

# CHAPTER TWO RESEARCH METHODOLOGY

#### 2.1 INTRODUCTION

This chapter provides an overview of the research methodology that this study has employed which includes how data was collected, analyzed and interpreted. In order to collect rich data which would provide answers to the critical questions of this study, an empirical investigation based on qualitative research design was followed.

## 2.2 RESEARCH DESIGN

According to Creswell (1994) a research design represents a plan according to which data will be collected. In addition, Silverman (2000) maintains that the most important consideration in the choice of a paradigm emerges from the aim of the study. In other words, the nature of the phenomenon under study determines the methodology to be used.

There are two types of research approaches, namely, qualitative and quantitative. According to Cohen et al. (2000) a quantitative approach can be defined as an inquiry into a social or human problem, based on testing a theory composed of variables, measured with numbers and analyzed with statistical procedures in order to determine whether the predictive generalization of the theory holds true. Cohen further asserts that a quantitative research method is associated with a positivist tradition and deductive in approach, relying on experimental design and statistical correlation. In contrast, a qualitative research paradigm refers to research that elicits participants' accounts of meanings, experiences or perceptions about the nature of a phenomenon understudy. Its' central aim is to understand social life and meanings that people attach to everyday life. Qualitative research is therefore concerned with understanding, rather than explanations, and subjective exploration of reality from the perspective of the insider (Creswell, 1994;



McRoy, 1995). According to McMillan & Schumacher (2006) qualitative research is based on the constructivist philosophy that assumes that reality is a multilayered, interactive, shared social experience that is interpreted by individuals. The philosophy further assumes that reality is a social construction, and that is, individuals or groups of people derive or ascribe meanings to specific events, persons, process, and objects.

Informed by the objective of this study, which was to investigate the experiences of secondary school management teams (SMT) in the implementation of Continuous Assessment, I chose to conduct a qualitative research study. The rationale for choosing a qualitative approach was firstly informed by the fundamental philosophical assumption that a qualitative approach is based on, and that is, individuals construct reality by interacting with the social worlds from different dimensions or perspectives (Creswell, 1998). Guided by this, I then considered a qualitative approach as the most appropriate research paradigm through which the understanding of the secondary school management teams of what CASS is and the role they play in its implementation could be explored. In addition, a qualitative approach, with its emphasis on peoples' lived experiences, and the provision of a holistic view of what 'real life' is like (Miles & Huberman, 1994), I was able to get credible data with regard to the kind of support the Limpopo Department of Education provides to secondary school management teams for the implementation of CASS as experienced and interpreted by those who were personally affected by the process.

#### 2.3 RESEARCH POPULATION AND SAMPLING

This study has been conducted at Malamulele East Circuit, which is part of Vhembe District in Limpopo. Malamulele East is comprised of eleven secondary schools. However, for the purpose of this study six secondary schools were selected, namely Deliwe, Dlayani, Falaza, Gembani, Ndhengeza and Falaza. The underlying objective for selecting these schools was that they are all located in rural areas and as a result, are characterised by lack of resources and over-crowding. These factors were considered critical as they have an impact on classroom dynamics like sitting arrangement and



instructional practice, which sometimes can determine the success or failure of a curriculum change of this magnitude.

Cohen et al. (2000:92) "maintain that the quality of a piece of writing does not only stand or fall by the appropriate type of the methodology and instrumentation, but also by the suitability of the sampling strategy that is adopted". According to Anderson (1998), a sample comprises elements of a population considered for actual inclusion in the study, or it can be viewed as a subset of subjects drawn from the population in which we are interested. Sampling is a strategy which is used to select a sample of participants chosen from the whole population in order to gain information about the larger group (McMillan & Schumcher, (2006); Johnson & Christensen, 1999). These participants are chosen on the basis of being knowledgeable and informative about the phenomenon under investigation (McMillan & Schumacher 2006).

Seaberg (1988: 240) defines sample as "a small portion of the total set of objects, events or persons that together comprises the subject of study". More often, qualitative researchers are intentionally non-random in their selection of data sources, instead sampling is purposeful. They select those individuals or objects that they believe would yield the most information about the topic under investigation (Leedy & Ormord 2005). Furthermore, some qualitative researchers believe that there is not necessarily a single truth to be discovered. Instead, there may be multiple perspectives held by different individuals, with each perspectives having equal validity or truth (Creswell, 1998; Leedy & Ormord 2005).

Melville & Goddard (1996) maintains that in deciding on the participants for a study, the researcher chooses a number of individuals who he/she selects according to the predetermined criteria, for the sake of valuable contribution to increase knowledge. Guided by these views, six principals, six deputy principals and twelve heads of departments were selected for data collection in this study. In addition, two curriculum advisors were selected to participate in this study. The six secondary schools principals and deputy principals were purposefully selected since I regarded them to be information-rich and



have in-depth knowledge with regard to matters pertaining to curriculum change since they were all appointed to the position of management before CASS was implemented.

Furthermore, principals are considered to be curriculum leaders and on the basis of this they are considered to be information-rich. On the other hand, twelve heads of departments were also purposefully selected on the account that they are the ones responsible for the provisioning of curriculum support and guidance to educators. They are the middle managers who are responsible for managing and monitoring the classroom activities.

Finally, the two Curriculum Advisors were also purposefully selected in order to get informed understanding about the nature of support the Limpopo Department of Education provides to secondary school management teams for the implementation of CASS. Below is a table which provides the profiles of the participants.



Table 2: Biographical details of the participants

Name of	Name of	Position	Gender	Race	Age	Experience	Subject
School	participant						offering
DELIWE	Benson	Principal	Male	Black	58	26	_
	Khangela	Deputy	Male	Black	45	18	English
		Principal					
	Benny	HOD	Male	Black	50	24	EMS
	Talent	HOD	Female	Black	43	16	English
DLAYANI	Dickson	Principal	Male	Black	52	23	=
	Mbhoni	Deputy	Female	Black	50	24	Life
		Principal					Sciences
	Fumani	HOD	Female	Black	50	20	Natural
							Sciences
	Moyana	HOD	Male	Black	42	23	Geography
FALAZA	Wilson	Principal	Male	Black	48	27	-
	Burisani	Deputy	Male	Black	54	19	Life
		Principal					Sciences
	Nthabiseng	HOD	Female	Black	49	15	Economics
	Thulani	HOD	Male	Black	39	21	Maths
GEMBANI	Mapawa	Principal	Male	Black	55	21	Maths
	Khondhema	Deputy	Male	Black	56	22	History
		Principal					
	Tumelo	HOD	Female	Black	57	27	Xitsonga
	Thapelo	HOD	Male	Black	38	17	Physical
			3				Science
Ndhengeza	Gregory	Principal	Male	Black	60	21	
	Mbhoni	Deputy	Female	Black	48	16	Afrikaans
		Principal					
	Khetani	HOD	Female	Black	53	23	Social
							Sciences



	Thandeka	HOD	Male	Black	46	20	English
YOLLISA	Daniel	Principal	Male	Black	40	25	Economics
	Tsakisa	Deputy Principal	Male	Black	46	20	B. Studies
	Carrol	HOD	Female	Black	51	21	History
	Maggy	HOD	Female	Black	38	22	Agricultural Science
	Jameson	Curr. Advisor	Male	Black	56	28	
	Peterson	Curr. Advisor	Male	Black	58	26	

The names provided in the above table are not the real names of the participants and the respective schools, but pseudonyms.

## 2.4 DATA COLLECTION METHODS

Miles & Huberman (1994) maintains that qualitative research uses a naturalistic approach that seeks to understand phenomenon in the context-specific settings, such as a "real world setting (where) the researcher does not attempt to manipulate the phenomenon of interest". This implies that qualitative research produces findings which are from the real-world settings where the 'phenomenon of interest' unfolds naturally. In this study, indepth individual interviews and focus group interviews were used as data collecting instrument to get credible data on the experiences of secondary school principals in the implementation of the Continuous Assessment Policy.

### 2.4.1 Interviews

For the purpose of this study, I conducted in-depth face to face interviews with the selected principals, deputy principals and two Curriculum Advisors and with their permission, all the sessions were audio-recorded. On average, each of these interviews



took approximately thirty minutes. The rationale behind choosing interviews as the appropriate instrument for collecting data in this study is that, according to Griffee (2005:36), "interviewing is the most predominant mode of data or information collection in qualitative research". Interviewing is perceived as 'talking', and talking is natural. In support of this view, Kvale (1996) defines qualitative research as an attempt to understand the world from the participants' point of view, to unfold the meanings of peoples' experiences (and) to uncover their lived world prior to scientific explanations. In addition, interviews are regarded as a two-way conversation which is initiated by the interviewer for the purpose of obtaining research relevant information. Furthermore, Seidman (1998) maintains that one interviews because one is interested in other peoples' stories, and stories are ways of knowing.

According to Creswell (2003) one of the strengths of qualitative research, is that it enables researchers to explore the 'hidden' areas of peoples' lives, attitudes and emotions-by entering their 'sacred places' and unraveling their 'cover stories'. In support of this, Leedy & Ormord (2005) maintain that qualitative research focuses on phenomenon that occurs in natural setting, and that is the 'real world'. Guided by this, all the interviews with principals, deputy principals and Curriculum Advisors took place in their respective offices.

I conducted face to face in-depth, semi-structured interviews with the principals and deputy principals of the selected schools. Taking in consideration Borg & Gall (1998)'s observation that the quality of an interview depends mainly on the skills of the researcher as an interviewer, in order to prepare questions that would not only yield rich data, but also provide answers to the critical research questions of this study, I used an interview guide or schedule. I listed and categorised all the questions according to different themes to be explored, that is impact of the curriculum change, understanding the concept 'Continuous Assessment', role of the SMT in the implementation of CASS, and support by the Limpopo Department of Education (See Appendix 4).



After conducting the first session of interviews with the first participant, I listened to the audio-recorded response and thereafter transcribed it verbatim. The understanding gained from the first interview helped me to probe deep during the other interview sessions (with principals and deputy principals) and get quality data with regard to the experiences of school management teams in the implementation of CASS. Participants were asked openended questions which enabled them to express themselves freely when relating their 'lived stories' with regard to the role they play in the implementation of CASS. Follow-up questions were pursued, with special reference to the interview guide or schedule in order to ensure that all the aspects of this study were covered. According to Cohen et al. (2003) open-ended questions are flexible, and they allow the interviewer to probe so that he/she may go into more depth if she/he chooses, or clear up any misunderstanding. Through these questions I managed to get information which clearly reflected their inner most feelings and emotions of the participants about their successful experiences and challenges thereof with regard to the implementation of continuous assessment.

I conducted two sessions of in-depth, semi-structured interviews with two Curriculum Advisors. Having met them several times in the past, during Circuit Management meetings, I found it quite easy to establish a relationship of mutual trust, openness and acceptance with them which made it easier for them to reflect their experiences. Miles & Huberman (1994) maintain that a relationship of this nature is crucial in qualitative research because the participants are not only expected to reveal their 'hidden stories', but also their 'secrets' and 'sacred' feelings about the phenomenon under investigation.

Participants were asked open ended questions and direct questions to elicit their 'innermost feelings' about some of the challenges they experienced when providing support to secondary school management teams as experienced and interpreted by themselves, being actively involved in the implementation process. While listening to the participants I took down notes in my journal. This included participants' gestures which were noted and summarised for thorough analysis and interpretation. McMillan & Schumacher, 2006:324) maintain that "concrete, precise description from the field notes and interviews elaboration are the hallmark of qualitative research and principal patterns in the data".



## 2.4.2 Semi-structured focus group interviews

Schurink & Schurink (1998) describe focus group interviews as a purposive discussion of a specific topic or related topics taking place between nine to twelve people with similar backgrounds and common interests. In addition, according to Krueger (1994) focus group interviews is a carefully planned discussion designed to obtain perceptions on a defined area of interest in a permissive, non-threatening environment. The rationale behind using focus group interviews as a data collection instrument in this study was, according to Krueger its ability to produce concentrated amounts of data on a topic of interest. In addition, focus group interviews are cost and time effective as participants and researcher can be in the same place at the same time and as a result are able to interact on a face to face basis (Schurink & Schurink, 1998). The aim of using focus group interviews in this study was to develop a better understanding of the role that heads of departments play in the implementation of CASS.

For the purpose of this study, I conducted two sessions of focus group interviews with the Heads of Department of the selected schools and with the permission of the participants, both sessions were audio-taped. These interview sessions took approximately one hour and thirty minutes. Each session was constituted by six participants and ran for approximately one hour and thirty minutes. This has enabled the participants to prepare themselves thoroughly for the interviews. For the smooth running of the interview, I ensured that the venue was convenient for all the participants, in other words, that it was accessible and had electricity for audio-recording purposes.

Before the start of the interviews I introduced myself and thereafter assigned or allocated all the participants with numbers from one to six. These numbers were used as 'name tags' to enable me to identify them throughout the discussion or interview session. In addition, participants were also made aware that the allocated numbers would only be used to facilitate the discussion, but for the purposes of data analysis and writing of the final report, they would be replaced with pseudonyms. Participants were also assured that everything they would share during the discussion would be treated as confidential. They



were also requested that after the discussion they should not reveal each other's identity and most importantly, they should also treat all the comments made during the discussion as confidential. Participants were further assured that there was no right or wrong answers, and that even negative comments are useful in gaining insight about the topic under discussion. Participants were thereafter seated in a circular shape so that everyone could face each other throughout the discussion. This enabled me, as the facilitator, to keep track of the discussion and through this arrangement I was able to link comments made by a particular participant with the allocated number when transcribing the audio-recorded interviews verbatim for data analysis.

Participants were asked semi-structured questions guided by topics which were to be explored, that is, understanding of continuous assessment, the role of the SMT in the implementation of CASS and support from the department of education. In addition, participants were asked direct questions to probe their responses. By following up in areas which I felt needed clarity I managed to collect rich and quality data which reflected the emotional feelings of the participants, as viewed or experienced by the people who were actively involved in the implementation process. In line with Stewart (1990), when comments related to one question are finished, I briefly summarized them, making sure there was a general agreement among the participants. While directing the discussion, I also took down notes in my journal. The notes included non-verbal behavior such as eye contact, posture and gestures between group members for analysis. At the end of each session, all the main points were summarised and clarification was sought from individual participants on issues that I felt needed further explanation.

### 2.5. DATA ANALYSIS

The concept 'data' refers to all the information identified and gathered in the process of a particular study. Ary et al. (2002: 465) maintain that "data analysis is the heart of qualitative research and the process that most distinguish qualitative from quantitative research. This is the most critical role of the researcher since he/she has to search, arrange and re-arrange the collected data in such a way that it can be clearly understood and



presented. In analyzing the collected data, my first step was to listen to the audio-recorded interviews several times. This was followed by transcribing all the audio-recorded interviews (including field notes) verbatim. Seidman (1991: 281) maintains that transcribing "is a crucial step, for there is the potential for massive data loss, distortion and reduction of complexity". Field notes for both the individual and semi-structured focus group interviews were constantly consulted when transcribing the collected data. This helped me to recall the body language, facial expressions and other gestures of the participants. After transcribing the interviews, I went through the transcripts several times until I became familiar with the data and made sense of the responses of the participants. This was informed by Griffee (2000), Marshall and Rossman (1999) who suggest that reading, reading and reading once more through the data forces the researcher to become familiar with the data in an intimate way.

Qualitative research requires logical reasoning, organizing data into categories and identifying patterns and relationships among the categories, making specific observations and then drawing inferences about larger and more general phenomenon (Griffee, 2005). Following this, emerging different sets of information with regard to the implementation of CASS were organized in categories and given codes. Leedy & Ormrod, (2005, 150) maintain that "analysis in qualitative research is a systematic process of selecting, categorizing, comparing and synthesizing and interpreting data to provide explanations of the single phenomenon of interest". According to Cohen et al. (2001) coding is a process of breaking down, examining, comparing, conceptualizing and categorizing data. Selective coding was used to identify and determine recurring categories. This proved helpful since through these codes I managed to work out commonalities and differences in the participants' responses with regard to the successful experiences of secondary school management teams in the implementation of CASS. Finally, themes which focused and supported the experiences of secondary school management teams in the implementation CASS were summarised, interpreted and regarded as the findings of this study. For this study, the interpretation of the findings was presented in a narrative form, with direct quotations supporting the interpretations.



## 2.6 TRUSTWORTHY

According to Creswell (1998) trustworthiness concerns convincing the audience and the self that the findings of the inquiry are worth paying attention to and taking account of. Guided by this, the strategies employed in ensuring the trustworthiness of this study relate to the credibility and transferability of the findings.

### 2.7 CREDIBILITY

According to Schulze (2002) credibility refers to ensuring that the research was conducted in such a way that the phenomenon under study was accurately described. This is regarded as the most critical elements of determining the trustworthiness of the findings and inferences from qualitative research. For the purpose of this study, trustworthiness was achieved by ensuring data were collected in the natural setting to reflect lived experiences. I personally visited schools and interviewed the participants. In addition, in order to verify the accuracy of the findings, all the participants were given the opportunity to read through the transcripts of the interviews in order to check if the transcriptions were correct before a comprehensive integration of the findings (Leedy & Ormord, 2005).

#### 2.8 TRANSFERABILITY OF FINDINGS

According to Schulze (2002) transferability determines whether the results of a particular study can be applicable to another context, as opposed to quantitative research where the researcher is looking for results that can be generalized.

#### 2.9 ETHICAL CONSIDERATIONS

According to Schulze (2002) ethical measures are principles which the researcher should abide himself/herself by when conducting research. For the purpose of this study, the following research principles or ethics were followed.



#### 2.10 PERMISSION TO CONDUCT STUDY

Borg & Gall (1989:104) maintain that when working with any administrative hierarchy like schools it is imperative to follow appropriate channels. In addition, McMillan & Schumacher (2006) say that in order to conduct research at an institution such as a university or school, approval for conducting the research should be obtained before data is collected. Informed by this, I firstly applied for a permission to the Provincial Head of Department of Limpopo to conduct a research study (See Appendix 1). Upon receiving the permission, I then applied for permission to the Circuit Manager of Malamulele East to visits principals of the selected secondary schools. The purpose of the visit was to meet all the participants and explain to them the nature of my studies before the process of data collection gets underway. This is supported by Pilot & Hungler (1995) who mentions that while the granting of permission by relevant authority is important, it also lets people on the ground know what the study seeks to accomplish.

#### 2.11 ACCESSING THE PARTICIPANTS

Borg & Gall (1989: 104) "maintain that when working with any administrative hierarchy such as school district, it is very important to follow appropriate channels of authority". In compliance with this observation or protocol, upon receiving permission from the Circuit Manager, I then telephonically secured appointments with principals of the selected schools. I also requested principals to provide me with contact numbers of two heads of departments from their respective schools.

Upon receiving their approval, I then visited their schools. These preliminary visits (to the selected schools) proved significant because they provided me with the opportunity to meeting the participants personally beforehand and establishing a healthy working relationship with them. In addition, these visits proved critical since many participants, upon realizing that I too, was a deputy principal, who presumably was also going through what they were experiencing, showed greater eagerness and willingness to participate in my study.



Furthermore, through these visits I also managed to arrange with them convenient times for the interviews as I did not want to disrupt the smooth running of their schools. It was difficult to arrange convenient times for interviews as some of the principals and deputy principals preferred to be interviewed in the afternoon, citing tight schedules during school hours. Due to this arrangement, in some instances, I would conduct one session of interview with the principal and went back in the afternoon for another session with the deputy principal. However, despite these challenges I managed to access all the selected participants.

#### 2.12 INFORMED CONSENT

Upon receiving permission from the Circuit Manager I then secured appointments with all the principals of the selected schools to visit their schools and to also recommend two heads of departments who can participate in this study. Anderson (1998: 16) maintains that "all human behavior is subjected to ethical principles and rules, and that research practice is no exception". One of the most important principles for ethical acceptability is informed consent (Cohen et al., 2003; Anderson, 1998). Participants should be informed beforehand about the objective and the benefit of the research. For the purpose of this study, I firstly explained to all the participants the purpose of this study, and thereafter indicated to them that their participation in this study is voluntary. I also indicated to them that they were free to withdraw from the study without advancing reason(s) for their decision. I further explained to them that the research objectives were secondary to their well-being and as such every action taken would always place their interests above those of the study. They were thereafter presented with the Consent Forms which they were requested to read and thereafter sign as shown in (See Appendix 3.

#### 2.13 CONFIDENTIALITY

According to McMillan & Schumacher (2006) qualitative research is more likely to be personally intrusive than quantitative. McMallan & Schumacher further say that information on participants should be regarded as confidential unless otherwise agreed on



through informed consent. Ethical issues such as confidentiality indicate an awareness and recognition of the rights of individual in undertaking research (Anderson, 1998). For the purpose of this study, participants (principals, deputy principals and curriculum advisors) were assured that the information they would provide would be treated as confidential and also be used only for the purpose of this study. In addition, participants were also guaranteed anonymity in any recorded or published material.

## 2.14 CONCLUSION

This chapter has provided a framework of the research methodology that was employed in this study. Given the central objective of this study was to investigate the experiences of secondary school SMT in the implementation of CASS, it was decided that the study would be qualitative in nature. This was informed by the fact that qualitative research seeks to understand the social phenomenon under investigation from the participants' perspective. In addition, for the purpose of this study, data were collected from the natural setting, that is schools. Furthermore, the chapter has provided a breakdown of the research methods that was followed in collecting data. In order to collect data which would be rich, all the participants were purposefully solicited. Secondary school principals, deputy principals and heads of departments are key personnel in the implementation of curriculum change and as such, they were regarded as knowledgeable and rich sources of information. In this study in-depth interviews and focus group interviews were used as data collecting instruments to gain insight with regard to the experiences secondary school management teams in the implementation of Continuous Assessment in the Revised National Curriculum Statement.