THE FORMATIVE EVALUATION OF A HIV/AIDS MODULE FOR FIRST-YEAR TEACHER EDUCATION STUDENTS AT THE CENTRAL UNIVERSITY OF TECHNOLOGY, FREE STATE

CC NEL

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Views expressed in this dissertation are those of the author and should not be attributed to the Central University of Technology, Free State.

DECLARATION

I, CHRISTOFFEL CORNELUIS NEL, ID no. 5306115044089, hereby declare that this mini-dissertation, *The formative evaluation of a HIV/AIDS module for first-year Teacher Education students at the Central University of Technology, Free State (CUT),* is my own independent work and that all the sources used or quoted have been acknowledged by means of complete references. This dissertation has not previously been submitted by me to any other higher education institution in fulfilment of requirements for the attainment of any other qualification.

....

C.C. NEL **Date**

DEDICATION

This mini-dissertation is dedicated to

My spouse, Sandra,

For endless patience, love and encouragement

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I thank my Creator who gave me the strength and perseverance to complete this mini-dissertation.

I would like to express my sincere gratitude to:

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To whom it may concern

This is to certify that I language-edited Chris Nel's mini-dissertation manually. He effected the changes himself. In this way both linguistic excellence and the candidate's ownership of his text were ensured.

Sincerely

Luna Bergh

Language and writing specialist

ACRONYMS

AAC	American Association of Community Colleges
AIDS	Acquired Immune Deficiency Syndrome
ANOVA	Analysis of Variance
ARRM	AIDS Risk Reduction Model
ARVs	Antiretrovirals
ASTD	American Standards for Training and Development
BTCAP	Being a Teacher in the Context of the HIV/AIDS Pandemic
CTP	Council of Technikon Principals
CUT	Central University of Technology, Free State
DoE	Department of Education, Republic of South Africa
HEAIDS	Higher Education AIDS Programme
HE	Higher Education
HIV	Human Immunodeficiency Virus
HSRC	Human Sciences Research Council
Immune Deficiency	A weakening or deficiency in the immune system
OVC	Orphaned and Vulnerable Children
PLWA	People Living with AIDS
PTHEAA	Pilot Teacher Education HIV and AIDS
SAUVCA	South African Universities Vice-Chancellors' Association
STDs	Sexually Transmitted Diseases
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNICEF	United Nations Childrens's Fund
UNGASS	United Nations General Assembly
WHO	World Health Organisation

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ABSTRACT

KEY CONCEPTS

Devastating effects of the pandemic, vulnerability of adolescents to infection, escalation of the disease, HIV and AIDS prevalence and infection rates, need to adapt a less risky lifestyle, need to educate learners in order to advance their knowledge, skills and behaviours towards living positively with HIV and AIDS.

ABSTRACT

This study presents the embodiment of an evaluation of a compulsory HIV and AIDS modular (pilot) training programme for first-year Teacher Education students at the CUT: FS. The study focussed extensively on the evaluation of the HIV/AIDS module content with comparative norms and dimensions identified from contemporary literature on HIV and AIDS. Living positively with HIV and AIDS was evaluated in terms of the following:

- How to prevent the spread of the disease: bio-medical knowledge base
- How to care and support people living with HIV and AIDS
- How to handle grief caused by the deaths of loved ones, and
- How to support orphans and vulnerable children.

Data were obtained from a group of (n=90) Teacher Education students that completed the modular course during the latter part of 2011. An appropriate questionnaire covering the respective dimensions was completed by 90 out of 200 students under controlled conditions. The data collected were professionally analysed by the Department of Statistics at the University of the Free State.

The results obtained provided sufficient information reflecting that the module was not successful in altering the respondents' attitudes, knowledge or skills regarding people living with HIV/AIDS, or that the retention of what was learned was not lasting.

ABSTRAK

Hierdie navorsingstuk vervat die evaluering van ‘n verpligte MIV/Vigs modulêre opvoedkunde gidsprogram vir Eerstejaar Onderwysstudente aan die Sentale Universiteit van Tegnologie, Vrystaat (SUT). Die studie was hoofsaaklik gerig op die evaluering van die MIV/Vigs module inhoud met vergelykende norme en dimensies volgens hedendaagse MIV/Vigs literatuur.

‘n Positiewe lewenswyse met MIV/Vigs word geëvalueer in terme van die volgende:

- Hoe om die verspreiding van die siekte te beperk: biomediese kennis
- Hoe om mense met met MIV/Vigs te ondersteun en te versorg
- Hoe om te handel met die verdriet en hartseer wat veroorsaak word deur die afsterwe van geliefdes, en
- Hoe om ondersteuning te bied aan wees- en kwesbare kinders

Data is verkry vanaf ‘n groep (n=90) Opvoedkunde onderrig studente wat die modulêre kursus gedurende laat 2011 voltooi het. ‘n Toepaslike vraelys wat handel oor onderskeie dimensies is onder beheerde omstandighede afgeneem by 90 uit ‘n moontlike 200 studente. Die data is professioneel verwerk deur die Universitet van die Vrystaat se Departement van Statistiek.

Verwerfde resultate het genoegsame inligting verskaf om aan te toon dat die Module nie daarin kon slaag om die respondente se houding, kennis en vaardighede te bevorder rakende mense wat saamleef met MIV/Vigs nie, en/of dat die retensie vermoë van wat geleer is, nie langdurig van aard was nie.

KERNKONSEPTE

Vernietigende effek van die pandemie, kwesbaarheid van adolessente ten opsigte van infeksies, eskalasie van die siekte MIV/Vigs, voorkoms en tempo van infeksie toename, noodsaaklikheid vir aanpassings na ‘n minder riskante leefwyse, behoefte vir die opvoeding van leerders ten einde hul kennis te bevorder, vaardigheid en gedrag jeens ‘n positiewe MIV/Vigs lewenswyse.

CHAPTER 1

OVERVIEW OF THE STUDY

1.1 INTRODUCTION TO THE STUDY

1.1.1 HIV Statistics

The pandemic caused by the human immunodeficiency virus (HIV) and the Acquired Immune Deficiency Syndrome (AIDS) in Southern Africa has become a serious source of concern for Higher Education Institutions in general. This statement is based on statistics reflecting the extent of infection rates and associated deaths. The UNAIDS report 2009 states that 22.4 million HIV infected individuals exist worldwide. Sub-Saharan Africa remains the most heavily affected region, accounting for 67% of all HIV infections worldwide; 68% of all new infections among adults and 91% of all new infections among children. Sub-Saharan Africa also bore the brunt of the world's highest AIDS related deaths i.e. 72% worldwide (http:www.aids.org.za.pag).

In 2006 alone, close to five million people in Southern Africa became newly infected with HIV, the most in any single year since the epidemic commenced. During 2006, the United Nations AIDS (UNAIDS) declared that 'South Africa's AIDS epidemic is considered to be one of the worst in the world and has shown no evidence of a decline' (UNAIDS 2006:17). Statistics gleaned from the South African National HIV Survey 2008, compiled by the Human Science Research Council, depicts the estimated HIV prevalence rates among South Africans as follows:

Figure 1: Estimated HIV prevalence among South Africans

Age %	Male prevalence %	Female prevalence %
2-14	3.0	2.0
15-19	2.5	6.7
20-24	5.1	21.1
25-29	15.7	32.7
30-34	25.8	29.1
35-39	18.5	24.8

40-44	19.2	16.3
45-49	6.4	14.1
50-54	10.4	10.2
55-59	6.2	7.7
60+	3.5	1.8
TOTAL	7.9	13.6

(South African National HIV Survey, 2008).

Among females, HIV prevalence is highest in those between 25-29 years old, whereas among males, in the group aged 30-34 years.

HIV is no doubt a disaster in national contexts, with sub-Saharan Africa harbouring about two thirds of the world's HIV positive individuals (UNAIDS, 2007a) and Asia having the second highest number of HIV cases. What is so disconcerting is that the November 2007 World Bank report estimated that there is currently 15 million children orphaned worldwide as a result of AIDS, of which 12 million live in sub-Saharan Africa.

In South Africa, the estimated figure for AIDS orphans runs at approximately 2.2 million children (12% of all children under the age of 18 years who have lost one or more parents to AIDS). It is estimated that, without change in behaviour and interventions such as antiretroviral therapy, by 2015 there will be 3 million AIDS orphans (18% of all children) under 18 in South Africa alone (Bradshaw, 2002:12). These statistics represent a society in dire need of interventions to curb the spread of HIV/AIDS as well as coping with those who are living with HIV/AIDS. One such intervention is education. **For the purposes of this study, all quotations will be reflected in italics.**

HIV/AIDS education extends much further than the mere dissemination of information. It is directed at changing knowledge, attitudes and behaviour. It essentially amounts to equipping people with appropriate life skills not to indulge in risky sexual behaviour to prevent the spread of HIV infection and in a sense persuade them to help care for those who are already infected and

affected and to help take care of all vulnerable children. This is confirmed by a review of UNAIDS publications that indicate that behaviour may be modified by HIV/AIDS and/or sex education, and changes, when they do occur, are almost invariably in the desired direction (Grunseit & Aggleton, 1998:45-54). Hence, HIV prevention directed at the youth is a crucial and effective strategy to alter the future course of the pandemic. Intervention in this instance depicts any measure which purpose is on improving health or alters the course of the disease. In various instances, interventions are focused primarily on changing behaviour whilst many learners are already infected and as a result their lives are severely disrupted.

1.1.2 Modular Programme

In May 2008, Higher Education South Africa (HESA) published an HIV/AIDS Module and Learning Guide entitled *"Being a teacher in the context of the HIV/AIDS pandemic"*. These documents comprise a compulsory pilot programme devised specifically for inclusion in all pre-service Teacher Education curricula at all Higher Education institutions in South Africa. It was introduced to all Teaching faculties of HE institutions in the country during the latter part of 2008 as a semester course. The module is compiled to achieve the following:

- Provide educators with a basic knowledge of HIV and AIDS and its impact on all aspects of schooling and society;
- Develop skills, knowledge and competencies in teaching approaches and learning styles that is appropriate for teaching learners about HIV and AIDS;
- To foster and develop the personal capacity and confidence required by educators to cope with HIV and AIDS responsibly throughout their daily activities in schools;
- To explore and develop suitable collegial values and attitudes to render a sustained, caring and compassionate climate in the school and or other settings of professional activities (HEAIDS Programme Report, 2002-2004:26).

This study investigates the module as piloted on first-year Teacher Education students at the Central University of Technology: Free State. **The purpose of the module was to equip teachers to empower learners to deal positively with HIV and AIDS in this country. The module reflects it as follows "*The purpose of these materials is to give you as a student***

teacher or teacher-learner a foundation for facing one of the major challenges for teachers in South African classrooms today – dealing positively with HIV and AIDS" (Being a teacher in the context of the HIV/AIDS pandemic (BTCAP, Learning Guide, 2008:12). This view is supported by the renowned South African academic, Professor Alta van Dyk (2008:166) who indicates in the content of her book "*HIV/AIDS Care and Counselling"* that if we are to assist teachers and learners to deal positively with HIV and AIDS through education, the curriculum should involve a knowledge base and the teaching of skills regarding the following:

- How to prevent the spread of the disease by teaching students the bio-medical facts about the virus **(which will be referred to as the bio-medical knowledge base)**.
- How to care and support people living with HIV and AIDS
- How to handle grief caused by the many deaths of loved ones and
- How to support orphans and other vulnerable children (Van Dyk, 2008).

Of relevance is that these four indicators will serve as criteria for evaluating the success of the module entitled, "Being *a teacher in the context of the HIV/AIDS pandemic (BTCAP)"* as it was presented to students at the CUT, commencing late 2008.

1.1.3 Living positively with HIV/AIDS

This implies the execution of interventions and strategies towards mitigating the effects of HIV and AIDS. This study established how successful the mentioned module has succeeded in deterring students from risky sexual behaviour, fostering positive attitudes towards people infected and affected by the HIV and AIDS pandemic and caring emotionally for orphaned and vulnerable children. It is important to note that the mechanism through which education works to minimize HIV and AIDS problems lies in bringing about a change in people's attitudes and perceptions towards the disease, as well as its transmission and the people living with it. It is essential for people to change their thoughts and perceptions regarding HIV and AIDS and following that, their behaviour in order to deal positively with the pandemic (Van Dyk, 2008).

1.1.4 Why the High HIV Infection rates among young adults?

It is known that 85% of young adults live in developing countries where more than 90% of the pandemic is now concentrated (Stine, 2009:334-340). There are various reasons why young people are exposed to infection, bearing in mind that HIV is a sexually transmitted virus. It is during this period of personal growth and development that young people discover and have to deal with emerging feelings of independence and explore new behaviour and relationships. It is also an exciting period of experimentation and change. Experimentation may also involve drugs and alcohol/substance abuse. In some instances it may manifest in rebellious behaviour and also risky sexual behaviour. In some instances young people live on the street where they are exposed to smoking and alcohol abuse and embark on commercial sexual experiences and possibly also share needles among injecting drug users, not to mention how young females are being sexually and physically abused (Stine, 2009:334-340). It is for this reason that particularly the bio-medical knowledge base of the teacher education students is explored.

Chapter 1 serves as an introduction to the study and emphasise the need to educate Teacher Education students on HIV and AIDS, "…..*which, if not already, will soon be the worst transmittable virus or bacterial plaque in history"* (Stine, 2009: iii).

1.2 RESEARCH QUESTION

How successful has the module been in equipping students to deal positively with HIV/AIDS?

1.2.1 Subsidiary Questions

- How does the module outcomes and content compare with the requirements of successful intervention of HIV/AIDS as posed by research in the literature?
- How accurate is the knowledge base of the students regarding HIV/AIDS?
- What is the attitude of the students towards people living with HIV/AIDS?
- How skilled are the students in handling the grief of children?
- How skilled are the students in handling orphans and vulnerable children?

1.2.2 Propositions

The research question informs the following propositions:

- The distribution of the students' scores on the Knowledge Base questionnaire will be negatively skewed indicating more scores on the higher end of the scale.
- The proportion of students who 'agree' with the *"Living positively with HIV/AIDS questionnaire"* statements will be significantly larger than the proportion that "disagrees" with questionnaire statements on attitude and skills towards *"Living positively with HIV/AIDS"*.

1.2.2.1 Propositions regarding confounding variables

The propositions stated that the variables, age, gender and ethnicity would not have an effect on the outcomes of the questionnaires

1.3 AIMS AND OBJECTIVES

The overarching aim of this study was to determine how successful the module was in equipping students to deal positively with HIV/AIDS. This amounts to being equipped to avoid risky sexual behaviour, knowing how to handle people living with HIV, handling children in grief and knowing how to care and support vulnerable children and HIV/AIDS orphans.

1.3.1 Objectives

The objectives that had to be achieved in order to answer the main research question were to:

- Select a sample of students who had completed the module.
- Test the accuracy of the students' "knowledge base" of HIV and AIDS.
- Do a survey regarding the attitude and skills of students regarding People Living with HIV, handling children with grief, and care and support of vulnerable children and AIDS orphans.
- Compare the module outcomes with current literature directives for dealing positively with HIV and AIDS.

1.4 RESEARCH DESIGN AND METHODOLOGY

The research was based on a quantitative, non-experimental, descriptive, survey-type design. As the study was quantitative, it was based on a post-positivistic paradigm (Maree, 2007). This implies that the researcher would stay as objective in the data collection and analyses exercises as was possible. This would also imply an objective evaluation of researched literature.

1.4.1 Sampling

A convenience sample of 200 teacher education learners was selected to partake in the study. They all attended the module in 2011 at the School for Teacher Education, Central University of Technology, Free State. The sample consisted of both genders and different ethnical and age groups.

1.4.2 Data Collection

Data collection followed a group administration of questionnaires (refer to item 4.3) where the researcher observed the completion of a specially designed questionnaire (Appendix 1) by the learners and learner consent form (Appendix 2). The test on biological knowledge in the questionnaire was administrated to ascertain what changes in knowledge and attitudes resulted from the learner teachers' exposure to the HIV and AIDS module. The choice of electing the use of a questionnaire was considered based on the fact that:

- The response rate is optimal.
- Test administrators can check questionnaires for accuracy.
- The method is considered cheap and easy to administrate.

1.4.3 The measuring Instrument

The measuring Instrument was designed by the researcher and comprised 3 parts. In the first section, the participants' bio-medical knowledge base was tested, followed by the second and third sections where student attitudes towards the following aspects were evaluated:

- Section 1: Caring for and supporting People Living with HIV/AIDS, which covers the bio-logical knowledge base, supplemented by a questionnaire initiated by the researcher entitled: Living positively with HIV/AIDS, to gather more data.
- Section 2: How to handle grief caused by the deaths of loved ones
- Section 3: How to support orphans and vulnerable children.

1.4.4 Analysis of Results

The study was quantitative in nature. It involved descriptive statistics (regressions and ANOVA's) and a multivariate analysis of the influence of the confounding variables (gender, age and ethnicity) on the distribution of the scores on the questionnaires.

1.5 ETHICAL ISSUES

Prior to commencement of the study the researcher received formal consent and written authorisation from the CUT to proceed with the study. Letters of informed consent were signed by every participating student. The document explicitly stated that participation was voluntary. Whatever information was provided by the participants was confidential and all particulars and data collected were treated with care and kept anonymous. Any participant feeling uneasy in divulging any particular information required by a questionnaire was given the opportunity to leave immediately should they so wish, without any fear of reprisal.

1.6 VALUE OF THE RESEARCH

The approach followed assisted the researcher in determining the mean and standard deviation of the scores as well as the skewness of the distribution, which is an indicator of the degree to which the students were positive towards people living with HIV, grieving children and equipped to care for and support vulnerable children and AIDS orphans.

1.7 DEMARCATION OF THE STUDY

The relevance of this study falls within the ambit of Higher Education studies and research, more specifically Teacher training.

1.8 CONCEPT CLARIFICATION

- AIDS: Acquired Immune Deficiency syndrome. This acronym emphasises that the disease is acquired and not inherited. It is caused by a virus that invades the body. This virus then attacks the body's immune system and makes it so weak and ineffectual that it is unable to protect the body from both serious and common infections and pathogens (Van Dyk, 2008:489).
- Anti-retroviral therapy: Drugs which suppress or prevent the replication of HIV in cells (Van Dyk, 2008:490).
- Bereavement: The experience of pain, loss and grief that is usually experienced when someone close dies (Van Dyk, 2008:490).
- CD 4 count. The laboratory test most commonly used to estimate the level of immune deficiency in HIV infected individuals by counting the CD 4 cells (Van Dyk, 2008:490).
- HIV – The human immunodeficiency virus: The virus that causes AIDS. The predominant form of HIV in Central, Eastern and Southern Africa, North and South America and Europe is HIV-1. HIV-2 is a closely related retrovirus found in Western Africa (Van Dyk, 2008:492).
- Home-based care: The care given to individuals in their own homes by their families, extended families and any other available and concerned helpers (Van Dyk, 2008:492).
- Orphan: UNAIDS defines an orphan as a child under the age of 18 who has lost at least one parent to death. The South African Children's Bill identifies an orphan as a child who has no surviving parent caring for him or her (Van Dyk, 2008:343).
- PLWA: Person Living With AIDS (Stine, 2009:436).
- Prevalence: The total number or percentage of cases of a disease existing at any time in a given area. The proportion of people living with HIV (Stine, 2009:436).
- Self-efficacy: The belief in one's ability to do something, for example, to insist on condoms (Van Dyk, 2008:495).
- Vaccine: A preparation of dead organisms, attenuated live organisms, live virulent organisms, or parts of microorganisms that is administered to artificially increase immunity to a particularly disease (Stine, 2009:438).

- Virus: Any of a large group of sub-microscopic agents capable of infecting plants, animals, and bacteria; characterised by a total dependence on living cells for reproduction and by a lack of independent metabolism (Stine, 2009:438).

1.9 CHAPTER OUTLINE

- Chapter 1 – Overview of the study.
- Chapter 2 – HIV and AIDS Teacher Education Pilot Programme.
- Chapter 3 –A comparison of the HIV/AIDS Teacher Education Pilot Programme with current research.
- Chapter 4 – Research Design and Methodology.
- Chapter 5 –Research findings and discussion of results.
- Chapter 6 – Conclusions, recommendations and limitations of the study.

1.10 CONCLUSION

This chapter provided a concise overview of the study and reflected statistics depicting the seriousness of, and the continuing growth of the pandemic, along with the threat it poses to so many spheres of the South African society. It no doubt confirms the absolute need for HIV and AIDS education interventions. It further deals with and emphasises the need for changing young people's risky lifestyles, behaviour and their vulnerability to the HIV/AIDS pandemic.

The chapter further provides a concise description of what the HIV/AIDS module comprises, its purpose and what the study wishes to achieve. The HIV/AIDS module content and outcomes were to be evaluated in terms of appropriateness and how well it compared with guidelines provided in the literature regarding dealing positively with HIV and AIDS.

CHAPTER 2

HIV/AIDS TEACHER EDUCATION PILOT PROGRAMME

2.1 BACKGROUND

The Higher Education HIV and AIDS programme (HEAIDS) originated from a partnership that existed between the South African Universities Vice-Chancellors Association (SAUVCA), the Committee of Technikon Principals (CTP) and the National Department of Education (DoE). SAUVCA was established as a statutory body for the 21 public universities in South Africa by the Universities Act (Act. 61 of 1955). This body makes recommendations to the Minister and Director-General of Education on matters referred to it or alternatively on any other issues which is deemed important for universities. Having been launched during November 2001, HEAIDS became the first nationally-coordinated event directed at improving the capacity of Higher Education Institutions' response to HIV and AIDS (HIV and AIDS Audit, 2003-2004:ii). This was important because the United Nations General Assembly Session on HIV and AIDS (UNGASS, 2002) identified young people aged 15-24 years as a priority group in reducing new HIV infections and set a global target of reducing incidence of HIV in this group by 20% by 2015. The youth in particular is the focus area in the fight against HIV and AIDS as people in the 15-24 age group are the most vulnerable to HIV infection. The youth remains an important target group to protect against future HIV infection, as today's youth is critical to South Africa's present and future economy.

From the outset, the above-mentioned initiative focused on harnessing the collective efforts of the higher education community into a much stronger response to the HIV/AIDS threat in the education sector. To support this initiative, all South African Universities and Technikons (at the time) were requested to integrate HIV and AIDS content into teaching and learning practices and curriculum. Of significance to note is that the HIV/AIDS Programme Report (2002-2004:62) reflects that there was resistance amongst staff with regard to curriculum development in the area of HIV and AIDS education. The question involuntary arises as to the appropriateness and practicability of such integration into the many faculties/disciplines. However, the dilemma was earmarked as a priority to be addressed at a future date in order to achieve the desired level of

integration. The absence of such integration deprives large numbers of students from gaining an in-depth knowledge on HIV and AIDS.

Since its establishment during 2001, HEAIDS progressively introduced measures to mitigate the effect of HIV and AIDS in higher education. It also gave rise to the very first HIV and AIDS Audit in South African higher education during 2003-2004. This period onwards also saw the much-needed development and implementation of a compulsory core module for professional teacher education programmes at higher education institutions in SA. The project entitled, *"Piloting of HIV Module in Teacher Education faculties in higher education institutions in South Africa"* was implemented at most of the Higher Education Universities during late 2008 and was done with the assistance of the HEAIDS programme coordinating unit (HIV and AIDS Audit 2003-2004:i-xiv).

The SA Higher Education system can indeed play an important role in shaping attitudes and practices of future decision-makers and in so doing prevent the further spread of HIV/AIDS. Higher education institutions have the capability of influencing policy, shaping the development agenda and mobilizing research as a decision-making tool. Higher education, in addition, has an important role to act out in terms of generating and disseminating new knowledge on HIV/AIDS and its management (HIV and AIDS Audit 2003-2004:29).

Successful institutional and societal responses to HIV/AIDS require leadership and higher education institutions can play a crucial role in the leadership of their communities. The introduction of the HIV/AIDS module is a major attempt in support of capacity building, learning and knowledge development which replicate best practice and facilitate feedback on implementation and sustainability (HIV and AIDS Audit 2003-2004:i-xiv).

This chapter deals primarily with the composition and conceptual framework of the PTEHAA module, implemented at the Faculty of Humanities: School of Teacher Education, Central University of Technology: Free State.

2.2 PILOT TEACHER EDUCATION HIV AND AIDS MODULE (PTEHAA)

The materials for this module comprised a Learning Guide and an accompanying Reader.

The purpose of these materials is to provide the CUT learner teachers (and those lecturers who are the presenters of both the Life Skills and HIV and AIDS modular courses) with a foundation for facing one of the major challenges for teachers in South African classrooms today, which is dealing positively with HIV and AIDS.

2.2.1 Outcomes of the PTEHAA module

The purpose of this module is elaborated in four main outcomes, namely that the student should be able to (Being a teacher in the context of the HIV/AIDS pandemic (BTCAP Learning Guide 2008:12):

1. *Implement participative pedagogical approaches to teaching.*
2. *Understand how issues of poverty, gender, stigma and discrimination relate to HIV and AIDS in the South African and wider African context and to engage learners around these issues in a participative manner.*
3. *Understand the physical, economic, social and emotional impact of the HIV and AIDS pandemic on teachers, learners and their communities.*
4. *Respond in sensitive, positive and holistic ways to the practical as well as psychological needs of learners and colleagues.*

These outcomes in many ways endorse the views held by Prof Alta Van Dyk (2008:166-169), i.e. in order to deal positively with HIV and AIDS through education, the curriculum should involve a knowledge base and teaching of skills, amongst others the following (BTCAP Learning Guide 2008:12).

The criteria for living positively with HIV/AIDS will be contained in the composite questionnaire (Appendix 1):

Section A: Caring for people living with HIV/AIDS which covers the biological knowledge base, supplemented by a questionnaire initiated by the researcher titled 'living positively with HIV/AIDS' to gather more data on pages 87 and 88 of the questionnaire.

Section B: How to handle grief caused by the deaths of loved ones.

Section C: How to support orphans and vulnerable children.

In brief, it is quite evident that these outcomes indicated in the PTEHAA module with the title *"Being a teacher in the context of the HIV/AIDS pandemic (BTCAP)"* (2008) align both favourably with and complement the above-mentioned core aspects identified by Van Dyk (2008).

It is also of relevance to note that the HIV & AIDS and STI Strategic Plan for South Africa (2007-2011:36) considers the higher education sector's response as being comprehensive. This is also demonstrated in the above-mentioned outcomes where this module strives to address behaviour change interventions, care and support as well as knowledge production. These are fundamental rights that children and young people should not be deprived of in their education. It is vital that they observe the development information, behaviours and skills acquired in this module to protect them against HIV/AIDS infection.

2.3 UNIT OUTCOMES OF THE PTEHAA MODULE

In addition, each Unit offers a set of outcomes at the beginning thereof (as demonstrated below), followed by a summary at the end. It serves to focus on what the student is intended to learn from the unit and whether or not the student grasped the major elements by the end. Throughout the learning guide, learning takes place through various activities, and comments on those activities. Some amount to reading activities and case studies with associated questions contained in the reader that accompanies the Learning Guide. This is again followed by key assessment tasks that harness all the learning of all the activities of that particular unit. The outcomes are meant to assess the student's understanding and knowledge gained from an intimate association and connection with teachers, peers, family and casual acquaintances (BTCAP Learning Guide 2008:12).

2.3.1 Unit 1 (Learning Guide, HIV/AIDS Teacher Education Pilot Programme, 2008:15)

The outcomes and the study time of Unit 1 are reflected as follows, namely to:

- *Demonstrate understanding of the basic biological facts about HIV/AIDS.*
- *Distinguish between accurate and inaccurate information about how HIV is transmitted and preventative ways to reduce the spread of HIV.*
- *Recognize the symptoms and stages of HIV/AIDS and understand its impact on the body.*
- *Select and communicate information about HIV/AIDS in age appropriate ways to learners.*

Study time:	*15 hours– excluding key assessment task* *25 hours– including the learning assessment task*

2.3.2 Unit 2 (Learning Guide, HIV/AIDS Teacher Education Pilot Programme, 2008:35)

The outcomes and study time of Unit 2 are reflected as follows, namely to:

- *Understand the social and economic reasons for high rates of HIV prevalence particularly in South Africa.*
- *Understand the reasons for the greater vulnerability of young girls and women to HIV infections and the socio-economic effects of the epidemic.*
- *Understand how stigma and discrimination, besides creating human suffering contribute to the spread of HIV.*
- *Use these understandings in our approach towards dealing with the effects of HIV/AIDS on our learners and the school community as a whole.*

Study Time:	*15 hours– excluding key assessment task* *25 hours– including the learning assessment task*

2.3.3 Unit 3 (Learning Guide, HIV/AIDS Teacher Education Pilot Programme, 2008:50)

The outcomes and study time of Unit 3 are reflected as follows, namely to:

- *Talk about, and think through, the implications of HIV/AIDS for individuals, families and communities.*

- *Understand how children's' lives are being changed by the HIV/AIDS epidemic.*
- *Understand the impact that HIV/AIDS is having on the teachers and, through teachers on the society as a whole.*
- *Assess the extent to which the nation as a whole is dealing with the impact of HIV and AIDS.*

Study Time:	*15 hours – excluding key assessment task* 25 hours – including the learning assessment task

2.3.4 Unit 4 (Learning Guide, HIV/AIDS Teacher Education Pilot Programme, 2008:67)

The outcomes and study time of Unit 4 are reflected as follows, namely to:

- *Understand and apply the national policy for HIV and AIDS for schools in the light of the evolving mission of schools as centers of care and support.*
- *Understand the role of the individual teacher, the school, the community, the state and other agencies in dealing holistically with HIV and AIDS.*
- *Participate in the development of informed strategies for providing practical and emotional support for vulnerable children.*
- *Contribute in curricular and extra-curricular ways towards increasing knowledge of HIV and AIDS and how it can be prevented.*
- *Contribute to creating a positive and safe environment for dealing with HIV and AIDS in a non-discriminatory and supportive way with both colleagues and learners.*

Study Time:	*15 hours – excluding key assessment task* *25 hours– including the learning assessment task*

2.4 UNITS OF THE MODULE / MODULE DESIGN

In order to achieve the above-mentioned unit outcomes, each of the four units in the module has a key question that provides the focus for that particular unit. This set of questions is considered

important for learner teachers, namely to engage with the following (BTCAP Learning Guide 2008:13):

What do we need to know about HIV/AIDS?

1. *Why is HIV/AIDS part of our lives?*
2. *What is HIV/AIDS doing to our communities and schools?*
3. *What can we do about HIV/AIDS in our classrooms and school communities?*

Also of relevance for prospective teachers to note is that knowledge acquisitioning can be referred to as either the theoretical or practical understanding of a subject. It, however, involves complex cognitive processes such as perception, learning, communication, association and reasoning (also discrimination; manipulation and problem-solving). Cognitive development, for instance, refers to the way in which the mental abilities of a child develop from birth (see more detail in item 2.6). Initially the mind of the child is immature, but as the child grows and develops, its mental capacities increase. Cognitive development further refers to the way knowledge is accumulated in an individual person's mind and how we transform such information into knowledge and how we store, retrieve and use it to direct our behaviour; new knowledge is continually being added to existing knowledge and new thought structures are continually being developed and organized in the mind (Van Dyk, 2008:169).

2.5 KNOWLEDGE CONTENT

All four units place a high demand on the interactive levels of group work. It requires a thorough understanding and comprehension of factual knowledge and a reliance on distinguishing between accurate and inaccurate information. It also requires a proper grasp of the impact thereof, and fosters the development of pertinent knowledge and skills on how to deal sensitively in communicating information to learners. The selection of methods and activities is founded on the objectives, content and assessment of the modules. The methods applied, focus largely on participatory learning i.e. relating knowledge to the needs of the learner to do things in the present as well as the future.

These units create and amplify the need for sensitivity in understanding the reasons leading to infection. It elicits a high degree of interaction on aspects related to economic and socio-

economic vulnerability of adolescents, the effects of discrimination and stigma and consequently the demand for dealing positively with HIV/AIDS with our learners and school communities. It further suggests a thorough understanding of the implications of HIV/AIDS for children and individuals 'lives', the effects on our communities; and the impact on our teachers and our nation as a whole. Education should therefore ensure that students acquire knowledge and skills in order that they may adopt and maintain behaviour that will protect them from HIV infection.

Van Wyk (2006) points out that little research has been conducted at higher education institutions on the perceptions and awareness of undergraduate students about the pandemic. *"There appears to be a gap in targeting youths of ages 18-24 years, including those enrolled in tertiary educational institutions. Many arrive at the university already infected. Others will become infected whilst at university. Higher Education South Africa (HESA) acknowledges that 18-30 year olds are that age group with the highest risk of contracting the HIV virus and therefore HIV/AIDS is of particular relevance in higher education."* (Van Wyk, 2006:305-318).

The module generally places a high onus and expectation upon learners to fully comprehend the extent of prevalent risks, and the need to implement policy and the development of schools as centers of care and support and being supportive in the role of government and other agencies in dealing with HIV and AIDS. Learner students are made aware that what they are learning is relevant to their lives and that education is a crucial factor in preventing the spread of HIV. Given the huge numbers of deaths that might still be prevented, the importance of effective education cannot be overestimated.

It is emphasized that for education to be effective, information needs to be absorbed and remembered. Active learning encourages students to engage with information by giving them the opportunity to apply it. In this instance schools play a major role in shaping the attitudes, opinions and behaviour of young people and so provide the ideal environments for teaching the social as well as biological aspects of HIV/AIDS.

Active participation is essential in the development of learning curricula. It similarly applies to the formulation of strategies for practical and emotional support, particularly for vulnerable children. In addition, it is also fundamental in creating new knowledge, leading to the prevention of HIV/AIDS as well as providing a safe environment for dealing with HIV/AIDS. The intensity

of group and classwork is well-defined and balanced; it is prominent and serves to ascertain a deep understanding in learning the extent of what is required to make a difference in the lives of adults, adolescents and young children in mitigating the effects of HIV and AIDS in the education sector as a whole.

2.6 PRACTICAL APPLICATIONS AND CLASSWORK

Some observations with respect to practical and classwork subscribed by the Pilot Teacher Education HIV and AIDS (PTEHAA) module are observed and continuously adhered to in the modules under the following headings:

2.6.1 Learning Outcomes

The following three learning outcomes for practical applications and classwork are observed (Race, 1994:62):

Objectives or intended learning outcomes are clearly stated and unambiguous.

- *The objectives are free of jargon which may not be known to the learner before commencing with the material.*
- *The objectives are generally presented in a friendly way and not: 'the student will'.....'*

Note: Refer to pages 13-15 for the module and the respective learning unit outcomes.

2.6.2 Structure and layout

Visually pleasing and well-structured material with proper headings are important for supporting the learning process. It is also easy for learners to find their way backwards and forwards through signposting and making use of good headings (Race, 1994:62). Biggs and Tang (2011:45) support this when stating "Knowing where you going, and feedback telling you how well you are progressing, heighten expectations of success".

2.6.3 Self-assessment questions and activities - learning by doing

Several clearly-defined case studies and group work activities are included for self-monitoring and management purposes in the learning process. In addition, do the self-assessment questions and activities test learners' achievement of objectives (Race, 1994:62).

2.6.4 Response to the self-assessment questions and activities - learning through feedback

Self-assessment questions and learning activities encourage not only the effect that meaning is created by the learner. It is also relevant that responses meet the learners need to find out "Was I right? If not, why not?" (Race, 1994:62).

2.6.5 Introduction, summaries and reviews

The logical structure and summary of the material provide not only step-by-step guidance for learners in role-plays, group tasks and activities (Race, 1994:63), but also create deep learning opportunities when *"students are required to reflect, hypothesize and apply"* (Biggs & Tang, 2011:31).

2.6.6 General remarks

The fact that the "material is broken into manageable chunks" encourage a deep approach to learning (Race, 1994: 63). The reasons for these are reflected by Biggs and Tang (2011: 26-27) when students have the "intention to engage in tasks meaningfully and appropriately" with well-structured material (see 2.5) by focusing on a high conceptual level (working from first principles).

The relevance of the above serves as an accepted standard or guidelines for both curriculum or course development and served to optimize the module structure and course lay-out.

2.7 CHILDHOOD DEVELOPMENT

It is also propagated that prospective teachers need to acquire a thorough knowledge on childhood development. Successful application thereof depends on a firm knowledge of how children learn and develop. Of importance is that at one stage or another, a particular learning theory may no longer be sufficiently relevant, and effective teaching depends largely on a teacher's ability to integrate knowledge of a particular learning theory with the knowledge of and the stages of the cognitive development of learners. It must be observed that despite many people not having a solid formal knowledge of the stages of childhood development, they are normally quite aware of some things that children should have learned to do at various stages of

their development. Of importance in the module is that school-aged children ought to be provided with age appropriate information on HIV and Aids. This in itself is not a simple matter as attitudes to sexuality education in schools vary greatly (BTCAP Learning Guide 2008:11).

"Sexuality and HIV/AIDS education should ultimately be devised in such a manner that it is fit and appropriate for the young person's particular development stage. It also has to take cognizance of the level of cognitive, emotional, social moral and sexual development of the particular age group of the child" (Van Dyk, 2008:167). It is for this reason that it is crucial that teachers apply the basic guidelines on what they can promote and talk about and at what age. Teachers further ought to develop a sensitivity to adjust their education programmes and to cater for individual and cultural development needs to be exactly appropriate for the level it is intended for. It is suggested that the following stages in childhood development serve to emphasize its applicability to the identified childhood development stages indicated below.

2.7.1 Development Domains

Of essence for learner-teachers to know is that there are several development domains of children which all relate to one another. Development is divided into several broad categories: physical development, cognitive-development, and social-emotional development (DoE Course: EDU200/210 SM:12) - where social refers mostly to the ability to form attachments, play with others, cooperation and sharing, and being able to create lasting relations with others.

- Physical development refers to changes in a child's body, how they develop and grow as well as how they perceive their environment.
- Cognitive/Intellectual development represents the process of making sense of the world around them, how their mental processes develop in terms of language, memory, problem-solving and their use of knowledge.
- Emotional development of self-awareness includes self-confidence, and copping with feelings as well as understanding them and handling relationships with others (Katz, 1996:137).

2.7.2 Psychosocial Development

Suffice to mention is that psychosocial development in a social realm refers to how a person's mind, emotions, and maturity level develop.

2.7.2.1 Cognitive Development

According to Jean Piaget, a Swiss developmental psychologist and philosopher and pioneer of the constructivist theory, there are four major stages of cognitive development i.e. Sensorimotor, Pre-operational, Concrete operational and Formal operational (DoE Course: EDU200/210 SM: 22). However, of these, the sensorimotor stage warrants no mention as it occurs between the ages of birth and two years of age. In order to render it practical, the researcher reflects on the remaining three stages as follows:

2.7.2.2 Pre-operational Stage (2-7 years)

During this stage, intelligence is increasingly demonstrated through the use of symbols; memory and imagination are developed as language use matures; thinking is non-logical, non-reversible, and egocentric (DoE Course: EDU 200/210 SM:23). Egocentrism refers to inability to see situations from any perspective other than one's own (DoE Course: EDU200/210 SM:23).

2.7.2.3 Concrete Operational Stage (7-11 years)

This stage refers to the beginning of operational thought. The child acquires logical thought processes, also known as operations that can be applied to concrete challenges. The child understands laws of conservation and is able to classify and associate. Reversibility is attained. Operations of this period are associated with personal experience. Concrete but not formal operations are executed. At this stage the child is unable to deal with abstract ideas, reason or speculate about possibilities (DoE Course: EDU200/210 SM: 24). The following are some of the important concrete operations a child is capable of performing at this stage.

- *Classification - refers to a mental operation, i.e. cats + dogs = animals.*
- *Reversibility - refers to the ability to imagine what would happen if an action was undone or reversed, animals - all the cats = all the dogs.*
- *Serializing - is the ability to arrange a series of objectives in order, i.e. Balls according to size.*
- *Conservation - a major achievement of this stage is the development of conservation. The child is able to exercise logical skills involving observation such as quantity, number, length, etc.*

The accomplishments mentioned are essential for the child to be able to deal with problems requiring concrete operations.

2.7.2.4 Formal Operational Stage (11-14 years and older)

What is noteworthy is that at this stage, a child is able to reason in a logical manner. This reasoning power can be utilized to solve scientific problems. During this stage, adolescents develop the ability to think and reason abstractly. They engage in discussions where they consider solutions to problems and predict outcomes of actions. At this stage furthermore, adolescents can isolate individual factors and possible combinations of factors that may result in the solution (DoE Course: EDU 200/210, Study Manual 2008:22-24).

A further characteristic at this particular stage is that a strong tendency also exists in adolescents to turn their new powers of thought upon themselves and become introspective. Of importance is that it is also the stage where many adolescents start to become sexually active and need to know about sex and the dangers of becoming infected with HIV/AIDS. The fact that girls naturally develop faster than boys also renders them more vulnerable to sexual advances of older boys. It is therefore advisable that they be subjected to appropriate education alerting them to this situation. It must be borne in mind that in some instances many teenagers are sexually active from a very early age. This not only makes them vulnerable to falling pregnant; they are also highly at risk of becoming infected with HIV or becoming infected by other sexually transmitted diseases. It is at this stage of their lives that they are in dire need of appropriate sexuality education on reproduction, sexual health and healthy sexual behaviour (DoE Course, EDU 200/210, Study Manual 2008:22-25).

2.8 THEORETICAL BASE OF THE MODULE

The HIV/AIDS module is based on a model derived from the work devised by Bronfenbrenner that is based largely on the Eco-systemic theory which provides a conceptual framework into which the factors related to resources, values and practices and anything that needs to be learned and taught about HIV/AIDS in our society can be integrated readily. The model generally serves to refresh and provide an ongoing understanding of how specific factors of learning relate to the successive levels of influence in the model i.e. influences working inwards, reciprocally and

outwards. It provides a well-defined framework facilitating an understanding of how all elements of the module is interrelated and how the actions taken in relation to the pandemic cannot be separated from one's own specific context, and the contexts of those you teach (BTCAP Learning Guide, 2008:08).

2.8.1 What teachers should know in terms of Child Development

The following theories provided the student teacher or teacher-learner a foundation for facing one of the major challenges, namely to deal positively with HIV/AIDS in South African classrooms. (BTCAP Learning Guide, 2008:12).

2.8.1.1 Child Development Theory

A few viewpoints in the module serve to highlight the importance of what every teacher needs to know. Of great importance is child development theory. It is essential that every teacher is knowledgeable about what a child can understand and conceptually integrate at different stages of cognitive development. Whatever the teaching context, understanding children's emotional and social development is equally important. With respect to HIV/AIDS teachings, it is considered of even greater importance. A thorough knowledge of the physical, emotional and social aspects involved in sexual development is of high importance (BTCAP Learning Guide, 2008:8-9).

Without a proper understanding of an adolescent's emotional and social development, hardly any teacher can adequately address a child's emotional pain in the event of losing a parent or caring for a terminally ill parent; neither the agony, nor confusion that is so emotionally overpowering for a child facing his own imminent death. This view applies equally well to stigmatization and social isolation from which a vast number of children suffer, and which need to be understood in terms of the particular stage of social development the child is in (BTCAP Learning Guide, 2008:9-10).

2.8.1.2 Resilience Theory

Several researchers (Wood, 2008:93; Haeffel & Grigorenko, 2007:435-448; Masten & Reed, 2005:74-88) describe resilience as *"the positive functioning in negative circumstances"*. Adverse or risk-laden conditions, such as a pandemic, poverty or a dysfunctional family, often predict

maladaptive functioning, such as psychological difficulty or criminal activity. As and when people manage negative circumstances without developing negative coping skills, they are referred to as being resilient.

The BTCAP Learning Guide (2008:10) suggests that resilience theory basically maintains that it is the relative balance between the stresses and development risks to which such children are exposed on the one hand, and the protective factors that might be operating for them on the other hand that determines whether a particular child will rise above his/her circumstances or not. A number of research studies identified several key protective factors which relate primarily to the following areas of development (BTCAP Learning Guide, 2008:10).

- *The degree to which a child has experienced emotional nurturing and support from at least one consistent caregiver, particularly in the early stages of development.*
- *Caregivers (and this includes teachers) who have consistently encouraged and supported the child's competence in interpersonal communication, problem solving and skills development, as well as her/his general sense of confidence and self-worth.*
- *A family that lives by a strong, coherent and consistent set of positive, pro-social values (and schools are important sites for reinforcing this).*
- *A supportive network of peers - particularly over the school-going years - where a sense of social acceptance and identity are fostered.*
- *Significant people - beyond the immediate family – who - particularly in adolescence act as mentors, counselors or role models to the child (again, teachers may be key persons here).*

2.8.1.3 Social Identity Theory

Of relevance here, is that the value of the social identity theory rests in how it serves to shape and contribute in "grooming" the prospective teacher to be aware of, and know him or herself. This is deemed very necessary given our multicultural society and its relevance in facing the HIV/AIDS pandemic. Educators and learners alike are affected and influenced by the social contexts they are involved in. Social identity theory is a social psychological analysis of the role of self-conception in group membership, group processes, and intergroup relations (BTCAP Learning Guide, 2008:10-12.

Some interrelated concepts and sub-theories focusing on social, cognitive, motivational, and social interactive and macro-social facets of group life are embraced by this theory. Social identity theory also addresses phenomena such as prejudice, discrimination, ethnocentrism, stereotyping, intergroup conflict, conformity, normative behaviour, group polarization, crowd behaviour, organizational behaviour, leadership, deviance, and group cohesiveness. *"As a teacher one is positioned in society or in a community where they inevitably construct, reconstruct, negotiate and reproduce values and meanings in complex ways"* (Hogg, 2006:112). The above theories are contained in the module and it suffices to describe application and relevance of the mentioned theories (BTCAP Learning Guide, 2008:10-12).

2.8.1.4 The Principle of Inclusion

The concept of "inclusion" hails primarily from the Department of Education's policy of Inclusive Education and means much more than the mere inclusion of people with disabilities in education. It is therefore executed in the spirit and practice of total inclusion in every dimension of educational functioning (BTCAP Learning Guide, 2008:11).

2.9 CONSTRUCTIVISM

What is meant by constructivism? The term refers to the idea that learners construct knowledge for themselves i.e. each learner individually (and socially) constructs meaning as he learns. "*Constructing meaning is learning; there is no other kind. What we should realize is that there is no such thing as knowledge out "there", independent of the knower; but only knowledge we construct for ourselves as we learn"* (Hein, 1991).

The role and importance of constructivism in this study is vested in how it is meant to enhance the HIV and AIDS module and is briefly discussed to highlight its relevance. It will provide clarity on its effectiveness in helping learners learn through some core ideas. Of interest is that constructivism does not dismiss the role of the teacher/educator or the value of their expert knowledge; it effectively modifies that role so that teachers assist students in constructing knowledge rather than reproducing a series of facts. The constructivist teacher facilitates tools such as problem-solving and inquiring learning activities, which assist students in formulating and testing their ideas, drawing conclusions and inferences which they pool and then convey their knowledge in an interactive and collaborative learning environment. Constructivism further

has the effect that it transforms the student from a passive recipient of information into an active participant, not just ingesting knowledge from the textbooks. By questioning themselves and their strategies, students learn how to learn and gradually become expert learners (Hein, 1991).

The HIV/AIDS module provides many examples of how constructivism serves to enhance effective learning and knowledge retention. The extensive use of case studies, group discussions, assessments etc. necessitate frequent group tasks, interaction and discussion throughout the module. The module skillfully harnesses student involvement, sharing ideas and interpretation of divergent views and experiences of the topics under the guidance of an educator. By working through the learning guide, learning happens through activities and comments on those activities. Some of the activities are reading activities, and refer to the Reader that accompanies the learning guide. In addition, each unit has a key assessment task that helps to put together the learning through all the activities in the unit (BTCAP Learning Guide, 2008:13).

Having thoroughly analyzed both the Reader and Learning Guides of the Module, it is quite evident that the Constructivist Learning Theory (Hein, 1991) was applied throughout, enhancing the learner's personal and social construction of meaning out of a bewildering array of sensations is how he or she learns.

2.10 LEARNING APPROACH AND CYCLES

Of interest is that the learning approach incorporated into the Learning Guide comprises a cycle or spiral in which activities are central. Emphasis is placed on adding onto existing knowledge and building new knowledge through involvement in activities requiring the learner to think about what he knows in a different way, or executing a task that gives him experience of something he had not previously done. Personal thinking is enhanced and stimulated through a process of discussing or commenting on the activity. Participation illicit questions and it is these questions that frame the next activity and result in the cycle to be repeated i.e.:

1. Content to frame activity
2. An activity
3. Comment on the activity (not answers, but a discussion on the issues that have arisen through the activity).
4. Reflection on what has been learned from the activity - new knowledge

5. Next activity

On reaching the end of the cycle the end of the unit is reached and the student should have had the chance to achieve the outcomes set at the outset of the unit. This agrees with Biggs and Tang (2011) who state that deep learning approaches should be encouraged among university students.

2.11 CONCLUSION

This chapter further deal with factual information gleaned from literature to determine the depth and extent of HIV/AIDS education in Higher Education globally. It also serves to provide insight into the complex nature of HIV/AIDS education and the degree of sensitivity required from educators to impart the necessary knowledge, skills and behaviours to effect responsible lifestyle changes in students. From the literature consulted it is found that educational content and presentation methods vary greatly between institutions with respect to HIV education. Educational material seems to focus on tailor-made solutions instead of general or standardized material. No evidence could be found of a formal evaluation of the HIV/AIDS modular course, specifically designed for Teacher Education students.

The youth remains a critical group to protect against future HIV infection. As such, the education sector has an essential role to play in educating young people to be aware of the devastating consequences of HIV and AIDS and the need to adopt responsible lifestyles. The role of HEADS in introducing the compulsory HIV/AIDS modular course specifically for Teacher Education students at all higher education institutions is commendable; however, being restricted to this minority group creates an enormous gap as the remainder of students is not currently subjected to the course.

In addition, it is further expected that future teachers will utilize their newly acquired skills and experience to the benefit of all learners and the forums they may serve on, to help curb the ever-increasing infections in our communities and learners.

Finally, the module content and outcomes reflect the complexity and the challenges ahead in educating and engaging learners and adolescents in HIV and AIDS awareness. The need to be aware of and understand the associated theories of childhood development and constructivism is

equally important and cannot be overemphasized. This confirmed the value of this module within the higher education context.

What follows in the next chapter is a comparison of the HIV/AIDS Teacher Education Pilot Programme with current research.

CHAPTER 3

A COMPARISON OF THE HIV/AIDS TEACHER EDUCATION PILOT PROGRAMME WITH CURRENT RESEARCH

3.1 INTRODUCTION

In Chapter 2 the purpose of the PTHEAA module was stipulated (see 2.2) as providing CUT learner teachers with a solid theoretical and practical foundation to deal positively with HIV and AIDS so that they, in turn, may impart this knowledge and their positive attitudes to their learners.

In this chapter, report is presented of a literature review that was done to specifically determine how the module outcomes compare with the requirements of successful interventions of HIV and AIDS by the literature on HIV/AIDS.

3.2 A COMPARISON OF THE HIV/AIDS TEACHERS EDUCATION PILOT MODULAR PROGRAMME WITH LITERATURE ON HIV/AIDS

The introduction of the PTHEAA module for specifically teacher education students is a major attempt in support of capacity-building, learning and knowledge development which replicate best practice and facilitate feedback on implementation and sustainability. As mentioned previously, South Africa has one of the fastest-growing HIV/AIDS epidemics and our student cohort in the HE sector contains the age-related most-at-risk segment of South African society (see 2.1). This particularly vulnerable group is also the life-blood of HE institutions. This age group is amongst the most capable and promising members of all societies and represents the future high skills base required by any economy. It, however, also represents the age group at the highest risk of contracting HIV, the simple reason being that HE environments are focal points of social and sexual interaction.

3.2.1 The HIV/AIDS Pilot modular programme framework

The module's instructional techniques are based on two important premises i.e. people learn better through active experience as opposed to passive listening and learners learn better through interacting with one another than working alone. It also provides a foundation for continuing professional education in that learning and assimilation of information and ideas

can contribute to the quality of day-to-day performance throughout their careers. Related techniques include accelerated learning, behavioural modelling, experiential learning, groupware, interactive lectures, learning teams, and team building (Craig, 1996:517). Ideally, these educational techniques enable learner teachers to keep abreast of new knowledge, and maintain and enhance their competence and thereby advance their careers.

With reference to the Pilot HIV and AIDS Module entitled "Being a teacher in the context of the HIV/AIDS pandemic" (BTCAP), it essentially presents a unit of instruction devised to engage the learner teachers in intellectual and practical activities that will encourage them to keep abreast of new developments in the field of HIV and AIDS education (e.g. Antiretrovirals (ARVs)) and to reflect and apply critical judgement to what are being studied. The Module's Learning and Reading Guides as such serve to supplement and practically teach learner-teachers to learn, make decisions on how they feel and what to do. Educators are ultimately expected to motivate learners and provide them with appropriate guidance, facilitate interaction on the subject taught, pose questions to test and illicit understanding, discuss and persuade learners to seek alternative answers, and provide enrichment activities. It is imperative that the learner-teacher must be concerned with understanding the teaching process and gain sufficient confidence for them to apply it on their future students.

Both the Reader and Learning guide of the module "Being a teacher in the context of the HIV/AIDS pandemic" (BTCAP) provide appropriate information to render learner-teachers competent to transfer and utilise the required knowledge, skills and behaviour to educate their students in a convincing and practical way (Chapter 2 provides extensive coverage on the full spectrum of the module content and outcomes). This study is meant to ascertain whatever shortcomings or oversights surface in the module through a comparative analysis with literature and practices gleaned from publishing subject authors globally. Emphasis is implicitly placed on four specific elements propagated by (Van Dyk, 2008) stating that if we are to assist teachers and learners to deal positively with HIV and AIDS through education, the curriculum should have a solid knowledge base and teaching skills covering the following four core aspects:

- *How to prevent the spread of the disease (bio-medical) knowledge base*
- *How to care and support people living with HIV and AIDS*
- *How to handle grief caused by the deaths of loved ones, and*
- *How to support orphans and other vulnerable children. (Van Dyk 2008).*

Only by following the above-mentioned core aspects does it become possible to form meaningful comparisons between the curriculum content and practice as prescribed by the module and the indicators endorsed by current research.

3.2.2 How to prevent the spread of the disease (bio-medical) knowledge base

Information on HIV and AIDS is, in most instances, medically complex to laymen and facts are often reflected in such a manner that it could lead to misunderstanding. The module, therefore, was designed to render biological information in a comprehensible way and it is also based on the premise that if we understand what it does in our bodies, we would find it easier to understand the how and how it is not transmitted.

3.2.2.1 Current research

Emphasis is placed on the individual's commitment to change, focusing on perceptions of enjoyment, self-efficacy, social norms and aversive feelings; taking action relates to all the feelings and emotions that help people make decisions to reduce HIV risk behaviour (King, 1999:8).

Literature reflects that in the United States of America, institutions of higher education have begun to realize that HIV/AIDS prevention can be incorporated into their mission i.e. academic coursework. One of the problems with HIV prevention programmes is that they have almost always consisted of voluntary activities with students having a choice to attend. The result was that students rather spent their free time tending to extracurricular activities. Realising that something needed to be done to encourage students to learn more about HIV, some institutions have created elective courses that students can register for to become more knowledgeable about HIV/AIDS-related issues (Kowaleski *et al.,* 1991; Strauss *et al.,* 1992; Taylor, 1992). If students have the opportunity to learn about HIV for academic credit, those who are curious about the topic may be motivated to sign up for the course. They can learn about a topic they are interested in while still earning credits for graduation (Moglia, 1993).

A selected number of colleges and universities are creating courses that are mandatory for graduation (Castronovo, 1990; Moglia, 1993). Making a course mandatory serves two functions. One, while it does not guarantee behaviour change, it does ensure that no student will graduate without the basic knowledge about the disease and the risk behaviours that contribute to infection. Two, it takes away the stigma of registering for the course. Despite prevalent information about HIV/AIDS, some people may still believe that the only people

who are interested in taking a course on HIV/AIDS must be gay or homosexual. Knowing that this attitude prevails may prevent some students from registering for an elective course, regardless of their sexual orientation. Castronovo (1990) reports that upon completion of a mandatory HIV/AIDS course, college students strongly recommended it for incoming freshmen. Either elective or mandatory, an entire semester of classes is a far cry from a one shot education method of the past (AACC, 2005; Castronova, 1990; O'Leary *et al.,* 1992). Another option institutions are utilizing is curriculum infusion; integrating HIV/AIDS curriculum into courses across all majors and disciplines (Strauss *et al.,* 1992). This allows for increased opportunities for the HIV/AIDS prevention message (Hoban *et al.,* 2003:28).

There has not been much research on the perceptions, attitudes and awareness of undergraduate students regarding the epidemic. Pretorius *et al.* (1995) conducted a qualitative investigation to explore the perceptions and quality of human conduct of students with regards to HIV/AIDS and to elicit their views on possible components of an effective HIV/AIDS prevention strategy. These authors came to the conclusion that students fear HIV/AIDS. Furthermore, they concluded that students are aware of the disease, but do not really understand it. A need exists for the integration of facts gleaned mainly from the media. This lack of understanding may be contributing to their fear. Grunseit and Aggleton (1998) came to the conclusion in their research that it would appear that education have greater success when it comes to changing attitudes and increasing levels of factual knowledge than in adjusting sexual practice. Education is part of the fight against new HIV infections. As a result, many teachers have to teach learners how to prevent the infection, but are uncomfortable with this responsibility and with the learning contents of HIV prevention (Car-Hill & Coombe, 2003).

Adolescents say that fear and embarrassment constitute the greatest barriers to them seeking information and services. In many societies, sexual activity among young people prior to marriage remains stigmatized and even talking about sex is taboo. Because policymakers do not want to be perceived as promoting promiscuity, they may be reluctant to expand the capacity of teachers and health care providers to effectively provide sexual health care information and services to young people. Failure to acknowledge the central role that sexuality plays in the lives of virtually all people as well as the role that sexual experimentation plays in the lives of young people is self-defeating (Boonstra, 2007) . In too many instances, adolescents perceive themselves to be invincible and thus not susceptible to the virus. Some also feel that HIV is "their disease" i.e. belonging to another group in the

population and not to them. "Many adolescents thus perceive AIDS as a threat to the social deviant and thus not a threat to themselves" (Tolond, 2002:8).

3.2.2.2 Module content

Unit 1 of the module's learning guide is divided into a range of activities encouraging student interaction and participation. It specifically deals with the biological facts and preventative measures pertaining to HIV and AIDS. It extensively covers topics related to what a virus is, what it does to the body, what the difference in context is between HIV and AIDS, and why AIDS is called a 'disease', but HIV is not. The unit deals holistically with how the virus multiplies, the effects on the immune system, the difference between a virus and a cell, CD- 4 counts and the role of ''T'' cells. A further section is devoted to the transmission of HIV and AIDS *per sé,* the stages of the disease; how HIV and AIDS are treated, how HIV and AIDS can be prevented and how to communicate information on HIV and AIDS to learners. It reflects on the knowledge base required, particularly related to risky sexual behaviours and an awareness of how others perceive people who are HIV positive (BTCAP Learning Guide, 2008:16).

This unit covers bio-medical knowledge i.e. How to prevent the spread of the disease extensively as well as the need and views expressed by Professor Alta van Dyk (2008). The overall module content is considered very informative and thoroughly covers the bio-medical complexities and spread of HIV and AIDS, also taking into account our very diverse African society. The Reader's chapter seven reflects the need for particularly women to be empowered to practice safer sex, promote and request condom use and require better detection of STi's, which will serve to reduce HIV infections in women. Once infected, a woman needs emotional support and counselling to assist her in planning for her future. Community support groups and NGO's can support women in making these decisions. Pregnant women need to know that treatment with specific medicines during pregnancy can greatly reduce the risk of passing the infection to the infant and that special care during pregnancy and delivery can reduce the risks of passing the infection to the infant. Babies born to women who have not received medication and are infected with HIV has about a 1-in-3 chance of being infected with HIV. More than two thirds of the infants infected with HIV may die before they are five years old.

The module also deals with antiretroviral drug treatment; HIV-positive people can maintain their health and often lead relatively normal lives. However, few people have access to this treatment and deaths are alarmingly common throughout the country. The associated module reading reflects that almost half of all deaths in South Africa and a staggering 71% of deaths among those aged between 15 and 49 are caused by AIDS. So many people are dying of AIDS that in some parts of the country, cemeteries are running out of space for the dead and so much free time over weekends is spent on attending funerals of friends and relatives.

The module deals explicitly with the difficulties of learner teachers' conveying this kind of information to learners i.e. to be careful not only about the facts we as teachers communicate to our learners, but also the messages. Facts and messages need to be appropriate for our learners' age and context (BTCAP Learning Guide, 2008:29).

The authors of the module had as an objective to make the information interesting and understandable and utilise it in the following manner (BTCAP Learning Guide, 2008:1):

- The way that processes are shown in pictures and in words
- That facts are explained with comparisons (such as the comparison of the virus and its proteins to a plan and the comparison of the cell it invades**,** to a builder and his materials)
- That the facts and processes are explained and then summarised, including all the techniques they could learn from in preparing lessons on HIV and AIDS for potential learners.

3.2.3 How to care and support people living with HIV and AIDS

There can be no doubt that we have to encourage a greater level of caring and empathy among educators and learners alike, as an essential part of HIV and AIDS education.

3.2.3.1 Current research

In Van Dyk (2008:329-341) an entire chapter is dedicated to care and support, featuring specifically home-based care. It addresses questions such as: Why has it become necessary for families and communities to look after their own AIDS patients? Why is it better for an AIDS patient to be cared for at home rather than in hospital? What are the potential problems

with home-based care? Who should be in the home-care team? (BTCAP Learning Guide, 2008:69).

What is of importance and must be emphasised is that, should health care professionals wish to be successful in changing people's sexual behaviour, they ought to have a thorough working knowledge and understanding of existing theories contained both in the literature and module related to behaviour modification. The critical basis thereof can be found in the following theories:

- The theory of reasoned action (Fishbein & Ajzen, 1975);
- The theory of planned behaviour (Ajzen, 1991);
- The integrative behavioural prediction model (Von Haeften *et a.l,* 2001);
- The health belief model (Becker & Maiman, 1975; Rosenstock, 1974);
- The AIDS risk reduction model (ARRM) of Catania *et al*., 1990);
- The social-cognitive learning theory of Bandura (1977); and
- The learning theory of Rotter (1966).

The theories mentioned provide appropriate guidance for HIV/AIDS into curriculum development of all learning areas and also life skills courses.

3.2.3.2 Module content

Unit 2 of the PTHEAA module i.e. "Being a teacher in the context of the HIV/AIDS pandemic" (BTCAP) and the learning guide provide sufficient insight on the care and support of people living with HIV/AIDS taking cognisance of what follows. From 2002 through 2008, about 40% of all adult deaths were due to AIDS (Stine, 2009:299). It is clear that a single approach for a generalized epidemic with socio-economic as well as medical causes will not suffice. What is required is a holistic approach that covers health care, emotional care, practical care as well as education for prevention. The manner and complex ways of how the epidemic affects the individual, workplace, and communities and our economy no doubt necessitates that teachers (currently) and in future have an even bigger "care" responsibility to fulfil (BTCAP Learning Guide, 2008:67).

Lerner *et al.* (2000:16-17) additionally suggest that positive child development can be segmented in what may be referred as the five Cs, namely Competence, Connection,

Character, Confidence, and Caring (compassion). *"Five clusters of individual attributes- for example, intellectual ability and social behavioural skills; positive bonds with people and institutions; integrity and moral centeredness; positive self-regard, a sense of self efficacy and courage, and humane values, empathy, and a sense of social justice, respectively.* It is further suggested that in the education context, some children may need special counselling; the broader challenge of psychosocial support for children is not a matter for specialists, *"Rather it lies in creating school environments within which children feel safe and supported, rather than excluded and vulnerable".*

In order to render HIV and AIDS education effective, the module propagates that a whole school approach, and a whole community approach along with the involvement of government departments as well as other agencies in society, including NGO's, CBO's and business organisations are required. The module does not prescribe a step-by step approach, but deals with key issues pertaining to planning a response, identifies common dilemmas, and further provides pointers to resolve those dilemmas. Of essence is that educators should not have to be saddled with the entire responsibility on their own as is currently being perceived to be the case. It is expected that in a society affected by HIV/AIDS such as ours, there need to be policies, plans and structures to support the implementation of practical care, emotional support, health promotion, and HIV and AIDS education and in doing so, observe non-discriminatory and stigmatisation practices. Furthermore, the module exclusively deals with the need for understanding the social and economic factors for the high prevalence rates of HIV and AIDS in sub-Saharan Africa. It focuses on the reasons for the greater vulnerability of particularly young girls and women to HIV infection along with the socio-economic effects of the epidemic. The unit in particular fosters an understanding towards stigma and discrimination, caring, suffering, also how it contributes to the spread of HIV. The aspects mentioned all contribute to create an understanding in the approach of dealing positively with HIV and AIDS and its effects on learners and the school community as a whole. Specific issues related to migrant labour backed by appropriate role plays and simulations are contained in the accompanying Reader. It also deals extensively with gender issues and the general threat and effects of HIV and AIDS. The unit concludes with discussions on the importance of, and how to act positively and responsibly in the community's response against the AIDS pandemic and also how to deal with those living with HIV and AIDS needing care and support. Young people can help by showing them compassion.

Most HE institutions have a health facility catering specifically for students' needs. Of relevance to Health Services is to note that patients with HIV infection and AIDS require (special) physical, emotional, psychological and spiritual care. It is suggested that such a care programme should be holistic, compassionate of nature and people centred. It is also necessary that it should ideally take place in a nurturing environment (Fahrner 1988:115-130).

Aspects that are prominent in the module covers child development theory, resilience theory, understanding social identity as well as the concept of inclusion (see 2.6). Only the essence of the theoretical and principled positions were dealt with in the introductory part of the module, but is extensively covered from a Southern African perspective, with references on the various topics in Donald *et al.* (2006).

3.2.4 How to handle grief caused by the death of loved ones

Grief as a result of death by a loved one causes diverse reactions and therefore coping strategies are crucial.

3.2.4.1 Current research

Literature confirms that care and support of individuals living with HIV/AIDS make demands on the community and society that cannot be met by hospitals alone. It calls for the involvement of families, loved ones and communities that have a major role to play in the support of individuals infected with HIV and AIDS (Van Dyk, 2008:329). Kluckow (2004:24) identifies the following challenges that children affected by HIV/AIDS often have to face given their parents' illness or death:

- Role changes when parents become more dependent on them as their health deteriorates.
- Isolation from family and peer group. With poor financial resources they drop out of school.
- Traumatic exposure to suffering, sickness and death. Children are not emotionally equipped to deal with such roles on their own.
- Physical poverty and deprivation. It is not uncommon that family members take the deceased's property and leave the children destitute.

- Multiple losses. Children tend to start grieving in anticipation long before the parent's actual death, and at times also experience multiple losses.

3.2.4.2 Module content

Unit 3 of the PTHEAA module commences with the challenges facing teachers in terms of dealing with dilemmas such as disclosure, treatment, coping financially and how to care for people that become ill. A major challenge rests in dealing with the need to disclose one's status and the risk involved in becoming stigmatized in a community. The silence and secrecies around HIV also serve to diminish trust and weaken support networks. Teachers are not only affected by learners, but as a social group they are very susceptible to getting and spreading HIV. The inclusion of the Shisana report on HIV and AIDS prevalence amongst teachers provides a clear idea of how many teachers are living with HIV. The question ultimately arises as to what will happen to schools if teachers become ill more often and die? The report reveals that people between the ages 15 to 49 experienced a sharp increase in deaths, that is, the age group of the majority of our teachers. Emphasis is placed on the teacher's role as educator of young people to become productive members of society and secondly as caretaker of the young whilst parents are at work. The need for appropriate training and development of teachers has thus become imperative and is enforced by the National HIV and AIDS Policy for educators and learners (BTCAP Learning Guide, 2008:68).

The reader guide features an article entitled HIV and AIDS, Trauma and "landscapes of suffering" depicting the Western view of trauma which sees suffering as something that can be counselled away. The importance of viewing HIV/AIDS as part of the "landscape of suffering" expanding on the social and economic conditions of our society and the new form of HIV/AIDS denialism, the denial of psychological effects of AIDS. It amounts to living with the disease that nobody wants to name as it is associated with too many taboos in society such as sex and death. Losing one loved one after the other, the reality of grief can hardly dissolve into words, or tears or rituals. Episodes of loneliness by those who cannot speak out, and the burden of taking care of the elderly without external support further results in the most vulnerable to be exploited. Suffering is real and intense; grieving for those who died and are dealing with fear of dying too. The agony and suffering is real and terrifying. Entering these landscapes requires knowledge of the social, political and economic forces that cause so much distress on an individual, family and community level. The module

places a high and (perceived) undue load on what teacher contributions and involvement should be in their respective societies. This is contradictory to what the Ministerial Committee on Teacher Education (2005:6) states, i.e. "The main competence of a professional teacher is argued to be competence in organising systematic learning." This stance, however, does not prohibit teachers from visiting homes of learners absent from class because they have responsibilities at home related to HIV/AIDS, cannot concentrate when they are in class because they are too hungry or cold; the impact of the HIV pandemic does become a concern for teachers (BTCAP Learning Guide, 2008:68-72).

The learning guide makes reference to teachers using storytelling as a development method to illicit learner participation in class work. It allows learners to talk about loss and grief. They can talk about a story rather than their own sadness. It provides a little bit of emotional distance, yet through stories they observe that they are not alone in their sadness (e.g. when other people had similar experiences and feel the same as they do). Ideally this should be done in small groups. It is also suggested that learners choose a partner, someone they know and trust to interact with, sharing their knowledge and anxieties. It is known that children can be very supportive of each other. As educators/teachers we need to create safe places for learners to share their sadness (BTCAP Learning Guide, 2008:80-83).

If we want to help learners build up emotional competence we should acknowledge their sadness. In the event of ignoring it or pretending it is not there out of fear of what will happen, one is telling learners that feelings are not important, or that it is inappropriate to show feelings. Teachers, however, should be sensitive and avoid activities or discussions that will distress students. It should be noted that some learners may need to be referred to a social worker in the event that they cannot function properly or become withdrawn or start to behave badly. Various strategies are reflected in the module for dealing with such issues (BTCAP Learning Guide, 2008:83-85).

Max-Neef and associated researchers believe that poverty should not be measured in terms of income threshold, but in terms of needs not satisfied: *"Any fundamental human need that is not adequately satisfied reveals a human poverty"* (Max-Neef *et al.*, 1991:18). For example, the quality of teaching and learning in sub-Saharan African schools are under threat as a result of the increasing number of orphaned and vulnerable children. The term OVC refers to any child whose vulnerability has increased as a result of HIV and AIDS and may include

any child under the age of 18 who falls into one or more of the following categories (Smart, 2003:viii) has lost one or both parents or experienced the death of other family members; is neglected; destitute, abandoned or abused; has a parent or guardian that is ill; has suffered increased poverty levels, has been the victim of human rights abuse; and/or is HIV positive themselves. For educators/teachers and learners there is no escape from the impact of the pandemic given the social, emotional, physical and human rights problems. The demands posed by the increased levels of anxiety, trauma, and short concentration spans; poverty, stigma and discrimination also become overwhelming.

A further dilemma vests in that for people of any age having to care for terminally ill family members (which is an already taxing task) also faces the additional burden brought about by supporting grieving grandchildren and the stress it causes. Stigma associated with HIV and AIDS in many instances result in social exclusion. In some severe instances, superstition and fear may lead to accusations of witchcraft and sorcery, resulting in ostracism or physical violence and death (World Disasters Report - Focus on HIV and AIDS, 2008:22).

A wealth of information exists with respect to Anti-Retroviral Therapy since the outbreak of HIV and AIDS all over the world. It is a complex area, extremely costly, but saves lives. It will however, not be discussed as part of the study.

3.2.5 How to support orphans and other vulnerable children

In order to provide emotional support to learners, one cannot force the issue, but needs to be sensitive and patient. In some instances it takes time to win a learner's trust. The module provides several guidelines one can use to build a trusting and safe relationship (BTCAP Learning Guide, 2008:79).

3.2.5.1 Current research

Currently, humanitarian organisations working under difficult situations battle to cope in supporting vulnerable people and strengthening their own resilience. In sub-Saharan Africa, many individuals and whole communities have been destroyed by the pandemic (AIDS-Update 2009:326). Approximately 15 million children have lost one or both parents to AIDS; children aged 10 or less run households and cannot go to school as they are burdened to the extent that they must run errands and look after their families. Ironically, and in so many instances, grandparents struggle to care for grandchildren during a period of their lives that they should have been cared for themselves. The existing illiteracy and education levels

also have a negative influence on HIV awareness and prevention and give rise to myths and misperceptions in our communities. A fact to be borne in mind is that the HIV pandemic is a disaster whose scale and extent could have been prevented, but ignorance, stigma, political inaction, indifference and denial have all contributed to the deaths of millions of people (World Disasters Report 2008:13).

A matter warranting comment deals with the estimated number of orphans, which was around 11.6 million in 2007 (UNAIDS, 2008) and the number of children who have been rendered vulnerable as a result of the pandemic, which is inestimable.

From the above it is quite evident that the term OVC could apply to the majority of learners in South Africa. It is further accepted that for teachers there is no escaping the impact of the pandemic on the lives of their learners, resulting from an increased incidence of social, emotional, physical, economic and human rights problems (Car-Hill *et al*., 2000; Culver, 2007; Ebersöhn & Eloff, 2002; Foster, 2002). The consequences of such problems are played out in the classroom (Hepburn, 2002), as teachers struggle to balance the already challenging business of teaching and learning with additional demands imposed by the increased levels of anxiety, limited concentration spans, severe trauma, heightened discrimination and stigma and increased poverty experienced by learners living in this age of AIDS (Foster & Williamson, 2000; Wood, 2008).

A fairly extensive contemporary study done by Lesley Wood and Linda Gobo (2008) provides valuable insight into "lived" teacher experiences at grassroots level in dealing with orphaned and vulnerable children (OVC). The study signifies that the quality of teaching and learning in sub-Saharan African schools is under severe threat as the amount of orphaned and vulnerable children escalates (Govender, 2004; Hepburn, 2002) worsening the existing socio-economic problems experienced in the mostly disadvantaged communities (Car-Hill *et al.*, 2000).

The enormous burden brought about by HIV/AIDS inevitably results in abnormally high levels of orphaning. The privilege of having a normal childhood diminishes where children substitute the role of care-givers of ill parents in child-managed households. Marked by high levels of unemployment and HIV/AIDS, many thousands of migrant children also arrive in South Africa often unaccompanied by parents or caregivers, only to end up in child labour and/or living off the streets. The established (voluntary) informal child care forums in

communities look after orphans, vulnerable children and provide care and support. Protection of the migrant children can also extend to xenophobic attacks. Needless to mention is the subsequent need for psycho-socio support in these tragic circumstances (BTCAP Learning Guide, 2008:79-82).

Coping with grief and loss is a very emotional experience. Grief results in people who experience emotional pain, which often manifests as physical pain. The intensity of pain greatly depends on the personality of the bereaved person and is affected by how precious the lost person related to the bereaved was. Bereavement can also be referred to as the experience of pain and grief (i.e. the grief felt by people who have outlived a person who has died of AIDS; grief experienced by a person who has been diagnosed with HIV infection and is mourning his deteriorating health; the grief felt by someone who is terminally ill, and the grief felt by caregivers who feel that they are constantly surrounded by death and those dying).

3.2.5.2 Module content

The module covers mental health quite extensively. However, little or no information was provided on the effects that HIV and AIDS have on mental health. People being infected and affected by HIV and AIDS all over the world may have good reason to be concerned for their long-term health and as a consequence may suffer from psychological ailments such as anxiety and depression. Their situation may be exacerbated by HIV-related stigma and discrimination, suffering and death of children, spouse, parents and also other family members and friends or colleagues. One should note that the potential impact on children is much wider as well: *"The health and mental health of ill or depressed caregivers, unable to provide basic nurturing and stimulation can have a profound impact on children's developing brains - their cognitive, emotional and social development"* (Whitman, 2005).

The Learning Guide provides ample information on how to deal with grief and how to provide practical care to vulnerable children. Despite providing emotional support, the school community can assist by identifying which children need practical care (i.e. accessing social grants to ensure the family or caregivers find sufficient financial support to survive). Currently, there are three grant types that could assist children affected by HIV or AIDS:

- Child support grant (for any South African citizen who takes care of a child or children up to 14 years old).
- Care Dependency Grant (for people who care for children with severe disabilities and need special care).
- Foster Care Grant (for anyone who looks after a child who has been placed in their care under the Child Care Act), families and communities.

The BTCAP Learning Guide presents an appropriate Case Study entitled: "Breaking the culture of silence." A variety of lessons provide emotional and practical support to learners and their families. The literature, however, provides a more hands-on approach in dealing with grief. Unit 3 critically deals with implications of HIV and AIDS for individuals. It concentrates on how children's lives are being affected by the pandemic, the impact it has on teachers as well as through teachers on society as a whole. It further extends to how the nation as a whole deals with the impact of HIV and AIDS. A great deal is covered relating to how children are affected and the pandemic's influence on the teaching community who function to provide spiritual, emotional and educational networks of care and support. The unit is supported by a comprehensive reading list that covers the history of HIV and AIDS in South Africa. Dealing with vulnerable children, care and protection in a high risk environment, as well as what can be done in schools to reduce the risks children are faced with. Children are acutely affected by the impact of illness and death - also of teachers as it affects the workplace, family, community and economy. In addition denial in whatever form surfaces as a major problem and more particularly in terms of the psychological reality of HIV and AIDS.

The Reader, compiled by Heather Brooks, Olive Shisana and Linda Richter, provides interesting facts relating to a National Household HIV Prevalence and Risk Survey of South African children. The main objectives of the study were to:

- *Determine the HIV prevalence among South African Children;*
- *Identify social and community risk factors that predispose children to HIV infection;*
- *Determine the number of orphans and child-headed households to assist in in proper planning and to intervene where necessary;*
- *Assess children's knowledge of HIV/AIDS prevention - an important factor in children's vulnerability to HIV infection.*

- *Reading thirteen (13) of the READER particularly deals with improving school children's mental health in an era of HIV/AIDS. This section touches on a very sensitive issue namely, the silent suffering of the child in the day-to-day struggle with the realities of HIV and AIDS. It involves the positive support for vulnerable children in a family, school and a community context and extents much wider than the immediate health condition.*
- *What is of importance for students and teachers to realise is that knowledge comprises both attitude change, and behavioural change theories. Both theories facilitate bringing about change. The module provides the change required whilst the components of attitude change is inherent to the module.*

Assistance is provided to children and orphans who became vulnerable as a result of HIV. Treatment, support and care are provided through home/community based/ health institutions for PLHIV, providing livelihood to the most vulnerable. A further dilemma involves discrimination affecting infected individuals. HIV-related stigma is not confined to groups at higher risk. People suffering from other serious illnesses like cancer, STDs etc. gain public sympathy, but contracting HIV/AIDS illicit severe distrust and animosity. People living with HIV are met with suspicion, contempt and distrust. It takes place despite legal provisions on discrimination enshrined in South African Law. Therefore, there should be a continuous striving to promote the development of community support groups and ensure that networks and programmes for all staff are in place.

The module further propagates that a holistic approach to HIV and AIDS in schools and communities not only requires HIV and sexuality education, but also projects that provide practical care and emotional support for children, health promotion for everyone (not only those with HIV and AIDS), and the practice of non-discrimination and respect for human rights. With regard to the provision of emotional support to learners, educators may feel that they do not have the necessary skills to deal with children's emotional distress, and need additional training. However, what this training should do is help them to understand and listen to children more attentively. It is so that education is not only about intellectual skills and good behaviour; we need to educate children to relate to other people, to have integrity, to have confidence in themselves and compassion for others.

Critical challenges in the South African society demand the strengthening and care of vulnerable children by preventing all forms of violence, abuse and exploitation of children. Sufficient evidence of the above is found in the daily media to suggest that violence against children from all communities and all spheres of life ranging from the very young to adolescence, and both boys and girls that are beaten, abused and exploited. We live in a country that inherited a legacy of violence, extreme inequalities and social dislocation. It extends to relatively high levels of neglect, domestic violence, alcohol and drug abuse and sexual abuse.

Unit 4 of the PTHEAA module in particular deals with a range of issues covering aspects such as understanding the national policy for HIV and AIDS in schools given their involving role as centres of care and support. It stresses the need for understanding the role and understanding of the teacher, school and community, the role of government and dealing holistically with HIV/AIDS. It emphasises the need to participate in the creation of informed strategies providing practical, expert and emotional support to vulnerable children. The need for increasing knowledge of HIV/AIDS and the preventative measures in development of curricula and extra-curricular ways are crucial issues for development. Providing a safe, supportive and positive environment for dealing with HIV/AIDS is propagated for both colleagues and learners. Sexuality education is a high priority, teaching children to respect their bodies and avoid situations in which they could be harmed sexually. Schools should have (compulsory) implementation plans and structures to meet prescribed legislative requirements. Emphasis is placed on competence, communication, character, confidence, caring, integrity and self-efficacy, courage and human values.

The holistic response to HIV/AIDS in schools and communities focuses on HIV/AIDS and sexuality education, but also embraces projects that provide practical care and emotional support to children, health promotion and the practice of non-discrimination with respect for human rights. The Reader provides a wealth of information supported by case studies and references on a wide range of HIV/AIDS related matters to gain practicable knowledge in dealing with the HIV/AIDS.

3.3 CONCLUSION

Already in Chapter 2 the youth, as a vulnerable age group (see 2.1), has been identified as a specific focus point in the fight against HIV and AIDS. This emphasised the importance of

this study. In addition, the module in this study covers critical areas which are also promoted nationally. For example, some are to promote improved health-seeking behaviour and awareness, and the adoption of safe sex practices as demonstrated in the following (BTCAP Reader, 3:26):

- *Given the small group of specifically Teacher Education students being "compulsory" subjected to the module, effectively excludes the larger student population, losing an ideal opportunity of extending it to the broader student population and possibly other sectors of Government and Civil society.*
- *The Module promotes the use of male and female condoms and focus on the increase and acceptance, attitudes, perceptions and efficacy and use condoms as a form of contraception among the youth.*
- *Increased access to youth friendly reproductive health services including STi management, VCT and rapid HIV testing facilities and family planning make schools places where youth can access friendly and supportive counselling services.*
- *Create awareness and develop programmes to support health and social needs of children affected by HIV and AIDS-promote all issues that affect children, mobilise financial and material sources for orphans and child headed households.*
- *Assist in promoting measures to facilitate adoption and or care of AIDS orphans.*

Therefore, involvement in HIV and AIDS education remains critical, but with the new knowledge being acquired, the learning content and guidelines, which are outdated (**if any**) or inadequate, should be revised. In addition, there is no doubt that knowledge helps to refute myths and misconceptions about sex and disease. The effects of HIV/AIDS impact widely and affect students and teachers in a myriad of ways. The fact is, the disease is real; it kills and there is no cure; it is a non-discriminative disease; and its prevalence elicits different emotions i.e. anger, pain, sadness, helplessness, denial and is most often caused by misconceptions and lack of knowledge.

It is generally accepted that educational institutions are becoming centres of care and support. Potential teachers such as our students embarking on the course meet fairly early with the circumstances caused by the pandemic. Teachers, therefore, need to become aware that knowledge is not only about the physical, but that the emotional aspects of sexual development are critical. *"The nature of the HEAIDS response to HIV/AIDS epidemic is not*

merely a health issue, nor is it a scientific problem, but by the fact that it is a multi-dimensional human crisis (HEAIDS Study Report, 2010: v).

The implementation of the PTHEAA module on a pilot scale is anticipated to result in a marked contribution in educating students in mitigating the epidemic. The evaluation of the module's (academic) learning content should ultimately determine its value in terms of fitness for purpose in changing and influencing student behaviour and risky lifestyles.

The prevention of HIV/AIDS lies in empowering our children and young people with the knowledge, skills, attitude and values (life skills) required in preventing them from becoming infected and ultimately equipping them to care for those who are less fortunate. *"The reality is, AIDS is not fun, and it's not sexy or manageable. AIDS is a debilitating, deforming, terminal and incurable disease and the drugs used can bring on heart, kidney and liver disease, cancer, and a host of daily discomforts, like never being too far from the nearest toilet"* (Stine, 2009:189).

In the next chapter the research design and methodology of this study will be outlined.

CHAPTER 4

RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

The aim of the study was to evaluate the compulsory "Being a teacher in the context of the HIV and AIDS pandemic" Teachers Education Module introduced at the Central University of Technology during the latter part of 2008. The intention was to establish how successful the Module was in equipping students to deal positively with HIV and AIDS presently and for application in their future careers. The literature review indicated that considerable research has been done in the field of study and that the Module and Reader's content is appropriately confirmed.

4.2 STATEMENT OF THE RESEARCH QUESTION AND PROPOSITIONS

How successful has the module been in equipping students to deal positively with HIV and AIDS?

4.2.1 Subsidiary questions

- How accurate is the knowledge base of the students regarding HIV/AIDS which will assist in curbing the spread of the disease?
- What is the attitude of the students towards people living with HIV/AIDS?
- How skilled are the students in handling the grief of children?
- How skilled are the students in handling orphans and vulnerable children?

4.2.2 Propositions

The research question informs the following propositions:

- The distribution of the students' scores on the Knowledge Base questionnaire will be negatively skewed indicating more scores on the higher end of the scale and thus a good knowledge of how the disease is spread.

- The distribution of the scores on the Living Positively with HIV/AIDS-questionnaire will be negatively skewed indicating a positive attitude towards people living with HIV/AIDS, and skill to handle orphans and vulnerable children.

4.3 RESEARCH DESIGN AND METHODOLOGY

Leedy & Omrod (2001) define research as follows: *"Research is at times mistaken for gathering information, documenting facts, and rammaging for information. It is the process of collecting, analysing and interpreting data in order to understand a phenomenon. The research process is systematic in that defining the objective, managing the data and communicating the findings occur within established frameworks and is in accordance with existing guidelines."*

The research was based on a quantitative, non-experimental, multivariate, survey type design. As the study was quantitative, it was based on a post-positivistic paradigm (Maree, 2008:65). This implies that the researcher had to stay as objective in the data collection and analysis exercises as was possible.

4.3.1 Identifying the variables

- **Knowledge base**

  For the purpose of this study, the Knowledge base of the respondents is described as a score on the Knowledge Base questionnaire. This questionnaire is taken from the module and tests the accuracy of the respondent's knowledge base regarding HIV and AIDS.

- **Composite Questionnaire: Living Positively with HIV/AIDS**

  For the purpose of this study, attitudes towards people living with HIV/AIDS are described as scores on the composite Living Positively with HIV/AIDS-questionnaire. This scale measures attitude towards infected people, skills in handling children with grief, skills and knowledge in caring and supporting vulnerable children and AIDS orphans.

  The confounding variables i.e. age, gender and ethnicity were measured on a Biographic questionnaire and their effect on the scores of the Knowledge Base Questionnaire - Living positively with HIV/AIDS Scale were analysed statistically.

  The composite living Positively with HIV/AIDS-questionnaire comprises sections A, B and C respectively. The introductory portion catered for biographical information in order to analyse the effects of the confounding variables on the dependent variable and to describe the sample.

- **Section A dealt with**: Caring for people living with HIV and AIDS supplemented with an additional "Living positively with HIV/AIDS" questionnaire to specifically acquire additional data by the researcher".
- **Section B dealt with**: How to handle grief caused by the deaths of loved ones.
- **Section C dealt with**: How to support orphans and vulnerable children.

4.3.2 Research Design

According to Kerlinger (1986), research design is the blueprint of the research and describes the methods used for collection, measurement and analysis of data. The objective of this survey expresses both the structure of the research problem and the plan of investigation used to obtain evidence related to the problem. In this instance the sampling method, data collection, measuring instruments and data analyses sufficed.

Research design is formulated by Schumacher & McMillan (1993:597) as providing a plan that describes both the conditions and procedures for collecting information and they advise that the associated research methods as well as the procedures to collect and analyse data should be systematic and purposeful. The characteristics formulated by Schumacher & McMillan (1993) for educational research are as follows:

- It implies 'probabilistic' thinking i.e. thinking that does not necessarily offer certainty.
- It promotes logical reasoning, which is guided by evidence rather than by opinions.
- It needs to be objective in the sense that data collection and analysis are such that not only one meaning can be deduced from it.
- It requires the use of precise language i.e. reflecting exact meanings.
- It provides for verification in that results can be confirmed in subsequent research providing 'parsimonious' explanations in terms of simple statements.
- It requires logical reasoning.

Although the researcher was keen to illicit as much information from the questionnaire as possible, it had to be limited to render it concise, appropriately short and uncomplicated to avoid participant anxiety or stress (Creswell, 2002:183), which would affect the validity of the scores. The questionnaire was designed in cooperation with the study supervisor. It was

done so that instructions were clear, unambiguous and that the questions would illicit data needed to answer the research questions (Matimolane, 2004).

In this chapter, the researcher needs to describe the steps followed to collect data. The researcher will also describe the research method chosen and the rationale for it. Reference is also made to the system of data analysis utilised for this study. As a point of departure, the researcher considered the advantages offered by the interviewing method of data collection. In this instance, however, it did not meet the demand for this study, as dealing with HIV and AIDS requires a great deal of sensitivity and confidentiality. It was appreciated that the sensitivity surrounding the research topic rendered the interviewing process inappropriate.

4.3.3 Population and Sampling

McMillan & Schumacher (2001:602) define a survey research as *"the assessment of the current status, opinions, beliefs and attitudes by questionnaires or interviews from a known population."* Cohen *et al.* (2001:169) "*assert that surveys, set out to describe and to interpret what is."* (Maree, 2007:155). According to McMillan & Schumacher (2001) and Crowther *et al.* (1994) *"survey data is used to describe and explain the status of phenomena to trace change and draw comparisons."* (Maree, 2007:155).

As many as two hundred students participated in the HIV/AIDS Teacher Education module. However, only 90 students successfully completed the questionnaires as part of the survey. A convenience sample of two hundred teacher education students, who attended the module in the second semester of 2011, were selected to partake in the study. A convenience sampling method may be referred to as a study of subjects taken from a group that is conveniently accessible to the researcher. It is also the simplest form of non-probability sampling as the researcher simply chooses participants who are the easiest to get hold of (wiseGEEK.com).

4.3.4 Data Collection

For the purpose of this study, questionnaires were utilised to collect data. Due to unforeseen logistical problems, the researcher found it impossible to facilitate suitable venues to occupy two hundred or more students at a time in order to complete the questionnaires. Challenges experienced were that very few teacher education students attended class as regularly as one would have expected. An alternative solution to the problem was to deal with whatever students attended class, albeit in an erratic manner and despite losing valuable time as a

result. Groups of students had to be gathered over a period of several weeks to complete the questionnaires in formal classroom conditions. The perceived advantages presented by this method are as follows:

- The researcher was able to control the entire process with relative ease and could offer immediate clarity on questions not clearly understood by respondents.
- The respondents were able to complete the questionnaires within a short space of time.
- It provided sufficient time to check questionnaires for completion.
- No additional costs were incurred as formal university venues were utilised with permission.
- Data collection followed a group administration of questionnaires where the researcher observed the completion of questionnaires by learners. Participants had to complete and sign a consent form stipulating anonymity.

4.3.5 Measuring instruments

An instrument is the generic term that researchers refer to for a measuring device such as a survey, test or questionnaire, and is normally chosen for the ease with which it can be administered, interpreted by the participant, and scored and interpreted by the researcher. In this instance an existing instrument, namely a questionnaire, was used as this method has been tested numerous times for accuracy. With reference to validity, the instrument was designed to facilitate the collection and analysis of data with the intent of measuring what it was supposed to measure to aid statistical analysis.

4.3.6 Data Analysis and Reporting

As the study was quantitative in nature it involved thorough data analysis and consolidation of the responses collected. Data were appropriately grouped using statistical programmes and analysis techniques and interpreted accordingly. Data were analysed using univariate as well as multivariate techniques and were presented in the form of tables and graphs only.

4.4 RELIABILITY AND VALIDITY OF THE RESEARCH

Fraenkel and Wallen (2008:147) state that "…reliability refers to the consistency of scores or answers from one administration of an instrument to another, and from one set of items to another." Kerlinger (1986:405) states that the reliability of research depends on the reliability

of the measuring instruments and the choice of the correct statistical procedure. External validity is not claimed in this instance. An instrument that is externally valid helps obtain population generalizability, or the degree to which a sample represents the population.

With respect to validity, Fraenekel & Wallen (2008:147) defines it as *"the appropriateness, meaningfulness, correctness, and usefulness of the inferences a researcher makes"*. In addition, two types of validity exist, i.e. internal and external validity. External validity also refers to the extent to which the results of the research can confidently be generalised to the population from which the sample was selected (Kerlinger, 1986; Maas, 1998:24). The reliability of the measuring instruments used in this study is reported in the next chapter. The statistical procedures were guided by a professional statistician and valid software for data analysis was used. The study is therefore considered partly reliable as a problem with internal consistency was experienced (see item 5.2).

4.5 CONCLUSION

This study was underpinned by Chapter 1: Overview of the Study and Chapter 2: The HIV/AIDS Teacher Education Pilot Programme.

This chapter has dealt with the research design and methodology utilised in this study. Reference was made to the categorisation, ordering, manipulation and summarising of data to obtain answers to research questions. Information dealing with the dependent variable, and independent and confounding variables was addressed. The questionnaires were scored by the researcher and handed to the Department of Statistics of the University of the Free State for processing.

The information obtained from the questionnaire provided valuable and significant results for purposes of analysis, interpretation and implementation thereof. The results and findings will be discussed in Chapter 5.

CHAPTER 5

RESEARCH FINDINGS AND DISCUSSION OF RESULTS

5.1 INTRODUCTION

Chapter 4 dealt exclusively with the research design and methodology related to the data collection methods and processes applied. The objective of this research project is to determine whether the HIV and AIDS module for learner-teachers in fact provided them with a solid and adequate knowledge base to deal positively with HIV and AIDS in their forthcoming teaching careers. It also has the objective to establish whether the respondents were able to meet the other criteria for dealing positively with HIV/AIDS. This relates to having a positive attitude towards caring and supporting people living with HIV/AIDS, knowing how to manage people with grief caused by the death of loved ones and knowing how to support and care for orphans and other vulnerable children. Dealing positively with HIV/AIDS was set as the criteria on measuring the success of the module and dealing positively with HIV/AIDS and consisted of four sets of factors that were measured and analysed by means of questionnaires.

- How to prevent the spread of the disease: bio-medical knowledge base.
- How to care and support people living with HIV and AIDS.
- How to handle grief caused by the deaths of loved ones, and
- How to support orphans and vulnerable children.

The sample comprised 90 students who had completed the Teacher Education module during 2011. The sample consisted of both genders, different ages and ethnicities. The questionnaires were administered in 2012. That is, approximately 6 months after completion of the module.

5.2 RELIABILITY OF THE QUESTIONNAIRE

The standardised Cronbach's Alpha test which indicates the internal consistency of the questionnaire was calculated and is very low at 0.46 (Cohen *et al*., 2008:277-284). Internal consistency is also a measure of reliability. However, before we assume that the questionnaire was at fault for being unreliable, a review of the results indicates that the respondents may have done a fair amount of guessing with regards the rating of the items in

the questionnaire because the results of the study are negative and do not support the proposition. Guessing, when rating an item in a questionnaire means not being able to access one's informed opinion or attitude and will result in a lack of consistency between items. It also suggests the absence of relevant behavioural knowledge with regards to the construct, living positively with HIV/AIDS. It is mentioned again that the questionnaire measured attitudes as they are underscored by behaviours. Coleman (2001: 63) defines an attitude as "...a more or less consistent pattern of affective, cognitive or conative, and behavioural responses (or of feeling, thinking, and behaving) towards a psychological object." The attitudes regarding living positively with HIV/AIDS are thus informed by behaviour.

5.3 DESCRIPTIVE STATISTICS: CHARACTERISTICS OF THE SAMPLE

In the following section, the characteristics of the sample describing the frequencies of different genders, age groups and ethnic groups are presented.

Table 1: Descriptive Statistics: Gender of the Sample

Gender	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Male	50	56	50	56
Female	40	44	90	100

Table 1 indicates that of the 90 respondents i.e. 50 (56%) were male and 40 (44%) were female.

Table 2: Descriptive Statistics: Age of the Sample

Age	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
19	3	3	3	3
20	3	3	6	7

Age	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
21	6	7	12	13
22	9	10	21	23
23	4	4	25	28
24	13	14	38	42
25	3	3	41	46
26	2	2	43	48
27	7	8	50	56
28	14	16	64	71
29	8	9	72	80
30	9	10	81	90
31	2	2	83	92
32	2	2	85	94
34	1	1	86	96
40	2	2	88	98
42	1	1	89	99
58	1	1	90	100

Table 2 describes the age dispersion of the sample. The youngest respondents were 19 while the oldest was 58.

Table 3: Descriptive Statistics: Ethnicity of the Sample

Ethnic	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Black	56	62	56	62
Coloured	16	18	72	80
Indian	3	3	75	83
White	15	17	90	100

Table 3 reflects the frequencies of the different ethnic groups of the respondents in the sample. The sample consisted of 56 (62%) black respondents, 16 (18%) coloured respondents; 3 (3.3%) indian respondents and 15 (17%) white respondents.

5.4 DESCRIPTIVE STATISTICS: THE MEANS PROCEDURE OF THE VARIABLES MEASURED IN THE SAMPLE

Table 4: Descriptive Statistics: Response to the Questionnaire

Variable	N	N Miss	Mean	Std Dev	Skewness	Median
Caring for and supporting people living with HIV/AIDS	**90**	**0**	**23**	**3.76**	**-0.30**	**23.00**
How to handle grief caused by deaths of loved ones	**90**	**0**	**42.16**	**6.73**	**-0.14**	**42.00**

Variable	N	N Miss	Mean	Std Dev	Skewness	Median
How to support orphans and vulnerable children	**90**	**0**	**22.72**	**3.84**	**-0.51**	**23.00**
Total of Living positively with HIV/AIDS	**90**	**0**	**64.88**	**9.75**	**-0.37**	**65.00**
Bio-Medical Knowledge Base	**90**	**0**	**13.91**	**3.24**	**-0.54**	**15.00**

Table 4 provides the descriptive statistics for the total sample and dimensions of the "Living Positively with HIV/AIDS" questionnaire, as well as the Bio-medical knowledge base questionnaire. The dimension" **Caring for and Supporting People Living with HIV/AIDS"** was completed by 90 respondents. The mean was 23 and the standard deviation was 3.76. The median was 23. The skewness value of the distribution of scores on the questionnaire was -0.30. This indicates a slight negative skew which would suppose that the number of respondents who felt positive about caring and supporting people living with HIV/AIDS were high. Unfortunately for the skewness value to be significant it has to be at least 0.1 or larger (Brown, 2008:4)). In this case the skewness is so small that the distribution of scores is considered normal. This indicates that the respondents did not have significant positive attitudes towards people living with HIV/AIDS and relevant knowledge of how to care and support these people. Consequently, the module did not succeed in altering respondents' attitudes, knowledge or skills regarding people living with HIV/AIDS or the retention of what was learnt was not lasting.

With respect to the questionnaire on **"How to handle grief caused by deaths of loved ones"**, the distribution was normal and no significant positive attitudes or skills was evident.

The module therefore was not successful in altering respondents' attitudes knowledge or skills regarding people living with HIV/AIDS or the retention of what was learned was not lasting.

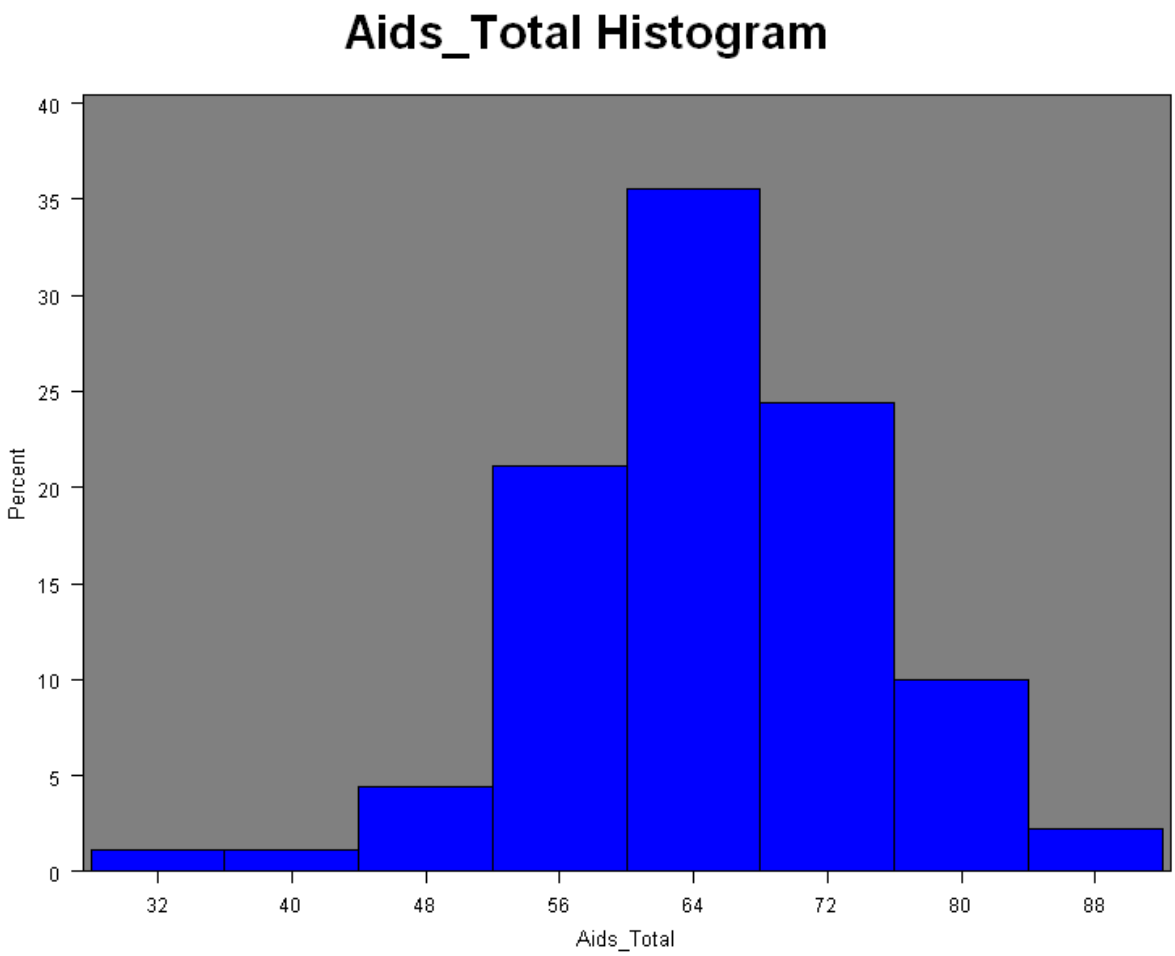
With reference to the questionnaire on **"How to support orphans and vulnerable children"** the distribution of scores was also found to be normal and no noticeable or significant positive attitudes or skills came about. As a consequence the module was not successful in altering respondents' attitudes towards people living with HIV/AIDS.

With regards to the dimension, i.e. **"Living positively with HIV/AIDS"** the response led to a normal distribution with no noticeable or significant positive attitudes or skills acquired. The module therefore was not successful in altering respondents' attitudes towards people living with HIV/AIDS.

The last dimension dealt with the **"Bio-Medical Knowledge Base"** that indicated a slight negative skew, which would suppose that the number of respondents who were knowledgeable about the medical facts of HIV/AIDS could have been high. However, in this instance the skewness value is so small that the distribution of scores is considered normal. It is also indicative of the respondents not having developed a significant knowledge or skills base on the topic.

The following histogram reveals the total scores on the "Living Positively with HIV/AIDS questionnaire".

Figure 2: Aids Total Histogram



According to the histogram, the scores on the attitude scale are distributed normally - as could be expected from a random sample population. There is no indication in the spread of the scores that positive or negative attitudes regarding people living with HIV/AIDS were measured. This corroborates what was said under Table 4 – the module has not succeeded in forming attitudes or developed knowledge which will lead to students living positively with HIV/AIDS.

5.5 INFERENTIAL STATISTICS: THE EFFECT OF THE CONFOUNDING VARIABLES

In the following tables, the effect of the confounding variables on the attitude regarding living positively with HIV/AIDS will be reflected. The total of the questionnaire as well as the sections A, B and C are presented with regards to the influence of the confounding variables.

Section A dealt with: Caring for people living with HIV and AIDS.

Section B dealt with: How to handle grief caused by the deaths of loved ones.

Section C dealt with: How to support orphans and vulnerable children.

The following tables reveal that the confounding variables, gender, age, ethnicity did not have an effect on any of the dependent variables.

Table 5: ANOVA of the scores of living positively with HIV/AIDS - Total and Gender

Source	DF	Type III SS	Mean Square	F Value	Pr > F
gender	1	23.57555556	23.57555556	0.25	0.6212

Table 6: ANOVA of the scores of living positively with HIV/AIDS - Total and Ethnicity

Source	DF	Type III SS	Mean Square	F Value	Pr > F
ethnic	3	12.92281746	4.30760582	0.40	0.7522

Table 7: Regression of age on living positively with HIV/AIDS – Total and Age

Parameter	Estimate	Standard Error	t Value	Pr > |t|
Intercept	13.89278872	1.69161689	8.21	<.0001
age	0.00068852	0.06224258	0.01	0.9912

Table 8: ANOVA of the scores on caring for and supporting people living with HIV/AIDS and Gender

Source	DF	Type III SS	Mean Square	F Value	Pr > F
gender	1	32.80500000	32.80500000	2.35	0.1287

Table 9: ANOVA of the scores on caring and supporting people living with HIV/AIDS and Ethnicity

Source	DF	Type III SS	Mean Square	F Value	Pr > F
ethnic	3	12.50476190	4.16825397	0.29	0.8344

Table10: Regression of age on the variable caring and supporting people living with HIV/AIDS

Source	DF	Type III SS	Mean Square	F Value	Pr > F
age	1	7.24687633	7.24687633	0.51	0.4774

Table 11: ANOVA of the scores of how to handle grief caused by the death of loved ones and Gender

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Gender	1	2.72222222	2.72222222	0.06	0.8080

Table 12: ANOVA of the scores of how to handle grief caused by the death of loved ones and Ethnicity

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Ethnic	3	74.20198413	24.73399471	0.54	0.6582

Table 13: Regression of age on scores of how to handle grief caused by the death of loved ones

Parameter	Estimate	Standard Error	t Value	Pr > |t|
Intercept	39.14421741	3.49862173	11.19	<.0001
age	0.11316093	0.12873082	0.88	0.3818

Table 14: ANOVA of scores on how to support Orphans and Vulnerable Children and Gender

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Gender	1	10.27555556	10.27555556	0.69	0.4069

Table 15: ANOVA of scores on how to support Orphans and Vulnerable Children and Ethnicity

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Ethnic	3	37.53293651	12.51097884	0.84	0.4734

Table 16: Regression of age on scores of how to support Orphans and Vulnerable Children

Parameter	Estimate	Standard Error	t Value	Pr > |t|
Intercept	25.23185031	1.98485768	12.71	<.0001
age	-0.09430753	0.07303229	-1.29	0.2000

The significant levels of all of these tests i.e. ANNOVA of scores on the Age, Gender, Ethnicity, and the Regression of age on the Knowledge Base were > 0.05 indicating that none of the confounding variables (gender, ethnicity or age) had any effect on the responses to the dependent variable questionnaires.

Regarding the knowledge base and the confounding variables, the same result was found.

Table 17: ANOVA of scores of - Knowledge Base and Gender

Source	DF	Type III SS	Mean Square	F Value	Pr > F
gender	1	1.38888889	1.38888889	0.13	0.7184

Table 18: ANOVA of scores of - Knowledge Base and Ethnicity

Source	DF	Type III SS	Mean Square	F Value	Pr > F
ethnic	3	12.92281746	4.30760582	0.40	0.7522

Table 19: Regression of age on Knowledge Base

Parameter	Estimate	Standard Error	t Value	Pr > |t|
Intercept	13.89278872	1.69161689	8.21	<.0001
age	0.00068852	0.06224258	0.01	0.9912

Tables 17, 18 and 19 reveal that the confounding variables had no effect on the outcome of the knowledge base questionnaire.

5.6 THE BI-NOMINAL TEST FOR PROPORTION

In order to establish whether there were any significant higher proportions of "agree or disagree'' responses, an exact Bi-nominal test was done on the totals of the three sections of the Living Positively with HIV/AIDS.

Table 20: The Exact bi-nominal test for proportion

Questionnaire	Disagree Frequency	Agree Frequency	ASE Statistic	Sig (Two-tailed)
Section A	58	32	0.0505	0.0061
Section B	64	26	0.0478	0.0001
Section C	60	30	0.0527	0.0016

Table 20 denotes that the proportion of respondents who disagreed with the statements were all significantly larger than the proportion of respondents who agreed with the statements. The agree responses indicate a positive attitude towards people living with HIV/AIDS in respect of the following:

- **Section A dealt with**: Caring for people living with HIV and AIDS.
- **Section B dealt with**: How to handle grief caused by the deaths of loved ones.
- **Section C dealt with**: How to support orphans and vulnerable children.

The results indicated that the respondents do not know how to deal positively with HIV/AIDS in respect of 'Caring for people living with HIV/AIDS, How to handle grief caused by the deaths of loved ones and How to support orphans and vulnerable children.'

5.7 HOW WERE THE QUESTIONS DERIVED AT?

The questions contained in the respective questionnaires originated from the Learning Guide and Reader. It is therefore conceivable that the respondents should have formed an attitude which indicates living positively with HIV/AIDS. They should also have been knowledgeable regarding the facts on living positively with HIV/AIDS.

5.8 REFLECTION ON THE QUESTIONNAIRE - LIVING POSITIVELY WITH HIV/AIDS

It is noteworthy to observe that the questions utilised in the respective questionnaires were covered throughout the Modular programme's Learning Guide and Reader. It was considered to be appropriate, current, and free from jargon, and not designed to confuse in any manner. The findings portrayed by the data analysis no doubt give rise to many questions in terms of its current and future success as it regrettably failed to achieve what it was meant for.

The HIV/AIDS module content is considered appropriate, compares favourably with literature and addresses a very wide spectrum of information in the form of group activities, assessments, role plays and case studies, presented by specially-trained lecturers. Another point of departure is that possible answers for the disappointing results may be attributed to poor class attendance as was experienced by the researcher on several occasions. However, the programme material covered all aspects referred to in the questionnaires extensively and in such a manner as to render it comprehensible to all participants of which many are second-language users.

5.9 SUMMARY OF RESULTS

Chapter 5 saw the culmination of statistical results obtained from the questionnaires, assessing the knowledge, skills and behaviours needed for dealing positively with HIV and AIDS. The sample population comprised 90 First-Year Teacher Education learners that completed the Pilot HIV/AIDS Module titled, *"Being a Teacher in the Context of the HIV/AIDS pandemic"* (BTCAP) during 2011.

As was mentioned earlier in the study, the questionnaires were administrated during the latter part of 2012, i.e. 6 months after the class having completed the Modular course. The sample population comprised various ethnic groups, representing both genders of which 50 were Male and 40 Female learners. The age distribution varied from 19 to 58. In terms of ethnicity, the sample population comprised 56 black respondents, 16 coloured respondents, 3 indian and 15 white respondents.

The statistics shown in Table 4 reflect the dimensions measured with regard to the respective questionnaires. It has indicated without exception that in no instance has the respondents

developed a significant knowledge, behavioural, or skills base on any of them. They are therefore not competent to deal positively with HIV and AIDS and it can therefore be concluded that the Module was not successful in developing the respondents' knowledge, and/or that the retention of what was learned overall was not lasting.

Chapter 6 will deal with conclusions, recommendations and limitations of the study.

CHAPTER 6

CONCLUSIONS, RECOMMENDATIONS AND LIMITATIONS OF THE STUDY

6.1 INTRODUCTION

This research study was undertaken mainly to ascertain whether the module has been successful in equipping students to deal positively with HIV/AIDS. Both the research and subsidiary questions (item 1.2.1) were observed and extensively covered throughout the study.

Chapter 1 provided an overview of the study. Reference was made to the devastating effects of the pandemic. Mention was also made of high prevalence rates and the need for proper education and therefore the introduction and implementation of the HIV/AIDS modular programme. It needed to equip learner teachers to deal positively with HIV/AIDS. A comparison of the HIV/AIDS module with literature provided sound directives to deal positively with HIV/AIDS. The module design and methodology emphasised the need to change young adults' risky lifestyles and their vulnerability to the pandemic. With reference to the subsidiary question "How do the module outcomes and content compare with the requirements of successful intervention of HIV/AIDS as posed by research in the literature?" In this instance, it suffices to note that the literature covered supports the module content extensively.

Chapter 2 dealt with the reasoning and input by many role players towards the eventual implementation of the HIV/AIDS module at Higher Education institutions in South Africa. Much information was provided about the design and composition of the module, related outcomes, practical application, classwork, assessments, summaries and reviews. The importance of childhood development, development domains, and theoretical base of the module and the effect of constructivism was mainly based on information from the study guide and reader.

Chapter 3 dealt extensively with the comparison of the HIV/AIDS teacher-education (pilot programme) with current research. Reference was made with respect to the modular programme framework, how to prevent the spread of the disease (bio-medical) knowledge base; how to care and support people living with HIV/AIDS; how to handle grief caused by the death of loved ones and how to support orphans and other vulnerable children.

Chapter 4 covered the research design and methodology reflecting on the research question and propositions, followed by the population and sampling method applied, data collection and associated measuring instruments. It also covered ethical issues and matters related to reliability and validity of the research.

Chapter 5 dealt with inferential statistics and the effect of confounding variables as depicted in the graphs. It reflected on the questionnaire with reference to the dimensions identified. It dealt with the reliability of the questionnaire, descriptive statistics, and characteristics of the sample and the means procedure of variables measured in the sample.

It may be concluded that it is sufficiently evident that the HIV/AIDS module content compares well with what literature suggests. It covered the full spectrum of what should be covered in an educational HIV/AIDS module and is considered fit for purpose and the target population. Of concern, however, is that retention of absorbed knowledge and skills was not evident - as was indicated by the data analysis.

6.2 RECOMMENDATIONS

Adapting the questionnaire for a future study could benefit from additional questions that do not specifically relate to the module content, but is equally current and covered in the media.

A further avenue to be pursued is the possible inclusion of HIV and AIDS educational matter on the CUT website, accessible to all CUT students and staff. This may enhance the strive for creating an awareness of the pandemic and how to minimise the effect thereof on individuals.

An alternative avenue to be pursued is to link HIV and AIDS policy to formal teaching structures and, where feasible, it should preferably be governed by a formal committee with top management support and commitment towards successful execution. It would also be advisable to institute formalised mechanisms for monitoring and evaluating student participation and progress with regular feedback to the CUT Executive Committee and Council respectively.

Implementation of periodic in-depth assessments to determine the impact of HIV and AIDS infection and prevalence rates at the institution (for staff and students alike), of which the outcomes or results would serve to improve the quality of overall planning and strategy formalisation for the University.

It needs to be ensured that the continued HIV and AIDS programme application is aligned to the Institution's Strategic Plan, as well as the broader National HEAIDS programme initiatives. It needs to maintain momentum and Institutional support for the latest educational developments in Higher Education.

Currently, student enrolments increase annually, providing the ideal setting for all first-year students to be subjected to the HIV/AIDS module at the CUT. By rendering it a compulsory semester course for all first-year students and allocating credits for successful completion thereof would provide a viable opportunity to enhance student awareness of their vulnerability to the ever-increasing HIV/AIDS infections and escalation of the pandemic.

6.3 LIMITATIONS OF THE STUDY

The Pilot HIV/AIDS study focussed exclusively on first-year Teacher Education Students who were subjected to the compulsory HIV/AIDS semester course. Some limitations realised were:

A separate questionnaire or alternatively interviews for the Module lecturers could have highlighted specific challenges they experienced in presenting the semester courses. This may have covered items related to whether its timing was sufficiently paced to accommodate student interaction and participation during formal class presentations. In addition, it is further suggested that a formal written Assessment and Portfolio of evidence be incorporated to enhance the module outcomes.

Another item for consideration would be whether the formal classes were executed within the modular framework or merely dealt with as informal Life Skills presentations, and whether student learning was enhanced by tasking the respective classes to compile and submit individual and/or group tasks.

A drawback in terms of results yielded from the questionnaires may be attributed to the relatively long (6 months) period time lapse from having completed the programme until being subjected to the questionnaires. This aspect need to be reconsidered and it would be advisable to complete the questionnaire 3 months after finalisation of the programme and possibly a second time, following a period of 6 months to determine what knowledge have been retained by students.

Having focussed on the CUT Teacher Education students only, it no doubt creates a need for a comparison of results obtained from other Higher Education Institutions, where the Module was also rendered compulsory to teacher-education students.

6.4 CONCLUSION

The fact that the module has not sufficiently succeeded in changing student attitudes to people living with HIV and AIDS is not considered catastrophic. The Modular programme serves as a pilot study programme and may be enhanced by introducing a combination of techniques which may include some of the items raised above.

The chapter effectively provided the rationale for having conducted this research study. In conclusion, the researcher suggests that all those involved in HIV/AIDS education, especially in Higher Education Institutions, take heed of the relevant findings and recommendations' in this study.

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GLOSSARY

Abstinence: the practice of refraining from indulging in sex. (Wood, L., 2008).

Age appropriate: the material and activities chosen should be suitable for the development level of the learner in terms of emotional, cognitive and physical development. (Wood, L., 2008).

AIDS: Acquired Immune Deficiency Syndrome. (Stine, J., 2009).

Bereavement: The experience of pain, loss and grief that is usually experienced when someone close dies. (Van Dyk, A., 2008).

CD 4: A protein imbedded on the surface of a T lymphocyte to which HIV most often binds - a CD 4+ or T cell. (Stine, J, 2009).

Conformity: The tendency to in to social pressure (in the case of adolescents, to peer pressure. (Van Dyk, A., 2008).

ELISA: test ELISA stands for ‘’enzyme- linked immunosorbent assay”. This is a laboratory test (technique) to detect antibodies in the blood. (Van Dyk, A., 2008).

Demographically: the adverb of “demographics”, the statistical data of a population for example the spread of people at a certain age, income, education level, etc. (Wood, L., 2008).

Efficacy: Effectiveness. (Stine, J, 2009).

Egocentrism: The inability to see situations from any perspective other than one’s own. A cognitive characteristic of the young child in the middle childhood years. (Van Dyk, A., 2008).

Epidemic: Affecting many persons at once, outbreak or rapid, sudden growth or development. (Stine, J, 2009).

HIV: Human Immunodeficiency Syndrome. (Stine, J, 2009).

HIV (Human Immunodeficiency virus): A newly discovered retrovirus that is said to cause AIDS. The target organ of HIV is the T4 or CD4 subset of T lymphocytes, which regulate the immune system. (Stine, J, 2009).

HIV positive: Presence of the human immunodeficiency virus in the body. (Stine, J, 2009).

Immunity: Resistance to a disease because of a functioning immune system. (Stine, J, 2009).

Incidence: The total number of new cases of a disease in a defined population within a specified time, usually one year. (Stine, J, 2009).

Infection: Invasion of the body by viruses or other organisms. (Stine, J, 2009).

Infectious disease: A disease that is caused by microorganisms or viruses in or on the body as parasites. (Stine, J, 2009).

Injection – drug use: Use of drugs injected by needle into a vein or muscle tissue. (Stine, J, 2009).

Morbidity: The proportion of people with a disease in a community. (Stine, J, 2009).

Mortality: The number of people who die as a result of a specific cause. (Stine, J, 2009).

Opportunistic disease: Disease caused by normally benign microorganisms or viruses that become pathogenic when the immune system is impaired. (Stine, J, 2009).

Orphan: UNAIDS defines an orphan as a child under the age of 18 who has lost at least one parent to death. The South African Children's Bill identifies an orphan as a child who has no surviving parent caring for him or her. (Van Dyk, A., 2008).

Orphans and vulnerable children: The definition of a vulnerable child is based on indicators of basic needs. Skinner *et al.* (2004) have identified a list of variables to measure vulnerability in children:

- Death or desertion of parents
- Severe chronic illness of parents: HIV/AIDS or others
- Illness of a child
- Physical or mental disability of a child
- Poverty
- Access to basic needs: education, health, social services, etc.
- Inadequate clothing
- Emotional problems
- Abuse of the child
- Drug abuse by caregivers or the child

Pandemic: Occurring over a wide geographic area and affecting a high proportion of the population. (Stine, J, 2009).

Piloting: before a research study is implemented, it has to be piloted to make sure that it is feasible: pilots usually take place with a small number of participants or respondents. (Wood, L., 2008).

PLWA: People living with AIDS. (Stine, J, 2009).

Positive HIV test: A sample of blood that is reactive on an initial ELISA test, reactive on a second ELISA run of the same specimen, and reactive on Western Blot, if available. (Stine, J, 2009).

Prevalence: The total number or percentage of cases of a disease existing at any time in a given area. (Stine, J, 2009).

Stigmatisation: to assign negative attributes or characteristics to someone. (Wood, L., 2008).

Tolerance: A state of non-responsiveness to a particular anti-gen or groups of antigens of a disease at any time in a given area. (Stine, J, 2009).

Vaccine: A preparation of dead organisms attenuated live virulent organisms, or parts of micro-organisms that is administrated to artificially increase immunity to a particular disease. (Stine, J, 2009).

Viral load: The total amount of virus in a person's blood. (Stine, J, 2009).

Western Blot Test: A blood test that detects the antibodies to HIV infection. It is sometimes used to confirm an ELISA test that has produced a (HIV) positive result. (Van Dyk, A., 2008).

APPENDIX 1

QUESTIONNAIRE:

LIVING POSITIVELY WITH HIV AND AIDS

QUESTIONNAIRE: LIVING POSITIVELY WITH HIV AND AIDS APPENDIX 1

OFFICE USE	

Mark applicable block with X

RESPONDENT NUMBER: ☐

1. GENDER ☐ Male ☐ Female ☐

2. AGE IN YEARS ☐ Years ☐

3. ETHNIC GROUP ☐ 1 Black ☐ 2 Coloured ☐ 3 Indian Asian ☐ 4 White ☐

4. LANGUAGE ☐ 1 English ☐ 2 Afrikaans ☐ 3 IsiXhosa ☐ 4 SeSotho ☐ 5 Other ☐

5. KNOWLEDGE BASE ☐ ☐

Instructions:

For each item, please circle one of the numbers (1-5)
The numbers refer to the following responses:

1	this item was rarely true for me in this subject
2	this item was sometimes true for me in this subject
3	this item was true for me about half the time in this subject
4	this item was frequently true for me in this subject
5	this item was almost always true for me in this subject

Please answer each item. Do not spend a long time on each: your first reaction is probably the best one. Please note that the questions all refer to the subject which you study.

A. CARING FOR PEOPLE LIVING WITH HIV AND AIDS

6 I am close friends with someone living with HIV/AIDS

Disagree ☐ 1 2 3 4 5 Agree ☐

7 I think it is natural to hug someone living with HIV/AIDS

Disagree ☐ 1 2 3 4 5 Agree ☐

8 I do not mind sharing a pillow with someone who is living with HIV/AIDS

	Disagree		1	2	3	4	5	Agree		

9 People living with HIV/AIDS may drink and smoke as this relieves tension

	Disagree		1	2	3	4	5	Agree		

10 People living with HIV/AIDS should be encouraged to have plenty of rest and exercise

	Disagree		1	2	3	4	5	Agree		

11 People living with HIV/AIDS should not be encouraged to talk about their fear of dying

	Disagree		1	2	3	4	5	Agree		

12 People living with HIV/AIDS should have a pet to love and cuddle because that makes them feel
better

	Disagree		1	2	3	4	5	Agree		

B HOW TO HANDLE GRIEF CAUSED BY THE DEATHS OF LOVED ONES

13 It is not good to speak about the experience of losing a loved one due to death

	Disagree		1	2	3	4	5	Agree		

14 Grief for having lost a loved one should only last about a month

	Disagree		1	2	3	4	5	Agree		

15 There should be support groups for people who have experienced the lost of a loved one due to
HIV/AIDS

	Disagree		1	2	3	4	5	Agree		

16 Children should be encouraged to use drawings to express their grief when they have lost a parent due to HIV/AIDS

	Disagree		1	2	3	4	5	Agree		

17 Children do not grieve for a long time when they have lost a parent due to HIV/AIDS because they do not understand death

	Disagree		1	2	3	4	5	Agree		

18 Children who have lost a loved one due to HIV/AIDS may show anger in class because they are grieving

	Disagree		1	2	3	4	5	Agree		

C HOW TO SUPPORT ORPHANS AND VULNERABLE CHILDREN

19 Older children are quite capable of caring for their siblings when the parents have died due to HIV/AIDS

Disagree		1	2	3	4	5	Agree		

20 Orphaned children should not get special attention in class

Disagree		1	2	3	4	5	Agree		

21 Orphaned children should not show bad behaviour in class just because they are grieving

Disagree		1	2	3	4	5	Agree		

22 Educational games, music and art can help orphans deal with grief

Disagree		1	2	3	4	5	Agree		

23 As teacher it is my responsibility to tell the local health care provider of the community if a child's parents have died due to HIV/AIDS

Disagree		1	2	3	4	5	Agree		

24 When I talk to a child about his/her grief it is good to make sure I should not talk to the child at his/her eye level because than they will not respect what you are saying

Disagree		1	2	3	4	5	Agree		

25 As teacher I should make sure that a child does not go hungry because he is orphaned

Disagree		1	2	3	4	5	Agree		

RESEARCHER'S COMPILATION OF HIV/AIDS DATA

Please answer each item. Do not spend a long time on each: your first reaction is probably the best one. Please note that the questions all refer to the subject which you study

LIVING POSITIVELY WITH HIV/AIDS

26 HIV can be spread by shaking hands

Right	Wrong		

27 HIV can be passed on to another person during sex

Right	Wrong		

28 Pregnant women can pass HIV on to their unborn child

Right	Wrong		

29 A person can get HIV by donating blood

Right	Wrong		

30 It is possible to get HIV from a toilet seat

Right	Wrong		

31 HIV is spread by kissing

Right	Wrong		

32 HIV is carried in the blood

Right	Wrong		

33 Drug users can pass HIV to other drug users if they share needles

Right	Wrong		

34 Only men can become infected by HIV

Right	Wrong		

35 If you are strong and healthy, you cannot get HIV

Right	Wrong		

36 You can tell by looking at someone whether that person has HIV

Right	Wrong		

37 You are safe from HIV if you cut your skin with a knife used by someone else who cut themselves

Right	Wrong		

38 You are safe from HIV if you use the same condom more than once

Right	Wrong		

39 The risk of getting HIV increases if you have many sexual partners

Right	Wrong		

40 It is ok to share bed clothes and dishes with someone who has HIV and AIDS

Right	Wrong		

41 It is OK to share razors with someone who have HIV and AIDS

Right	Wrong		

42 Young people are at risk from HIV

Right	Wrong		

43 During menstruation the risk of getting HIV through unprotected sex is higher

Right	Wrong		

APPENDIX 2

CONSENT FORM

THE EVALUATION OF A HIV AND AIDS PILOT, MODULAR TRAINING PROGRAMME FOR FIRST-YEAR TEACHER EDUCATION STUDENTS AT THE CUT

CONSENT FORM

THE FORMATIVE EVALUATION OF A HIV/AIDS MODULE FOR FIRST-YEAR TEACHER EDUCATION STUDENTS AT THE CUT

Declaration by or on behalf of the Participant:

Respondent number						

A. I, the undersigned confirm that:

1. I have been asked to participate in the above-mentioned research survey conducted by a MA (HES) student enrolled at the University of the Free State (UFS).

2. It has been explained to me that:

2.1 The purpose of the research survey is to collect information related to the learning content and applicability of the HIV/AIDS module and reader subscribed for this compulsory course. The information required would assist to determine the relative worth of the module for future Teacher Education students.

2.2 In order to collect the necessary information I have been informed that I will be asked a number of questions regarding:

- Biographical details
- That the questionnaire measures my knowledge and attitude in dealing positively with HIV and AIDS.

2.3 I have been informed that the information collected from all first-year Teacher Education students at the CUT is a once-off project only.

2.4 I have been informed that collecting the information would not take more than 60 minutes.

3. It was explained to me that by participating in the study, I would help future Teacher Education students.

4. It was explained to me that the information collected will be kept confidential and that it will be used anonymously for disseminating findings to other educationists.

5. I do understand that I will not have direct access to the results of the survey. However, I may contact the researcher who will inform me of the findings.

6. It was also clearly explained to me that I can refuse to participate in this research survey. Should I refuse, it will not be held against me in any way.

7. The information in this document was explained to me by Mr Nel in English or Afrikaans and I confirm that I have a good command of this language and understand the explanations. I was also given the opportunity to ask questions on thing I did not understand clearly.

8. No pressure was applied on me to take part in this research survey.

B. I hereby agree voluntary to take part in this research survey.

Signed/confirmed at Bloemfontein on …….

…… ……

Signature of Participant Signature of Witness