

## CHAPTER 4 RESEARCH DESIGN AND METHODOLOGY

*Phenomenological approaches seek to explore, describe and analyse the meaning of individual lived experiences: how they perceive it, remember it, make sense of it and talk about it with others*  
(Marshall & Rossman, 2011:19).

### 4.1 INTRODUCTION

The literature review in Chapter 2 aimed to validate this research while Chapter 3 discussed Hall and Hord's (2001) Concerns-Based Adoption Model which was employed as the theoretical framework of the study. In this chapter, the epistemological interpretivist view and the qualitative study as a research design, and the selected research strategies of an open-ended questionnaire, semi-structured individual interviews and focus group interviews are discussed. An outline of the coding format of the transcribed data follows and lastly an explanation of my approach to data analysis is given. The subsequent presentation illuminates<sup>29</sup> the research process followed during the inquiry which resulted in the data analysis presented in Chapter 5.

While working with human subjects, it was important for me to adhere to ethical standards and refrain from infringing on the rights of the participants throughout the investigation of the research problem.

The visual presentation in Figure 4.1 clearly outlines the methodological overview of the research approach and design employed in this study.

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<sup>29</sup> The term illuminate is used to describe and explain the research strategies and procedures employed in undertaking the research (Schlager, 1999).



**FIGURE 4.1: Research Design and Methodology Overview** (Adapted from Chabilall, 2010:71)

## 4.2 RESEARCH APPROACH

This study took a qualitative approach using qualitative methods in natural settings, framed within an interpretive paradigm (de Vos, Strydom, Fouché & Delport, 2011:325, Creswell, 2007:212, Smith & Shepard, 1988:310) in order to acquire meanings from teachers' experiences of the AAPS and ways they implement this subject area. Conducting the research in naturalistic settings enabled me to

understand whether teachers teach the subject area<sup>30</sup> in accordance with policy provisions. Throughout the interview process, I allowed participants to be heard and not be silenced, distorted, disengaged or marginalised in their submissions in order to facilitate understanding of the topic under study through their perspectives (Creswell, 2007:212; Nieuwenhuis, 2007b:51). Adopting a qualitative research paradigm was beneficial as the interpretive nature of the methodology allowed for a representation of secondary school teachers with regard to their conceptualisation and implementation of the AIDS Action Programme for Schools (McMillan & Schumacher, 2006:22).

My commitment was to the 'naturalistic perspective and to the interpretive understanding of human experience' (de Vos *et al.*, 2011:310). I observed that reality is subjective: it resides in people and is constructed by people who experience it (Creswell, 2007:15-30). This informed me to solicit different views and meanings from teachers who have lived experiences in implementing the AAPS curriculum. As an interpretivist epistemologically, I believe that searching for knowledge is seeking the truth and obtaining the truth is about understanding the phenomenon that one is exploring. It is about alternatives that work best in a specific context (Creswell, 2007:20-34). I therefore strived to understand the subjective world of teachers' experiences and practices in implementing the AAPS (Cohen *et al.*, 2000:22). Due to my particular interest in the participants' knowledge, beliefs and attitudes, I observed teachers' actions to ascertain their intentions and behaviours, in order to share their experiences and obtain what Cohen *et al.* (2000:22-23) view as *behaviour-with-meaning*. By using an interpretivist approach it was possible to attain a holistic understanding of the topic under study.

#### **4.3 RESEARCH DESIGN**

A qualitative case study design was employed in this study with 20 secondary school teachers, four heads of schools and two Ministry of Education officials to illuminate secondary school teacher participants' comprehension and response to an official policy innovation, namely the AAPS (Hancock & Algozzine, 2006:15; Schlager, 1999:257). Since I was interested in the meanings teachers give to their experiences

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<sup>30</sup> In this study the term subject area refers to the AIDS Action Programme for Schools and the two terms are used interchangeably in this thesis

in implementing the AAPS, it was justified to use a case study in order to immerse myself in the phenomenon (de Vos *et al.*, 2011:321). The qualitative design was considered given that qualitative research is an imperial inquiry that investigates a contemporary phenomenon within a real life context using multiple data collection strategies such as semi-structured individual interviews, focus group interviews and observation (Cohen *et al.*, 2007:18). According to Creswell (2007:73) and Nieuwenhuis (2007a:75) the researcher enters a bounded system (that is, the four government secondary schools implementing AAPS), and collects comprehensive data involving triangulation of data sources and methods in order to produce thick descriptions and case-bound themes. In using a qualitative research design my intention was to provide a unique example of real people in real situations (secondary school teachers) hence enabling readers to understand ideas more clearly (Cohen *et al.*, 2007:253; Creswell, 2007:15-30).

My study involved an exploration of teacher conceptualisation and implementation of the AAPS in Masvingo district. Hence forth, an exploratory or instrumental case study (comprised of 20 teachers in four secondary schools, four school heads and two Ministry officials) was utilised (de Vos *et al.*, 2011:321; Mark, 1996). The purpose of the exploratory case study was to produce new knowledge on teacher policy, curriculum understanding and pedagogical practices, in order to inform policy formulation, curriculum implementation and teacher professional development. The exploratory/instrumental case study facilitated my acquisition of knowledge about a specific educational and social issue – teacher conceptualisation and implementation of the AAPS in schools, (de Vos *et al.*, 2011:322). Utilising the exploratory case study and the theoretical framework – CBAM, I was able to discern the understandings, experiences and behaviours of secondary school teachers regarding the AAPS.

Overall, the qualitative design used allowed me to: (i) conduct the research in four schools in Masvingo district, Zimbabwe; (ii) engage with teachers over time in their natural settings; (iii) understand events in the perspective of the teachers; (iv) provide thick descriptions of the phenomenon under study and (v) come to grips with the specificity of teacher conceptualisation and implementation of the AAPS curriculum in schools (Denzin & Lincoln, 2005). Since my aim was to discern and gain insight into the issues that are intrinsic in the case itself (de Vos *et al.*, 2011:321; Schwandt, 2007:28), the design enabled me to answer cognitive questions such as: How do

teachers understand, respond to and implement the AIDS Action Programme for Schools? I was able to employ the qualitative case study design to reveal what occurs in classrooms at the four selected schools regarding implementation of the subject area.

#### **4.4 RESEARCH QUESTIONS**

The research questions are imperative for understanding the data collection methods chosen. They determine the scope, periphery, and direction of the study with its subtle factors. The questions are also important in determining the type of data needed in the study in order to explore and answer the research problem. The questions indicate the research participants and spell out the nature of the study (Creswell, 2007). These arose from the aim of the study stated in Chapter 1, section 1.4, namely to investigate how secondary school teachers conceptualise and implement the AIDS Action Programme for Schools as a policy and curriculum initiative.

Below is a discussion of the primary and secondary research questions which underlined this research. The questions that are aligned to the research methodology are significant in understanding teachers' knowledge and practice with regards to implementation of the AIDS Action Programme for Schools. The primary research question is:

- *How do secondary school teachers understand, respond to and implement the AIDS Action Programme for Schools?*

This question aimed to reveal teachers' interpretations of policy and curriculum regarding the AIDS Action Programme for Schools as a critical subject area. It discerns how these teachers, who are the frontline policy implementers, understand the curriculum innovation and in turn use it in their classrooms.

By focusing on teacher knowledge, practice and levels of implementation, I gained insight into their attitudes, beliefs, and practice. Question one also allowed me to probe the teachers' common response to curriculum implementation. Exploring such understandings was significant because of the symbiotic relationship that seems to

occur between knowledge and practice. Teachers' knowledge and beliefs are seen as factors that influence their attitude towards change and curriculum implementation positively or negatively. Accordingly, Hall and Hord (1987:2001) in the Concerns Based Adoption Model argue that teacher knowledge, attitude and support impact on how they receive an innovation, thereby impacting on the level of practice on which a teacher engages with an innovation. By posing question one I was able to ascertain the meanings that teachers attach to the AIDS Action Programme for Schools and how they in turn implement the curriculum.

In order to answer the main research question, secondary research questions were generated and explored:

1. *What are the policy, curriculum requirements and components of the AIDS Action Programme for Schools?*

By focusing on sub-question one I was able to measure teacher practice in curriculum implementation against policy and curriculum requirements and components.

2. *How are teachers experiencing the implementation of the AIDS Action Programme for Schools?*

This question focused on highlighting teachers' experiences including emotional experiences regarding implementation of the AIDS Action Programme for Schools as a subject area.

3. *What is the relationship between policy, curriculum provisions and educational practices regarding the AIDS Action Programme for Schools?*

By asking sub-question three, I was able to focus on whether teachers perceive any discordance between policy and practice. It probes on both internal (attitude, beliefs, concerns and level of use) and external factors (support, collaboration, professional development) regarding implementation of an innovation. This question enabled me to reveal a point of disjuncture that exists between policy and practice regarding implementation of the AIDS Action Programme for Schools.

#### 4.5 CONTEXT OF THE STUDY

Four government secondary schools participated in this study. All four public schools had similar policy and curriculum requirements for the AIDS Action Programme for Schools. All the schools selected had classes running from Form One up to Form Six. Two of the schools are located in a township with low urban socio-economic status. One school is located at a district service centre (popularly known as growth-point in Zimbabwe) with low rural socio-economic status. The fourth school is located in an affluent suburb in Masvingo urban and is attended by children of a middle-class community. All these schools run double sessions (or hot seating), that is, they have full classes in the morning session as well as in the afternoon session. For a geographical understanding of the Masvingo district, see Appendix 5.

#### 4.6 SAMPLE SELECTION

Purposive sampling was adopted (Creswell, 2007; Denzin & Lincoln, 2000:370; Miles & Huberman, 1994) to select 20 teachers, four school heads and two Ministry of Education, Sport, Arts and Culture officials. I focused on these people because they were found to have certain attributes relevant to the phenomenon in that they were involved in the implementation of the subject area in different portfolios. As suggested by Cohen *et al.* (2000:103), I chose the four schools comprising the case to be included in the sample based on their *typicality* that they were engaged at varying levels with the HIV and AIDS education curriculum in their settings (De Vos *et al.*, 2005:375). Choice of the sample was also based on feasibility as total coverage of all AAPS teachers in Masvingo district was not possible (de Vos, 2011:224; Sarantakos, 2000:139). They then became rich samples for in-depth study of the topic under investigation to acquire deep understanding or a solid appreciation of teacher understanding and implementation of the AIDS Action Programme. The use of purposive sampling increased the utility of information acquired from the participants (Cresswell, 2007).

In selecting the research participants, the sample size was not statistically determined since gathering of comprehensive and reach data was the basis and not representativeness. At each of the four government schools, five teachers teaching the AAPS and the school head were interviewed. These variables were seen to be

relevant in sourcing interesting data regarding the programme under study. The sample size was directly correlated to the nature and purpose of the research problem, data collection strategies and access to information-rich cases. Informed by McMillan and Schumacher (2006:322) I realised that for credible and rich data<sup>31</sup> to be obtained in this investigation the participants should have experiences in the subject area.

#### **4.7 PARTICIPANTS**

All the teachers who participated in this study had degrees in different areas of specialisation except for four who had diplomas in education. The teachers ranged from 28 to 45 years of age. Both male and female teachers formed the sample. These teachers were recruited because they were responsible for teaching the AAPS at their respective schools.

I opted to work with secondary school teachers because they are a unique group in that they are subject specialists, tasked for the implementation of the AAPS over and above their subjects of specialisation. The four school headmasters and two Ministry of Education, Sport, Arts and Culture officials in the sample, provided complementary data based on their leadership and administrative roles in implementing the AIDS Action Programme for Schools. Hence, they were seen as credible sources of data. All the teacher participants in this study formed the unit of analysis (Schlager, 1999:239). A bio-data account of the participants and their research names is shown in Table 4.1.

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<sup>31</sup> By rich data, I mean data that is detailed and complete enough that it provided a full and revealing picture of the topic under research (Maxwell, 1996:95).



**TABLE 4.1: Research Participants**

School	Context Location	Teacher & Teaching Experience in Years	Gender and Age	Professional Qualification	Subject Specialisation
Target Copy – A	African high-density township school	1. Dudu: 19 2. None: 20 3. Mitz: 22 4. Precious: 23 5. Denio: 10	1. Female: 40 2. Male: 42 3. Female: 47 4. Female: 44 5. Female: 31	1. MBA, BSSc, CE <sup>32</sup> 2. BA, Grad. CE 3. BA, Grad. CE 4. BA Hons., Grad. CE 5. 'A' Level <sup>33</sup> , DE	1. Science 2. Shona & RS <sup>34</sup> 3. Shona & Divinity 4. History & English 5. History
Mucheke – B	African high-density township school	1. Nyasha: 12 2. Kay-Kay: 13 3. Muller: 15 4. Esx: 21 5. Concerned: 16	1. Female: 34 2. Male: 35 3. Male: 47 4. Female: 45 5. Female: 43	1. BSc in Educ. 2. MEd. 3. MEd. 4. STC, BEd. 5. BA, Grad. CE	1. Geography 2. Mathematics 3. Physics & Biology 4. Biology 5. English Literature
Rhodene -C	Former affluent white government school. Now a multiracial school	1. Rejoice: 10 2. Rtramile: 6 3. Shingairai: 10 4. Pauline: 15 5. Chiwanza: 16	1. Male: 32 2. Male: 30 3. Female: 33 4. Female: 39 5. Male: 40	1. BEd. 2. BSc, Grad. DE 3. BA, Grad. DE 4. BEd. 5. BSc. Hons.	1. Home Economics 2. Agriculture 3. Literature in English 4. Religious Studies 5. Biology
Nemanwa – D	Rural Service-centre/Growth point school. Rural and the Centre children attend this school	1. Praise: 8 2. Chiwawa: 20 3. Shumba: 3 4. Quevee: 3 5. Speaker: 9	1. Female: 32 2. Female: 43 3. Male: 25 4. Male: 26 5. Male: 34	1. BA. Grad. DE 2. BA, CE 3. 'A' Level, DE 4. 'A' Level, DE 5. 'O' Level <sup>35</sup> , DE	1. History 2. English 3. Business Studies 4. Computer Science 5. Agriculture

<sup>32</sup> MBA: Master of Business Administration; MEd. Master of Education; BEd. Bachelor of Education; BA: Bachelor of Arts; BScC: Bachelor of Science – Counselling; BSc: Bachelor of Science; Grad. DE: Graduate Diploma in Education; Grad. CE: Graduate Certificate In Education; DE: Diploma in Education; CE: Certificate in Education, STC: Secondary School Teacher certificate

<sup>33</sup> In the Zimbabwean education system 'A' Level refers to the 6<sup>th</sup> and last year in secondary school education

<sup>34</sup> RS: Religious Studies

<sup>35</sup> In the Zimbabwean education system 'O' Levels refers to the 4<sup>th</sup> year of secondary school education

From Table 4.1 it is clear that all 20 teachers have degrees in their specific areas of specialisation. They do not have a qualification in HIV and AIDS education and most of them were not trained to teach the subject area except one who had a Bachelor of Science degree in Counselling. Teachers who teach in their fields of specialisation were given the AAPS as an additional subject area to teach.

## **4.8 DATA COLLECTION**

Prior to onset of data collection, I first sought permission to undertake the study in government secondary schools from the Permanent Secretary, Ministry of Education, Sport, Arts and Culture. After permission was granted by the Secretary, I applied for permission to conduct the research from the Provincial Education Director (PED). Permission was also obtained from schools which participated in the study. I then applied for ethics clearance at the University of Pretoria, Faculty of Education which was granted (see Appendix 10).

### **4.8.1 PILOT STUDY**

Research instruments were tried and tested during construction to avoid ambiguity and misunderstanding. The results of the pilot study informed me to revise, rephrase, and clarify some of the items on the instruments. Besides refining data collection instruments, I did not use the pilot test results for any other purpose in this study (Yin, 2003:7). The drafts of all the instruments, namely questionnaire and interview schedules, were included in the application for ethics clearance, which was successful. An ethics clearance certificate was issued by the University of Pretoria as indicated in Appendix 10.

I conducted a qualitative pilot study to pre-test or trial run the data collection instruments, and improves reliability (Marshall & Rossman, 2011; 1999:64) at one of the secondary schools. The school selected for the pilot test was not in the sample, but it had the same characteristics as those that were in the main study. The Ministry of Education officials' data collection instrument was tested on one of the Education Officers involved in the AIDS Action Programme for Schools in the provincial office. The pilot test aimed to validate the items and confirm that they would be clear and meaningful to the participants. I also wanted to establish whether the instruments

were functional before undertaking the main study. Finally, the Ethics Committee of the Faculty of Education – University of Pretoria, cleared me to undertake fieldwork.

#### **4.8.2 PHASES OF DATA COLLECTION**

The qualitative research methodology applied in this study involved three main phases of data collection. In the first phase I investigated the national policy status on the AIDS Action Programme for Schools. It consisted of interviews with Ministry of Education, Sport, Arts and Culture officials responsible for implementation of the curriculum. This was done to explore policy issues and establish the degree of support offered to schools by the Ministry for effective policy implementation. In the second phase, school principals' views on school support and teachers' response to the AIDS Action Programme was undertaken. In the third phase, I investigated teachers' knowledge of the AAPS, regarding policy and curriculum requirements, and how the teachers implement the subject area in their classrooms. I also enquired among the teachers whether there was a disjuncture between policy and practice that could have been affecting the teachers' implementation of the subject area (Burgess *et al.*, 2010:56).

Since teachers were the key informants, the process of data collection involved that they completed an open-ended questionnaire that was administered by the researcher first. The teachers were encouraged as much as possible answer all questions in the open-ended questionnaire. This was done to enable teachers to volunteer personal data on the topic under study. The second stage involved the teachers in focus group interviews to acquire both their personal and group views regarding their conceptualisation and implementation of the AAPS. During the process respondents' answers were viewed as describing internal realities – feelings, meanings and occurrences (Silverman, 2010:225). All questions on the interview schedule with follow up probing questions were asked. Participants were also invited to add information that they were willing to give even if no specific question would have been asked.

### 4.8.3 DATA COLLECTION STRATEGIES

Strategies utilised to collect data in this study were open-ended questionnaires for subject area teachers, semi-structured individual interviews for Ministry of Education officials and school heads, and focus group interviews for the teachers. The strategy enabled different of data collection methods to be applied (triangulation), and thus strengthened the quality of the research design. Using qualitative research methods, I solicited rich data that was embedded in the context, and provided depth to descriptions. It was possible to collect information from a diverse range of individuals and settings, using varied methods. The rationale for using triangulation as an approach was to strengthen the worthiness and validity of the data in the study. Triangulation was applied to aid in the elimination of bias and to allow dismissal of plausible rival explanations (Mathison, 1998). I did this so as to obtain an objective proposition on the topic under study, namely secondary school teachers' understanding and implementation of the AIDS Action Programme. Triangulation enabled me to solicit different data, what Yin (2003) refers to as different images of understanding or converging lines of evidence. In this study, establishing the converging lines of evidence gave me a sense of related issues in the experience of various participants and a view of the larger group experience beyond that of the individual participant.

I utilised data triangulation by using several data sources involving teachers, government officials, and school heads. To attain methodological triangulation, I used multiple strategies sequentially and simultaneously to study a single research problem (McMillan & Schumacher, 2006:322). In qualitative research the object is to 'develop a complex and holistic view of social phenomena' and construct detailed descriptions of social reality (de Vos *et al.*, 2011:65, 66). So, I combined data collection strategies to achieve an objective outcome. I also used triangulation not as an end in itself but as a way of challenging my own findings and revisiting my interpretations. These strategies I employed complemented each other in a unified research design (Cohen *et al.*, 2007:288). Below is a detailed discussion of each of the strategies.

#### 4.8.3.1 Open-ended Questionnaire

I used a researcher-designed, open-ended questionnaire to explore the 20 teachers' knowledge<sup>36</sup> about and practices in implementing the AIDS Action Programme for Schools curriculum. Silverman (2010:123) contends that open-ended questions can be administered to small samples. The questionnaire was made up of open-ended questions that sourced data on both broad and specific issues regarding policy and teacher practice. Among other things, the questions solicited data on: teachers' knowledge of the official curriculum; policy mandates; teachers' responses to policy implementation; challenges faced by the teachers; teachers' engagement with the curriculum at a personal level; and teacher suggestions for effective programme implementation in schools. All 20 teachers in the sample completed the questionnaire in order to submit their experiences at a personal level.

A mixture of questions was adopted in the instrument to obtain meaningful, comprehensive data from the questionnaire. Mathison (1998) suggests that it is necessary to have open-ended questions because the data gathered is detailed and has a clear status as qualitative research data. Using the questionnaire allowed participants to compose their own answers rather than to choose from a number of given alternatives (Silverman, 2010). The open-ended questions were likely to produce valid and reliable data since the respondents were able to express views in their own words and think through issues.

The use of the open-ended questionnaire allowed for anonymity because the participants did not use their real names, and was an economical way of accumulating information in terms of time, effort and cost (Silverman, 2010:123, Oppenheim, 1992; Srivastava, 1994). The open-ended questionnaire was appropriate for addressing the research problem and it enabled me to attain triangulation of data collection strategies (see Appendix 9). Qualitative data from the open-ended questions was analysed for emerging themes, categories and sub-themes. I took the open-ended questionnaire with me to the schools during conducting individual interviews with school heads and administered it to the teachers. Administering the questionnaire personally, afforded me the opportunity to

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<sup>36</sup> In this study, knowledge refers to understanding and the two terms are used interchangeably in sections of this thesis (Oxford Advanced Learners' Dictionary 2000:714)

create rapport and bonding with teachers (de Vos *et al.*, 2011:325). This was done prior to conducting focus group interviews. I was able to obtain all teacher responses. Data collected through this method was merged with that from focus group discussions and field notes.

#### **4.8.3.2 Semi-Structured Interviews**

Semi-structured interviews were conducted with two Ministry of Education officials and four school heads. I employed a schedule as a guide and not a prescriptive device (Berg, 2001:70). Each of the individual interviews lasted for approximately 45 minutes. I recorded all interviews with a digital voice recorder to facilitate smooth discussions. The one-on-one interviews enabled participants to express their personal experiences, beliefs and opinions to me (Cohen *et al.*, 2007:350). At the root of the interviews was an interest in establishing how Ministry of Education officials and school heads view teachers' understanding and implementation of the AIDS Action Programme for Schools. It was also important to obtain information from these participants on their administrative and support role in the implementation of the subject area in schools. Interviews were used because social abstractions such as articulating HIV and AIDS issues, and teaching them, are best understood through experiences of school heads and Ministry officials who work with teachers in implementing programmes. Two interviews were conducted in Ministry officials' offices and four in the headmasters' offices. Throughout the conversations with these participants rapport was warm and non-threatening. They actually indicated that they were comfortable to share their experiences with me.

Issues that were explored through interviews included: teacher understanding regarding the AAPS; teacher understanding of the reform and its related components; teacher policy mandates; views on teacher academic and professional competence; programme implementation concerns; administrative and teaching support, as well as the dynamics of school politics in policy implementation and change. The transcribed data was taken back to the Ministry officials and school heads for them to verify whether their responses had been captured correctly. Field notes recorded in a research journal complemented the interviews. I transcribed the interviews as soon as I could and started analysing the responses. For explicit detail of these instruments see Appendices 8 and 9.

#### 4.8.3.3 Focus Group Interviews

Focus group discussions were employed with four purposefully selected groups. Each group constituted of subject area teachers teaching Forms One to Six in selected schools. The method builds on a group processing of information, thereby strengthening the credibility of my study (McMillan & Schumacher, 2006:360). Through use of focus groups the aim was to determine how the teachers understood, responded to and implemented the AIDS Action Programme for Schools in their school contexts. A range of responses from the submissions of the participants' views was elicited. I was also able to solicit collective views from the participants.

The groups were met once at each school and the interviews lasted for approximately one hour. The interviews were conducted in the natural settings of the schools in order to enhance realism. Three of the interviews were held in offices and one in an empty classroom. These were found to be private, neutral and distractive-free interview locations. A twenty-item interview schedule with explorative and descriptive questions guided the discussions as indicated in Appendix 8. Techniques such as probing, clarification, paraphrasing, and minimal verbal and non-verbal responses were adopted to explore and uncover teachers' lived experiences, knowledge and behaviour (Silverman, 2004:272). The interviews were audio-recorded and transcribed verbatim to capture complete data for each focus group discussion session. Voice recording the interviews enabled me to concentrate on the topic and the dynamics of the interviews. Subsequently, the transcribed data were explored for themes and categories to initiate interpretation and discussions in relation to the research questions (Ely *et al.*, 1997).

However, tape-recording the interviews presented a decontextualised version, because it did not include the visual aspects of the situation and the social atmosphere that prevailed (Seidman, 2006). Hence, field notes complemented the tape-recorded data and included things such as nuances, body language, gestures, incomplete submissions and my own reflections. To continuously enhance validity, I ensured that every participant's viewpoints were considered by cross-examining issues through the use of counter-check questions. By so doing, a context was created within the focus groups where participants expressed themselves freely and explicitly, showing dynamism as they reacted to each other' submissions (Louw,

1993). I capitalised on the sharing and creation of new ideas that might not have occurred if participants were interviewed individually (Hancock & Algozzine, 2006). I found the focus group discussions to be fruitful because issues were discussed and summarised for a consensus position. Soon after the focus group interviews data was transcribed and taken back to the participants for verification. Table 4.2 shows the composition of the focus groups at each of the four schools.

**TABLE 4.2: Composition of Focus Groups**

Setting	Group Composition	Gender and Number	Age
Target copy	Five Forms 1-6 AIDS Action programme teachers	Females: 4 Males: 1	31-35 years: 1 36-40 years: 1 41-45 years: 2 46-50 years: 1
Mucheke	Five Forms 1-6 AIDS Action programme teachers	Female: 3 Males: 2	30-35 years: 2 41-45 years: 2 46-50 years: 1
Rhodene	Five Forms 1-6 AIDS Action programme teachers	Females: 2 Males: 3	30-35 years: 3 26-40 years: 2
Nemanwa	Five Forms 1-6 AIDS Action programme teachers	Females: 2 Males: 3	25-30 years: 2 31-30 years: 2 41-45 years: 1

As indicated in Table 4.2, both male and female teachers were assigned to teach the curriculum area AAPS although females were one more than males. None of these teachers had a relevant professional qualification to provide HIV and AIDS education under the AAPS as indicated earlier in Table 4.1. Most of the teachers assigned to teach the subject were below 40 years of age. Three teachers were 45 years old and two were 50 years old. On the days I conducted interviews I got to the schools early to pay a courtesy call to the headmaster, set the venue, test the functionality of my digital voice recorder and chart with the teachers before commencement of the interviews. Before commencement of the interview I reassured participants about confidentiality, anonymity and consent. I took the time to explain the purpose of the study. It felt as if the participants were treating me as a colleague and not a researcher *per se*.



#### 4.8.3.4 Field Journal

As a researcher and an observer during fieldwork, I maintained a research journal to record personal observations, impromptu discussions, reflections and notes of perceived body language shown during interactions with teachers, school heads, and Ministry of Education officials. In the journal I also made other observations that were relevant to my study during individual and focus group interviews which took place in their settings, which were mostly offices. I also recorded methodological decisions, feelings and thoughts in the field journal during data collection while at the school settings (Lincoln & Guba, 1985:327). In using the research journal, I was able to capture and keep the field notes and reflections of activities directly observed in the school settings which yielded relevant information to my study. I was able to draw inferences that could not be obtained by relying exclusively on tape-recorded individual interviews and focus group discussions.

By using a research journal I gained insight into the informants' perspectives that they were unable to express verbally during interviews. The notes constituted descriptions of the *who*, *what*, *where* and *how* of a research context (Mosia, 2011:74) and directed the research process. These field notes strengthened the validity of the study and proved to be relevant during the data analysis. In using the journal I realised that although methods and procedures do not guarantee validity, they are nonetheless essential to the process of ruling out validity threats and increasing the credibility of my conclusions.

#### 4.9 DATA ANALYSIS

The purpose of conducting the qualitative exploratory/instrumental case study was to produce underlying meanings or findings. The qualitative data analysis transformed data into findings. The data analysis process involved 'bringing order, structure and meaning to the mass of collected data' (de Vos *et al.*, 2005:338). As observed by de Vos *et al.*, (2011:397), the data analysis involved 'constructing a framework for communicating the essence of what the data reveal'. Creswell (2007:150) views data collection, recording and analysis as interrelated, simultaneous procedures that are ongoing. At the onset of data collection, I took note of the suggestion by Coffey and Atkinson (1996:1-2) that researchers should never collect data without substantial

analysis going on simultaneously. Both verbatim transcriptions of interviews and open-ended questionnaire data were analysed using Tesch's method of qualitative data analysis (Creswell, 1994:154-155). The method entails scrutinising the data obtained for the emergence of themes. By using this method of data analysis I intended to capture the essence of teacher experiences studied through the identification of their constituent parts. Categorising and coding entailed identification of words and segments in the transcripts that related to teacher understanding of, response to and implementation of the AAPS. I was careful to ensure that the data analysis undertaken was rigorous, systematic and methodical (Schwandt, 2007:6). Field notes from the journal were used to interpret meanings and fill in missing links in the data obtained from interviews and questionnaire (Kvale, 1996:11). Refinement of identified themes continued as I held consensus discussions with supervisors during the data analysis phase (Creswell, 1994:158).

Tesch's method of data analysis used to analyse all the data from interviews and an open-ended questionnaire involved the following processes outlined in Creswell (1994:154-155), Skhosana and Peu (2009:5) and Mosia (2011:75):

For the open-ended questionnaire, I initially organised and analysed data according to individual research participants (the 20 teachers). I considered all the responses of each individual before moving on to the next participant's responses in order to preserve the coherence and integrity of the individual response and to develop a holistic image of each participant (Cohen *et al.*, 2007:467). On completion of the questionnaire responses, I could reflect on salient issues emerging and I developed tentative themes, categories and sub-categories.

In analysing individual interviews and focus group interview data, I started by transcribing all the data from the audio-tapes. Then the transcripts were read carefully in their entirety. Some ideas were jotted down as they came to mind. I placed the transcripts in such a way that those that were interesting and short were on top of the pile. I then chose one transcript at a time and reviewed it. During the review of the transcripts, I asked myself questions that shed light on the underlying meanings to the data given. A list of themes was made for each transcript. These themes were then clustered according to similarity. The list of themes was compared to the data and codes were allocated. The most descriptive wording for each theme

was found, and it became the theme of the data. The data were then divided and organised into the relevant themes, categories and sub-themes.

During data analysis I used thick description vignettes (Ely *et al.*, 1997:70) and quotes from the interviews and questionnaire. The strategy created mental images that brought to life the complexities of the variables inherent in how secondary school teachers understand and respond to curriculum implementation in their contexts (Hancock & Algozzine, 2006:16).

#### **4.10 CREDIBILITY AND TRUSTWORTHINESS CONSIDERATIONS**

The validity and reliability of my study hinge on the truth value, the transferability and the consistency of the study. As viewed by Merriam (2001:166) the truth value or internal validity and the transferability or external validity is the extent to which one's findings match reality. Reality in terms of teacher understandings, response to and implementation of the AIDS Action programme in schools is multi-faceted and cannot be resolved into a single truth. Reliability is a multiple set of mental and social, context-specific constructions (Wiersma, 2000:198). As a researcher, I tried to represent the multiple constructions adequately. I also aimed for credibility and the confidence in the truth of the data (Silverman, 2004). To present findings that are convincing and believable, I employed triangulation, respondent validation and thick descriptions.

In short, validity refers to the trustworthiness of inferences drawn from data. It is the correctness or credibility of a description, conclusion, explanation, interpretation or other sort of account (Maxwell, 1996; Wiersma, 2000:199). Validity as a component of my research design consists of the strategies used to eliminate threats. I made sure I did not engage in distortions through use of audio-tapes, interview transcripts and running field notes to capture data. It was critical to employ the approach so that anyone assessing my investigation could access the evidence to authenticate the accuracy of the accounts given. I constantly focused on the question, Am I measuring what I intend to measure? This I did in order to attain interpretive validity – the meanings which research participants give, which are not physical but mental. It includes all thoughts, feelings, beliefs understandings and perceptions of the respondents (Denis, 1994). I respected participants' verbatim accounts. The *emic*

aspects of an account, in this study, were grounded in the language of those studied; that is, teachers, school principals and Ministry officials' views were inherently inferential.

To achieve member checks or respondent validation, I solicited feedback on the data and the conclusions I made from the research participants as suggested by Guba and Lincoln (1989). I took the research transcripts back to the participants I interacted with for their own verification and perceptions. By the time I completed the data collection, the respondents were still in their settings so it was possible to take the research findings back to them.

To ensure credibility detailed descriptions were utilised to portray the image and feeling of the setting. These are an interpretive characteristic of descriptions (Schwandt, 2007:296). As viewed by Denzin and Lincoln (2000:393), the description of people and events is the cornerstone of qualitative research. For my research to be credible I carefully presented participants' views as reflected in the transcripts on their response to curriculum implementation. Being conscious of my personal attitude, opinions, experience and expectations as an educator, I tried to remove bias (Cohen *et al.*, 2007). I made it sure that data collection and analysis was logical, traceable and well documented (Creswell, 2007). Prolonged engagement in the field, detailed field notes, high quality audio-recordings and use of multiple data sources improved the credibility and trustworthiness of this study.

This study was further validated by the reviewed literature. Among other things the literature review related my research within existing literature and identified a niche for my study to contribute added knowledge and new insights into teacher policy and curriculum understanding, response to and implementation regarding AAPS (Merriam & Simpson, 1984). I was able to understand the assumptions behind the research questions and improved my knowledge of research and intellectual traditions that inform and support my study (Mosia, 2011:79; Marshall & Rossman, 1995:280). I conducted literature review to develop and sustain my confidence as a researcher (Woods & Catanzaro, 1998:136; Burns & Grove, 1997:545). The literature study strengthened the research's stance to be valued as part of cumulative knowledge-building regarding the research inquiry in terms of the research topic (Rubin & Babbie, 2001:121): how secondary school teachers conceptualise and implement the

AIDS Action Programme for Schools. Hence forth, the credibility and trustworthiness considerations were realised by employing the discussed measures.

#### **4.11 ETHICAL MEASURES**

Ethics was an integral part of this research. It is the science of criteria, norms and values of human action and conduct (MRC, 1993). It demands engagement in reflection and analysis of morals concerning whether an act is good or bad and how it influences our basic quest for meaning, our search for humanity and our attempt to create a humane society (Cohen *et al.*, 2000). More critically, ethics is vital for improving the quality of research. The four principles of ethics I considered in this study are: autonomy, beneficence, non-maleficence and justice. My aim was to safeguard human dignity and promote justice, equality, truth and trust (MRC, 1993).

Prior to data collection, I applied for ethics clearance which was granted before I proceeded to fieldwork. During the data collection process, I took cognisance of the fact that ethical issues could arise from the problem being investigated and the methods that I was using to source data (Cohen *et al.*, 2000:49). It implied that each phase in data collection was a source of ethical dilemma (Clasquin-Johnson, 2011:93). The basic assumption in my research was the autonomy of the individual within the broader context of human relations. Participants were treated as human beings in the context of their social, political and professional environments. Effort was made not to cause physical or psychological harm to participants. Therefore, I strictly focused on non-maleficence which is the absence of harm to the research participants. The research is of benefit to the research participants since information generated in the findings could highlight the problems teachers experience with the implementation of the AIDS Action Programme for Schools curriculum in order for the Ministry of Education, Sport, Arts and Culture and heads of schools to provide better support and in-service training.

The study was conducted in line with ethical requirements set by the Ethics Committee of the Faculty of Education, University of Pretoria, through applying the ten MRC's (1993:13-14) basic ethics codes of behaviour: The autonomy of the participants was respected. Ministry officials, teachers and school heads were treated as a unique people within the context of their school systems. I made sure

voluntary participation and freedom of choice were safeguarded. The basic rights of participants as human beings were respected as well as the rights of the school communities who were part of the research sites. To achieve the ethic of justice, fairness and objectivity, it was compelling that I guard against exposing participants to intentions and motives not directly attached to my research project.

Throughout my research integrity was promoted by being honest and fair. Research participants were kept informed of issues relevant to them and I strictly honoured my appointments. Balance of research interests with general values and norms affecting the human dignity of the participants was maintained. Under all circumstances confidentiality was respected. I safeguarded all the research documents such as transcriptions, audio-tapes and completed questionnaires. The documents were made accessible to people in terms of the limits of my study. Mutual understanding of my roles and interest as an investigator and participant observer in the study was negotiated. Participants were made aware of their roles in terms of the number of times they were to volunteer data. I ensured clear and understandable verbal communication with factual data. I took into consideration the participants' emotional and cultural values whilst investigating the research problem.

Special care was taken not to treat participants as mere objects. My research complied with the basic principle of treating human beings with respect. I also avoided direct or indirect coercion of participants such as taking advantage of them or misusing the authority and influence of the research. Throughout the study, participants' concerns, confidentiality and anonymity were highly considered. The nature of my research is qualitative and it involved close personal involvement. Interviews and observations employed were based on human interactions. Hence, two qualitative stances in my study were applied namely: absolutist and contextualist or holistic stance.

Under the absolutist stance I knew that I had no right to invade the privacy of research participants in order to avoid inducing harm on them. According to Cohen *et al.* (2000:61), privacy comprises three perspectives such as the sensitivity of information being given; the setting that is being studied; and the dissemination of information. Participants were assured of their right to privacy. The information they volunteered was not going to reveal their identities due to use of pseudonyms. As

viewed by the MRC (1993:13) under the contextualist stance, I advanced detailed descriptions and aimed at understanding events, actions and processes in the schools in which they occurred. I did not make an attempt to generalise the findings of my research beyond my target population.

During pursuing my qualitative study with human participants, it was absolutely important that I considered respecting their rights under ethics principles. Hence, participants were told in advance that the aim of the study was to explore how they understand, respond to and implement a curriculum reform, the AIDS Action Programme for Schools. Participants were informed of the intended uses of the data captured. Throughout the investigation transparency was observed (Cohen *et al.*, 2000:51; 2007:52); hence, it was anticipated that the participants would be quite ready to share their views. They were informed that their participation was voluntary and that anyone would be free to withdraw from the study at any point during the course of the research as reflected in Appendix 4.

The participants were assured that the information that they provided would be treated with strict confidentiality. Further, pseudonyms instead of the participants' real names were used both during transcription and in the final writing of the thesis. Hence, the participants' real names were not linked to the data in an obvious manner. I also obtained written consent from the participants to use names and organisational affiliations where they would add strength to statements and responses given. The concerned participants were given an opportunity to verify their statements where names and organisational affiliations were to be used. Information revealing a participant's identity was specifically labelled as 'confidential'. A copy of the thesis will be given to the Ministry of Education, Sport, Arts and Culture who gave me permission to carry this study in their schools. Finally, data generated in this research will be stored in a password-protected file at the University of Pretoria.

#### **4.12 CONCLUSION**

I planned and conducted a qualitative study in four government secondary schools in Masvingo district in order to investigate how teachers understand, respond to and implement the AIDS Action Programme for Schools. As an ethical researcher working

with teachers in schools it was imperative that I kept strict confidentiality to prevent recognition of the participants even after the research (Christiaan, 2006). The qualitative case study appropriately allowed for individual semi-structured interviews with Ministry of Education officials and school heads, completion of open-ended questionnaires and focus group interviews with teachers. During planning and execution of the study ethical measures as per requirements of the University of Pretoria were adhered to. The justification behind my choice of the theoretical framework and the methodology in this chapter was to enhance the findings in the next chapters so as to address the research questions logically. A detailed discussion of the analysis of the collected data is presented in Chapter 5.

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