CHAPTER TWO

RESEARCH METHODOLOGY

2.1 Introduction

In this chapter the research problem is dealt with, together with issues related to the methodology on which the study is based. Amongst other aspects included in this chapter is the relevance of Public Administration and qualitative research, the rationale for the use of qualitative research, data collection and analysis, research tools, ethical considerations and the limitations of the research study.

2.2 Public Administration and qualitative research

Given the philosophical nature of Social Science research, this research study is presented within the context of Public Administration, as a study discipline that is located within the Social Sciences. This research study, like many other research studies conducted within the Social Sciences, uses a qualitative approach – in order to effectively describe the nature of the problem that leads to the implementation of the NCS, 2002.

Public Administration is a human or social science that is largely practical and descriptive. According to Woodrow Wilson in Gildenhuis (ed. ,1988: 9-10), Public Administration is the science of administration, which is associated with the science of politics*, ".…...Administration is the most obvious part of government; it is government in action; it is the executive, the operative, the most visible side of government, and is of course as old as government."* This means that whatever government does through specific activities in rendering service to the public is studied in the discipline of Public Administration. Therefore, politics and public administration, as activities, cannot be separated. Public administration, as an activity, is the practical part of Public

Administration as a study discipline, which is mainly involved with the attainment of the set objectives or the enforcement of public policies in the successful rendering of public goods and services. This research study belongs to the Social Science research that requires a qualitative approach. It is basically what the researcher describes in his words after a critical and holistic interpretation of the collected data – in order to arrive at a logical conclusion; hence, the study belongs categorically in the Social Science research grouping.

 A Social Science research study is a study about society. As a result, the main aim of a Social Science study is not only to have a better understanding of the society, but also to transform society for the better. The word 'social' in Social Sciences, is an adjective that qualifies the noun 'science'. The word social is rooted largely in society – meaning people; and this refers to how people live, their institutions – and their artefacts. In this regard, the focus is on individual behaviour and group behaviour, interest groups, political organisations, community-based organisations and the non-governmental organisations in which the private business is included.

Social Science research can be easily understood when each concept is dealt with separately. Scholars of the Social Sciences include Karl Marx, Thomas Dye, Frederic Taylor, Henri Fayol and Max Weber (Rawlins, 1992:11-19). The noun 'science' covers a broad continuum of concepts. Science is an inquiry method that relates to the way of learning and knowing the world, as the physical environment within which is lived (Bailey, 1997: 7). The concept 'science' therefore refers to a conscious, deliberate and rigorous process of searching for the truth about a phenomenon that is either natural or social in nature.

The research study is by itself a Social Science, a study based on the discipline of Public Administration. Research, in the context of Social Science research, is defined by Babbie (2001:2-4) as a systemic observation of social phenomena for the purpose of finding and understanding patterns of relationships among social entities that are observed. This study, as Social Science research, is based mainly on data collection

and data analysis – that are used to arrive at a logical conclusion. Neuman (1997: 319-324) has outlined the six characteristics that are always associated with qualitative research, namely: the importance of the context, the case study method, the researcher's integrity (that involves some degree of trust in the researchers), the grounded theory, the process and sequence of events, and the interpretation of data collected.

In this way, this study is able to investigate the challenges that policy implementers and all the essential stakeholders face during the implementation of the new curriculum, the NCS, 2002, and its related policies in the Limpopo Department of Education. In this research study, the policy implementation process and public administration functions are explored to show the interrelatedness of the administrative functions within Public Administration as an academic discipline.

Since the study has adopted the qualitative approach, an approach that is largely descriptive, policy implementation is described and critically explained, as a process carried out within the Limpopo Department of Education. The process involves a case study which provides for a critical explanation of the research findings; draws conclusions; and proposes recommendations regarding the capacity requirement of educators for the implementation process of the NCS, 2002 in the Limpopo Department of Education – with specific reference to the Vhembe District. The focus is on capacitating educators through the provision of training and development, so that they are then able to carry out the requirements for the implementation of the new curriculum, the NCS, 2002.

2.3 Rationale for qualitative research

This section of the research study aims to make provision for an overview of the fundamental reason behind the relevance of qualitative research design in this study. Unlike quantitative research, that is mostly one-dimensional in its methodology, qualitative research is predominantly featured as being highly diversified. Punch (2005:

134-135) maintains that qualitative research is multidimensional and pluralistic with regard to paradigm discussions and debates. The qualitative research design highlights the political nature of social research, the recognition that social research as a human construction, is framed and presented within a particular set of discourses (and sometimes ideologies), and conducted in a social context with social arrangements, involving especially funding, cognitive authority and power.

Through qualitative research, the questions that have to be answered, where events are being described, include 'how' and 'what'. Neuman (1997: 317) emphasised that qualitative research contains several techniques that include grounded theory, ethnography, life history and conversational analysis. However, there are some topics that may require specific research techniques, not rejecting the fact that researchers often combine elements from both qualitative and quantitative research methods in some particular research topics.

This study has adopted a grounded-theory research technique. The grounded theory is, according to Strauss and Corbin (1990: 23), a research technique that is inductively derived, whereby a researcher systematically explores the available collected data and analyses them for the phenomenon they represent. By analysing the available data, the researcher is able to suggest meanings and explanations that may lead to a theoretical model (Payne and Payne, 2005: 99). Grounded theory allows a theory to be built from the ground up.

Pierce (2008: 34) argues that, rather than hypothesising about casual relations, the researcher in a grounded theory context should first seek out evidence of relationships. The first sample and data that the researcher gathers would be limited. According to Pierce (2008: 34), the findings of the researcher would be grounded in those data, tested and reformulated in further samples until theoretical saturation is reached, when the additional data have failed to reveal any further significant findings. As a result, an idealised grounded theory may be summarised as a research model that:

a) Selects the variables:

b) Collects data from a small sample;

c) Advances an explanation;

d) Tests against a larger sample;

e) Revises the initial explanation; and

f) Reiterates the procedure until theoretical saturation is reached (Pierce, 2008: 34).

In a grounded theory, the building blocks of the theory are the concepts that become the bricks that are grounded throughout the analysis process. The study seeks to argue that the related concepts in this study include development, training and implementation. These are concepts that are used for the capacity building of educators in the successful implementation of the new curriculum, the NCS, 2002 in public schools in the Limpopo Department of Education.

Through the qualitative research design that is closely associated with Social Sciences, the study has presented arguments and findings on human issues during the process of training and the development of public schools educators. The training and development of public school educators provides for the effective implementation of the new curriculum, the NCS, 2002, in public schools.

The sources used in the study include both primary and secondary sources. Since qualitative research calls for a rigorous analysis of the available relevant data, these sources of data are collected, reviewed and analysed from amongst other sources, such as interviews conducted, books, journal articles, acts of Parliament, policy documents and newspaper articles. All these and other sources help to deal with the research problem that has been identified in this study, whereby the research study is able to arrive at the findings. The findings of the research study should enable the study to suggest recommendations on the importance of capacity building of educators in the successful implementation of NCS, 2002. Creswell (2003: 181-183) has identified the following useful characteristics of a qualitative research that are relevant to this study:

a) Qualitative research takes place in a natural setting, whereby the researcher goes to the site, for example, a departmental office of the participant;

b) Qualitative research uses multiple methods of data collection that are interactive and humanistic – by involving the participants;

c) Qualitative research is fundamentally interpretive, whereby the researcher gathers, interprets and analyses data. Finally, the data are interpreted, in order to draw conclusions on their meaning and to then be able to state the lessons learned;

d) Qualitative research views social phenomena holistically, an indication of the reason why qualitative research is broad and complex. The more complex, interactive, and encompassing the narrative of the qualitative research is, the better the qualitative study becomes;

e) A qualitative study uses complex reasoning that is multifaceted, interactive and simultaneously uses both inductive and deductive methods in a qualitative research; and

f) The qualitative researcher adopts and makes use of one or more strategies of inquiry as a guide in the procedures of a qualitative study.

In the light of the above, the study assesses the impact that training and development have on educators in public schools in the correct and effective interpretation of the new curriculum, the NCS, 2002 and its implementation. Information on the importance of training and development is gathered and critically assessed – both from the primary and secondary sources of the data gathered.

The rationale for the selection of qualitative research in this study is that qualitative research identifies real issues and is largely discipline-based (in this case, Public Administration is the study discipline in which this study is anchored). Furthermore, qualitative research is largely descriptive and exploratory in nature. As indicated above, the data collected in qualitative research are mostly in the form of words from the

relevant documents, such as books, policy documents, journals, newspapers and acts of Parliament.

The critical discussion on training and development for the implementation of the NCS, 2002 and other relevant policies in education is centred firstly, in Public Administration as an academic discipline, and secondly, in public administration as an activity that is carried out within the Public Service. In his comparison of qualitative and quantitative research, Ile (2007: 38) has argued that unlike in quantitative research that determines the researcher's choices and actions, the strength of qualitative research, as adopted in this study, is in giving this study room to shape its research tools and to thereby deepen the inquiry on the discourse of training and development.

2.4 Qualitative instruments

This section of the research contains forms or designs of the qualitative research approach which are instruments whereby the data have been collected for this study. Data collection refers to a wide range of methods used to collect information that may include observation, structured and unstructured interviews, participant observation, ethnography, and historical documents or literature reviews from both primary and secondary sources, content analysis and any other method used to collect reliable documents.

Two qualitative research instruments were selected for discussion in this section of the study. These include the case study and literature review, whereby both primary and secondary sources are collected and analysed. Welman *et al.* (2005: 193) argue that a case study and literature review are usually forthcoming from the ethnographic methods that are applied by anthropologists, sociologists and educationists.

2.4.1 Literature review

Training and development are processes that have seen an increasing demand during the 1990s, as the economic growth in the United Kingdom (UK) and Europe as workforce skills have improved and new approaches to training design and delivery have emerged (Sloman, 1999: xv). The need for future employment prospects by staff members in organisations grows daily, so that administrative functions are effectively carried out in the context of Public Administration as an academic discipline. Many of the data gathered on training and development processes come from both primary and secondary sources. However, both primary and secondary sources have some benefits and disadvantages that need to be carefully taken into consideration when a research study is to be conducted.

A literature review comprises all those sources that have been recorded or preserved in writing, as sources that have to be read, analysed, synthesised and interpreted – in order to support an argument for any given event or practice (Welman *et al.*, 2005: 24). The available literature is classified either as coming from a primary source or from a secondary source. According to Neuman (1997: 384), primary sources are those sources that have realism and authenticity. These are sources that give first-hand information. Examples of primary sources include: letters, government circulars, memos, diaries, newspapers or magazines articles, as well as published and unpublished documents. The practical limitation or disadvantage of the primary source is the time factor, which narrows down an investigation and its data or information that is captured. This is because the data given is time-bound and reflects only the specific period in which the information was captured or reported

The secondary sources are those sources that are next and below what are regarded as primary in nature, and they supplement what is primary. In this study, secondary sources include books, legislative information and journals on training and development. Social researchers use mostly secondary sources when undertaking their research studies, such as books and journal articles that have been written by specialists in a

particular study discipline, for example, Public Administration, Sociology and Anthropology. The benefits of the use of secondary sources are that they not sytematised. There are no clear rules and procedures laid down for the valid use of secondary sources as evidence when conducting research (Neuman, 1997: 84). Secondary sources in this regard can be used in giving general explanations on the theory of training and development. Like primary sources, secondary sources also have some disadvantages. The disadvantages of secondary sources include inaccuracy in historical accounts, lack of studies in areas of interests, the inability to use secondary sources in testing hypothetical statements, and the presentation of more detailed information with different interpretation and individualistic biases (Neuman, 1997: 384).

In order to ascertain the reliability and usefulness of the sources to the research, there are certain principles whereby the available literature can be tested. According to Bryan (2004: 381), there are four criteria that need to be used in assessing the relevance and quality of the literature or documents, namely: authenticity; credibility; representativeness and meaning. These criteria are explained by Bryan (2004: 381) as follows:

a) *Authenticity*. Evidence is regarded as being authentic if there are elements of truth in it; it must be real and genuine.

b) *Credibility*. When the credibility of the evidence in the document is accepted, it must be error-free so that it must have evidence for it to be believed and it must not be twisted or distorted.

c) *Representativeness*. The evidence must be typical; it must be a good example of the evidence given. If the document is not typical, is there sufficient evidence of it not being a good example of the fact under discussion?

d) *Meaning.* The evidence must be free from misconceptions; it must be clear and capable of being understood without generating any doubts.

When the available sources are successfully measured against all the criteria explained above, they can then be used as reliable sources in justifying the argument or arguments presented in the social research study.

2.4.2 A case study

Through the application of the case study method in this research study for data collection, the study is able to provide an insight into a particular selected area of study, in order to deal with the identified problem statement. According to Yin (2003: 13), a case study is an empirical research method and instrument of data collection that is bounded by time and activity, as it investigates a contemporary phenomenon or programme within its real-life context, whereby multiple sources of evidence are used. It is a process that helps to explore a bounded system, for example, an event, a programme, an activity, an institution or a group that is performing a specific task in a given context. The argument is supported by Neuman (1997: 27) when that case study research entails an in-depth examination of a few people, a group of people or an organisation over a specific period of time. For the purposes of this research study, the Vhembe District situated within the Limpopo Department of Education has been selected as the case study area of the research for an in-depth investigation of the impact of training and development on public school educators in the new education curriculum, the NCS, 2002.

The significance of the case study in this research is that it is an opportunity whereby the uniqueness in understanding a particular case is created, instead of a generalisation. Punch (2005: 145) has identified four characteristics of case studies: Firstly, the case is a 'bounded system' that has boundaries. These need to be clearly identified and explained by the researcher in the research study. Secondly, the case is something that needs to be given a clear focus to research logically.

A clearly identified unit of analysis as a case should be selected. This can either be a single individual, groups of people, or institutions. Thirdly, an attempt is made to preserve the wholeness, unity and integrity of the case as a specific focus of the research study. Fourthly, case studies can use multiple sources of evidence and data-collection methods. These include observations, interviews, narrative reports and books. Although case studies also use numerical data in quantitative research, most

case studies are predominantly qualitative in nature and call for a rigorous analysis of the data available for the research project.

Maree (ed.) (2007: 76-77) argues that a case study is characterised by a unit of analysis with its focus on the action, rather than on individuals or groups of individuals. In the context of this research study, the focal point of the research is the effects that training and development have on educators as they implement the new curriculum, the NCS, 2002 in public schools. The case study is also highly selective and focuses on one or two issues that are important for an understanding of the system that is under investigation.

In this study, as indicated earlier, the focus is on the need for the capacity building of educators for the effective implementation of the new curriculum. Taking into consideration the above-outlined characteristics of case studies, the study engages in an investigation of those aspects that affect training and development for the sake of the achievement of quality education in Limpopo Province generally, and Vhembe District in particular. In line with the effective implementation of the education policies, capacity building and public administrative principles are imperative. As a result, the case study is viewed both as a system and a process that investigates the nature of the process. In this study, it is the training and development process within a given political context of transformation in South Africa. Through this approach (the case study), a description of unique experiences by the participants and the international best practices are shared in a narrative and detailed manner in the research study.

One of the benefits in using a case study design as a qualitative instrument or an approach in conducting the research study, is the ability to use extensive multiple sources and techniques in data gathering. In this study, the case study focused on the two groups or categories of people, namely: the public school educators (Annexure B) and the trainers of public schools educators, the curriculum advisors (Annexure C). All the groups responded to the specific questionnaire sent to them.

The total number of public school educators is 13 267 for both the GET and FET schools in Vhembe District. A sample of 40 educators responded to the questionnaire. These educators were selected from the best-performing schools and the under-performing schools offering different subjects in the district. In addition, there were two focus groups, with 60 GET and 50 FET educators, who were interviewed on two different occasions when they were attending their NCS, 2002, training and development workshops.

The main questions that the educators were asked, amongst others, were on whether the time allocated to training and development on the new curriculum, the NCS, 2002, was adequate; the relevance of the training and development contents to their curriculum needs; the challenges experienced during the implementation of the new curriculum; the knowledge level of their trainers regarding the new curriculum, and the frequency of school support they had received from the curriculum advisors.

The number of curriculum advisors that responded to the questionnaire was 25, out of 154 - the total number of curriculum advisors in Vhembe District. There were 10 curriculum advisors selected from the GET band and 15 were selected from the FET band. All these curriculum advisors were selected from their different subject specialisation areas, in which they provide training and development as well as on-school support to their educators in their respective bands. Amongst other questions in the questionnaire that the curriculum advisors received, was whether they had received adequate training and development on NCS, 2002, to become trainers of educators; whether the educator attendance in NCS, 2002, workshops was satisfactory; the availability of training and development resources and their job description; co-ordination of activities between the Limpopo Department of Education and the Vhembe district and between the district and the circuits.

Use was made of extensive multiple sources in the case study, such as the available literature and interviews, in order to address the problem statement or the research question in the research study. The collected data were mainly qualitative in nature.

Such data are collected through interviews, focus groups, and the literature review (Maree, 2007: 76). However, care should be taken in conducting the case study in the context of a qualitative research to remain objective and to avoid being subjective, as this leads to bias.

Fair opinions and representation on the gathered data to validate the authenticity of data consulted was ensured in this research study. Above all, the case study that remains the focal point of the research study needs to be clearly defined and the study area should also be clearly demarcated. In this research study, the Vhembe district in the Limpopo Department of Education is the case study under investigation, in matters relating to the training and development of public school educators in the new curriculum, the NCS, 2002.

Immediately after its introduction, Curriculum 2005 received an enormous tsunami of criticism. This resulted in it being streamlined and strengthened, a process that eventually led to the introduction of the new curriculum, the NCS, 2002, by the Department of Basic Education. However, the standard of education continues to deteriorate, as measured by the decrease in the Grade 12 results. This has caused the education system to be further criticised, as it keeps on receiving negative publicity through the media. The introduction of NCS, 2002 was the first major curriculum review in education, since 1994, after it was found that Curriculum 2005 was problematic both in terms of its approach and its implementation. This is because public school educators did not receive enough training and development on the new content and the new approach or methodology, OBE, required by the new curriculum. As a result, it has brought major challenges to the educators, as they were never exposed to this kind of methodology, when they received their professional training. All these accusations are disheartening to primary beneficiaries of education who are learners and parents – as the quality of education is compromised thereby. As a result, the training and development of educators as implementers of the new curriculum in the classroom is of fundamental importance, and should make a positive contribution towards the success of the new curriculum NCS, 2002, and should assist in achieving quality education.

It is against this background that the study research is conducted, in order to investigate the impact that training and development have on public school educators, and their ability to effectively implement NCS, 2002 in the Limpopo Department of Education. The Department of Basic Education has a responsibility to carry out the national mandate of the Department of Basic Education, as outlined in Section 29 (1) of the Constitution of the Republic of South Africa, 1996. This states that:

(1) Everyone has the right –

(a) To a basic education, including adult basic education; and

(b) To further education, which the state, through reasonable measures, must make progressively available and accessible.

The main function of the Department of Basic Education is curriculum delivery. This function is achieved by offering quality education to the people of South Africa. This should be done by offering an educational curriculum (i.e. NCS, 2002) that responds to the needs of the economy in particular and those of the country in general. The output achieved by this kind of education is the product of learners who are critical thinkers. The function of the Limpopo Department of Education, within the broad framework of the National Department of Basic Education, can best be summarised by the vision of the Department. This may be stated as follows (Service Standards, 2008/2009: i):

"To equip the people of our province, through the provision of quality, lifelong education and training with values, knowledge and skills that will enable them to fulfil a productive role in society."

The research study has selected its target population from the school-based officers that include both educators and principals and the office-based officers that include curriculum advisors, managers and administrators stationed at Circuit offices found within Vhembe district of the Limpopo Department of Education. The focus is on the training and development of educators in the public schools in their implementation of the new curriculum, the NCS, 2002, and the impact that training and development have on the achievement of quality education in Vhembe District.

The greatest challenge facing most of the stakeholders in the implementation process of the new curriculum, the NCS, 2002, and other related policies, is the lack of knowledge and understanding and the correct interpretation of the new curriculum, shortage of skills and capacity to interpret educational policies correctly, resistance to change by educators to adapt to the new curriculum, and its methodology.

For example, before 1994, educators were expected to teach only the prescribed syllabus of a given curriculum. The content to be taught was readily available and the training they had received, either at colleges of education or at universities, was mainly on the content and methodologies of teaching. They were never exposed to policy matters, let alone the meaning and the processes that need to be considered when implementing a public policy. That is where training and development come in if the NCS, 2002 and other related policies are to be effectively implemented.

The new curriculum needs to be correctly understood if the intended objective is to be achieved for the ultimate betterment of the education system in South Africa. The study will outline some training and development models, so as to identify a model that could help in the effective training and development of educators. The main purpose is to help improve educators' performance in the effective implementation of the new curriculum.

2.5 Conclusion

The chapter has outlined the research methodology the study has followed in this Social Science discipline. This research study conducted in the context of Public Administration as an academic discipline uses public administration as an activity to put what is known theoretically (Public Administration) into practice (public administration). The case study has been chosen as the relevant approach to look at the impact that training and development have on the successful and effective implementation of NCS, 2002 in Vhembe district. Educators, as the people directly involved in the implementation of the new curriculum, also need training on policy matters.

Training and development come in as intervention strategies, in an attempt to assist in the effective implementation of the new curriculum. The study, through qualitative design, has been able to observe and measure the performance of all the role-players as part of the target population in the implementation process of the NCS, 2002. The qualitative approach enables the study, through an extensive analysis of the data collected from both primary and secondary sources on both policy matters and training and development, to understand the new curriculum, the NCS, 2002.

In the next chapter, the theoretical perspective on training and development as it relates to education will be discussed.