted from Rickard, 2004 & Aronson, 1994)**

- |  |
|--|
| <ul style="list-style-type: none"><li>➤ Making notes immediately after the ethnographic interview</li><li>➤ Transcribed the recorded tapes</li><li>➤ Organized and indexed the data</li><li>➤ Coding</li><li>➤ Developed provisional themes</li><li>➤ Explored the relationship between the themes</li></ul> |
|--|

#### 4.5.2 Analyzing qualitative data

Analyzing qualitative data is considered an important activity in the research process in order to be able to make sense of, interpret and theorize the collected data (Smit, 2001). According to Smit (2001) data analysis is a crucial process that precedes data interpretation in research. It is in this regard that this study had to undertake data analysis. According to Nieuwenhuis (2006) qualitative data analysis is “usually based on an interpretive philosophy”. This implies that researchers analyze collected data in order to interpret it following a particular philosophy. Interpretation in qualitative research aims to establish how informants/actors attach meaning to a particular social phenomenon.

According to Nieuwenhuis (2006) understanding meaning is achieved when the researcher analyses informants' perceptions about the phenomenon, attitudes, knowledge, values, feelings and experiences.

There are various modes of analyzing qualitative data. This study will use a combination of three of these modes.

#### **4.5.2.1 Hermeneutics analysis**

Hermeneutics as a data analysis mode presents a way of making meaning of textual data. This approach is premised on the “dialectic between the understanding of the text as a whole and the interpretation of its parts”. Understanding the transcribed interview texts was important but also to get a clearer or better understanding of the informants' meaning of the phenomenon under investigation it was more important to break the whole text into smaller pieces and try to understand the meaning from that level by interpreting these smaller parts. Therefore hermeneutics will aid this study to achieve its aim by understanding the meaning of the whole transcribed texts.

Hermeneutics analysis began as soon as the interviews started. The researcher made reflective notes during the interviews. This was an attempt to break the whole interview into small understandable units and to begin to interpret the whole. Shortly after the interviews the researcher also summarized the proceedings so that important interview data can be noted and should not get lost with time.

#### 4.5.2.2 Content analysis

Nieuwenhuis (2006) defines content analysis as a “systematic approach to qualitative data analysis that identifies and summarizes message content”. Babbie and Mouton (2004:491) quoting Palmquist (1993) define content analysis as a method used to examine words or phrases within texts which may be obtained in books or interviews. Babbie and Mouton (2004:491) indicate that content analysis employs checking the presence or repetition of certain words or phrases in texts in order to make inferences about the author of the text. In short content analysis is a qualitative data analysis technique that is used to make inferences from the text in an objective and systematic manner in order to identify specified characteristics of a message (Babbie & Mouton, 2004:492).

One of the characteristics of content analysis is coding. According to Ploeg (1999:37) qualitative data analysis focuses on the analysis of codes, themes, and patterns in the collected data. Nieuwenhuis (2006) says that coding involves “reading carefully through the transcribed data then dividing the data into meaningful analytical units”. In addition Nieuwenhuis (2006) says that many researchers use inductive coding as this involves developing codes as the process of coding data continues. In addition Babbie and Mouton (2004:492) say that coding involves choosing whether to code for existence or coding for frequency. This study used the former as well as inductive coding. Analysis focused on the existence of certain phrases and concepts as identified during literature review in the first three chapters of this study. The coding process was employed after the data has been organized into transcripts. The coding involved identifying content from transcripts. The content was either a word or a phrase or a paragraph that was used by the informants (Rickard, 2004:1). In addition analysis also included all meaningful instances generalized around the content of the code of data.

According to Nieuwenhuis (2006) content analysis helps the researcher to look at data from different angles in order to be able to identify keys in the text that will aid in understanding and interpreting the raw data. This mode of data analysis will be used to identify similarities and differences in the transcribed text in order to be able to corroborate or refute theory.

It is worth noting at this point that there is a thin line that divides hermeneutics and content analysis. Hermeneutics involves breaking the whole into smaller units for interpretation purposes whilst content analysis entails dividing data into meaningful units. The difference between the two is the purpose for the analysis.

Aronson (1994:1) says there are many ways to analyze informants' talk about their experiences and further identified thematic analysis as one strategy to do exactly that.

This means that the process of coding data culminates in the emergent of themes. According to Aronson (1994:1) thematic analysis focuses on identifiable themes and patterns of behaviour of informants. Building themes from the data simply means organizing related codes into themes. A theme will constitute a group or a number of codes which relate or give a particular meaning to it. It is important to note that themes emerged from the analyzed data (cf. Nieuwenhuis, 2006). In this study each theme was assigned an identifying name using descriptive phrases. The process of building themes continued until there was no more possibility of new themes or categories emerging from the data.

#### **4.5.2.3 Discourse analysis**

Nieuwenhuis (2006) says that discourse analysis focuses on studying and analyzing written texts and spoken words to reveal the discursive sources of power, dominance, inequality, and bias. Thorne (2000:4) argues that discourse analysis recognizes speech as an 'explicit linguistic tool constructed and shaped



by various social or ideological influences'. Discourse analysis aid in trying to understand the power relations in education policy (as a social setting) as well as understand what policy makers regard as reality in further education and training from the perspective of informants. Consequently this study had to resort to discourse analysis to establish how government influences the provision of further education and training in Gauteng.

With this technique all data that related to the already classified themes in content analysis were then identified and explained in detail. At this stage of the analysis process the researcher tried to establish the meanings of these themes or patterns from the informants' point of view. In other words the researcher went beyond the superficial meanings of what emerged as themes to establish the untold meanings, feelings and actions.

This is the stage that Aronson (1994:3) refers to as the stage of building an argument for the chosen themes. The study critically looked at the language that was used by the informants and the way it was used in order to try and uncover societal influences underlying the experiences, behaviour, thoughts, and feelings of policy originators and implementers.

The above strategies of qualitative data analysis are all regarded as ethnographic methods of data analysis and Thorne (2000:4) says that all these methods are concerned with interpreting the processes and products of cultural behaviour. These methods of analysis involve 'sifting and sorting through pieces of data to detect and interpret thematic categorization, search for inconsistencies and contradictions, and generate conclusions about what is happening and why.

In summary this study has to analyze collected data in the form of transcribed audio interviews to firstly select bits of pieces of data and secondly to assign these pieces of data to categories or themes. This process was carried out in order to aid the interpretation of data which is addressed in the next section.

### 4.5.3 Data interpretation

By this far the study had coded data and established themes as well as looked at the language usage by informants. According to Nieuwenhuis (2006) codes and themes are summarized versions of what informants have said about the research topic. The next step was to interpret these themes and codes in order to begin to understand why policy development and implementation are the way they are at the moment. Neuman (2003:148) indicates that it is the responsibility of the researcher to interpret data by finding out how the informants see their world, how they describe their situation or what it means for them. McMillan and Schumacher (1997:533) say that this is the stage where themes simply provide an explanation of the situation.

Nieuwenhuis (2006) states that themes as analyzed data must be “brought into context with existing theory to reveal how it corroborate already existing knowledge or bring new understanding to the body of knowledge”. In other words the data should present an explanation for interpretation and intellectual understanding of the phenomenon under study.

A number of activities are normally involved in the actual interpretation of inductively derived data analysis. Nieuwenhuis (2006) says interpreting this kind of data involve searching for emerging patterns, associations, concepts and explanations in data. The product of this process will culminate in a framework through which the researcher will construct new meaning and understanding of what emerged from the data.

This study adopted the discourse analysis as both a data analysis strategy as well as a strategy to interpret collected data. Discourse analysis assisted the study to understand policy origination and implementation from the informants’ point of view. Analyzing their responses from the transcripts to determine what meanings they attach to their actions, feelings and behaviour during the time they were developing policy helped the researcher to be able to interpret data better.

Both the first- and second-order interpretation approaches were used. According to Neuman (2003:148) first-order interpretation is the interpretation attached to an event, behaviour or action by the informant. In other words this is how the informants see the event, or behaviour or action. First-order interpretations are meanings attached by the informant or informants.

The second-order interpretation was carried by the researcher after the first-order interpretation. At this stage of interpretation the researcher tried to understand the interpretations as presented by the informants and attach his meanings to them.

The method of comparative analysis was used for this purpose. Interpretations of individual informant were compared with interpretations of other informants' and then finally the researcher reconstructed the interpretations of the first order. These interpretations helped the study to make conclusions about the research topic.

## **4.6 CHAPTER REVIEW**

This chapter outlined the research design followed in this study. It was indicated that a research design is simply a map showing how the research will unfold as the researcher tries to answer the research question. This study has adopted the qualitative research design and ethnography was used as a strategy to answer the question.

Ethnographic studies were outlined in detail including methods used for data collection, analysis and interpretation. This chapter further outlined the study's approach to trustworthiness in order to render the results acceptable to other researchers and readers.