CHAPTER 4

THE RESEARCH METHODOLOGY

4.1 INTRODUCTION

Having reviewed what the literature has to say about the primary school learner and HIV/AIDS in the previous chapter, this chapter will focus on the set of logical steps undertaken by the researcher in answering the research questions.

4.2 RESEARCH PROBLEM

The research problem can be stated in the following two questions:

Question 1: Which strategies can be used in order to bring about HIV/AIDS awareness in Mgwenya Circuit, with specific reference to Lekazi Primary School, Mpumalanga Province?

Question 2: What are the responsibilities of educators regarding the implementation of HIV/AIDS programs in primary schools?

4.3 AIMS OF THE RESEARCH

4.3.1 SPECIFIC AIM

The specific aim is devising strategies for bringing about HIV/AIDS awareness.

4.3.2 GENERAL AIMS

It is the general aim of the study to:

- Differentiate between HIV and AIDS;
- Explain the meaning of being HIV positive and of having AIDS;
- Provide accurate information on the transmission and prevention of HIV/AIDS;
- Identify the role of educators in bringing about HIV/AIDS awareness in primary schools;
- Probe the perception of educators with reference to their presentation of HIV/AIDS lessons in

primary schools;

- Identify responsibilities of educators regarding the implementation of HIV/AIDS programs in primary schools; and
- Design questionnaires for primary school learners in order to check the level of HIV/AIDS awareness.

4.4 METHOD OF RESEARCH

For the purpose of this study, the researcher will use the qualitative and quantitative research methods. In this study, data collection will consist of a mix of qualitative data, i.e. text or images as well as quantitative data, i.e. numbers. The researcher will combine both methods to best explain and explore a research problem (Creswell 2002).

4.5 QUANTITATIVE RESEARCH METHODOLOGY

Quantitative research is research that involves measuring quantities of things, usually numerical quantities. The issues of measurement are of primary importance (Neuman 2002). Quantitative analysis is based on the natural sciences, with emphasis on empirically quantifiable observations, which lends themselves by means of mathematical tools (Creswel 2002). For the purpose of this study, quantitative research will give less emphasis on exploring the personal, individual meanings of experiences to the people. This does not mean, though, that meaning and feelings have no place in quantitative research. The quantitative approach does not deny or ignore personal experiences. It merely insists that these experiences be quantified and measured on some scale, before they can be scientifically studied. Within this framework, a dazzling variety of questions can be addressed (Punch 2000). In this study, quantitative research will be used to determine the primary school learner's level of awareness regarding HIV/AIDS. In order to use a larger sample, this will be done by designing questionnaires that will be suitable for primary school learners. The researcher and her two colleagues at Lekazi Primary School will also observe HIV/AIDS lessons presentations. By doing this, the researcher will be working quantitatively. Quantitative research has the purpose of making objective descriptions of a limited set of phenomena and also to find out whether or not certain interventions can be used to control the phenomenon. The initial quantitative studies of a research problem therefore involve a precise description of the phenomena and a search for pertinent variables and their interrelationships. Finally, a theory is formulated to account for the empirical findings (Creswell 2002).

4.6 QUALITATIVE VERSUS QUANTITATIVE RESEARCH

According to Neuman (2002: 147), "key features common to all qualitative methods can be seen when they are contrasted with quantitative methods. Most quantitative data techniques are data condensers. They condense data in order to see the big picture. Qualitative methods, by contrast, are best understood as data enhancers. When data are enhanced, it is possible to see key aspects of cases more clearly". Neuman (2002: 147) tabulate quantitative style versus qualitative style as follows:

QUANTITATIVE STYLE	QUALITATIVE STYLE
➢ Measure objective facts;	➢ Construct social reality, cultural meaning;
➢ Focus on variables;	➢ Focus on interactive processes, events;
➢ Reliability is key;	➢ Authenticity is key;
➢ Value free;	➢ Values are present and explicit;
➢ Independent of context;	➢ Situational constrained;
➢ Many cases, subjects;	➢ Few cases, subjects;
➢ Statistical analysis;	➢ Thematic analysis;
➢ Researcher is detached.	➢ Researcher is involved.

4.7 QUALITATIVE RESEARCH METHODOLOGY

Qualitative research is defined by De Vos (2002: 222) as an inquiry approach useful for approaching and understanding a central phenomenon. Qualitative analysis is the paradigm that is derived from the humanist with the emphasis based on holistic and qualitative information and interpretative approaches (De Vos 2002). In this study, the researcher will ask participants questions based on HIV/AIDS, collect the detailed views of participants in the form of words, and analyze the information for designing strategies that will be used for bringing HIV/AIDS awareness to primary school learners. From this data, the researcher will interpret the meaning of the information. The final structure of the final report will be flexible, and will display the researcher's biases and thoughts (Creswell 2002). According to Neuman (2002: 137), qualitative methodology refers to research that produces descriptive data – generally people's own written or spoken words. In this study, qualitative research will be used by conducting focus group interviews in order to design strategies that can be used for bringing HIV/AIDS awareness to primary school learners. The researcher has also chosen this method because of a number of reasons, some of which are stated in Neuman (2002: 138):

- Gaining direct access to interact with the respondents in collecting data;
- Allowing for interviewing of a relevant target population in their own environment and observing the participants in the research; and
- Allowing the researcher to know people personally and to see them as they are, and to experience their daily struggles when confronted with real-life situations.

The qualitative research methods will further enable the researcher to interpret and to describe the actions of people (Neuman 2002).

In relation to this study, the qualitative research method will have the following advantages for the researcher as stated by Creswell (2002: 191):

- The researcher will be concerned primarily with process rather than outcomes or products;
- It will involve fieldwork. The researcher will physically go to the people, setting, site or institution to observe or record behaviour in its natural setting;
- The study will be descriptive, in that the researcher will be interested in process, meaning and understanding gained through words or pictures; and
- The research methods will make the study to be inductive, in that the researcher will build abstractions, concepts, hypothesis and theories from details.

The nature of the study is such that it will be a pilot study and primary schools will use it for future research projects. The researcher will conduct focus group interviews, formulate questionnaires and make use of observations as methods to collect data. Interviews will be conducted in order to get the educators', learners' and parents' opinions in designing strategies that can be used in bringing about HIV/AIDS awareness. The researcher will design questionnaires specifically for Lekazi Primary School learners. This will be done in order to determine their level of knowledge regarding HIV/AIDS.

4.8 RESEARCH DESIGN

Punch (2000: 149) defines research design as the overall plan for a piece of research, including four main ideas: the strategy, the conceptual framework, the question of who or what will be studied, and tools to be used for collecting and analyzing empirical materials. For the purpose of this study, the research design will form the most important part in the research as it indicates the whole set-up procedure for conducting the study. The research design thus serves as a point of departure for this study, that is, without the design it will be impossible for the researcher to conduct the proposed scientific study.

Creswell (2002: 191) reflects the steps that can be used in the qualitative and quantitative data collection processes, namely:

- Obtaining permission to conduct the study - identifying units of analysis, securing different types of permissions and obtaining informed consent from participants;
- Selecting participants and sites purposefully to best understand the phenomenon, specifying a population and sample, using probability sampling, and choosing the size of the sample;
- Identifying data from various sources such as observations, focus group interviews and questionnaires; and
- Administering and recording data by using the tape recorder in the focus group interviews.

The above-mentioned steps will be applicable in this study during the data collection process.

4.9 GAINING ENTRY INTO THE FIELD

Access to the field shall be gained in the following way:

- The researcher will write a letter to the circuit manager of Mgwenya, requesting permission to conduct the study. After permission has been granted, the researcher will then access the field. (See annexure A for the letter)

4.10 DATA COLLECTION METHODS RELAVANT TO QUALITATIVE APPROACH

4.10.1 OBSERVATIONS

The researcher has decided to use the observational material **in order to investigate the nature, the success or lack of the teaching skills employed by educators in presenting HIV/AIDS lessons. The researcher wants to see the practical application of the teaching skills used by educators in a classroom situation**. Creswell (2002: 198) regards observation as the process of gathering first hand information by observing people and places at a research site. This technique will be used by the researcher to determine how individuals or groups of persons react under specific circumstances, either natural or artificial (Creswell 2002).

In this study, the researcher will observe the presentation of HIV/AIDS lessons by educators during the Life Skills periods for the foundation phase and Life Orientation periods for the intermediate and senior

phases at Lekazi Primary School in Mgwenya Circuit. Nine HIV/AIDS lessons will be observed by three different observers at Lekazi Primary School, namely the researcher and her two colleagues. The reason for doing this is to get more reliable observations. The researcher will observe three classes that will be randomly selected, representing the three different phases found in Lekazi Primary School. The researcher will ask her two colleagues to observe the same classes that were observed by the researcher. The researcher and her two colleagues will use an observation guide form during the observations (See Annexure E for the guide). Spradley in Mertens (2002: 317) identifies five types of methods used in observations, namely:

- Non-participant: The lowest level of involvement and is usually accomplished by watching a video tape of the situation;
- Passive participation: The researcher is present but does not interact with the participants;
- Moderate participation: The researcher attempts to balance the insider or outsider roles by observing and by participating in some but not all of the activities;
- Active participation: The researcher does what the others do, generally, but does not try to blend in completely;
- Complete participation: The researcher becomes a natural participant, which has a disadvantage of trying to collect data and maintaining a questioning and reflective stance.

4.10.2 METHOD OF OBSERVATION

For the purpose of this study, the researcher will use the passive participation as a method of observation. She will play the role of a passive observer. She will be present but will not interact with the participants, which will be pure observation. The researcher will be sitting at the back of the classroom watching and writing down the activities without being involved in the activities of the participants. HIV/AIDS lessons presentations will be evaluated by considering the following:

- The introduction;
- Subject matter;
- Method of teaching;
- Conclusion; and
- Application.

The HIV/AIDS lessons presentations will be evaluated according to the format that is used by the Department of Education.

Marks will be allocated to each HIV/AIDS lesson presentation according to the items mentioned above. Information will be captured by using the frame below:

ITEM EVALUATED	MARKS ALLOCATED	MARKS OBTAINED
Introduction	10	
Subject matter	40	
Method of teaching	20	
Conclusion	20	
Application	10	
Total	100	

In the introduction, the researcher will give marks while taking the following into consideration:

- How is the lesson introduced or begun?
- How did participants (learners) respond or react to what was said?

In the subject matter, marks will be allocated while taking the following into consideration:

- What is being discussed?
- What is the response of the learners?
- What are the variations in how participants are engaging in the lesson?
- Which learning aids are used by educators in clarifying the subject matter?

In the method of teaching, marks will be allocated by considering the following:

- Which method does the educator use?
- Is the method involving the learners?
- Is the teaching method successful?

In the conclusion, marks will be allocated taking the following into consideration:

- What are the signals that the lesson unit is ending?
- How do learners react to the ending of the lesson?
- How is the completion of the lesson related to other program activities and future plans?

In the application, marks will be allocated by taking the following into consideration:

- What assignment or written work does the educator give the learners at the end of the lesson?

Neuman (2002: 110) mentions the following advantages and disadvantages of observations:

- The advantage of observation is that real-life behaviour can be perceived, studied and verified. Misunderstanding can also be clarified on the spot;
- The disadvantage is that the target group may feel that an outsider is interrupting them in their work and they may become uncomfortable. The nett result of the observation will then not be a true picture of real-life behaviour.

In view of the above disadvantage, educators will introduce the researcher to the learners and briefly spell out the purpose of the visit and the researcher will remain unobtrusive. She will ensure that a good relationship exists between her and the participants.

In view of the fact that the researcher will be targeting Lekazi Primary School, she will spend an hour per class as informed by the educator's school timetable. This implies that in the school, she will spend an hour a day, and will take three days to complete the observations. One day will be allocated to one phase for proper observations. After observation, the researcher will withdraw slowly from the site, thank the participants and inform them of the use of the data and the availability of the summary of result when the study is completed (Creswell 2002).

4.11 FOCUS GROUP INTERVIEWS

4.11.1 EXPLAINING THE TERM "FOCUS GROUP INTERVIEW"

According to De Vos (2002: 314), "A focus group interview could be described as a purposive discussion of a specific topic or related topics taking place between six to ten individuals with a similar background and common interests. Focus groups in essence are group interviews that rely, not on a question and answer format of interview, but on the interaction within the group (Neuman 2002). This reliance on interaction between participants is designed to elicit more of the participant's point of view than would be evidenced in more researcher dominated interviewing. According to Manion (2000: 160), focus groups are described as contrived settings, bringing together a specifically chosen sector of the population to discuss a particular given theme/topic, where the interaction with the group leads to data and outcomes. Cohen (2000: 123) also defines focus groups as unnatural settings, yet they are very

focused on a particular issue and they produce a large amount of data in short period of time.

Watts & Ebbuts (in Morrison *et al*, 2000) stipulates the following advantages of focus group interviews as a means of collecting data that will be useful in this study:

- They include the potential for discussion;
- They yield a wide range of responses than individual interviews;
- They are often quicker than individual interviews;
- They are time saving and involve minimal disruption;
- They can bring together people with varied opinions or as representatives of different collectivities; and
- They are less intimidating than individual interviews.

4.11.2 THE FOCUS GROUP PROCESS

In this study, the focus group interviews will be divided into specific phases, namely:

- Foundation phase educators;
- Intermediate phase educators;
- Senior phase educators;
- School Governing Body; and
- Senior phase learners.

For the purpose of the study, the focus group interviews will be conducted as an open conversation on strategies for bringing about HIV/AIDS awareness. Each participant will be allowed to make comments, ask questions of other participants or respond to comments by others, including the researcher (De Vos 2002). The focus group interview will enable the researcher to design strategies for bringing HIV/AIDS awareness to primary school learners.

For the sessions to be more effective, the researcher will do the following when conducting the focus groups interviews:

- Introduce herself and the research project;
- Obtain consent from the interviewee to participate in the study;
- Hand out the consent forms;
- Begin with the focus group once everything is signed; and

- End the focus group with a short summary of the main ideas.

Throughout the whole process, participants can ask questions and nobody will be forced to participate if they do not wish to do so. The researcher will make use of a tape recorder to record what is happening in the sessions. Participants' permission to tape the sessions will be requested. The researcher will inform the participants that the information will be used for research purposes only. The aim of the focus group will be to device some strategies for bringing about HIV/AIDS awareness.

Questions that will be asked during the focus group interviews have been designed to stimulate debate and discussion. In this study, the role of the researcher will change to functioning more as a moderator or facilitator, and less as an interviewer .The process will not be one of alternate question and answer, as in the traditional interview. The researcher will be facilitating, moderating and monitoring group interaction. The group interaction will be directed by questions supplied by the researcher (Punch 2000).

In order to yield the desired results, the researcher will ensure that the focus group is not too small or too big. Twelve participants will be an optimum size. Participants will be selected through random sampling. Only five groups will be interviewed, namely:

- Life skills educators for the foundation phase;
- Life orientation educators for the intermediate phase;
- Life orientation educators for the senior phase;
- Senior phase learners from Lekazi primary school; and
- The School Governing Body, i.e. parents' representatives.

Only one group shall be interviewed in one day. This implies that the group interviews shall be conducted over five days. The researcher will guard against one participant dominating the group and against personal matters emerging during the interviews.

4.11.3 PHYSICAL ARRANGEMENT OF THE GROUP

The objective of focus group interviews is discussion (De Vos 2002). In this study, participants will normally be seated around a table to ensure maximum opportunity for eye contact with the researcher as well as the other participants. In order to enhance rapport among all participants, nametags will be placed on the table in front of them.

In these focus group interviews, the researcher will use open-ended questions. De Vos (2002: 149) defines open-ended questions as questions that allow individuals to respond in any way they wish. For the purpose of this study, open-ended questions will allow interviewees to develop answers much more fully than they could if they were completing questionnaires. De Vos (2002: 149) also mentions that: "Open-ended questions are used where the issue is complex, where relevant dimensions are not known, and where a process is being explored". Because the focus group is a 'guided' discussion, the researcher as a facilitator will have a list of five to seven questions to ask during the 1 hour to 2 hour session. The questions will be used in a semi-structured way to ensure coverage of important issues, yet allow for flexibility in responding to group initiated concerns. One of the benefits of focus group sessions is the additional insight gained from the interaction of ideas among the group participants (Mertens 2002). **In this study, the researcher will conduct focus group interviews in order to determine strategies that can be used by educators, parents and learners in bringing HIV/AIDS awareness to Lekazi Primary School learners**. Different focus group interviews will be conducted. The main goal shall be to analyze and to interpret data so as to determine what this study may reveal in the light of designing strategies for bringing about HIV/AIDS awareness.

4.11.3.1 Questions that will be asked during the foundation phase focus group interviews are as follows:

1. How can you present a lesson on the following topics?

   - The definition of HIV and AIDS;
   - The transmission of HIV/AIDS;
   - The prevention of HIV/AIDS.

2. What are your responsibilities regarding the implementation of HIV/AIDS programs in the foundation phase?
3. What are the greatest obstacles in bringing about HIV/AIDS awareness?
4. In your opinion, is it necessary to teach learners about HIV/AIDS from the moment they start school?
5. Which strategies can be used for bringing HIV/AIDS awareness to the foundation phase learners?

4.11.3.2 Questions that will be asked during the intermediate phase focus group interviews are as follows:

1. How can you present a lesson on the following topics?

- The difference between HIV and AIDS;
- Transmission of HIV/AIDS among primary schools learners;
- The significance of universal precautions;
- Practices that cannot lead to HIV infection; and
- The importance of confidentiality and HIV/AIDS counselling.

2. What are your responsibilities regarding the implementation of HIV/AIDS programs in the intermediate phase?
3. Which strategies can be used for bringing HIV/AIDS awareness to the intermediate phase learners?

4.11.3.3 Questions that will be asked during the senior phase focus group interviews are as follows:

1. How can you present a lesson on the following topics?

   - Definition of the two concepts HIV and AIDS;
   - Factors promoting the spread of HIV;
   - Transmission and prevention of HIV/AIDS;
   - Testing for HIV; and
   - Medication for HIV/AIDS.

2. What are your responsibilities regarding the implementation of HIV/AIDS programs in the senior phase?
3. Which strategies can be used for bringing HIV/AIDS awareness to the senior phase learners?

4.11.3.4 Questions that will be asked during the learners focus group interviews are as follows:

1. What is HIV?
2. What is AIDS?
3. How is HIV transmitted?
4. How can a person prevent HIV infection?
5. Do you believe that you have sufficient information about HIV and AIDS?
6. What are your responsibilities regarding the prevention of HIV infection?
7. Do you have any suggestions or comments on strategies that can be used in bringing about HIV/AIDS awareness?

4.11.3.5 Questions that will be asked during the parent's focus group interviews are as follows:

1. In your opinion, is it right to talk to children about sexual matters, including HIV and AIDS?
2. How can you explain the difference between HIV and AIDS to your children?
3. In your opinion, how can you be involved in the implementation of HIV/AIDS programs in primary schools?
4. Do you believe that your children have sufficient information regarding HIV/AIDS?
5. Do you have any suggestions on strategies that can be used for bringing about HIV/AIDS awareness in primary schools?

Questions on the presentation of HIV/AIDS lessons will be asked to verify the hypothesis that teaching skills used by educators for bringing about HIV/AIDS awareness are poor.

Participants will be allowed to take part in more than one focus group, because the researcher would like to cover as many ideas as possible. Participants will be made aware that the opinion of each and every individual is valued and that they need not reach consensus on the topic under discussion. For recording purposes, only one person will be allowed to speak at a time.

The exit will be the last stage of the interview, where the researcher will thank the respondents, assuring them of the confidentiality of the responses and leaves. She will go to a quiet private place to edit the interview and record other details while they are fresh. Details may include the date, time and place of the interview.

4.12 DATA COLLECTION METHODS RELEVANT TO QUANTITATIVE APPROACH

4.12.1 QUESTIONNAIRES

One of the main instruments of research to be used shall be the appropriate questionnaire designed for Lekazi Primary School learners who will be selected randomly to answer them. A structured questionnaire with close-ended questions designed for the learners will be provided. **The reason for designing questionnaires is that the researcher wanted to determine the learner's level of knowledge regarding HIV/AIDS.** De Vos (2002: 152) defines a questionnaire as "a set of questions on a form that is completed by the respondent in respect of a research project". In this study, the researcher will weave questions together so that they flow smoothly. She will include introductory remarks and instructions for clarification and will measure each variable with one or more survey

questions (Neuman 2003). Questionnaires will be used in this study because of the following advantages as stated by Neuman (2002)

- A questionnaire is relatively economical, can ensure anonymity and questions can be written for specific purposes;
- Respondents have time to think about the answers to questions in the questionnaire;
- A large number of respondents distributed over a large geographical area can be reached.

The disadvantage according to Neuman (2002: 149) is that the researcher is not at hand to explain uncertainties, which may result in biased or distorted answers by the participants. To avoid such a problem, the researcher will include introductory remarks and instructions on how to complete the questionnaires. Questions will be formulated in a simple, precise language that will be understood by all participants.

An explanatory note will be attached to the questionnaire indicating the aim of the research, to convey to respondents its importance, to assure them of confidentiality, and to encourage their replies (Morrison 2000).

For the purpose of this study, questionnaires will be distributed amongst learners of Lekazi Primary School. At Lekazi Primary, there are 300 learners in the foundation phase, 200 learners in the intermediate phase and 100 learners in the senior phase. Ten percent of learners from each phase will be selected through random sampling. It is only these learners who will be requested to respond to the questionnaires, as described below.

Table 2 shows distribution of the questionnaires.

PHASE	**NUMBER OF QUESTIONNAIRES TO BE DISTRIBUTED**
Foundation	30
Intermediate	20
Senior	10
TOTAL	60

According to Neuman (2002: 150), there is a key principle for good survey questions, namely to avoid confusion and keep the respondent's perspective in mind.

To comply with the above principle, questionnaires will be formulated taking into consideration the various phases found in Lekazi Primary school, namely:

- Foundation phase;
- Intermediate phase; and
- Senior phase.

The questions that will be included in the questionnaire will be relevant to the research problem. The researcher will formulate the foundation phase questionnaires in their home language, i.e. Siswati, so that they can understand and be able to respond correctly. The questionnaire will also be translated into English (See Annexure B). The intermediate phase and the senior phase questionnaire will be formulated in English because these learners are already introduced to English as a Language of Learning and Teaching. The level of development of the learners will be taken into account when formulating the questionnaires, i.e. the degree of complexity varies according to phases. In this study, the researcher will use closed–ended (structured, fixed response) questions. Neuman (2002: 160) defines a closed-ended question as a question that both asks a question and gives the respondent fixed responses from which to choose. The researcher will use multiple-choice questions. In these questions, four response options will be offered, with the "don't know" option of the dichotomous question as one response possibility (Neuman 2002). The following is an example of the closed-ended question that will be used by the researcher in this study:

- Choose the answer that you think is the most appropriate, underline the response. For example,

  HIV /AIDS can be transmitted by:

  (a) Sharing the same utensils;
  (b) Using the same toilet;
  (c) Hugging a friend;
  (d) Being involved in sexual intercourse without using a condom;
  (e) Don't know

(See Annexures B, C & D for more questions).

Table 3 shows the content of the questionnaires for the foundation phase:

ASPECTS	NUMBER OF QUESTIONS
Basic facts about HIV/AIDS	3
Transmission and prevention of HIV/AIDS	2
Practicing universal precautions	1
Avoiding sexual abuse	2
Caring for and supporting learners living with HIV/AIDS	2

Table 4 shows the content of the questionnaires for the intermediate phase:

ASPECTS	NUMBER OF QUESTIONS
Basic facts about HIV/AIDS	4
Transmission and prevention of HIV/AIDS	2
Practicing universal precautions	1
Caring for and supporting learners living with HIV/AIDS	2
Parental involvement in the implementation of HIV/AIDS programs	1

Table 5 shows the content of the questionnaires for the senior phase:

ASPECTS	NUMBER OF QUESTIONS
Transmission and prevention of HIV/AIDS	2
Caring for and supporting learners living with HIV/AIDS	3
Medication for HIV/AIDS	1
The impact of HIV/AIDS to the learners	2
Learner's rights	1
The window period	1

Questions regarding the basic facts about HIV/AIDS, transmission and prevention of HIV/AIDS, and caring for learners living with the disease are in the majority in all the phases for the reason of determining the learner's knowledge about HIV and AIDS.

The method of circulating the questionnaires will involve personal delivery by the researcher to the principal and educators of the targeted population. After a week, the researcher will collect completed questionnaires from Lekazi Primary School.

4.13 TARGET POPULATION AND SAMPLING

4.13.1 TARGET POPULATION

Cresswel (2002: 159) stipulates that individuals drawn from a larger group of persons are called the population. De Vos (2002: 190) defines population as a group of participants sharing a cultural or sub-cultural tradition, which distinguishes the participants from their neighbours.

For the purpose of this study, participants to provide the data required will be drawn from the following population:

- Learners from Lekazi Primary School;
- Educators teaching Life Skills;
- Educators teaching Life Orientation; and
- School Governing Body, i.e. parents' representatives.

The researcher has decided to make use of educators and parents as the target population, because she has noted that they are reliable sources to be used in bringing HIV/AIDS awareness to the young ones, and they are a lively group of people who are not afraid to air their opinions. The learners are also included in the target population because the researcher cannot adequately and justifiably design strategies for bringing HIV/AIDS awareness at the exclusion of the actual people that are to be taught about the disease.

4.13.2 SAMPLING STRATEGIES

The nature of the study necessitates that a probability sample can be a suitable strategy for sampling purposes. Morrison (2000: 99) states that a probability sample is useful if the researcher wishes to make generalizations, because it seeks representativeness of the wider population.

For the purpose of this study, both the stratified and random samples will be used.

(a) Stratified sampling

The researcher chose stratified sampling because it involves dividing the population into homogenous groups, each group containing subjects with similar characteristics (Morrison 2000). In this study, a population will be divided into different, clearly recognizable subpopulations or strata, namely:

- Life skills educators for the foundation phase;
- Life Orientation educators for the intermediate phase;
- Life Orientation educators for the senior phase;
- Senior phase learners; and
- School Governing Body, i.e. members representing the parents.

The researcher will then select elements for the sample randomly from each of the different strata of the population.

(b) Simple random sampling

Simple random sampling means that each member of the population has an equal and independent chance of being selected (Mertens 2002). The method involves selecting at random from a list of the population, the required number of subjects for the sample (Morrison 2000). In this study, the population shall consist of the strata identified above. The researcher will draw names randomly out of a box containing the names of educators, learners and parents until the required number is reached. Each sample will consist of six participants.

Application of the above-mentioned sampling technique would contribute towards validity and reliability, and to a large extent eliminate bias (Mertens 2002).

4.14 HYPOTHESIS

A hypothesis as defined by Mertens (2002: 110) "is an instrument of control for the actual research; it enables the researcher to determine what he or she wants to know about the research problem".

For the purpose of this study, the following hypothesis can be stated:

a) Learners do not have sufficient information about HIV/AIDS;
b) Teaching skills used by educators for bringing HIV/AIDS awareness to the learners are not effective.

The research to be conducted will reflect the truth of this hypothesis from the analysis of the responses and findings.

4.15 RELIABILITY AND VALIDITY

Reliability can be defined as the extent to which test scores are consistent and stable (De Vos 2002). Validity can be divided into two categories, namely external validity and internal validity. External validity refers to the extent to which the result of a study can be generalized to the wider population, while internal validity measures the extent to which the test actually measures the correct variables (De Vos 2002). In this study, validity will mean the truth generated from the research on designing strategies for bringing about HIV/AIDS awareness. It is through validity that the researcher will be able to determine whether the information collected is in relation with what actually happens or not in the classroom situation. Through observations, focus group interviews and questionnaires, the researcher will therefore be able to determine the validity of the study. Quantitative research rests on the foundations of reliability and validity. In the quantitative research, the aim is to prove something by using statistics, while in qualitative research, the aim is to understand the individual and the context that surrounds them. In qualitative research, emphasis falls on the concepts of transferability and credibility. Transferability refers to how the research finding can be applied to other contexts (De Vos 2002). Terms like applicability and fittingness have also been used in conjunction with this idea. When it comes to transferring data to another context, a description that provides information on the themes, labels and constructs of a study can provide the researcher and the reader with enough information to judge the appropriateness of applying the information to other settings (De Vos 2002).

From what has been explained above, the results of this study will be made available for use by various departments, circuit offices, primary schools and libraries.

4.15.1 RELIABILITY OF OBSERVATIONAL DATA

Adler and Adler in Mertens (2002: 198) suggest the following ideas for enhancing the validity and reliability of observational data, which are also applicable to this study:

- Use multiple observers or teams, diverse in age and gender, if possible;
- Compare observational findings with other researchers and eliminate inaccurate interpretations;

- Describe the research setting and findings in such a way that the reader can "see and feel" what it was like; and
- Address reliability by making observations in various settings, at various times of the days of the week, and months of the year.

In complying with the above recommendations, the researcher will enhance reliability and validity by doing the following:

- Requesting two colleagues of the researcher responsible for life skills to go and observe the presentation of HIV/AIDS lessons at Lekazi Primary School. The officials will be requested to observe the same classes that were observed by the researcher. The two colleagues will be asked to use the observation guide that has been drawn by the researcher for observations to promote standardization (See annexure E for the guide);
- Comparing the results of the two officials with her own results, and thereby arriving at the decision. If the results of the researcher agree with the results of the officials, this will indicate the reliability and validity of the observational data.

4.16 ETHICAL REQUIREMENTS

De Vos (2002: 230) indicates that ethics "are considered to deal with beliefs about what is right or wrong, proper or improper, good or bad". In this study, the researcher will ensure that ethics such as honesty, confidentiality and anonymity, to mention but a few, are respected throughout the study. The researcher is ethically responsible for protecting the rights and welfare of the population while the study is being conducted (De Vos 2002). The researcher will make sure that the participants know how she can be contacted.

The researcher will also take into account the following measures as stipulated by Morrison (2000: 66-67) to satisfy the demands of ethical research during the study:

- Ensuring confidentiality of the information gained in the research project, no confidential data will be recorded or published. If confidentiality cannot be guaranteed, the participants will be informed by the researcher. Confidentiality also implies that participants will never be compelled to reveal their names or write them on the questionnaires. In order to meet the ethical requirements, the researcher will:
    - Always and under all circumstances report the truth and will never present the truth in an unbiased manner. The researcher will not deceive the participants. She will explain

clearly the nature of the research and how the information gathered will be used;

- Emphasize that participation in the study shall be voluntary; participants will under no circumstances be forced or coerced to participate in the study;
- Stress that access to information shall be strictly controlled and has to be negotiated;
- Indicate that the results of the research will be made available to the respondents once the study is completed, if they ask to see it. This is important because their thoughts and ideas will form an integral part of this study.

4.17 DATA ANALYSIS

4.17.1 DATA ANALYSIS TECHNIQUES

Once the researcher has completed the data collection process, an in-depth analysis of the data will be made. Creswell (2002: 260) states the following technique for data analysis, which will also be applicable in this study: transcription. It is defined as a process of converting audio tape recordings or field notes into text data. The researcher will utilize the following guidelines to ensure that data from the tape recorder is analysed:

- Leave extra space between the interviewer's comments and the interviewee's comments. This will enable the reader of a transcript to clearly distinguish between speakers during data analysis;
- Answer the questions that will be asked by the interviewees during the focus group interviews;
- Use complete detail headers that contain information about the focus group interviews and observational sessions; and
- Will use percentages to analyze data from observations and questionnaires.

In this study, the researcher will design her own strategies for bringing HIV/AIDS awareness to primary school learners. The researcher will make recommendations on the responsibilities of educators in the implementation of HIV/AIDS programs. The researcher will also acknowledge the strategies of the focus group interviews. The results of the focus group interviews will be used to answer the research questions, namely:

- Which strategies can be used in order to bring about HIV/AIDS awareness in Mgwenya Circuit, with specific reference to Lekazi Primary School, Mpumalanga Province?
- What are the responsibilities of educators regarding the implementation of HIV/AIDS programs in primary schools?

4.18 CONCLUSION

The research design serves as a point of departure for the entire study; it is a prerequisite for a scientific study of this nature. Addressing the empirical research will be the basis of the next chapter.