

**AN ANALYSIS OF THE INTEGRATION OF HIV AND AIDS EDUCATION  
IN TEACHERS EDUCATION PROGRAMMES OF ZAMBIA: A CASE OF  
FOUR SELECTED COLLEGES OF EDUCATION**

**BY  
EDITH JERE-BEDDING**

**A Thesis Submitted to the University of Zambia in Fulfilment of the  
Requirement for the Award of Degree of Doctor of Philosophy in Sociology  
of Education**

**THE UNIVERSITY OF ZAMBIA**

**LUSAKA**

**2020**

## **COPYRIGHT**

All rights reserved. No part of this thesis may be reproduced, stored in any retrieval system, otherwise, without prior written permission of the author or the University of Zambia.

© Edith Jere-Bedding, 2020

## DECLARATION

I, **Edith Jere-Bedding**, do hereby solemnly declare that this thesis represents my own work, except where otherwise acknowledged and that it has never been previously submitted for a degree at the University of Zambia or any other University.

Signature: .....

Date: .....

## **APPROVAL**

This thesis of Edith Jere-Bedding is hereby approved as fulfilling the requirements for a degree of Doctor of Philosophy in Sociology of Education by the University of Zambia.

### **EXAMINERS' SIGNATURES**

**Internal Examiner 1.** ..... **Signature:** ..... **Date:**.....

**Internal Examiner 2.** ..... **Signature:** ..... **Date:** .....

**External Examiner:** ..... **Signature:** ..... **Date:** .....

**Chairperson Board of  
Examiners:** ..... **Signature:** ..... **Date:** .....

**Supervisor:** ..... **Signature:** ..... **Date:** .....

## **DEDICATION**

This Thesis is dedicated to the memory of my father - Mr Philip Maguya Jere, my three brothers Lucky Maguya Jere, Patrick Maguya Jere and Christopher Maguya Jere, my two sisters Kesiwe Maguya Jere Mfula and Dora Maguya Jere Mwale for the wonderful cherished memories of reassurance. The inspiration they all gave me, is what invigorated me to complete this thesis. I loved them all so deeply. May their souls continue to rest in perfect peace, AMEN.

## **ACKNOWLEDGEMENTS**

Writing this thesis has been a very thought-provoking journey for me. The Almighty God has been my guide, my El Shaddai, Adonai, Ebenezer; omnipresent and omniscient in my life, without whom I would not have completed my studies.

I would also like to express my profound gratitude to all my friends, family, colleagues, organisations and various stakeholders without whom I would not have made this remarkable journey. It is with a lot of gratitude that I mention the following:

My two supervisors - Principal Supervisor, Dr Oswell C. Chakulimba, and Co-Supervisor, Dr Emmy H. Mbozi. Dr Emmy Mbozi was an inspiration and a wonderful mentor who was so willing to share her academic experiences with me without being tight-fisted with information. I enjoyed listening to her wisdom. Dr Chakulimba was so thorough that I sometimes thought he was taking too long to go through my thesis, now I know better, because it was all for a good reason and I am extremely happy that he was thorough. The guidance, patience and encouragement that they both gave me is more than I can say. Dr Martha Banda, Dr Innocent Mulenga, Dr Bibian Kalinde, Dr Magdalene Simalalo, and Dr Ebby Mubanga who shared their very valuable expertise in research methods and I undeniably appreciate your contributions colleagues.

Gratitude is extended to the participants who took part in this research study and showed a lot of commitment and support by providing me with the relevant information that permitted me to complete this study. My gratitude also goes to the University of Zambia for funding this study. Finally my special thanks go to my spouse Ramap, my children, Nanpyal, Tawonga and Yahnan Bedding for their selfless support, love, prayers and encouragement without which this study would not have been possible. You are the best guys, thank you. To God be the Glory, Amen.

## TABLE OF CONTENTS

<b>COPYRIGHT .....</b>	<b>ii</b>
<b>DECLARATION.....</b>	<b>iii</b>
<b>APPROVAL.....</b>	<b>iv</b>
<b>DEDICATION .....</b>	<b>v</b>
<b>ACKNOWLEDGEMENTS.....</b>	<b>vi</b>
<b>TABLE OF CONTENTS .....</b>	<b>vii</b>
<b>LIST OF TABLES.....</b>	<b>xiii</b>
<b>LIST OF FIGURES.....</b>	<b>xiv</b>
<b>LIST OF APPENDICES .....</b>	<b>xv</b>
<b>ACRONYMS.....</b>	<b>xvi</b>
<b>OPERATIONAL DEFINITION OF TERMS.....</b>	<b>xix</b>
<b>ABSTRACT .....</b>	<b>xxi</b>

<b>CHAPTER ONE: INTRODUCTION .....</b>	<b>1</b>
1.1 Overview .....	1
1.2. Background to the Study .....	1
1.3 Statement of the Problem .....	8
1.4 Purpose of the Study .....	9
1.5 Objectives of the Study .....	9
1.6 Research Questions .....	9
1.7 Significance of the Study in Relation to Sociology of Education .....	10
1.8 Delimitations of the Study .....	11
1.9 Organisation of the Thesis .....	11
1.10 Summary of the Chapter .....	12
<b>CHAPTER TWO: THEORETICAL FRAMEWORK .....</b>	<b>13</b>
2.1 Introduction .....	13
2.2 Constructivism Theory .....	13
2.3 Principles of Constructivist Learning .....	15
2.4 The CIPP Evaluation Model .....	18
2.5 Conceptual Framework - CIPP Model of Evaluation .....	18
2.6 Summary to the Chapter .....	24
<b>CHAPTER THREE: LITERATURE REVIEW .....</b>	<b>25</b>
3.1 Introduction .....	25
3.2 Primary and Secondary Teacher Education Programmes .....	25
3.3 Integration of HIV and AIDS Education in this Study .....	26
3.4 History of HIV and AIDS in Zambia .....	27

3.5	Global information on HIV and AIDS .....	30
3.6	The Zambian Government response to the Pandemic .....	32
3.7	Policies in Zambia .....	33
3.7.1	Education for All (EFA, 2015) .....	33
3.7.2	Zambia Education Curriculum Framework, 2013 .....	34
3.7.3	The Education Act – 2011 .....	34
3.7.4	Education Sector National Implementation Framework Document (ESNIF) .....	34
3.7.5	The Zambian Basic Education Sub-Sector Investment Programme (BESSIP) .....	35
3.8	Integration of HIV and AIDS studies in selected countries of the world .....	35
3.9	Background to the Integration of HIV and AIDS Education in Zambian Colleges of Education.....	43
3.10	Tool 5-1 Integrating HIV and AIDS Education in the Official Curriculum – IBE- UNESCO .....	44
3.11	Tool 5-1: Key Features, Main Advantages and Challenges of Main Curricular Approaches to Integrating HIV and AIDS Education into the Curriculum .....	45
3.12	Tool 5-2: Key Implementation Issues of Main Curricular Approaches to Integrating HIV and AIDS Education into the Curriculum .....	46
3.13	Global Efforts in Alleviating HIV and AIDS in the Education Sector .....	46
3.14	Research studies done on the integration of HIV and AIDS Education in Colleges of Education of Zambia .....	47
3.15	Community Health and Nutrition, Gender and Education Support–2 (CHANGES-2) Contribution to the Integration of HIV and AIDS Education .....	49
3.16	Appropriateness of Content .....	51
3.17	Methodology .....	52
3.18	Assessments .....	53
3.19	Summary to the Chapter .....	54
<b>CHAPTER FOUR: METHODOLOGY .....</b>	<b>55</b>	
4.1	Introduction .....	55
4.2	Constructivism Philosophical Paradigm .....	55
4.3	Research Design .....	56
4.4	Study Sites .....	57
4.5	Target Population .....	63
4.6	Study Sample .....	63
4.7	Sampling Technique .....	64
4.8	Pilot Study .....	65
4.9	Data Collection Instruments .....	66
4.9.1.	Questionnaires .....	67
4.9.2	Structured Interviews .....	67
4.10	Data Analysis .....	68
4.11	Ethical Considerations .....	69
4.12	Limitations of the Study .....	70

4.13	Enhancing the Quality of the Study .....	70
4.14	Summary of the Chapter .....	72

## **CHAPTER FIVE: PRESENTATION OF FINDINGS ..... 73**

5.1	Introduction .....	73
5.2	<b>Theme 1:</b> The Views of Lecturers, Teacher Trainees and Graduates on the Appropriateness of Content, Methods of Teaching and Learner Assessment as Elements that Support the Integration of HIV and AIDS Education in Teacher Education Programmes .....	73
5.2.1	Content .....	75
5.2.1.1	Content in Different Subject Areas Taught in Colleges of Education and Analysed in this Study .....	76
5.2.2	Methodology of Teaching .....	84
5.2.3	Learner Assessments .....	88
5.3	<b>Theme 2:</b> Teacher Trainees Understanding of the Phenomenon of the Integration of HIV and AIDS Education in Teacher Education Programmes .....	89
5.3.1	Extent of the Integration .....	90
5.3.2	Teaching Materials .....	91
5.3.3	Sexuality .....	91
5.3.4	Time Allocated to Teaching on HIV and AIDS Education .....	91
5.3.5	Cross Cutting Issue .....	92
5.3.6	Expertise .....	93
5.4	<b>Theme 3:</b> Graduate Teachers Practice of the Integration of HIV and AIDS Education in the Schools where they are Serving .....	93
5.4.1	HIV and AIDS Support to Infected Children .....	93
5.4.2	Availability of HIV and AIDS Information .....	94
5.4.3	Pressure from Colleagues on the Importance of Teaching HIV and AIDS Education .....	94
5.5	<b>Theme 4:</b> Challenges Faced By Lecturers in Teaching Integrated HIV and AIDS Education in Teacher Education Programmes .....	95
5.5.1	The Status of Teachers as One of the challenges in the Integration of HIV and AIDS Education in Teacher Education Programmes .....	96
5.5.2.	Marital Status as a Challenge in the Integration of HIV and AIDS Education in Teacher Education Programmes .....	96
5.5.3	Behavioural Changes as a Challenge in the Integration of HIV and AIDS Education in the Teacher Education Programmes .....	97
5.5.4	Integrated Content Prepares Teacher Trainees to Effectively Teach on HIV and AIDS Education .....	99
5.5.5	Integration of HIV and AIDS Education is the Best Way of Delivering HIV and AIDS Education to Teacher Trainees .....	99

5.5.6	Administrative challenges in the integration of HIV and AIDS Education in teacher education programmes .....	100
5.5.7	Consultations done on the integration among the lecturers as another challenge in the integration of HIV and AIDS Education in teacher education programmes .....	100
5.6	<b>Theme 5:</b> Views of stakeholders regarding the various modes of integrating HIV and AIDS Education in Teacher Education Programmes .....	102
5.6.1	Ministry of Education Partners .....	104
5.6.2	Cultural Beliefs .....	105
5.6.3	Extent of the Integration.....	105
5.6.4	Not Examinable .....	107
5.6.5	NGO–Restless Development .....	108
	5.5.5.1. Colleges of Education.....	108
	5.5.5.2 Information Sharing .....	108
	5.5.5.3 Extent of the Integration.....	109
	5.5.5.4 Partnership.....	109
5.6.6	Improvements that the Integration of HIV and AIDS Education has Brought in the Teacher Education Programmes .....	110
5.6.7	Rate of the Current Impact of HIV and AIDS Education .....	110
5.6.8	Summary .....	111
	<b>CHAPTER SIX: DISCUSSION OF FINDINGS .....</b>	<b>112</b>
6.1	Introduction .....	112
6.2	<b>Objective 1:</b> What are the Views of Lecturers, Teacher Trainees and Graduates on the Appropriateness of Content, Methods of Teaching and Learner Assessment as Elements that Support the Integration of HIV and AIDS Education in Teacher Education Programmes? .....	112
6.2.1	Appropriateness of Content .....	113
6.2.2	Methods used in Teaching HIV and AIDS Education .....	118
6.2.3	Learner Assessments .....	120
6.3	<b>Objective 2:</b> How do Teacher Trainees Understand the Phenomenon of the Integration of HIV and AIDS Education in Teacher Training Programmes .....	121
6.3.1	The Extent of the Integration .....	121
6.3.2	Teaching Young Ones .....	122
6.3.3	Acquisition of Knowledge on HIV and AIDS Education .....	123
6.3.4	Teaching of Sexuality Education Among the Young Learners .....	123
6.3.5	Peer educators .....	124
6.4	<b>Objective 3:</b> How do the Graduates Practice the Integration of HIV and AIDS Education in Schools where they are Serving? .....	125
6.4.1	Application of the Integration .....	125

6.4.2	Extent to which the Integration is Experienced .....	126
6.4.3	HIV and AIDS Support to Infected Children .....	127
6.4.4	Accessibility of Teaching Materials .....	127
6.4.5	Administrative Influence .....	128
6.4.6	Availability of HIV and AIDS Information .....	128
6.4.7	Pressure from Colleagues on the Importance of HIV and AIDS Education.....	129
6.4.8	Children with Special Needs .....	129
6.5	<b>Objective 4: What Challenges do Lecturers Face in Teaching Integrated HIV and AIDS Education in Teacher Education Programmes?</b> .....	130
6.5.1	The Extent of the Integration .....	130
6.5.2	Physical Education.....	131
6.5.3	Methods used in teaching HIV and AIDS Education in Colleges of Education .....	132
6.5.4	The Integration of HIV and AIDS Education into the New Curriculum ...	132
6.5.5	Integration of HIV and AIDS in Different Subject Areas .....	133
6.5.6	Different approaches of integrating HIV and AIDS Education in the Two Teacher Education Programmes. ....	134
6.5.7	Negative Pressure from Colleagues on the Teaching of HIV and AIDS Education .....	136
6.5.8	Marital Status .....	137
6.6	<b>Objective 5: What are the Views of Stakeholders Regarding the Various Modes of Integrating HIV and AIDS Education into Teacher Education Programmes?</b> .....	139
6.6.1	Core subject areas .....	139
6.6.2	Time allocated for the teaching of HIV and AIDS Education .....	140
6.6.3	Teaching materials .....	141
6.6.4	Accessibility of Teaching Materials .....	142
6.6.5	Application of the Integration .....	143
6.6.6	Extent to which the Integration is Experienced .....	143
6.6.7	HIV and AIDS Support to Infected Children .....	145
6.6.8	Administrative Influence .....	145
6.6.9	Pressure from Colleagues on the Importance of HIV and AIDS .....	146
6.6.10	The HIV and AIDS Status of Teachers .....	146
6.6.11	Methods of Teaching .....	147
6.6.12	Sexuality Education .....	147
6.6.13	Acquisition of Knowledge on HIV and AIDS Education .....	148
6.6.14	Religious Beliefs and Cultural Beliefs .....	148
6.7	Student's Role in the Learning Process According to Bruner, 1960 .....	149
6.8	Summary of the Discussion .....	151

<b>CHAPTER SEVEN: CONCLUSION AND RECOMMENDATIONS .....</b>	<b>154</b>
7.1 Overview .....	154
7.2 The Main Research Findings and Conclusion .....	154
7.3 Practical Implications of the Study .....	157
7.4 Theoretical Implication of the Study – Constructivism Theory .....	159
7.5 Conceptual Framework Implication of the Study – Context, Input, Process and Product (CIPP) Evaluation Model .....	160
7.6 Contribution to Science .....	161
7.7 Recommendations of the Study .....	161
7.8 Areas for Future Research .....	162
<b>REFERENCES .....</b>	<b>163</b>
<b>APPENDICES .....</b>	<b>174</b>

## LIST OF TABLES

<b>Table 1:</b>	Grouping of Subjects Study Areas.....	2
<b>Table 2:</b>	Percentage of Women and Men 15-49 with Comprehensive Knowledge about AIDS by Province, DHS 2007 and 2013-14 .....	4
<b>Table 3:</b>	The Statistics of HIV and AIDS in East and Southern as at 2002.....	27
<b>Table 4:</b>	Country Profile: Kenya's Record on HIV and AIDS Training .....	37
<b>Table 5:</b>	Burkina Faso: Country Profile on HIV and AIDS Training .....	42
<b>Table 6:</b>	Background Information of Colleges of Education Chosen for the Study.....	58
<b>Table 7:</b>	Background Information of Head/Lecturers Interviewed (College A).....	59
<b>Table 8:</b>	Background Information of Head/Lecturers Interviewed (College B) .....	60
<b>Table 9:</b>	Background Information of Head/Lecturers Interviewed (College C).....	61
<b>Table 10:</b>	Background Information of Head/Lecturers Interviewed (College D) .....	62
<b>Table 11:</b>	Gender.....	64
<b>Table 12:</b>	Marital Status.....	64
<b>Table 13:</b>	Views from Lecturers on the Appropriateness of Content, Methods of Teaching and Learner Assessments as Elements that Support the Integration of HIV and AIDS Education .....	74
<b>Table 14:</b>	Do Lecturers Teach HIV and AIDS Related Topics to Students.....	75
<b>Table 15:</b>	Adequately Packaged Content for Teacher Trainees.....	75
<b>Table 16:</b>	The Integration of HIV and AIDS.....	82
<b>Table 17:</b>	Content Knowledge on HIV and AIDS Education .....	83
<b>Table 18:</b>	Responses of Teacher Trainees Understanding of the Integration.....	89
<b>Table 19:</b>	Focus Group Discussants Profile.....	90
<b>Table 20:</b>	Cultural Factors that Make Lecturers to Feel Uncomfortable to Teach on HIV and AIDS.....	102
<b>Table 21:</b>	Government's Responses to the Integration.....	103
<b>Table 22:</b>	Views on HIV and AIDS Prevention Education Being Conducted.....	103
<b>Table 23:</b>	Profile for Stakeholders.....	104
<b>Table 24:</b>	Profile for the Graduates.....	125

## LIST OF FIGURES

<b>Figure 1:</b>	CHANGES - 2 Colleges of Education Support Model .....	6
<b>Figure 2:</b>	The Principles of the Constructivism Theory .....	16
<b>Figure 3:</b>	CIPP Evaluation Model (Stufflebeam, 1983) .....	19
<b>Figure 4:</b>	The Modified CIPP Evaluation Model .....	23
<b>Figure 5:</b>	Map of Zambia and its Provinces .....	58
<b>Figure 6:</b>	Methods Lecturer's Use to Teach HIV and AIDS Education .....	84
<b>Figure 7:</b>	Game of Agode, Agode: Being Played by Teacher Trainees from College ...	86
<b>Figure 8:</b>	Game of Shomba: Being Played by Teacher Trainees from College B.....	87
<b>Figure 9:</b>	Challenges Lecturers Experience with the Integration.....	95
<b>Figure 10:</b>	Lecturers Comfortability in Delivering Lecturers on HIV and AIDS.....	101
<b>Figure 11:</b>	Model for Stand-Alone Approach.....	157

## **LIST OF APPENDICES**

<b>Appendix 1:</b> Letter from the Head of EPSSE Department .....	174
<b>Appendix 2:</b> Letter from Dean Postgraduate .....	175
<b>Appendix 3:</b> Information Sheet .....	176
<b>Appendix 4:</b> Consent Form .....	178
<b>Appendix 5:</b> Letter Requesting one to Participate in the Study .....	180
<b>Appendix 6:</b> Focus Group Discussion (FGD) Guide for Teacher Trainees .....	182
<b>Appendix 7:</b> Advisory Unit Colleges of Education Questionnaire .....	184
<b>Appendix 8:</b> Interview Guide for Ministry Senior Officials .....	189
<b>Appendix 9:</b> Interview Guide for Principals of Colleges and Lecturers.....	191
<b>Appendix 10:</b> Interview Guide for Graduates.....	193
<b>Appendix 11:</b> Exemption Ethics Letter.....	195
<b>Appendix 12:</b> Abservational Check List .....	197
<b>Appendix 13:</b> Game of AgodeAgode (observed lesson) .....	198
<b>Appendix 14:</b> Game of Shomba (observed lesson) .....	199
<b>Appendix 15:</b> Administration Block – College of Education .....	200
<b>Appendix 16:</b> Table 5-1 - Main Curricular Approaches .....	201
<b>Appendix 17:</b> Table 5-2 - Key Implimentation Issues .....	203
<b>Appendix 18:</b> Timeline of the integration of HIV and AIDS Education .....	207

## ACRONYMS

AB	Abstinence and/or Be faithful
ADEA	Association for the Development of Education in Africa
AEI	Africa Education Initiative
AIDS	Acquired Immune Deficiency Syndrome
AIR	American Institute for Research
ART	Antiretroviral Treatment
ARV	Antiretroviral
AUCE	Advisory Unit for Colleges of Education
CDC	Curriculum Development Centre
CHANGES-2	Community Health and Nutrition, Gender and Education Support-2
CoE	College of Education
CSO	Central Statistical Office
DA	Development Assistance
DEBS	District Education Board Secretary
EFA	Education for All
EI	Education International
EO	Education Officer
ESF	Economic Support Fund
EDC	Education Development Centre
EMIS	Education management Information System
FAWEZA	Education for African Women Educationalist in Zambia
FTI	Fast Track Initiative
FGD	Focus Group Discussion
FNDP	Fifth National Development Plan
GMR	Global Monitoring Report
GRZ	Government of Republic of Zambia
HATEC	HIV and AIDS Teacher Education Course

HE	Higher Education
HDI	Human Development Index
HIV	Human Immuno-Deficiency Virus
HIPC	Heavily Indebted poor Countries
IBE	International Bureau Education for Education
IATT	Inter Agency Task Team
IEC	Information Education Communication
ILO	International Labour organisation
JTCC	Jeanes Training Centre for Community Teachers
MDGs	Millennium Development Goals
MoE	Ministry of Education
MoEZ	Ministry of Education in Zambia
MoH	Ministry of Health
NAC	National AIDS/STD and TB Council
NISTICOL	National In-service Teachers College
NGO	Non-Governmental Organisation
OVC	Orphans and Vulnerable Children
PEPFAR	President's Emergency Plan for AIDS Relief
PLWA	People Living with AIDS
PLWHA	People Living with HIV and AIDS
PRSP	Poverty Reduction Strategy Paper
RID	Rapid Infrastructure Development
SACMEQ	Southern and Eastern Africa Consortium for Monitoring Educational Quality
SADC	Southern African Development Community
SEN	Special Education Needs
SEO	Senior Education Officer
SCP	School Community Partnership
SHN	School Health and Nutrition
SNDP	Sixth National Development Plan

SPRINT	School Programme of In-Service of the Term
SPW	Student Partnership Worldwide
SRH	Sexual Reproductive Health
STI	Sexually Transmitted Infection
TED	Teacher Education Department
TESS	Teacher Education Specialized Services
TTC	Teacher Training College
TTISSA	Teacher Training Initiative for sub-Saharan Africa
TVTC	Technical and Vocational Teachers College
TWH	Teaching in the Window of Hope
UCS	University College Status
UNAIDS	Joint United Nations Programme of HIV and AIDS
UNESCO	United Nations Scientific, Cultural and Scientific Organisation
UNGASS	The United Nations General Assembly Special Session on HIV and AIDS
UNICEF	United Nations Children Fund
UNZA	University of Zambia
USAID	United States Agency for International Development
VCCT	Voluntary Confidential Counselling and Testing
WHO	World Health Organisation
ZATEC	Zambia Teacher Education Course
ZAOU	Zambia Open University
ZNAN	Zambia National Aids Network
MoGE	Ministry of General Education

## **OPERATIONAL DEFINITION OF TERMS**

<b>Integration:</b>	The term integration literally means "to combine into a whole." Thus, when integrating HIV and AIDS, the emphasis is on a comprehensive understanding of a "whole," rather than many unrelated "parts."
<b>Constructivism:</b>	Here teachers and students work together to build an education based upon what students' experiences are and what they know, so that learning becomes meaningful.
<b>Learning:</b>	A relatively permanent change in behaviour that occurs as a result of experience.
<b>Analysis:</b>	This is the examination of the Integration of HIV and AIDS Education.
<b>Colleges of Education:</b>	Institutions which offer careers in teaching that were sampled in this study.
<b>Institution:</b>	Is an establishment, foundation, or organisation created to pursue a particular type of endeavour, such as education.
<b>Education:</b>	A process through which a society's way of life in terms of knowledge skills and moral values are passed on to the incoming generation.
<b>Educator:</b>	Any trained or untrained person teaching in the primary, secondary or teacher training sub-sectors or any other programmes falling under the jurisdiction of the Ministry of Education.
<b>AIDS:</b>	Is the final phase of HIV infection and is a condition which is characterised by a combination of signs and symptoms caused by HIV which attacks and weakens the immune system of the body, making the affected person to be susceptible to other life threatening diseases.
<b>Child:</b>	A person below the age of 18years.
<b>Anti-Retroviral:</b>	A class of drugs that inhibit retroviruses like HIV.

**Learner:** Any child or adult enrolled in an education programme falling under the jurisdiction of the Ministry of Education.

**Peer Educator:** A person, child or adult trained or equipped to train or support another person equal in rank merit or age.

**Workplace:** Refers to occupational settings, stations and places where workers find time for employment. Schools and other institutions of learning are also considered to be work places.

**Co-Curriculum:** Play and educational activities that complement academic learning.

### **Cross-cutting**

**Issues:** Issues of national concern which affect all people such as democracy, good governance, gender equality, sustainable environment, life skills and HIV and AIDS.

**Curriculum:** Refers to prescribed programmes of study for learners in tertiary teacher education institutions of learning.

### **School**

**Experience:** This is a programme in which teacher trainees undertake school based teaching.

## ABSTRACT

This study was conducted to analyse the integration of Human Immuno-Deficiency Virus (HIV) and Acquired Immuno Deficiency Syndrome (AIDS) Education in two Teacher Education Programmes in Four (4) Zambian Colleges of Education. The objectives were firstly, to collect views from lecturers, teacher trainees, graduates and stakeholders on the appropriateness of content, methodology and learner assessment elements that support the integration of HIV and AIDS Education in Teacher Education Programmes. Secondly, to investigate how teacher trainees in Colleges of Education understood the phenomenon of integration of HIV and AIDS Education in the curriculum. In order to conceptualise the study, the Context, Input, Process and Product (CIPP) conceptual framework and the constructivism theory were used. The study employed the constructivism philosophical paradigm in which the descriptive survey research design was selected as being most appropriate. Since the study was qualitatively oriented, it was more interactive and the researcher interacted with the participants in their own natural setting. The non-probability sampling method based on non-random sampling method, and the purposive sampling technique were also used. The sample size was n=90 participants.

Data were collected through questionnaires, structured interview guides, focus group discussion guides and lecture observation checklist. The secondary data were derived from journal articles, books and reports. Data was processed using Qualitative Solutions and Research (QSR) International NVIVO 11, and a Statistical Package for Social Sciences (SPSS) version 16 to present descriptive statistics. The study established, among other issues, that HIV and AIDS Education were partially integrated in most subjects in teacher Education Programmes and were presented as cross cutting issues. Other constraints were inadequate teaching time allocated to teaching HIV and AIDS Education, negative attitudes of some administrators, inadequate teaching and learning materials among other things. The study recommended inter alia that the Ministry of Education with the help of experts on HIV and AIDS Education train more peer educators to help deliver the course and to also consider opening up units or departments to handle HIV and AIDS issues in Colleges of Education. Another submission was that, the Ministry of General Education should also consider employing Colleges of Education to teach HIV and AIDS Education as stand-alone subjects.

The study further proposed the teaching of HIV and AIDS as stand-alone subjects to be dealt with in the two Teacher Education Programmes. The proposed Model of the Stand-Alone approach is provided in this thesis.

**Keywords:** Integration, HIV and AIDS, Zambian Colleges of Education, Teacher Education Programmes, Cross-cutting Issues.

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Overview**

This chapter presents the background to the study, the statement of the problem, purpose of the study, research objectives, research questions, significance of the study, delimitations of the study, operational definition of terms, organisation of the thesis and finally a summary structure of this chapter.

### **1.2 Background to the Study**

The loss of teachers, and other educators at all levels of the education sector due to lack of quality education in terms of skills, knowledge and awareness information on Human Immuno-Deficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) have very severe consequences. Despite significant global efforts to mitigate HIV and AIDS, these epidemics continue to present serious problems to the human race. HIV and AIDS have claimed many productive individual lives, including teachers, administrators, and parents, leaving millions of young and old people traumatised and orphaned (Mugimu and Nabadda, 2009). Ministries of Education in Africa are all taking on responsibility for identifying and driving education responses to HIV and AIDS, and Zambia is no exception.

The late President, Nelson Mandela, of South Africa, at the close of the XIII<sup>th</sup> International HIV and AIDS Conference which was held in Durban in 2000, also alluded to the fact that the time to deal with the issue of HIV and AIDS was now and not later on (Coombe, 2003). This pronouncement by Nelson Mandela motivated many countries in the southern region of Africa to take action. The Ministry of Education (2002) in its logical framework activity number 2.7, included the integration of HIV and AIDS Education and life skills into the Zambia Teacher Education Course (ZATEC) curriculum as part of its activities for The Zambian Basic Education Sub-Sector Investment Programme (BESSIP) which ran from 2001 to 2006. The Ministry of Education developed an HIV and AIDS policy document which stipulated that the integration of HIV and AIDS Education were better done as cross cutting issues, but placed emphasis on the fact that it be done cautiously.

Zambia Education Curriculum Framework, (2013:24) states that “learning institutions should integrate HIV and AIDS Education into their programmes to allow learners to acquire knowledge, values and skills that they can use in their day to day lives.” In the *Zambian Primary School Teacher’s Course* for lower and middle basic teachers’ programmes the first and second year teacher trainees go for school experience. This is a very important component of teacher preparation. “During this period teacher trainees experience the real school environment and demonstrate progressive proficiency in a variety of learning areas, teaching and professional skills.” (MoESVTEE, 2013: 48). The Pilot phase for *Zambia Teacher Education Course (ZATEC)* was from 1997 to 1999 and it was then taken to full scale from 2000 to 2015, it was being offered in all Basic Colleges of Education. In this course the curriculum was a subject integrated type in which the subjects were grouped into six study areas. Table 1 shows the subjects grouped in six study areas:

**Table 1: Grouping of Subjects Study Areas**

Study Areas	Contributory Subjects
<b>Education Studies</b>	Sociology of Education, Counselling and Placement, Special Education Needs (SEN), Philosophy, Psychology.
<b>Social Spiritual and Moral Education</b>	History, Geography, Civics, Religious Education
<b>Expressive Arts</b>	Art and Design, Music, Physical Education and Dance.
<b>Literacy and Language Education</b>	Local languages (Zambian languages) and English.
<b>Technology Studies</b>	Design, Home Economics, Industrial Arts and Community Studies.
<b>Integrated Science</b>	Integrated Science and Agricultural Science.
<b>Mathematics Education</b>	Mathematics.

*Source: MoE, 2007*

According to Nzioka and Ramos (2008), the six study areas mentioned above also include the integration of HIV and AIDS and Life Skills education. A similar grouping like that of primary schools has also now been generated for secondary and teacher pre-service education. For the Pre-service Primary Teacher Education Course, the Ministry of Education, in 2006, revised the curriculum for integrating HIV and AIDS Education in all the above mentioned six study areas resulting in having seven study areas.

While it is well known that the subject integrated curriculum under the Zambia Teacher Education Course was introduced with a major aim of improving on the quality of Education in Basic Colleges of Education and in the Lower/Middle Basic Schools, many stake holders criticised this arrangement. According to Ministry of Education and DANIDA, ZATEC Tutors Guide (1988), grouping means that the content remains the same but the number of examinations under the grouping is reduced. This revision places emphasis on the fact that that now the course would prioritize team planning, team teaching and integrated assessments.

The ZATEC course and the University degree programme in its quest to train teachers in both theory and practice of education, integrated HIV and AIDS Education into the curriculum, as cross cutting issues in all primary education subjects in 2013. In this same vein, the Ministry of Education has gone beyond academic training in the areas of HIV and AIDS Education to integrate counselling and care, targeting the already infected members in the ministry and all other sectors of society including education officers, lecturers, teachers and other working staff (Nzioka and Ramos, 2008). Ramos (2006) in Breidlid, Cheyeka and Farag, (2015) alluded to the fact that adequately trained teachers were instrumental in enhancing HIV and AIDS awareness and in addressing socio-cultural practices that promote unsafe behaviours influencing appropriate transmission of life skills.

The Zambian census of 2000 stated that at the time, the people affected by HIV and AIDS constituted 15 per cent of the Zambian population, amounting to one million, of which 60 per cent were women. It was further reported that the pandemic results increased the number of orphans from 218 in 1995 to 326 orphans aged 10-14, it was also reported that the proportion of children who were orphaned increased with age (MOSYCD, 2004). By 2002 there were 600,000 orphaned children in the country. UN-Habitat (2005) further postulated that by 2014, about 974,000 children could be orphaned.

The Zambia Country Report to the United Nations, General Assembly Special Session on HIV and AIDS, (2015), reported that the number of victims were high in the urban areas of Lusaka and Copperbelt provinces. Kapungwe (2009) estimated that from 2006, the HIV positive cases were 5 per cent in the age group 15-19 years, 25 per cent from 30-34 years and 17 per cent from 45 to 49 years. He further reported that HIV was more prevalent in urban

areas compared to rural areas, and that, the increased mortality rate was 94,055 from all the nine provinces in 2010 and this number decreased to 19,000 in 2014. This was due to the increased access to ‘Antiretroviral Therapy’ (ART). It was anticipated that this number would decrease further by 2017. The Government of Zambia by 2002 had created a mission to make ‘Antiretroviral Therapy’ available for every individual. By 2005 the Government made ‘Antiretroviral Treatment’ free for every individual (ZCSO, 2000). Despite the decrease in mortality rates of HIV and AIDS pandemic, the serious impact on the education sector was still visible at the time of the study. Boler and Jellema, (2005: 12) stated that “lack of knowledge on the HIV and AIDS had also led to the loss of human capital through death”. The Zambian situation was such that by 2007 most Zambians had started to acquire some knowledge on the pandemic. By 2014 both men and women in almost all the ten provinces had acquired some significant knowledge on HIV and AIDS, as is seen in Table 2.

**Table 2: Percentage of Women and Men 15-49 with Comprehensive Knowledge about AIDS by Province, DHS 2007 and 2013-14**

<b>Province</b>	<b>Women</b>	<b>Men</b>		<b>Women</b>		<b>Men</b>
	<b>2007</b>	<b>2007</b>		<b>2013/2014</b>		<b>2013/2014</b>
<b>Central</b>	32.0	40.1		35.5		43.3
<b>Copperbelt</b>	41.7	52.8		51.3		61.9
<b>Eastern</b>	34.0	28.5		32.9		42.4
<b>Luapula</b>	33.4	33.6		29.8		39.3
<b>Lusaka</b>	43.2	45.4		49.7		57.7
<b>Muchinga*</b>	-	-		37.1		34.3
<b>Northern</b>	27.5	34.0		33.1		37.5
<b>North-western</b>	22.0	34.7		30.8		46.6
<b>Southern</b>	40.7	31.5		58.6		51.5
<b>Western</b>	34.4	26.7		26.7		29.8

\*Was not yet a province in 2007

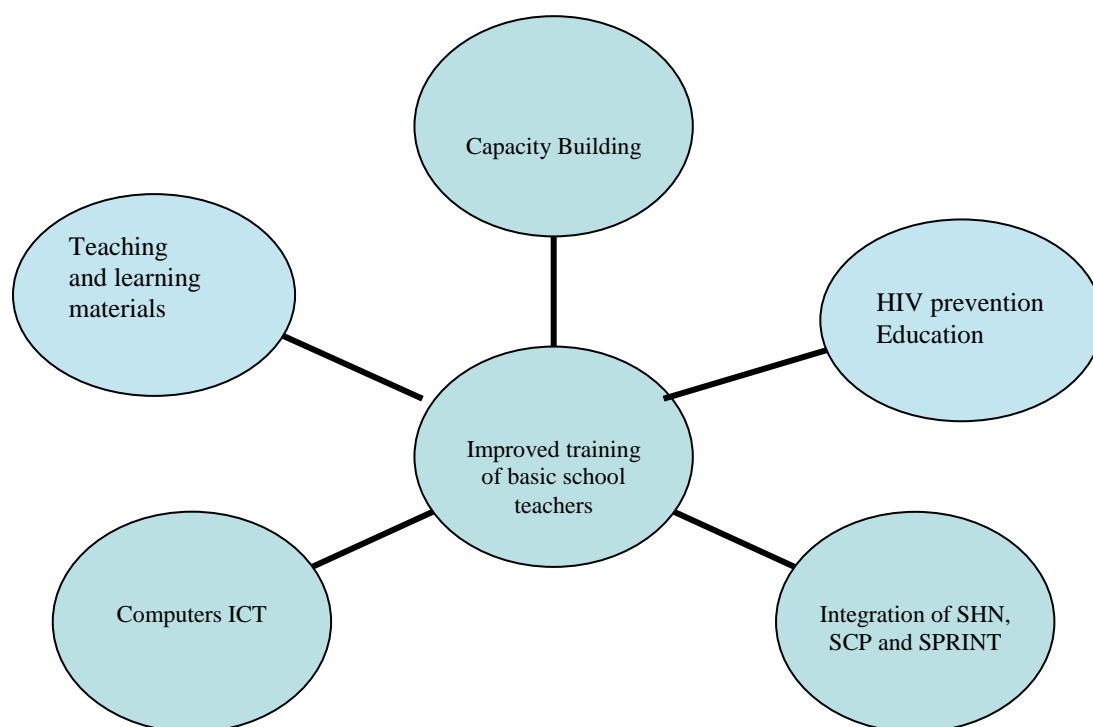
Table 2 above shows that majority of men had knowledge on HIV and AIDS than women, the highest number being 61.9 per cent men to 51.3 per cent women from Copperbelt province during the period 2013 to 2014. In 2007 Copperbelt Province had 41.7 per cent women with comprehensive knowledge on HIV and AIDS and North Western Province showing 22.0 per cent. In the same year, 2007 the picture depicted above was such that Lusaka Province had 45.4 men who had comprehensive knowledge on HIV and AIDS and Western Province had 22.5 per cent men with comprehensive knowledge on HIV and AIDS. In 2013 and 2014, the picture above shows 58.6 per cent women from Southern Province as

having comprehensive knowledge on HIV and AIDS and 26.7 per cent from Western province. In 2013 and 2014, 61.9 per cent men on the Copperbelt had comprehensive knowledge on HIV and AIDS whereas 29.8 per cent men from Western province had less comprehensive knowledge on HIV and AIDS. The summary in the table above shows that the majority of men folk had comprehensive knowledge about HIV and AIDS than the women folk, This is clearly seen during the period 2007 and also in 2013 to 2014.

In 2007, The American Institute of Research (AIR), Community Health and Nutrition, Gender and Education Support – 2 (CHANGES-2) programme was implemented through an EQUIP1 Associate Award. The programme commenced operations in June 2005 and ended in September 2009. CHANGES-2 is said to have received funding from the President's Emergency Plan for AIDS Relief (PEPFAR), the Africa Education Initiative (AEI), Development Assistance (DA), Fast Track Initiative (FTI), and the Economic Support Fund (ESF). As a result of all these different sources of funds, a multi-component programme was developed and implemented, providing the much needed support to the Zambian Ministry of Education (MoE) in addressing Teacher Education, HIV and AIDS Prevention, Support to Orphans and Vulnerable Children (OVC), School Health and Nutrition (SHN), School Community Partnerships (SCP), and Small Grants.

The CHANGES-2 programme provided support to basic schools, community schools, high schools, and Colleges of Education. CHANGES-2's central office was in Lusaka, with provincial offices in Southern, Lusaka, Central, and Copperbelt provinces. USAID in collaboration with the Zambian Ministry of Education (ZMoE) and Teacher Education Specialised Services (TESS) developed, piloted and institutionalized a new HIV and AIDS pre-service course in 2005 called "Teaching in the Window of Hope (TWH)." For the Zambian teachers, the HIV and AIDS Education were tested in Colleges of Education in Zambia. The focus of this programme was to develop the student teachers' skills on how to teach HIV and AIDS related topics in an age appropriate manner when deployed in schools (AIR, 2005). The CHANGES-2 programme started with four Colleges of Education in 2007 and the number grew to ten in 2008. The above programme was meant to help teachers to overcome the many barriers they faced as they implemented classroom-based HIV prevention. This programme was used only in education foundations regarded as Education studies (ES). Teachers in Education Studies were trained at the four Colleges of Education and over 1,000 student teachers were involved in the pilot test. Teams made up of Ministry of

Education and CHANGES-2 staff visited each of the four colleges twice during the year and brought together the tutors twice to discuss issues and challenges. Based on the findings of the pilot test, teaching in the Window of Hope materials were expanded and improved upon and the programme was scaled-up. Figure 1 is the Education support model that was used by CHANGES-2 to address the pandemic.



**Figure 1: Graphics 6.1: CHANGES - 2 Colleges of Education Support Model**

*Source:* EUIP1: By the American Institute for Research

According to the USAID/Zambia CHANGES-2 Programme Final Report, 2005, the Ministry of Education (MoE) Teacher Education Department (TED) requested assistance from CHANGES-2 in addressing the issue of HIV prevention education at the basic Colleges of Education. The report also indicated that prior to 2006 HIV and AIDS was dealt with by the Colleges of Education as an extra-curricular activity with emphasis on the dissemination of

factual information. While such information was considered to be necessary, it was considered to be insufficient for teachers to protect themselves and to also effectively teach prevention in the classroom.

Tutors in the Colleges of Education, teacher trainees and classroom teachers reported that they knew the basic facts about HIV and AIDS but lacked the methodologies and skills to effectively impart this information to their learners on developing life skills for prevention. They further stated that although they knew how HIV was spread, a number of them continued to engage in risky behaviours and underestimated their personal risk to HIV infection. This is what culminated into the partnership of CHANGES-2, Ministry of Education and Colleges of Education in order to develop the programme on Teaching in the Window of Hope (TWH): TWH started from the assumption that, teacher trainees were to be adequately trained to open up dialogue and facilitate the development of life skills for HIV prevention, so as to have a unique opportunity to reach out to the young people before they became sexually active.

Teaching in the Window of Hope attempted to motivate teachers, pupils and communities to examine the cultural and traditional factors within communities which put young people at risk of HIV infection and to develop community responses to lessen this risk. It was reported that as a result of CHANGES-2 and Colleges of Education, HIV Prevention Education was now included in the basic college curriculum in every subject area and was examinable. In addition to teaching HIV and AIDS Education, participatory methodologies were also being used by teacher trainees to give assignments related to Teaching in the Window of Hope, especially when they went for teaching practice. Since 2005, 10,003 teacher trainees at Colleges of Education benefitted from CHANGES-2. The report went further to suggest that as the Colleges of Education moved from certificate training towards diploma and degree training for basic school teachers, HIV prevention education, in the form of materials and methodologies for Teaching in the Window of Hope, should be integrated across all study areas. Many tutors were heavily involved in Teaching in the Window of Hope, from materials development to training and implementation. The report further suggested that those tutors who had excelled and shown commitment towards the CHANGES-2 could be involved in the teaching of HIV and AIDS prevention education (USAID/Zambia CHANGES-2 Report, 2005). The CHANGES-2 work which commenced in 2005 came to an end in 2009.

Looking at what CHANGES-2 did for Zambia, it is still imperative for the Ministry of Education to carry on with the work left by CHANGES-2 by encouraging more teachers to be well trained in HIV and AIDS Education. This could be done through appropriate methods for the acquisition of information and orientation which would later be transmitted to the learners. Empowering learners with useful information on the virus would help information to slip into the communities from where these learners originate.

Whilst USAID ran the Teaching in the Window of Hope programme in 2005 through to 2009, IBE-UNESCO (2006) suggested that the Sexual Reproductive Health (SRH) HIV and AIDS Education could be incorporated in the curriculum in five different approaches as a stand-alone subject; integrated in one-main-carrier subject; a cross-curricular subject; infused through the curriculum and as an extra-curricular topic. Zambia has used one of the approaches suggested by IBE-UNESCO in integrating HIV and AIDS Education as cross cutting issues. This meant that HIV and AIDS cut across all subjects in the Zambian curriculum as recommended by USAID through the American Institute for Research in their Final Report for CHANGES-2. Zambia Education Curriculum Framework (MOESVTEE, 2013) also agreed with this idea of integrating HIV and AIDS in most subject areas in the curriculum. The Zambia Education Curriculum Framework further stated that cross cutting issues when integrated in the curriculum were not to be unduly fragmented or overloaded or else the curriculum would be ineffectively implemented. Carmody (2004) wondered how a clustered curriculum which did not allow coverage of detailed content, skills and methodologies could produce quality teachers, this assertion by Carmody gives justifications as to why the Zambia Education Curriculum Framework was also against the overloading of the curriculum with too much information. Research in Zambia indicates that most Colleges of Education are implementing skills which are related to Reproductive Health and HIV and AIDS Education as cross-cutting issues.

### **1.3 Statement of the Problem**

The integration of HIV and AIDS Education into the Teacher Education Programmes were designed to address the concerns about the high prevalence rates of HIV and AIDS deaths in the education sector and other government sectors across the country, which, in 2015 stood at one million three hundred thousand people living with HIV and AIDS out of an estimated population of 15 million people living in Zambia (UNAIDS, 2015).

Whilst the Zambian government had made efforts to integrate HIV and AIDS Education in Teacher Education Programmes, there was a gap in knowledge due to paucity of empirical research to inform stakeholders on the quality or extent of the integration of HIV and AIDS Education in all the Teacher Education Programmes, consequently necessitating a study in this area.

#### **1.4 Purpose of the Study**

The purpose of this study was to analyse the integration of HIV and AIDS Education in Teacher Education Programmes in Zambia.

#### **1.5 Objectives of the Study**

The objectives of this study were to:

- i. collect views from lecturers, teacher trainees and graduates on the appropriateness of content, methodology and learner assessment elements that support the integration of HIV and AIDS in Teacher Education Programmes.
- ii. investigate how trainee teachers in Colleges of Education understood the phenomenon of integration of HIV and AIDS Education in the curriculum.
- iii. establish how the graduate teachers practiced the integration of HIV and AIDS Education in the schools where they were serving.
- iv. examine the challenges lecturers faced in teaching integrated HIV and AIDS Education in Teacher Education Programmes.
- v. gather views from stakeholders regarding the various modes of integrating HIV and AIDS Education in Teacher Education Programmes.

#### **1.6 Research Questions**

The research questions were formulated in line with the objectives as follows:

- i. How appropriate was the content, methodology and evaluation systems?
- ii. How did trainee teachers in Colleges of Education understand the phenomenon of the integration of HIV and AIDS Education in the curriculum?
- iii. How did the graduate teachers practise the integration of HIV and AIDS Education in schools where they were serving?
- iv. What challenges did lecturers face in teaching integrated HIV and AIDS Education in Teacher Education Programmes?

v. What were the views of stakeholders regarding the various modes of integration?

### **1.7 Significance of the Study in Relation to Sociology of Education**

The HIV and AIDS as social problems affect the structure of family, school, religion, education, politics, economics and health in the wider society. Sociology of Education therefore gives a new and different perspective of looking at problems educationally, socially, economically, psychologically as well as culturally. According to Ballantine and Hammack (2009: 6) “The problems facing our schools reflect the problems in our society.” Consequently integrating HIV and AIDS Education in teacher education would help to solve some of these problems that our society faces today. It has been said by many scholars Ballantine and Hammack inclusive that, sociological research knowledge sheds light on educational issues and thus helps teachers, citizens and policy makers with the decision-making process.

Sociology of Education is defined as a discipline which studies education sociologically and applies sociological principles and methods to the solution of problems such as HIV and AIDS Education in an education system. HIV and AIDS infect and affect any person such as children and adults. Inculcating teacher trainees with HIV and AIDS Education is a step in the right direction, because the repercussions of the pandemic affect the economic stability of any country. Adeyemi and Adeyinka (2003) define education as a condition of human survival, they went further to say that it is the means whereby one generation transmits knowledge and experience which prepares the next generation for life’s duties and pleasures. Integrating HIV and AIDS Education fully into different subject areas could help in the acquisition of knowledge, skills and values which would give more meaning to the eradication of HIV and AIDS from the face of the earth to help make this world a better place for humans to survive in as echoed by Adeyemi and Adeyinka (2003).

This study analysed the integration of HIV and AIDS Education in two Teacher Education Programmes, specifically Primary Teacher Education Course and Secondary Teacher Education Course with a view to enriching all the key stakeholders who are curriculum innovators, implementers, teacher trainees, heads of institutions, policy makers and technocrats with HIV and AIDS Education.

This study made reference to a UNESCO report (2006) which indicated that there was limited available information to date on the integration of HIV and AIDS Education in teacher training programmes and that most of the information that was available did not offer hard data on measuring such programmes for their effectiveness. It was hoped that this study would highlight the challenges that both teacher trainees, lecturers and stakeholders faced as they implemented the integration of HIV and AIDS Education in Colleges of Education. It was further hoped that this study would contribute to the existing global knowledge on the integration of HIV and AIDS Education.

### **1.8 Delimitations of the Study**

This study was limited to the analysis of the integration of HIV and AIDS Education in Colleges of Education of Zambia. The study specifically analysed the views of lecturers, teacher trainees, graduates and stakeholders on the appropriateness of contents, methods of teaching and assessment as elements that support the integration of HIV and AIDS Education. It explicitly included only Colleges of Education that were affiliated to the University of Zambia. This was because the University of Zambia lecturers were part of the participants sampled. The parameters of the population were restricted to seven geographical locations (see Methodology section of this report, page 62 for more details).

### **1.9 Organisation of The Thesis**

This thesis is organised into seven chapters as follows:

Chapter One presents the background to the study, statement of the problem, purpose of the study, objectives and research questions, significance of the study, delimitations of the study, operational definition of terms and organization of the thesis and finally the summary. Chapter Two presents the constructivism theory (1960) and the CIPP model of Daniel Stufflebeam (1986) that directed the study. Chapter Three discusses literature that was relevant to this study. The literature reviewed included studies from other parts of the world pertaining to the analysis of the integration of HIV and AIDS Education in Teacher Training Programmes, Chapter Four presents the description of the research design and methodology. This is followed by Chapter Five

which presents the findings of the study obtained from the questionnaires and structured and semi-structured interviews, Chapter Six presents the discussion of the findings of the results while Chapter Seven presents the conclusion and recommendations of the study.

#### **1.10 Summary of the Chapter**

This chapter presented an introduction on the integration of HIV and AIDS Education. It also tabulated events that led to the integration of HIV and AIDS Education in Teacher Education Programmes in Colleges of Education in Zambia. The purpose of this study was to analyse the integration of HIV and AIDS Education in Teacher Education Programmes in Colleges of Education of Zambia. The chapter stated that HIV and AIDS were taught as cross cutting issues because of the limited available information on how the integration was fairing. This study also made reference to a UNESCO report (2006) which indicated that there was limited available information to date on the integration of HIV and AIDS Education in Teacher Education Programmes and that most of the information that was available did not offer hard data on measuring the effectiveness of such programmes.

## **CHAPTER TWO**

### **THEORETICAL FRAMEWORK**

#### **2.1 Introduction**

This study used the constructivism theory expounded by Jerome Bruner, born in 1915 and died in 2015. In conceptualising this study the Context, Input, Process and Product (CIPP) conceptual framework of Stufflebeam (1983) was also used. The constructivism movement aptly explains that individuals gradually build their own understanding of the world through experience and maturation. The theory and the model have been modified with some other variables which have made it relevant to this study. This next section discusses the constructivism theory.

#### **2.2 Constructivism Theory**

Mascolol and Fischer, (2005) define Constructivism, which is a philosophical and scientific position, as a process of active construction through which knowledge arises. Gall and Borg (2007) also define constructivism as the epistemological doctrine which argues that social reality is constructed differently by different individuals, and that these constructions are transmitted to the wider society by various social agencies and processes. Constructivism argues that there is no single reality, however, people construct their own understanding and knowledge of the world through experiencing things and reflecting on these experiences, this is what later, becomes reality. This means that this theory is based on observations and scientific study about how people learn by stating that people construct knowledge acquired. Knowledge construction is based on personal experiences and continual testing of the hypotheses. Each person interprets knowledge differently based on their past experiences and cultural, and environmental factors. The constructivism theory provides multiple representations of reality which avoid over simplification and represent the complexity of the real world to the society as well as emphasise knowledge construction instead of knowledge reproduction. Constructivism is an educational theory about how we all make sense of our world that has not really changed (Brooks, 1999). These theories also emphasise authentic

tasks in a meaningful context rather than abstract instruction out of context. The theory also helps individuals to learn about environments such as the real world predetermined sequence of instruction and it encourages thoughtful reflection on experience, enables context and content to be dependent on knowledge construction and finally supports collaborative construction of knowledge construction through social negotiation and not competition among learners for recognition.

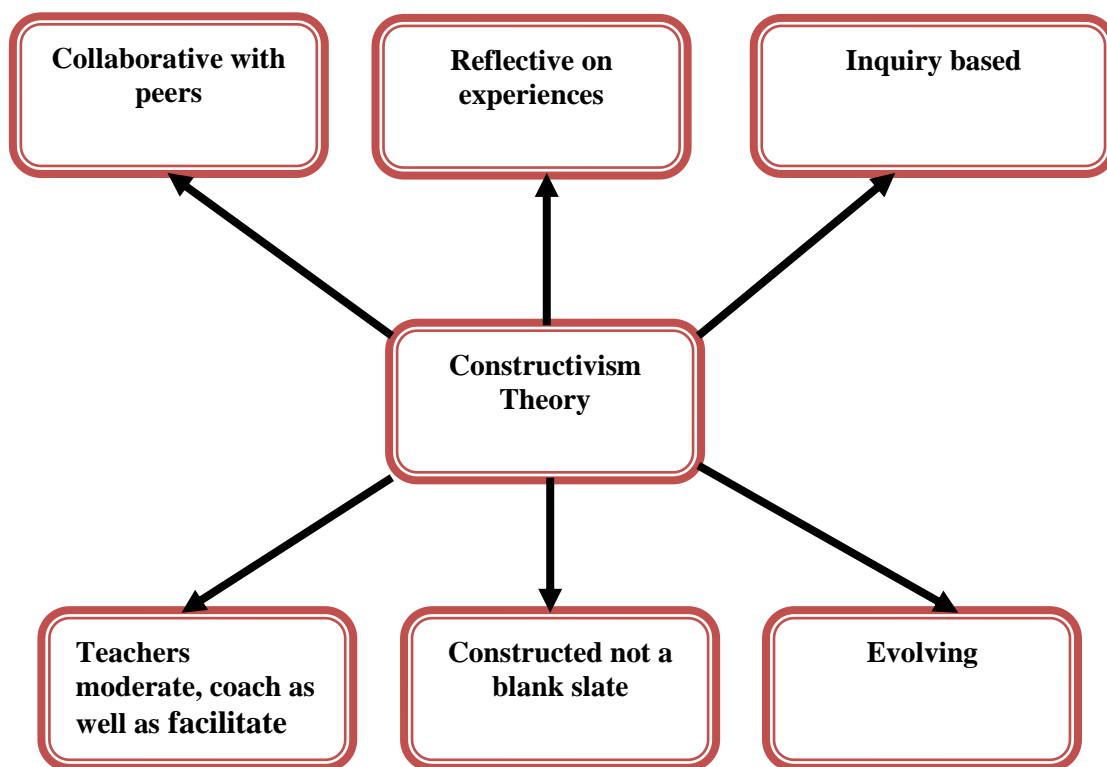
This study used the constructivism theory in its quest to analyse HIV and AIDS Education in Teacher Education Programmes. The constructivism learning theory argues that people produce knowledge and form meaning based upon their experiences. Two of the key concepts within the constructivism learning theory which create the construction of an individual's new knowledge are accommodation and assimilation. Assimilating causes an individual to incorporate new experiences into the old experiences. This causes the individual to develop new outlooks, rethink what were once misunderstandings, and evaluate what is important, ultimately altering their perceptions. Accommodation, on the other hand, is reframing the world and new experiences into the mental capacity already present. Individuals conceive a particular fashion in which the world operates. When things do not operate within that context, they must accommodate and reframe the expectations with the outcomes. Jerome Bruner (1960) expanded his theory of constructivism by including the social and cultural aspects of learning as well as the practice of law. Constructivism theory, among other teachings, ideas and arguments emphasises the learner's active role in the learning process. The learner formulates hypotheses, constructs new ideas, and selects information that is integrated into existing knowledge and experience. (Bruner was one of the founding fathers of constructivist theory besides Vygotsky and Piaget. Constructivism is said to have a broad conceptual framework with numerous perspectives, and Bruner's theory is just one of them). This is a significant contribution to how individuals construct their unique models of the world. Bruner (1960) advocates that teaching activities allow students to discover and construct knowledge. These are (1) attitude towards learning; (2) knowledge presented in a way that accommodates the student learning ability; (3) material presented in effective sequences; and (4) carefully considered and paced rewards and punishments.

The role of teachers is very important within the constructivism learning theory. Teacher education from 1980 to 2000 required that teachers be knowledgeable about the subject

matter and pedagogy, make decisions, construct curriculum based responses, and know how to continue learning throughout their professional lifespan (Cochran-Smith, 2004 in Alexander, 2005). Cochran-Smith further stated that instead of teachers giving lectures, the teachers function were as facilitators whose roles were to aid the learners to understand, by taking away focus from the teachers or lecturers and placing it on the learners and their learning. The resources and lesson plans introduced in this this learning theory gave a different approach towards traditional learning. Instead of telling, the teachers began asking, instead of answering questions that were only aligned with their curriculum, the facilitators, in this case, were meant to make the learners come to the conclusion on their own instead of being told. Also, teachers were continually in conversation with the learners, creating the learning experience that was open to new directions depending upon the needs of the learner as the learning progressed. Instead of having learners relying on someone else's information and accepting it as truth, the constructivism learning theory postulates that learners should be given information, and allowed to interact with other learners so that they can learn from the incorporation of their experiences. The classroom experiences should be an invitation for countless different backgrounds, thus making the learning experiences to allow different backgrounds to come together, observe and analyse information and ideas.

### **2.3 Principles of Constructivist Learning**

The learners use their sensory input, by learning cognitively, physically and socially. Knowledge is necessary for learning but it takes time and is not spontaneous. Learners go over information, think over it, use it, practice it and experiment with it. Motivation is a necessary ingredient in learning. The principles of constructivism theory state that instruction must be concerned with the experiences and contexts that make the student willing and able to learn (readiness to learn). Secondly, instruction must be structured so that it can be easily grasped by the learner (spiral organisation). Thirdly, instruction should be designed to facilitate extrapolation and or fill in the gaps (going beyond the information given) See Figure 2.



**Figure 2: The Principles of the Constructivism Theory**

*A diagram showing the Principles of the Constructivism Theory (Brooks and Brooks, 1992)*

Not all students learn in the same way. A teacher must use different styles of teaching in order to reach all the students that he or she teaches. Most learners learn by being told what to do and being allowed to do it themselves. This therefore leads many scholars to believe that the best way to learn is by having students construct their own knowledge instead of having someone construct it for them. This belief is explained by the constructivist theory.

A teacher can only act as a guide in this process. According to Brooks and Brooks (1993), the percentages below indicate the retention rates: Lecture = 5%; Reading = 10%; Audio visual = 20%; Demonstration = 30%; Group discussion = 50%; Practice by Doing = 75%; and Teaching others and immediate use of learning = 90%. A person's prior knowledge may help or hinder the construction of meaning. People's prior knowledge comes from their past experiences, culture and their environment. Generally prior knowledge is good, but sometimes misconceptions and wrong information can be a hindrance. Sometimes, time must be spent correcting prior knowledge before new learning can occur. According to Di Vesta

(1987) in Amineh and Asl, (2015), learners' environment is said to refer to the context designed to support and challenge the learners thinking.

Adult learning theory which Malcom Shepard Knowles (1968) referred to as andragogy recognises that there are many differences in the way adults learn as opposed to children. His thoughts capitalised on the unique styles and strengths of adult learners, because of their experiences and previously existing neurological structures which enable them to find learning less of a problem. Brownstein (2001) in Makewa et.al (2014), also states that learners are constantly challenged with tasks that refer to skills and knowledge beyond their level of mastery. He also states that this captures their motivation and builds on previous successes to enhance learner confidence. This is in line with Vygotsky's Zone of Proximal Development which is described as being between the actual development level and the level of potential development. This can be under the guidance or in collaboration with more capable peers (Vygotsky, 1978). Vygotsky further claimed that instruction is good only when it proceeds ahead of development, then it awakens and arouses to life an entire set of functions in the stage of maturing, which lie in the zone of proximal development.

The constructivism theory by Piaget, 1970 stipulates that in order to create or construct new knowledge the learner must first accommodate and then assimilate knowledge (Piaget, 1970). This is not different from the Constructivism Theory of Jerome Bruner, (1960) which guided this study. Bruner emphasised four characteristics of effective instruction which emerged from his theoretical constructs which are a build up from Vygotsky, (1934); Piaget (1970) and Socratic tradition of learning through dialogue and encourages learners to enlighten themselves through reflections. The first one is that personalised instruction should relate to learners' predisposition, and facilitate interest toward learning, the second being that content structure should be structured so it can be easily grasped by the learner. The third is sequencing, which is an important aspect of material presentation. The fourth is reinforcement, in form of rewards and punishment which should be selected and paced appropriately (Bruner, 1960). Learning must be a process of discovery, where learners build their knowledge with the active dialogue of teachers, hence building on their existing knowledge. Bruner was an advocate of discovery learning. He was also the initiator of curriculum change which stated that learning is an active social process in which learners construct new ideas or concepts based on their contemporary knowledge. In this study the

personalised instructions given to teacher trainees did relate to their inclinations and helped in the facilitation of discovery learning of HIV and AIDS Education in different subject areas. The sequencing of material presentation was also done especially in Physical Education where games were used to present HIV and AIDS Education to teacher trainees. The curriculum in some instances had the content properly structured and well packaged, but lacked qualified personnel to teach the content. In this study the reinforcements were also not available to motivate the teacher trainees.

## **2.4 The CIPP Evaluation Model**

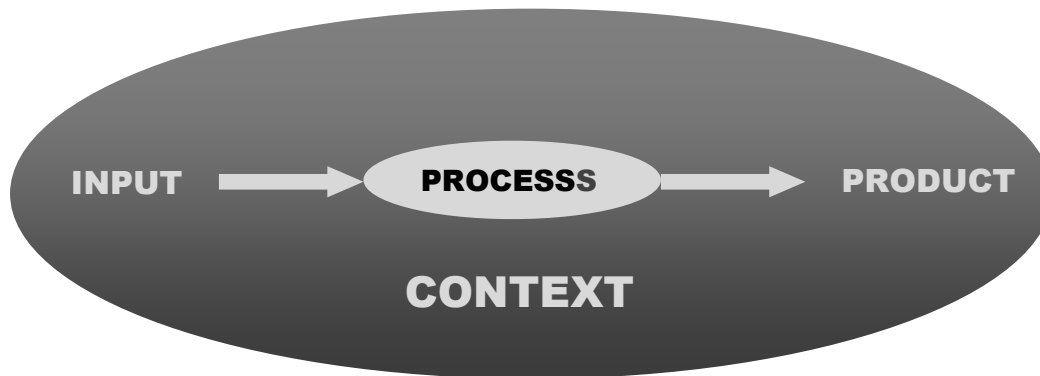
The following scholars (Fitzpatrick, Sanders and Worthen, 2011; Stufflebeam, 2003; Zhang, Zeller, Griffith, Metcalf, Williams, Shea and Misulis, 2011) have qualified this model of Daniel Stufflebeam CIPP evaluation model as having a great evaluation approach. In this decision-oriented approach, programme evaluation is defined as the “systematic collection of information about activities, characteristics, and outcomes of programmes to make judgements about the programme, improve programme effectiveness and or inform decisions about future programming” (Patton, 1997: 23). In this study CIPP approach was used in order to make judgements, suggest programme effectiveness as well as inform decisions about the future programming after thorough analysis of the existing programmes which are Primary Teacher Education Programmes and Secondary Teacher Education Programmes.

## **2.5 Conceptual Framework - CIPP Model of Evaluation**

This study, in analysing the integration of HIV and AIDS Education in teacher education programmes, used the Context, Input, Process and Product (CIPP) Evaluation Model, developed by Stufflebeam (1983). This Model provided the study with a systematic approach of analysing the different aspects of the teacher education programmes whereas the constructivism theory was used as a learning theory in this study.

This conceptual framework model below addressed many issues in order to fully analyse the integration of HIV and AIDS Education in Teachers Training Programmes. The key concepts in this model were Context, Input, Process and Product. Context in the model was the environment, which looked at the needs of the colleges of education, future technological developments, and the mobility of teacher trainees. In the Context the overall readiness of the environment was important. The existing goals and priorities were sufficiently responsive to assessed needs, which is what was termed as needs assessment. The relationship of one

course was also equally important, some of the questions that this model addressed were: Should courses be integrated or separated? Was the course relevant? There were many other questions which helped in the analysis of the Context section of this Conceptual Framework Model.



**Fig 3: CIPP Evaluation Model (Stufflebeam, 1983)**

*Source: Stufflebeam (1983; 2001; 2003; 2007)*

In order to answer the question of Input, the appropriateness of content, methodology and assessment elements around which the integration was centred were looked at. This tackled the first objective in this study. The input also looked at the entry point of students, curriculum objectives, detailed contents, methods and media, competencies of teaching staff and the appropriateness of teacher and learner resources. What was the ability of teacher trainees and what were their learning skills? Did teacher trainees have existing knowledge on the subject? Was the course clearly defined? Was the content relevant to practical problems? What books and equipment did teachers have? How strong were the teachers' strategies? These and many other questions were answered in this part of the Conceptual Framework. This also answered part of objective 2, 3 and 4 to some extent.

In order to answer the question of Process, objectives, 2, 3 and 4 also addressed the issue of how graduates practiced the integration of HIV and AIDS Education in the schools in which they were now serving. It also tackled the challenges faced by lecturers as they went about teaching HIV and AIDS Education as well as teacher trainees understanding of the phenomena of the integration of HIV and AIDS Education.

The Process further addressed the actions that each stakeholder took in order to make certain that the HIV and AIDS Education was taught in Colleges of Education. The question of how the integration was being implemented was also answered. Here is where the project implementation process was monitored. The extent to which the learners accepted and carried out their roles in this part of the model was analysed. This answered objective 5 of this study. This looked at the effectiveness of teaching methods, utilisation of physical facilities, utilisation of teacher learner processes, as well as effectiveness of the system of evaluation of student performance. Level of cooperation among the learners was also looked at. These and many other factors are what made up the process aspect of this model.

The Product in the model which is the outcome was also answered by addressing the issue of graduates and where they were deployed to upon completion of their teacher training course. The product also addressed the issue of the pupils in primary and secondary schools. The study suggested an approach that could take care of any gaps identified in this study pertaining to the integration of HIV and AID Education. Did the programme succeed? Did it accomplish all its goals, did it measure and interpret and judge the programme outcomes, by assessing their merit, worth and significance to probably ascertain whether all the needs of the participants were met. This last part of the model looked at whether the final examination, which is part of learner assessments at the end of the course were administered to the learners. How did the learners use what they learnt, how was the overall experience for both the lecturers and the teacher trainees? Did the teachers' or lecturers' reputation improve as a result of the programme?

These and many other questions were answered in this study. Some scholars who have used this model have said that this model seeks to improve and achieve accountability in educational programming through a "learning-by-doing" approach (Zhang et.al.2011).

The Input in the above diagram represents the content, student teachers, and personnel such as lecturers, finances and new ideas, as well as support staff in the colleges of education who help the colleges of education to run efficiently and effectively. The process cannot take off without the structures and machinery found in the colleges of education that spearhead programmes. The heads of institutions who discipline everyone and respond to demands both inside and outside the colleges of education are part of the process. This is where most of the activities are done and this was the central concern of this study. Most of the activities take place in this part of the model. The organisational roles and functions of lecturers, principals and student teachers also take place here. The colleges of education are constantly responding to demands from both the outside and inside their premises which are not solid, but remain flexible to allow system needs to be met. The environment which is the context includes other surrounding systems e.g. other competing or cooperating organisations e.g. Ministry of General Education and Non-government organisations from where the colleges get the finances to run the colleges including the surrounding communities and the prevailing attitudes, the values, norms and changes in society. The environment has a lot of challenges some of which might even make it difficult for programmes to take off. The surrounding organizations can sometimes help to enrich the Colleges of Education.

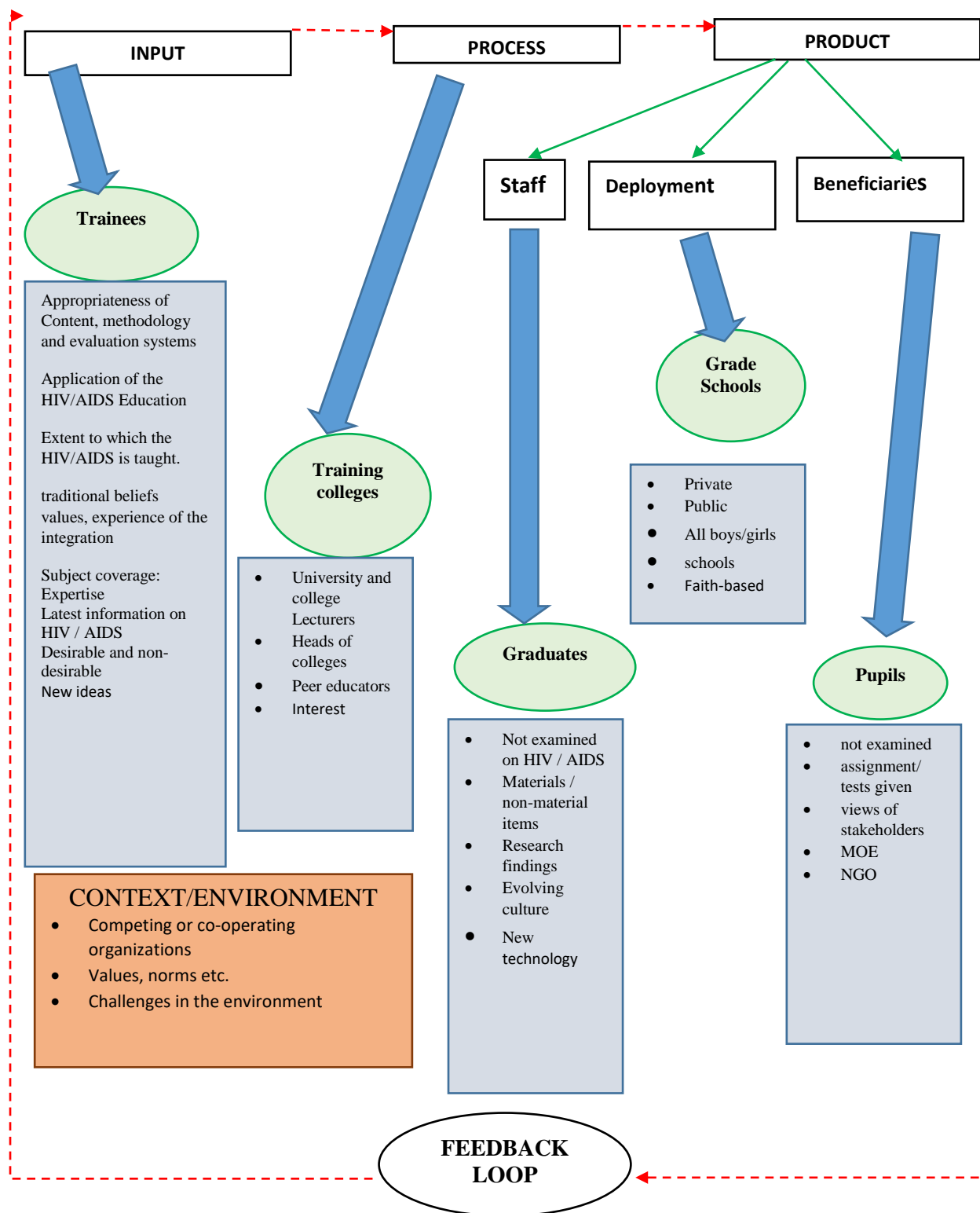
The Output refers to the material items and non-material ideas that leave the colleges of education. These are graduates, research findings, new technology (Ballantine and Hammach, 2009). All these are responsible for selling the colleges products to the world.

The next stage is deployment where teachers, after graduation, are placed. The primary or secondary schools are where graduates are deployed to for providence of employment. These graduates who are completed products are considered to be material items and non-material ideas that leave the college. Research findings, culture and new technology are also considered as output or outcomes in this model.

When the teaching personnel are deployed to these schools, the beneficiaries are the young learners who benefit from the teaching personnel's expertise in HIV and AIDS Education. These young learners, known as the window of hope, after acquiring the HIV and AIDS Education transmit their knowledge to their families and various communities from where they originate. The feedback in this whole process is very cardinal because negative or positive feedback could attract different responses if not monitored.

The interactions, according to Ballantine and Hammack (2009), take place in this systems model in the form of inputs and outputs. Each college faces different challenges, some are pleasant and some are not pleasant but they are necessary. The organisation receives input in the form of information, raw materials, students, personnel finances and new ideas. Some of the members who belong to the college also belong to other organisations in the environment and as such they bring with them influences from outside the environment in some form of environmental inputs which are mandatory for the survival of the college, and these are finances, human resource, technology etc. Some inputs are undesirable and unavoidable such as competition, financial pressures – usually the organisation can expect some control over the inputs e.g. colleges have selection processes for new lecturers, textbooks and other curricular materials, some positions in the organisation are people who have influence in society and other positions are held by other support staff who also have links with the environment.

The programmes constantly have to adapt to changes and demands in the environment as a result of new information that the programme receive. This basic model has been used in analysing the HIV and AIDS Education in teacher training programmes. Guskey (1985) states that, a significant change in teacher attitudes and beliefs come after they begin using a new practice successfully and see changes in student learning. This was not very visible in the teacher trainees but in the pupils in schools. This was clearly shown in CIPP Model generated in this study because the pupils after being taught would disseminate HIV and AIDS Education to their various communities. Kelly and Bain (2005) confirmed this by stating that teacher trainees should be provided with knowledge and skills required for the inculcation of positive attitudes and values which they would eventually pass on to their learners. Young people below the age of 15 years old were referred to as the "Window of Hope" meaning the "HIV free generation" (MoE, 2008).



**Figure 4: The Modified CIPP Evaluation Model**

**Adapted from Stufflebeam, (1983; 2001; 2003; 2007)**

## **2.6 Summary to this Chapter**

The researcher hypothesized that the integration of HIV and AIDS Education would fit cohesively within the two frameworks, the Context, Input, Process and Product (CIPP) Conceptual Framework as provided by Stufflebeam, 1983, 2001, 2003 and 2007 and the Constructivism Theoretical Framework as provided by Bruner (1960). Bruner explained how learning occurs, his theory argues that people produce knowledge and form meaning based upon their experiences. This study acknowledged that it was necessary to show how the teacher trainees understood the integration of HIV and AIDS Education since they did not come to class as empty slates. The study further saw it equally necessary to highlight the constraints that the teacher trainees faced as they learnt the HIV and AIDS knowledge with the collaboration of their peers. The Constructivism theory revealed that learning though an active process and evolving, learners based their learning on the understanding and meaning which was personal to them. This study disclosed that though teacher trainees used their experiences and their inquiry method of learning to find solutions they still had a lot of questions to ask as regards the HIV and AIDS Education. Lack of guidance from their lecturers in certain situations did not help them to revisit the conclusions they made regarding the integration of HIV and AIDS Education.

The concepts used in this study were the Context, which was the immediate and the secondary environment, the Input, which were the teacher trainees, the Process, which was the content, methodology and evaluating systems and the Product, which were the graduates. As the two Teacher Education Programmes were being analysed they had to be analysed from the perspectives of the trainees, the support element systems, the graduates and the Colleges of Education themselves. The holistic view was based on all the aspects mentioned, only then were the two programmes able to be analysed adequately.

## **CHAPTER THREE**

### **LITERATURE REVIEW**

#### **3.1 Introduction**

This chapter presents reviewed literature on relevant issues that this study addressed. Literature reviewed include, the integration of the HIV and AIDS Education, the five different approaches of integrating HIV and AIDS Education done globally, regionally and nationally pertaining to the integration of HIV and AIDS Education in teacher training programmes. Most of the studies mentioned in this research converged on the issue of the HIV and AIDS and teacher education. The point of departure is seen in this thesis as it analyses the integration of HIV and AIDS Education in two teacher training programmes, the primary teacher education programme and the secondary teacher education programme.

The historical background of HIV and AIDS, the prevalence rates as well as the paradigm shift pertaining to the pandemic is also mentioned. The position of Zambia in the fight against HIV and AIDS, the Ministry of Education literature on the Zambian Colleges of Education, the University of Zambia Advisory Unit for Colleges of Education as well as some of its activities are also outlined. Literature is also centred on the five research questions of this study.

#### **3.2 Primary and Secondary Teacher Education Programmes**

When teacher trainees are trained in the Primary and Secondary Teacher Education Programmes they end up being deployed to either teach in primary or secondary schools of Zambia. The primary diploma qualification is somewhat lower in status than the secondary teacher's diploma. The primary teacher mobility to secondary schools after undergoing upgrading courses lowers the general quality of education provision in the area of primary education this was also affirmed by Longe, and Chiputa,( 2003). Teachers in this regard, opt to teach at secondary schools and hence desire to retrain for the secondary teacher's diploma course. This does not in any way affect the two Teacher Education Programmes because both of them have the HIV and AIDS integrated as cross-cutting issues in all the subject areas taught in these two programmes.

### **3.3 Integration of HIV and AIDS Education in this Study**

Integration of HIV and AIDS in this study means the infusion of HIV and AIDS into the already existing programmes. According to Mathison and Freeman (1997) in Van-Laren (2011: 98) integrated initiative assists students to “synthesize discreet information and to connect such knowledge to the needs of everyday living”. The term integration literally means "to combine into a whole." Thus, when integration is mentioned in this context all it means is that Human Immuno-Deficiency Virus (HIV) and Acquired Immuno-Deficiency Syndrome (AIDS) education is combined into the core subjects such as Sciences, English, Expressive Arts and so forth. The emphasis is on a comprehensive understanding of a "whole," rather than many parts, in this study this refers to the two Teacher Education Programmes in Zambian Colleges of Education.

The statistics on HIV and AIDS in East and Southern Africa in 2002 as reported by Rose Smart, HIV and AIDS Consultant and Member of UNAIDS above, show South Africa as having the highest number (6,000,000) of adults and children living with HIV and AIDS virus as compared to Zambia with 1,400,000 adults and children living with HIV and AIDS. The statistics in Table 1 justifies why there was a dire need for most countries in the sub-Saharan Africa to prevent further propagation of HIV and AIDS virus by introducing a social vaccine which was education.

**Table 3: The Statistics on HIV and AIDS in East and Southern as at 2002**

Country	Adults and Children Living with HIV and AIDS (End 2001)		Adults (15-59 Years) HIV Prevalence Rate	Total Orphans as % of All Children	Orphans Due to AIDS as % of Total Orphans and Absolute Number
	Low Estimate	High Estimate			
Angola	250,000	450,000	5.5%	10.7%	14.9% 104,000
Botswana	260,000	390,000	38.8%	15.1%	70.5% 69,000
Democratic Republic of Congo	960,000	1,700,000	4.9%	9.4%	41.8% 1,366,000
Lesotho	230,000	480,000	31%	17%	53.5% 73,000
Malawi	720,000	1,100,000	15%	17.5%	49.9% 468,000
Mozambique	860,000	1,500,000	13%	15.5%	32.8% 4187,000
Namibia	150,000	230,000	22.5%	12.4%	48.5% 47,000
South Africa	4,000,000	6,000,000	20.1%	10.3%	43.3% 662,000
Swaziland	130,000	200,000	33.4%	15.2%	58.8% 35,000
Tanzania	1,200,000	1,700,000	7.8%	12%	42.3% 815,000
Zambia	930,000	1,400,000	21.5%	17.6%	65.4% 572,000
Zimbabwe	1,800,000	1,800,000	33.7%	17.6%	76.8% 782,000

Source: UNAIDS Report on the Global HIV and AIDS epidemic, July, 2002

### 3.4 History of HIV and AIDS in Zambia

Zambia is one of the countries that is heavily affected by HIV and AIDS, however, the Zambian government as early as 1986, created an AIDS surveillance committee and later created an emergency plan to control the spread by 1987. As per plan, all blood transfusion was screened for HIV and AIDS. Thirty-three years later, the vaccine for HIV and AIDS has still not been discovered, and AIDS continues to be the leading cause of death in the sub-Saharan Africa to which Zambia belongs. Zambia, therefore acknowledges that the only way to handle this pandemic is through prevention, care and antiretroviral therapy. Zambia is a landlocked sub-Saharan country and shares boundaries with Malawi, Mozambique, Zimbabwe, Botswana, Namibia, Angola, Democratic Republic of the Congo and Tanzania. Zambia having a total surface area of about 752,614 square km ranks among the smaller countries in South-central Africa, and is a developing nation with a total of 15 million people with ten provinces and 106 districts (UNAIDS, 2015). The population of this country has

grown enormously from 2,340,000 in the 1950s to 15,000,000 million people in 2015. The Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS) have been in existence in the world since the 1970s and responses to these epidemics have been largely biomedical, mainly focusing on prevention. However, there has been a paradigm shift to recognise these epidemics educationally, economically and socially. Education given to all sectors of the society is a social vaccine that is needed to help change attitudes and behaviour.

Studies show that Zambia has one of the most devastating HIV and AIDS epidemics (MoE, 1999; Kamuwanga, 2000 and USAID, 2002). As at 2015, one in every seven adults in the country was said to be living with HIV and AIDS (UNAIDS, 2015). The life expectancy fell to just 49 years old. Studies also showed that in 2009, nearly 76,000 people were newly infected with HIV, that is, roughly about 200 new infections each day. However, USAID recent reports further show that one million three hundred people are living with HIV and AIDS in Zambia today. The first diagnostic case of HIV in Zambia was reported in 1984, since then, the prevalence rates have dropped significantly. According to the Zambia Country Report of 2005, the mortality rate in 2010 was 94,055 from all the nine provinces whereas in 2014 the number decreased to 19,000. This decrease was reported to have come about as a result of the increased availability of Antiretroviral Treatment (ART). ART is not a cure for AIDS but it is a means for the management of the disease. This is in tandem with Breidlid's (2015: 10) view in Breidlid, Cheyeka and Farag (2015) that "Although deaths from HIV-related causes are being reduced and treatment availability is increasing, the reason for these positive developments is primarily the use of ART drugs." Breidlid (2015) further postulated that the delivery of ARVs was expensive and many poor countries depended on donor funding for providence of the same, making the sustenance of these drugs problematic. The above statistics give a broader view on how much knowledge and skills are necessary in order to curb the HIV and AIDS pandemic.

When the first case of HIV was diagnosed, within two years the National AIDS Surveillance Committee (NASC) and National AIDS Prevention and Control Programme (N TAPCP) was established to help coordinate HIV and AIDS-related activities (Gachuhi, 1999). Earlier in this fight against HIV and AIDS reported that there was declining numbers of teachers in East and Southern Africa Region (ESAR) due to HIV and AIDS related illnesses. In Zambia

the number of teachers dying from AIDS was said to be greater than the output from all teacher training colleges. This was the reason why there was a dire need for this study to analyse the integration of HIV and AIDS Education in the two teacher education programmes. The Ministry of Education reported that 680 teachers (2.2%) died in 1996. It was reported then, that the number was expected to rise to approximately 2000 a year by the year 2005. In agreement and similarly Kelly, (1998) estimated that there would be 5-6 deaths of teachers per day. Kelly (2000), further posited that HIV and AIDS had the potential to affect demand for education, supply of education, availability of resources for education, potential clientele for education, process of education, content of education, role of education, organisation of schools, planning and management of the education system and donor support for education.

Education had also the potential to provide the learners with knowledge and skills for self-protection, to develop value systems and to promote positive behavioural change with a view to help lower the risk behaviours. Kelly (2000), further postulated that when infection occurs, education had the potential to strengthen the ability of the infected people to cope with personal infection, cope with family infection by giving care to those infected and to also stand up for the human rights in the ugly face of stigma, silence, shame and discrimination. When death attacked as a result of this pandemic, education had the potential to help the bereaved families to cope with grief and loss. Education in the long run helps people to cope with poverty, ignorance, discrimination and the spread of HIV and AIDS.

Fourteen years later, the picture was still showing increased growth rate in terms of numbers of those infected with the virus. In 2010 alone, HIV and AIDS killed 1.8 million people, 1.2 million of whom were living in sub-Saharan Africa. Though life-saving antiretroviral therapy was available, access had not been so widespread. Of the estimated 14.2 million HIV-positive individuals in need of treatment, nearly 8 million people still were not currently able to access it. This therefore, was an indicator that something drastic had to be done, to help scale down these alarming deaths in the sub-Saharan Africa. The integration of HIV and AIDS into the curriculum was just one way of battling and handcuffing this scourge.

### **3.5 Global information on HIV and AIDS**

At Global level, there have been many reports on the HIV and AIDS pandemic, one of these reports from UNAIDS indicated that on the global scene HIV and AIDS prevalence rates which were rising showed that the virus was not completely controlled (UNAIDS, 2002). The world was said to have been at a critical moment in the fight against HIV and AIDS notwithstanding the fact that it had made incredible progress in its efforts to understand, prevent and treat this disease, with the progression being rapid during the last ten years. Research further showed that by the end of 2010 more than 6.6 million people were on life-saving antiretroviral therapy. Of the 6.6 million, more than 5 million were living in sub-Saharan Africa. By 2010 Botswana, Rwanda, and Namibia had already achieved universal access to ARVs, while Benin, Guinea, Kenya, Lesotho, Senegal, South Africa, Swaziland, Togo, Zambia, and Zimbabwe had coverage rates between 50 per cent and 80 per cent and were making progress towards universal access. This virus is now being understood economically, (how much money is being spent on this pandemic), environmentally (does this pandemic affect the environment that we find ourselves in?) and socially (how are people living with HIV and AIDS perceived by the society in which they find themselves?) and educationally (how can education be used as a tool to help learners and teachers to fully understand the scourge?). It is the education aspect that concerns most educators, this study being a testimony of that.

The economic, environmental, social and educational aspects of HIV and AIDS are questions that have been answered by many scholars through research. Literature from these studies, further postulated that a lot of countries were now taking on multi-sectional strategies. This has been seen in Ethiopia, Kenya, Uganda, Botswana, Namibia, Rwanda, South Africa and Zambia. In order for all the above countries to take part and make the education responses to HIV and AIDS succeed, the education sector needs to be strengthened. Coombe and Kelly at an Inter-Agency Working Group Conference identified a greater need to sustain the quality of Education and providence of quality education for stabilising the education sector as well as responding to new learner needs as early as 2000 (USAID, 2001).

Another organisation that contributed to the introduction of the integration of HIV and AIDS Education in Teacher Education is Internationale Weiterbildung und Entwicklung gGmbH (InWent) Capacity Building International in Germany. This organisation introduced a lot of

short awareness courses for educators to help bring them get to the level where they could begin to understand how to deal with the HIV and AIDS pandemic in the education sector. Late October in 2003, the Education Division of InWent convened an East and Southern Africa Regional (ESAR) meeting for senior officials and representatives of governments and other tertiary institutions, nongovernmental organisations, and educator associations. It was reported by Coombe, (2003) that sixty professionals from Kenya, Malawi, Mozambique, Rwanda, Tanzania, South Africa and Uganda met outside Johannesburg in South Africa. These countries were determined to support teachers and teacher educators' response to very complex needs of learners and educators affected by HIV and AIDS in primary and secondary schools in the region. This is just one of the many organisations that responded to the needs of teachers and teacher educators affected by HIV and AIDS in primary and secondary schools.

There were other international organisations that also contributed to HIV and AIDS Education, Educational International EI EFAIDS is one of those. In May 2006, EI published '*Training for Life*' a draft report whose aim was to establish a clear picture on the government's position in providing pre-and in-service training to teachers on HIV and AIDS. The EFAIDS Programme is being implemented in eighty education unions affiliated to EI in almost fifty countries in Africa, Asia, Latin America and the Caribbean. The programme has three programme goals to: (i) To prevent new HIV infections among teachers and learners, this is pursued via the training of teachers in HIV and AIDS Education; (ii) To mitigate the negative effect of AIDS on achieving the EFA goals. This goal fosters open environment where risk reduction, testing, treatment and care can be discussed and addressed; and (iii) To increase the number of learners completing basic education via research, advocacy and raising public awareness (Sanghavi, 2006).

The EI EFAIDS Programme hoped to achieve Education for All and prevent HIV infection. The first programme objective of EFAIDS was to provide training for teachers in order to avail them with the knowledge and skills to protect themselves, their colleagues and students from HIV infection (Leeuwen, 2007). This '*training for life*' report revealed that teachers complained to Union leaders regarding the lack of training materials and poor supply of materials from the education authorities. The resistance was also reported from parents and education authorities on HIV and AIDS related issues. It was the EI's conviction that if teachers would be given the necessary tools to do their job properly and with self-confidence,

as well as with the right amount of training, teachers would make a big difference to the lives of many (Ibid, 2007). The aspect of training teachers in HIV and AIDS Education in order for them to make a big difference in the lives of their learners was identified as early as 2007, but this has taken a long time to be actualized, leaving those at risk to still need knowledge and skills on how to handle the virus.

### **3.6 The Zambian Government's Response to the Pandemic**

In 2004, the late President of Zambia, Patrick Levy Mwanawasa declared HIV and AIDS as a national emergency. Four years later after President Mwanawasa's declaration, Zambia reported stabilisation of the epidemic and some evidence of behavioural change was also reported. Reports indicated then, that the HIV prevalence rates were higher in young females aged between 15 and 24 years old compared to their male counterparts.

The Zambian government in 1999 established the National HIV/AIDS/STD/ TB Council (NAC) in order to demonstrate its highest political commitment to the fight against HIV, AIDS, STIs, TB and other opportunistic infections. The chief mandate of this Council was to coordinate national responses to the HIV, AIDS, STI and TB pandemics and to mitigate them against the harmful socio-economic impact that communities were subjected to through these pandemics. There was a dire need to institute policy interventions against HIV, AIDS, STI and TB. However, in the past this was undertaken in an environment devoid of policy direction and guidance. As might be expected, the lack of a national policy resulted in undue duplication of effort and waste of scarce health resources. This policy provided the requisite framework for informing and guiding various stakeholders in the quest to contribute to the fight against HIV, AIDS, STI, TB and other opportunistic infections.

Media reports in 2003 revealed that there was an increase in child rape cases. This was stimulated by the "virgin cure" myth, (this is the belief that sex with a virgin child would cure HIV and AIDS). It was further revealed that youths between the ages of 15 and 24 offered the nation a "Window of Hope". These youths were the hope of an Aids-free future. (HIV and AIDS Report, 2003). The life expectancy in Zambia in 2003 was 49 years and the population was at 13.5 million. Today the population is at 15 million people and according to the latest WHO data published in 2018, the life expectancy is 60.2 for male, 64.4 for female giving 62.3 years as the total life expectancy for Zambians, ranking it as 160 on the world

scene. In 2017 the life expectancy was at 54.4 for female, 51.1 for male giving 54.4 years total life expectancy showing a marked increase of 43 per cent. This is commendable.

### **3.7 Policies in Zambia**

In order to understand the genesis of the integration of HIV and AIDS Education, this study viewed various policies and the relationship that each Policy documented had with HIV and AIDS Education. Policies of any country are principles of action, codes, systems, guidelines, intentions, blueprints that a country adopts to help with the running of that country. In order for Zambia to help drive her mandate to rule the country policies are developed. The policies and procedures are designed to influence and determine all major decisions and actions that a country makes. These policies are used in the confines set by that country and help the country to operate effectively, Zambia is no exception. Among the policies that Zambia developed are the following:-

#### **3.7.1 Education for All (EFA, 2015)**

The Global Monitoring Report (GMR) indicates that although there had been progress towards the Sixth Millennium Developmental Goals (MDG's) which aimed at decreasing the spread of HIV and AIDS, Malaria and other major diseases, large numbers of people are still dying from preventable diseases and unfinished business will remain undressed even after 2015. This is still the situation today because society is still striving to find ways of dealing with this pandemic. More and more policies have been developed. Another earlier policy was 'Educating our Future' (1996) which in order to respond to the developmental needs of the nation as well as those of individual learners in Zambia, had become the basis of all educational strategies. These educational strategies were to ensure the provision of quality education through suitable teaching and learning at all levels of the education system, tertiary education inclusive.

In order for Education for All (EFA) to be attained there was an enormous need to introduce capacity building through the integration of HIV and AIDS Education into teacher training institutions and universities where teachers were produced. Teachers in Africa were singled out as being a high-risk group with respect to HIV infection however, teacher mortality rates from AIDS were usually considerably lower than suggested by most expert commentators and the media (Bennell, 2003).

### **3.7.2 Zambia Education Curriculum Framework, 2013**

In 1996, the Ministry of Education developed the National Policy on Education, it is against this background that the late Permanent Secretary Nkosha saw the development of ZECF as a providence for further guidance on the preferred type of education for the nation. The late Permanent Secretary, Chishimba Nkosha in his preface in Zambia Education Curriculum Framework wrote that Zambia was undergoing a rapid socio-economic development and that the education sector was no exception (ZECF, 2013). He also stated that Education was an agent of change, because while education had always been perceived as a docile sector, it had also become an economic tool for development. ZECF provides the curriculum guidelines as well as the structure at all the levels, from Early Childhood Education (ECE) to Tertiary Education and Adult literacy. In addition, the ZECF is the basis for development and procurement of other subsequent educational materials (ZECF, 2013). The different education programmes in the ZECF has the integration of HIV and AIDS well documented and emphasis has been placed on the fact that the integration be taught as cross cutting issues.

### **3.7.3 The Education Act of 2011**

This Act stipulates that guiding policies on how best education in Zambia should be provided at all levels should be in the light of democratic indulgence. The act adheres to the education development principles of liberalisation, decentralisation, equality, equity, partnership and accountability. It is from this Act that the emphasis on the need to clearly include knowledge, skills and values in the curriculum from ECE to tertiary is based (ZECF, 2013). Though this Act did not clearly spell out the issue of HIV and AIDS Education, it still added yet another dimension by emphasizing on equality, equity and partnership. This act provided a broader understanding of the integration of HIV and AIDS in the different curriculum subjects through liberalisation, decentralisation, equality and equity partnership by all the players.

### **3.7.4 Education Sector National Implementation Framework Document (2007-10)**

The Education Sector National Implementation Framework Document (ESNIF) looked at how the Ministry of Education implemented the HIV and AIDS strategic plan for 2001 to 2005. This framework was meant to guide the Ministry's response to HIV and AIDS pandemic. UNESCO (2008) states that the assurance to up hold these policies was difficult because there were often gaps between policy and practice which were reported as hindrances

because of their failure to communicate the same to schools, colleges and other governing bodies. This was most of the time true because even work place policies were formulated but their implementation was very poor. The integration of HIV and AIDS Education was another way in which the Ministry responded to the HIV and AIDS pandemic.

### **3.7.5 The Zambian Basic Education Sub-Sector Investment Programme (BESSIP)**

The Basic Education Sub-Sector Investment Programme (BESSIP) is Zambia's first comprehensive programme which was meant to implement the 1996 National policy on basic education. The objectives of this programme were to improve access, quality, equity and relevance of basic education. This programme synergised several national policies like the Poverty Reduction Strategic Paper (PRSP) Public Sector Reform Programme (PSRP), National Gender Policy and HIV and AIDS etc. into one coherent programme (Musonda, 2003). According to Musonda BESSIP is another programme that saw the need of implementing HIV and AIDS as a cross cutting issue in Zambia. This programme was implemented between 1999 and 2002, though in its initial stages it was characterised by arguments over the scale of the programme, it was also said that the programme was unrealistic and too ambitious. With a lot of hard work from the Ministry of Education and Donors this partnership succeeded. This succession was because donors such as USAID partnered with the Ministry of Education and Teacher Education Specialized services by developing, piloting and institutionalizing a new HIV and AIDS pre-service course in 2005 called the 'Teaching in the Window of Hope', which was tested in Colleges of Education in Zambia. This course was meant to develop teachers' skills on how to teach HIV and AIDS related topics in an age appropriate manner. This was well explained and articulated on page 5 of the Introduction section of this study.

### **3.8 Integration of HIV and AIDS Studies in Selected Countries of the World**

In 2012, reports from across the world showed that the picture had worsened from the one depicted above. Grunseit and Aggleton (1998) reported that education prevention programmes had a great degree of success in increasing knowledge but not necessarily change sexual behaviour. Teaching people about HIV and AIDS Education would promote their knowledge base as well as provide them with skills that would help the young people to make responsible decisions about their sexual behaviour. Ministry of Education in Zambia

decided to deal with HIV and AIDS as cross cutting issues and not as an entity on its own. The Ministry of Education in Zambia still needs to do more to instruct teachers to teach HIV and AIDS Education. Coombe (2002) reported that it was assumed that teachers would be at the battlefield but it was found that they were generally unarmed. Given the correct tools teachers would not be unarmed. Coombe assumed that with the introduction of HIV and AIDS Education in Colleges of Education, they would no longer be unarmed. The need for Zambian teachers to be trained in HIV and AIDS education became greater so as to get rid of misconceptions about whether teachers were teaching content that they are required to teach or not.

Most countries took the initiative of integrating the HIV and AIDS in their curricula. The following countries, Kenya, Malawi, Mozambique, Rwanda, Tanzania, South Africa and Uganda, in collaboration with UNESCO, integrated HIV and AIDS in various ways. Zambia at the time when this information was being documented had not yet integrated HIV and AIDS Education in its curriculum. This is the review of teacher training and curriculum design activities in sixteen countries in sub-Saharan Africa which revealed various stages of development. What was not clear was whether any of these efforts were analysed to see whether the interventions worked. This was what was reported from Tanzania and many other countries:

The Ministry of Education in Tanzania has been providing in-service training of teachers on HIV and AIDS prevention in collaboration with UNESCO and UNICEF, Data on teachers' receiving training on HIV was recorded on (Education Management Information System (EMIS), but this data had not yet been analysed, therefore it was not accessible for this research. In Tanzania the in-service training on HIV and AIDS were done through career subjects in primary and secondary schools, as well as in teacher training colleges. The reason given was that HIV and AIDS were not taught as a subject but integrated in other subjects (Chediel, 2009).

A study done in Kenya explored the preparation of teachers to teach about HIV and AIDS. In this study the aim was to understand the preparation of teachers to teach about HIV and AIDS by exploring both teacher trainers and trainees preparedness. The study collected views from college administration, teacher trainers and trainees. The study established that there were awareness programmes at the college, however interviewees felt that teacher trainee

preparation to teach about HIV and AIDS were superficial. It was hence recommended that the Ministry of Education intensify the cascade model that it had employed. The other observation in this study was that the HIV and AIDS were incomplete therefore it needed completing, so that it could provide guidance on HIV and AIDS Education.

The information in Table 4 below shows that 38,706 teachers out of the total number of 222,250 representing 17 per cent received training on HIV and AIDS in Kenya in 2007. The EI report further showed how many student teachers were trained in HIV and AIDS Education. The teaching of HIV and AIDS were taught as integrated into a range of different subjects. In the final examinations students were required to answer some questions on HIV and AIDS. It was also reported that many teachers opted not to teach on HIV and AIDS in their classes due to lack of appropriate training. The teaching that was done was lecture based.

**Table 4: Country Profile: Kenya's Record on HIV and AIDS Training (2007)**

<b>Data Box</b>	
HIV Prevalence Rate	6.1%
%GDP Spent on Education	8%
<b>Pre-service Training</b>	
No. Trainee Teachers in Teacher Training Colleges	--
No. Trainee Teachers who have received training on HIV and AIDS	24,000
Duration of Training	40 weeks
Focus of training	Peer education and counseling
<b>In-Service Training</b>	
<b>Primary Schools</b>	
Total number of teachers	173,360
No. of Teachers who have received training from state on HIV and AIDS	30,006
Duration of Training	48 weeks
Focus of training	Implementing HIV and AIDS curriculum
<b>Secondary Schools</b>	
Total number of teachers	48,890
No. Teachers who have received training on HIV and AIDS	8,700
Duration of training	48 weeks
Focus of training	Implementing HIV and AIDS Curriculum

Source: EI – Report, 2007

In South Africa a study was conducted at the Cape Peninsula University of Technology's Faculty of Education which prepares pre-service teachers for primary and high school teaching. The study involved 68 respondents. With the use of qualitative based vignette probe, the pre-serving teachers' intentions to teach HIV and AIDS knowledge, attitudes and self-efficacy were investigated. The study revealed that the interface between the pre-service teacher's HIV and AIDS knowledge, attitudes and self-efficacy and their intentions to teach HIV and AIDS knowledge, attitudes and self-efficacy was inconsistent. The results also highlighted the need for a constructivist model for HIV and AIDS pre-service teacher education which would develop pre-service teachers' HIV and AIDS subject matter expertise and their professional dexterity to critically assess and implement school-based HIV and AIDS curricula in an HIV and AIDS context of teaching (Alexander, 2005).

Another study conducted in South Africa was by Linda Van Laren (2011). The study focused on preparing teachers for HIV and AIDS education, in an integrated and interdisciplinary pre-service teacher education. This study indicated that the final year foundation and intermediate phase teachers were introduced to integrating HIV and AIDS Education in Mathematics Education and reflected on their four years of training. In this study the pre-service teachers indicated that they were under-prepared to teach in the HIV and AIDS context. The pre-service teachers were of the opinion that they could, however be better prepared through HIV and AIDS teacher education that included both discipline of subject and integrated models of teacher education. In order to prepare Mathematics pre-service teachers and integrate HIV and AIDS Education at the same time, the required knowledge and skills, attitudes and values in Mathematics section needed to be extended to benefit both HIV and AIDS and Mathematics Education.

Manoucheri (1997) in Van Laren, (2011) reports that research is said to be consistently showing that teachers translate their knowledge of mathematics and pedagogy into practice through the filter of their beliefs. This is attributed to their personal experiences as learners. Van Laren observed that South African policy documents made provision for two options, namely a stand-alone subject for HIV and AIDS education and/or the integration of HIV and AIDS education in subjects or discipline. These models ranged from what was classified as integrated model (integrated across the curriculum) and what was classified as a discipline or subject model (HIV and AIDS education offered in one discipline). However, in this

particular study the subjects or discipline model was used, which is the integrated method of teaching mathematics. This study succinctly expresses the view that teachers were underprepared to teach in the HIV and AIDS context, this study yet added another view that there was need to extend required knowledge and skills, attitudes and values in maths and HIV and AIDS. This particular study did not analyse the integration of HIV and AIDS Education in the different education programmes. This therefore means that the study was at variance with what this study was on about.

Holderness (2012) wrote an article which focused on equipping educators to address HIV and AIDS: A review of selected teacher education initiatives. This review is based on a reflective account of two major undertakings: an e-learning course for teacher educators in sub-Saharan Africa and (b) South Africa's Higher Education HIV and AIDS Programme. The article also reviewed a range of academic pursuits currently involving in-service school teachers and principals studying in South African university. The article concludes that experiential and context-specific action based learning and research into the social and educational aspects of HIV and AIDS can contribute to breaking the silence and reducing stigma while at the same time, equipping educators to provide care and support for infected and affected learners and colleagues. Holderness (2012: 24) states that:

*teacher educators have a pivotal role to play in changing the course of the epidemic, and one of the fundamental ways in which this can be done he said was by continuing to break the silence around HIV and AIDS in teacher training institutions, schools and communities.*

He went further to say that this could be done by providing care, support to their colleagues, learners and peers. The article also articulated the involvement of InWent in HIV and AIDS and Teacher Education. The teacher educators were meant to investigate how HIV and AIDS were integrated in the curriculum and how the HIV and AIDS related content were taught in schools. This part of the article was a reflection of what Zambia was doing in terms of integrating the HIV and AIDS in the different subject areas. The teacher trainees, lecturers as well as all the stakeholders were crucial in curbing this scourge through the social vaccine which is education.

In Ghana a project called Strengthening HIV and AIDS Partnership in Education (SHAPE) was included in teacher training as a key component in its effort to improve HIV and AIDS Education in schools. SHAPE is using a curriculum called "Window of Hope" to train

teachers in HIV and AIDS issues at teacher training colleges. SHAPE was sponsored by the Ministry of Education in Ghana and USAID. A baseline research was done with ten out of forty-one teacher training colleges to gain understanding into the future teachers' HIV and AIDS knowledge, attitudes and practices. A total of 1,752 teacher trainees were randomly selected to complete questionnaires and qualitative data was obtained from eighty trainees who participated in the 8 focus groups. Findings indicated that myths regarding HIV and AIDS transmission and prevention existed and that many trainees did not consistently practice HIV and AIDS prevention in their own lives. Almost all the teacher trainees acknowledged that they were at risk of HIV and AIDS infection.

In Bangladesh, Sarma and Oliveras (2013) conducted a study on Implementing HIV and AIDS Education: Impact of Teachers' Training on HIV and AIDS Education in Bangladesh. This study was a cross-sectional study that was conducted among teachers to identify factors that supported or hindered their role in HIV and AIDS Education. A self-administered questionnaire was used to interview teachers from randomly selected schools in two adjacent districts in Bangladesh. Based on exposure to teachers' training, the districts were divided into control and intervention areas and the teachers' ability, skill and their participation in HIV and AIDS Education were compared between the districts. Trained teachers in the intervention schools were more likely to participate, less likely to face difficulties, and more likely to use interactive teaching methods in HIV and AIDS class was found to be barriers to HIV and AIDS Education. This therefore suggested that there was need to provide teachers with more support in terms of training and logistics. This also brings us to the sentiments by Muzumara (2011) regarding the relationship between teaching materials, learning materials and teaching methods. When necessary materials for teaching and learning are available then, appropriate method of teaching can also be easily adopted. This study also holds the same view as Muzumara, that the provision of teacher and learner materials are important if HIV and AIDS Education is to be achieved. In the study by Sarma and Oliveras (2013) Trained teachers were considered to be less likely to face difficulties as they implemented HIV and AIDS Education. This therefore adds an interesting side to this study regarding the integration of HIV and AIDS Education in the primary and secondary teacher education programmes. The aspect of providing good training to the teacher trainees would be achievable if only the packaging in the different subject areas would be appropriate to the needs of the learners.

In Malawi, USAID, UNICEF and the Ministry of Education developed a pre-service training curriculum for use in seven teacher training colleges. Adapting a life skills curriculum developed by the United Nations International Children Fund (UNICEF) and the Swedish International Development Agency (SIDA) with the United Nations Education UNEPA also developed an in-service curriculum for primary school teachers in standards 5 and 6.

In Mozambique, Ministry of Education revised its 1996 teacher training curriculum and developed the strategy to train teachers in the new curriculum in 410 teacher training centres in the country for both pre and serving teachers, but in Nigeria guidelines for comprehensive sexuality education was developed using international guidelines developed by sexuality information and education Council of the United States (SIECUS). The Association for reproductive and family health is training teachers in Oyo State to teach on reproductive health in secondary schools.

In Zimbabwe, the Ministry of Education and Culture with UNICEF coordinated the effort in which both pre and serving teachers in HIV and AIDS Education were trained. Another study was conducted by Chamba in 2010 and 2011 with the assistance of IIEP and UNESCO on the ‘effectiveness of HIV Education prevention programme in Zimbabwe: The role of school Heads in SACMEQ III.’ This study described the viewpoints and professional characteristics and also examined how the school environment, especially the heads, and how they were supportive in the context of HIV and AIDS. This study revealed that the geographical setting of where the schools were, hampered the effectiveness of implementing HIV prevention education programmes. To this end it was suggested that more needed to be done to mobilize both human and financial resources for improving the basic school infrastructure and training of teachers in life skills and HIV and AIDS Education prevention. One of the recommendations of this study was that the ministry should strengthen/organize its structures so that the inspectorate division establishes mechanisms to regularly and efficiently monitor and evaluate the implementation of the HIV and AIDS Education prevention programmes.

The information in Table 5 below shows that in Burkina Faso, all the teachers who carried out pre-service training in the colleges were trained on HIV and AIDS over a period of six

months. They did not receive any learning materials for use in the classrooms. Whereas a total of 6,738 school directors and fifty teacher unions received on the job training from resource persons at the National AIDS Committee. The training, however, did not filter down to the level of the teachers themselves. Thus the potential of the training programme to achieve results was somewhat limited.

**Table 5: Burkina Faso: Country Profile on HIV and AIDS Training.**

<b>Data Box</b>	
HIV Prevalence Rate	2.0%
%GDP Spent on Education	
<b>Pre-service Training</b>	
No. Trainee Teachers in Teacher Training Colleges	1,750
No. Trainee Teachers who have received training on HIV and AIDS	1,750
Duration of Training	6 months
Focus of training and /skills	Knowledge
<b>In-service Training</b>	
Primary schools	--
Total number of teachers	
No. Teachers who have received training from state on HIV and AIDS	6,732 school heads
Duration of training	40 weeks
Focus of training and skills	knowledge
<b>Secondary Schools</b>	
Total number of teachers	.....
No. Teachers who have received training on HIV and AIDS	.....
Duration of training	.....
Focus of training	.....

*Source:* EI Report, 2007

Zambia partnered with an NGO called Restless Development to help colleges of education deal with the HIV and AIDS pandemic. Peer educators were trained to help in training teacher trainees in Colleges of Education. All the countries mentioned above show that they could not work alone but with NGO's that dealt with HIV related issues.

Below is a tool that was developed by IBE – UNESCO, this tool gives the main disadvantages and challenges of the three different approaches towards the HIV and AIDS curriculum manual – Tool 5 – 1 (see appendix 16 page 198) of this document. The Tool

explains why a country like Zambia can hope to encounter as it uses, these different approaches. Despite the cost implications attached to each of these different approaches, the countries that use them have given very good reports on the performance of each of these approaches.

### **3.9 Background to the Integration of HIV and AIDS Education in Zambian Colleges of Education**

The HIV and AIDS pandemic which is a leading cause of death in the sub-Saharan Africa was seen to have spread drastically, with up to half of all new HIV infections occurring among youths under the age of 25 years old in 2001. It was therefore believed that teachers who are a crucial link in providing valuable information about reproductive health and HIV and AIDS to the youths would have to be the ones to spearhead this crusade. To do this effectively, teachers needed to know the subject, acquire good teaching techniques and understand what was developmentally and culturally appropriate. Some researches such as the one done by Akoulouze, Rugalema and Khanye (2001) reported in their Readiness Survey Report of 2001 that most of the interventions focused on learners only with very few focusing on equipping teachers to deliver the integration of HIV and AIDS Education.

Thus the 2001 United Nations General Assembly Special Sessions on AIDS sought to ensure that by the year 2005, at least 90 percent of the worlds' youth would have accessed information and education necessary to reduce the vulnerability to HIV and AIDS (Williamson, 2000). Pre-service and in-service teachers needed HIV and AIDS Education in order to have competence and confidence in teaching about this subject. It was in this vein that the Ministry of Education Policy integrated HIV and AIDS in institutions of learning (MoE, 1996). The HIV and AIDS integration into the Teacher Training Programmes was meant to be operational in all the sixteen grant aided and eighteen private Colleges of Education, thirty-four in total (MoESVTEE, 2013). Ministry of Education (2004) in Nzioka and Ramos (2008) reported that HIV and AIDS and Life Skills was considered as a cross cutting issue and was to be dealt with in all six study areas.

### **3.10 Tool 5 - 1 Integrating HIV and AIDS Education in the Official Curriculum – IBE- UNESCO**

In dealing with HIV and AIDS IBE – UNESCO developed Tool 5-1 in order to provide curriculum planners with a curriculum approach which would be more feasible and relevant to their particular context, as well some practical guidance on how to integrate HIV and AIDS education. Though UNESCO used different terms to explain the five different approaches, however, different countries have developed their own different terminologies. Some countries have actually decided to use two different terms concurrently.

According to Meidema (2006) in the Module by IBE-UNESCO Tool 5 – 1 there were five different approaches in which HIV and AIDS could be integrated in a regular curriculum. Many countries as at 2006 had integrated HIV and AIDS into their curriculum using the five different approaches. The first one being the stand-Alone Subject Approach which is being used by Benin has all the topics in SRH (Sex and Reproductive Health) and HIV and AIDS clearly marked in the school timetable. It hence addresses all issues relating to HIV and AIDS.

The second one is the Integrated in One Main Carrier Subject Approach, this has HIV and AIDS incorporated within the teaching and learning of the most relevant materials. This is addressed in one main carrier subject for example social science. Countries that are using this approach at the moment are Brunei, Chile, China, Colombia, Nigeria, South Africa and Vietnam.

The third one is the Cross Curricular Subject Approach in this approach the SRH, HIV and AIDS is integrated in a limited number of subjects (in no more than one third of the total number of subjects in the curriculum, subjects bear a close affinity with the topic and teaching and learning on SRH, HIV and AIDS is clearly defined and divided. Countries like Cambodia, Brazil, Malawi, Malaysia and Mozambique are using this approach.

The fourth one is the Infused into the Curriculum Approach. This approach includes HIV and AIDS Education across the broad range of subjects in more than three quarter of the total number of subjects in the curriculum. Countries using this approach are Botswana and

Kenya Zambia is also using this approach to some extent, though Zambia had adopted teaching of HIV and AIDS Education as a cross cutting issue approach.

The fifth approach is the Extra Curriculum Topic Approach – This is arranged outside the regular curriculum. There is more active interaction here but this is not examinable and as such, students get less motivated. Extra-curricular activities are activities that schools arrange outside the regular curriculum. These are less structured. They offer greater opportunity for more interactions among learners, teachers and the community. Outcomes are not generally assessed or credited. Teachers are also less motivated to devote time to facilitate HIV and AIDS activities, outside normal working hours especially when overtime is not paid for. Examples of countries using this approach are Botswana, Bahamas and Indonesia. Zambia has also been using this approach to a lesser extent. A matrix to give guidance on how to plan integration of SRH, HIV and AIDS was provided by UNESCO.

### **3.11 Tool 5-1: Key Features, Main Advantages and Challenges of Main Curricular Approaches to Integrating HIV and AIDS Education into the Curriculum**

The HIV and AIDS Tool 5 - 1 devised by IBE – UNESCO was meant to give more insight into the challenges of the different approaches to integrating HIV and AIDS Education. The Tool further gives highlights into the Stand-Alone, Main Carrier Subject and Cross Curricular Subject Approaches. Among the main challenges of the Stand-Alone subject is that if the subject is made mandatory the risk is that some teachers might not have to teach the HIV and AIDS Education. In the case of the Main Carrier Subject, the main challenge is that if integrated in science the focus might be on scientific aspects neglecting among others, social dimensions and communication skills. The Cross Curricular Approach involves training a large number of teachers and teaching requires close and consistent coordination to ensure that coherent coverage is achieved. The tool reported that the across selected subjects monitoring is mandatory and complicated. Below is a brief explanation on the features and main advantages and challenges of the main curricular approaches to integrating HIV and AIDS Education into the curriculum. A more detailed table is in the appendix, cited as Appendix 16 & 17.

### **3.12 Tool 5-2: Key Implementation Issues of Main Curricular Approaches to Integrate HIV and AIDS Education into the Curriculum**

IBE-UNESCO presented another Tool 5-2 which looked at the implementation issues of main curricular approaches to integrating HIV and AIDS Education into the curriculum.

On the issue of time it was said that on the Stand-Alone Subject Approach was critical as the dedicated and scheduled time was allocated within the main carrier subject and subsequently the school timetable. It was also said that the new subject of HIV and AIDS Education would need space and time meaning that the old subjects on the timetable would need to be revised and what was not essential and not relevant would be removed. This was going to be the same angle taken in all the three different approaches mentioned in Tool 5-1.

### **3.13 Global Efforts in Alleviating HIV and AIDS in the Education Sector**

Globally efforts are still being made to mitigate HIV and AIDS pandemic, which has claimed many productive lives, including teachers. It was in this light that Governments the world over were challenged to invest more into Colleges of Education to provide teachers with knowledge and skills on HIV and AIDS Education by integrating these subjects into the mainstream curriculum in Africa. UNAIDS estimates that in 1998 alone, 590,000 children under the age of 15 years old became infected, while by the end of that year one-third of the 33 million people in the world living with HIV were young people aged from 15 to 24 years old (UNAIDS, 1999a). These were school and college going children. How can the world intervene? Kelly (2000) advocated for the integration of sexual health and HIV and AIDS Education into the curriculum for all educational levels. Furthermore in Kelly's article "What HIV and AIDS Can Do to Education and What Education Can Do to HIV and AIDS", he indicated that across countries, AIDS had a devastating toll in human suffering and death. This scourge, he revealed, disrupted social systems, intensifying poverty, reducing productivity and wiping out skilful manpower and reversing development gains. He further stated that the full consequences of these catastrophic effects were yet to be felt in all its fullness. Kelly in the article above cited that education can generate hope because of its potential work at three levels where AIDS related interventions are needed. The three levels were summarised as follows:

1. Providing knowledge where there is infection by strengthening the ability to cope with personal or family infection.

2. Promoting care for those who are infected. When death occurs by helping people to cope with their grief and loss.
3. He further said that in longer terms, education plays a key role in establishing conditions that render transmission of HIV and AIDS less likely to occur. Conditions such as poverty, reduction, personnel empowerment, gender equity are factors that are evident. HIV and AIDS can also reduce vulnerability to a variety of factors such as streetism, prostitution or the dependence of women on men, which also help to breed ground for HIV infection. This was true today, because what Kelly predicted has come to pass.

The social systems are indeed aggravating resulting in poverty and also depriving the world of the much needed human capital through premature deaths as a result of HIV and AIDS pandemic. At the request of countries affected by HIV and AIDS the United Nations AIDS (UNAIDS) Inter Agency Task Team (IATT) for Education was established to mechanise for coordinated action on AIDS and Education. In 2002 a working group coordinated by the World Bank aimed to help accelerate the education sector responses to HIV and AIDS in Africa.

The group identified four key areas for support. Thus, donor coordination, leaders in the education sector, capacity building and sharing of information on good practices in sectoral responses to HIV and AIDS were among the key areas for support. Programmes like EFAIDS, also got on board to try and combine the goal of achieving Education for All with the need to limit the impact of HIV and AIDS on the education sector. The programme worked in the areas of research, policy, development, advocacy, publicity and training. Esau, (2010) wrote a paper on “Breaking the culture of silence in Checkmating HIV and AIDS as a Teacher Researcher” Esau reported that teachers can encourage learners to prioritise sport for their wellbeing and health especially in the context of HIV and AIDS.

### **3.14 Research Studies Done on the Integration of HIV and AIDS Education in Colleges of Education of Zambia**

A study conducted by Banda and Mulenga (2015) on teacher education and HIV and AIDS investigated teacher educators’ positioning in the teaching of HIV and AIDS and Life Skills Education. The case study was of one primary teacher training college on the Copperbelt province of Zambia. This study was aimed at examining how teacher-educators positioned

themselves during the process of mediating HIV and AIDS and Life Skills Education in classrooms at one primary teacher training college in Zambia. This study found that the context in which these educators lived and worked was significant to understanding how they each positioned themselves differently according to who they were in that context. It is this positioning of themselves that influenced the way they taught HIV and AIDS and life skills education in the college classrooms. Some of the revelations in this study were the different constraints such as conflict between curriculum content and the actual practice of teaching sexuality and HIV and AIDS, student lecturer relationships, taboos, social, cultural, religious norms and assumptions surrounding sex and sexuality that hampered the teaching of HIV and AIDS Education as well as Life Skills Education. The conclusion of this study was that up until now colleges of education did not manage to be places where teacher trainees were being prepared to teach HIV and AIDS and Life Skills Education later in their teaching careers.

This study posits that the context in which the educators in this study lived and worked was significant to understand how they each positioned themselves, in this case they positioned themselves differently according to who they were in that context. This positioning influenced the way they taught HIV and AIDS and life skills education, resulting in conflict between curriculum content and actual teaching. This however did not provide an analysis of the integration of HIV and AIDS Education in the two teacher education programmes as was the case in this study.

A study by Chikwanda (2015) looked at HIV and AIDS and teacher education in Zambia. She concentrated on a college in the peri-urban setting. Her study used the qualitative paradigm. The findings in her study revealed that teacher trainees and their lecturers' understanding of HIV and AIDS were centred on the unprecedented social problems of the disease. This negativity of the disease imposed social and economic burdens on the lives of the infected and affected in the college understudy. It was for this reason that HIV Education was introduced in the college to equip student teachers with knowledge, skills, positive attitudes and values to help them cope and avoid contracting the disease, as well as to mitigate the impact of the epidemic on the college community (Chikwanda in Breidlid, Cheyeka and Farag (eds) 2015). This is just one of the many studies that was done in this area to try and understand this pandemic educationally.

This study contends that teacher trainees and their lecturers understanding of HIV and AIDS were centred on the unprecedented social problems of the disease. The above negativity of the disease imposed social and economic burdens on the lives of the infected and affected in the colleges understudy. This study did not analyse the integration of the HIV and AIDS Education in the two teacher education programmes, as was the case in this study.

Another study on teacher education was conducted by Lucinda Ramos (2003) in which he analysed the response of a teacher training institution to HIV and AIDS: A case study of one teacher training college of Zambia. This study sought to examine the extent to which a teacher training institution in Zambia was able to address the problem of HIV and AIDS. The research identified the impact of HIV and AIDS on staff and students in the college and the existence of institutional policies, structures, teaching programmes and strategies for addressing HIV and AIDS. It described barriers to effective teaching on HIV and AIDS and the causes for weaknesses in the overall response. It was reported that the study found that while attempts were made to establish structures and integrate HIV and AIDS into the current teaching programmes, the response needed much strengthening and improvement. Issues such as lecturer-student sexual relationships, peer pressure, lack of teaching materials, selective teaching practices and discomfort with the subject and lack of policies were all identified as major barriers to adequately address the epidemic and equip future teachers with the skills, attitudes and knowledge for effective teaching on HIV and AIDS. The research concludes that the teacher training college is being only partially responsive to the future needs of teachers and needed much more support from the Ministry of Education and other partners.

Though the study by Ramos (2003) analysed the colleges response to HIV and AIDS Education in only one college of education, his study is in agreement with this study and similarly reveals that competition for curriculum time, shortness of lesson, limited experience of teachers, inability to use interactive methodologies were issues that hindered the HIV and AIDS education from being fully taught to teacher trainees.

### **3.15 Community Health and Nutrition, Gender and Education Support-2 (CHANGES-2) Contribution to the Integration of HIV and AIDS Education**

Another contribution in the fight against HIV and AIDS through education came from Community Health and Nutrition, Gender and Education Support – 2 Programme (CHANGES2) through The American Institute of Research (AIR) in 2007. The programme

commenced operations in June 2005 and ended in September 2009. This programme provided support to basic schools, community schools, high schools, and Colleges of Education (COEs). United States Agency International Development (USAID) in collaboration with the Ministry of Education (MoE) and Teacher Education Specialized Services (TESS) in Zambia developed, piloted and institutionalized an HIV and AIDS pre-service course called “Teaching in the Window of Hope (TWH).” This HIV and AIDS Education were tested in Colleges of Education in Zambia. The programme started with four Colleges of Education in 2007 and the number grew to ten in 2008. The above approach was meant to help teachers to overcome the many issues they faced as they implemented classroom based HIV prevention. This integration was only in education studies. Many Ministries of Education in Africa are taking on responsibility for identifying and driving education responses to HIV and AIDS Education, Zambia is no exception. This programme was meant to develop the skills of teacher trainees to teach HIV and AIDS related topics in an age appropriate manner when they were deployed in schools AIR (2005). The ministry of Education has continued with the work of CHANGES-2 which is the use of appropriate methods for the acquisition of information and orientation to help in the facilitation of teaching HIV and AIDS Education.

In its quest to fight HIV and AIDS in Colleges of Education, Zambia complied with the United Nations General Assembly Special Sessions on HIV and AIDS and developed a manual on interactive methodologies for HIV and AIDS prevention in Zambian schools in 2003. The Ministry saw the issue of lack of trained teachers to teach HIV and AIDS Education as the biggest challenge and so the need to get all the teachers to be trained in interactive methodologies and life skills and psychological competencies was seen as a priority. This was because the common response that was seen to work to prevent the spread of HIV and AIDS was education. It was identified as a “social vaccine” (World Bank, 2002) against HIV because it equipped young people with invaluable tools to increase self-confidence, social and negotiation skills. Mitigating the impact of HIV and AIDS in teacher training institutions and equipping teachers with the right skills and attitudes to teach HIV and AIDS Education in formal education setting was then recognised as being very important at all levels, nationally and globally. It was imperative to focus on teachers in this study because teachers play a pivotal role in the development of skills and clarification of attitudes and if properly trained, could help to mitigate HIV infection among young people.

### **3.16 Appropriateness of Content**

Kelly (2000) illuminated that there appeared to be an implicit assumption that once teachers were given the right training and support in form of curriculum and materials, they would necessarily become effective vehicles for contributing to the promotion of imagined future change in the children between the ages of 5 and 24 years old target group. Research has also looked at teachers in the context of HIV and AIDS and focused on determining what teachers knew and identification of misconceptions of whether teachers were actually teaching the content that they were required to teach.

Two separate qualitative studies by Chiwela and Mwape (1999) revealed that most of the teachers in Zambia had neither been trained to deal with HIV and AIDS Education nor had they been provided with teacher and learner materials. As a result, the teachers were said not to be knowledgeable enough to pass on correct and complete information to students. Weiler and Weiler (2012) commented on the success of combating HIV and AIDS pandemic according to the United Nations Millennium Development Goals (MDG's) Report of (2010) where it was stated that knowledge and understanding were the first steps in combating the spread of HIV and AIDS but success has not been as great as it was hoped. They further added that teachers reported about their discomfort in teaching on sex related content. Article 26 of the United Nations Declaration on Human Rights proclaims the right to an education which included sex education, and the pupils and teachers right to knowledge and skills needed for HIV protection. Such a right can be exercised if teacher trainees who are the future teachers could have the full knowledge of the disease including HIV and AIDS prevention and care.

Bruner (1960) reported that content to be taught in any subject area should be structured so that it can easily be grasped by the learners. Changes-2 simplified this by indicating that HIV and AIDS content should be age appropriate. Muzumara (2011) reaffirms this by stating that there are a number of factors that determine what methods teachers should use to accomplish a given learning outcome, one of them being the age of pupils, time allocated to the teaching, weather conditions, and availability of teaching and learning resources. Banda and Mulenga (2015) in their study revealed that conflict between curriculum content and expectations is what hinders the actual process of teaching HIV and AIDS in the classroom. They attributed

some of the conflicts to selective teaching which makes HIV and AIDS Education impartial and incomplete. This selective teaching is as a result of teachers not feeling comfortable to teach certain HIV and AIDS contentious related issues.

### **3.17 Methodology**

This study revealed that the most common teaching method was the lecture method, which was not superlative for learners, whereas on the other hand the demonstration method was considered to be ultimate and helped the lectures to give more information or explanations to the learners. The lecturer was able to carry out the activity or explanations clearer to the learner, so that the learner could carry out the activity or illustration on their own, this was supported by Jenkins and Whitfield (1974) in Muzumara (2011). This study also observed that brainstorming, discussion, group work and field work were other methods of teaching which were ideal for all categories of learners. In addition, Eclectic method which is a combination of a lot of teaching methods also helped to facilitate learning. Another study by Mwetit (2007) and Hellevwe et.al (2011) in Weiler and Weiler, (2012) cited role plays as methods that were well suited to teach HIV and AIDS Education to teacher trainees. This was confirmed in this study. Coombe (2002) argued that teachers were at the battlefront, but they were generally unarmed, meaning that they did not have the required tools to teach HIV and AIDS Education adequately. This further suggested that the teaching methods that were sometimes adopted did not have the desired result for the learners, as the teachers also lacked skills and knowledge in order for them to effectively teach on HIV and AIDS Education.

Kirby et al. (2006) reviewed the evaluations of multiple studies of some interventions on the teaching of HIV and AIDS Education and found that successful curriculum-based programmes have seventeen characteristics. Five involve the development of the curriculum, eight involve the curriculum itself; four describes the implementation of the curriculum, including selection and training of teachers with desired characteristics. Once a curriculum is developed, teachers need to go for training to enable them improve students' knowledge about HIV prevention and transmission, attitudes toward HIV prevention and behaviours relating to HIV and AIDS. Even when the curriculum is prepared the issue of time allocation for a new HIV curriculum, availability of teachers, and distribution of teaching materials have all been shown to affect outcomes. This article mentioned the following as being factors that hindered the outcome of HIV and AIDS Education: Competition for curriculum

time, shortness of lesson, low priority by senior personnel, and limited experience of teachers, inability to use interactive teaching methods, as well as absence of teachers in school hindered sexual and HIV Education programmes. Some of the other factors mentioned were as a result of the commitment of senior personnel, intensive teachers' training, and selection of relevant teachers such as science teachers to facilitate these programmes. Whereas Kirby et al. (2006) cited a number of interventions that hindered the teaching of HIV and AIDS, another study done by Weiler and Weiler (2012) gave contra reports stating that even when the teachers had the knowledge, confidence and willingness to address HIV and AIDS in their teaching yet they did not do it. The two cited incentives as being the hindrances to addressing contentious issues in the classroom. These contentious issues were in terms of shortness of lessons, limited experience of teachers, inadequate time to address the HIV and AIDS issues etc. These were generally what most scholars had attributed to as factors that hindered the inability to fully teach and address the HIV and AIDS Education in Colleges of Education.

### **3.18 Assessments**

Bruner (1980) postulated that in the act of learning, three processes take place: Acquisition of new information, transformation of knowledge acquired and assessing of the learning? Benoy, Chifunyise and Mukubi (1999) also observed that very little effort was spent on developing HIV and AIDS teacher education materials. This laxity in preparing teaching materials in many subject areas is what made it difficult for many subjects' areas to integrate HIV and AIDS Education and to be examined. Crotty, (2009) in Creswell, (2009) also emphasised the concept of assessment, where he said that assessment is seen as a two way process involving interaction between the lecturer and the learner. The role of the lecturer who is the assessor in this context is seen as one to initiate dialogue with the learner to find out the level of performance on any task and also sharing with the learners' possible ways of improving their performance. It is on this basis that examinations are seen as an essential facet of learning.

A Report by The American Institute for Research (2013) indicated that in 2006 a survey was conducted by Colleges of Education (CoE) student-teachers and staff by the Ministry of Education and Changes 2. The survey revealed that student teachers did not feel comfortable or well prepared to teach HIV and AIDS prevention in the classroom let alone assess the

pupils in the subject. Because of this, Ministry of Education has been working closely with college tutors, teacher trainees and Teacher Education and Specialised Services to develop an HIV and AIDS Teacher Education Course (HATEC) which is an activity based course with tutors acting as facilitators.

### **3.19 Summary to this Chapter**

This chapter reviewed literature on the history of HIV and AIDS in Zambia as well as the integration of HIV and AIDS Education in different countries such as: Zambia, Ghana, South Africa, Nigeria, Bukina Faso, Kenya, Malawi, Mozambique, Zimbabwe, Tanzania and Bangladesh. All these countries demonstrated that the integration of HIV and AIDS Education in Colleges of Education was meant to give the teacher trainees knowledge and skills in HIV and AIDS Education. Literature reviewed further showed that the integration of HIV and AIDS Education had a lot of challenges, some of the challenges had to do with the appropriateness of content, methodology and assessment elements that supported the integration. The following factors were considered to interfere with the delivery of HIV and AIDS Education: laxity in preparing teaching materials, negative attitude of teachers towards the integration, lack of teaching and learning resources, limited time allocated for the teaching of the subject, selective teaching, unsuitable teaching methods, conflict between content and expectations and finally not taking into consideration the age of the learners as HIV and AIDS is being taught. This and many other reasons made the integration of HIV and AIDS Education not to be fully successful. It is in this vein that this study was planned to analyse the integration of HIV and AIDS Education in the two Teacher Education Programmes in four Colleges of Education of Zambia.

## **CHAPTER FOUR**

### **METHODOLOGY**

#### **4.1 Introduction**

This chapter discusses the research methods used in the analysis of the integration of HIV and AIDS Education in Colleges of Education of Zambia. The chapter presents the constructivism philosophical paradigm, research design, data collection instruments and procedures as well as data analysis, ethical considerations, limitations of the study and enhancing the quality of the study. This study analysed Primary Teachers Programme and Secondary Teachers Programme which run for two and three years respectively, these two programmes have integrated the HIV and AIDS Education in the Teacher Education Programmes through different core subjects as cross cutting issues.

The limitations, validity, reliability of this research, and issues related to ethics are also articulated. Emerging themes and sub-themes were provided for the purpose of analysing the HIV and AIDS Education in Colleges of Education. The target population was all lecturers and teacher trainees at the four Colleges of Education which was estimated at 2,000 people. The sample size was n=90 participants. The chapter ends with a summary.

#### **4.2 Constructivism Philosophical Paradigm**

This study employed the constructivism philosophical paradigm. This paradigm stipulates that there's no simple reality or truth, and that reality is created by individuals in groups which is considered to be less realistic (Adoni et al., 2016). The constructivism philosophical paradigm as a world view guided this study and the participants beliefs, values, agreements as well as experiences regarding the integration of HIV and AIDS Education and Teacher Education Programmes came to the fore through their narrations of reality constructed, this is in line with the views of Fossey et. al., (2002). The study also took into consideration the ontology which is the nature of the reality of the integration of HIV and AIDS Education in Teacher Education programmes, and the epistemology which is the perceived relationship with the knowledge on HIV and AIDS Education that this study revealed (Guba, 1990). According to Honebein (1996) Constructivism philosophical paradigm asserts that people construct their own understanding and knowledge of the world through experiencing things and reflecting on their experiences. This is the basis upon which people form or construct

their reality based on their experiences (Cashman et al., 2008; Hein, 1991). In this study, the constructivism philosophical paradigm enabled the researcher to use interviews, focus group discussions, document reviews, observations and questionnaires for the purpose of methodological triangulation of the information from the colleges and university participants through the use of across case approach analysis. Though questionnaires were used, most of the questions were open ended hence encouraged the participants to explain their unique perspective. This way the subjective experiences of the participants were brought to the fore.

### **4.3 Research Design**

The study was structured by a descriptive survey research design and it was qualitatively oriented. In using the descriptive survey research design, the study took into consideration the different characteristics of the people sampled. This research design helped to generate answers to the research problem, as also stated by Kombo and Tromp (2006) in Kasonde Ngandu (2013). In using qualitative research approach the rich descriptive data such as feelings, thought processes and emotions were achieved which could not have been achieved had the study used quantitative research approach (Strauss & Corbin, 1998; Merriam, 1998; Marshall & Rossman, 1999 in Ogina, 2007). Other scholars have also described qualitative research as a social science research approach that involves watching people in their own territory and interacting with them in their own language and on their own terms (Kirk and Miller, 1986). In this study the survey descriptive research design was used by identifying different cases based on the category of participants used.

This study also embraced, among other views, those of Denzin and Lincoln (2003) which stipulated that the qualitative researcher relies as much as possible on the participants' views of the situation being studied, and makes knowledge claims based on multiple meanings of individual experiences. This study shared the lived experiences, and views of all the participants and analysed them. According to Creswell (1994) and Manning (2000) in Onyango (2009), interpretations and descriptions offered by participants in qualitative study aided the researcher and others in understanding the phenomenon under study. This study analysed the descriptions and narrations given by the participants and this is well captured in the results section of this study. Additionally this study, used a substantial amount of data collected about the integration, this is in line with what Gall et al. (2007) postulated by stating that a substantial amount of data is collected about a specific case or cases selected to represent the phenomenon. When collecting data the researcher interacted with the

participants in their own natural setting, this way the researcher was able to gain a deep understanding of the participants' lived experiences and actions within their context, this is in agreement with (Stake, 1995, 2005; Mabry, 2008) views.

#### **4.4 Study Sites**

The study was conducted in Lusaka province at four Colleges of Education, one college, for special education needs and the other one, an in-service college. In the Central province, the study was conducted at one College of Education of mathematics and science, and in Southern province the study was done at a faith-based College of Education. The fourth, fifth and sixth sites were at the Curriculum Development Centre (CDC), University of Zambia and one Non-Governmental Organisation (NGO). Zambia is divided into ten provinces each administered by an appointed Provincial Minister. Colleges of Education are found in almost all the ten provinces of Zambia and are considered to be the starting point of where Human Immuno-deficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS) Education are taught to teacher trainees with a view to inculcate in them the knowledge, skills and positive behavioural attitudes.

Figure 5 shows the ten provinces of Zambia out of which only Central, Lusaka and Southern provinces were sampled in this study. All Colleges of Education whether private or public offer courses in teaching in the following Teacher Training Programmes: Early Childhood Teacher Education Programme; Primary Teacher Education Programme and Secondary Teacher Education Programme. This study however concentrated on Primary Teacher Education Programme and Secondary Teacher Education Programme found in the sampled Colleges of Education. At the time of conducting this research, Zambia had a record of sixteen public Colleges of Education and eighteen private Colleges of Education, thirty-four in total (MoGE, 2013). Out of the twenty-nine private and public Colleges of Education, two of these had acquired university status but were still affiliated to the University of Zambia. The study focused on only four of these Colleges of Education which were affiliates of the University of Zambia.



**Figure 5: Map of Zambia and its provinces**

*Source:* [copyright@Ontheworldmap.com](http://copyright@Ontheworldmap.com) (2017).

Table 6 below provides the background information on Colleges A, B, C and D and the reasons for choosing these Colleges of Education. Pseudonyms A, B, C and D were used to protect the identity of the colleges.

**Table 6: Background Information of Colleges of Education Chosen for the Study**

Colleges	Background Information	Reasons for Choosing the Colleges
<b>College A</b>	A faith based college Situated in an urban setting	Produces science and mathematics Secondary and primary school teachers.
<b>College B</b>	A special needs college situated in an urban setting	Produces special needs education teachers for primary schools.
<b>College C</b>	A government college for Teachers in an urban setting	Produces secondary teachers in science and mathematics.
<b>College D</b>	A pre and in-serving college for teachers in a peri-urban setting.	Produces teachers and administrators for primary and secondary schools.

College A is located in the tourist city of Livingstone. It is a Grant-Aided and faith based Institution. This college enrolls pre-serving teachers by distance and full time learning modes. The pre-service teacher education system is for grades 8 and 9 which is junior secondary

school. This college was established in 1957 by Northern Rhodesia Christian Council. The distance from the main post office to the college is about six kilometres. Originally the college trained primary school teachers, until 2002 when it was upgraded to offer diploma programmes for secondary school teachers which were meant to teach grades 8 to 12. Its core mission was to enhance quality education to students and to produce teachers with Christian principles who would render excellent services to the community, the whole country and beyond. This college is currently undergoing a curriculum review process in teaching and learning.

Table 7 below gives information on the lecturers who were interviewed at college A, their subject areas and reasons for choosing them. Mr Chanda is the Principal of the college. Mr. Killie lectures in Sociology of Education, he was the lecturer who was sent to Lusaka to participate in the new curriculum process for primary schools. Mrs Yaya is a lecturer in Physical Education. This is one course that had a lot of drama, songs and many other interactive components of HIV and AIDS Education. Mr Chongwe is a lecturer in Educational Psychology.

**Table 7: Background Information of Head/Lecturers Interviewed (College A)**

<b>Lecturer</b>	<b>Background Information</b>	<b>Reasons for Choosing the Lecturer</b>
<b>Mr Chanda</b>	In-charge of the college	Overseer of all college issues.
<b>Mr Killie</b>	Lecturer in Sociology of Education	He is the lecturer who was sent to Lusaka to participate in the new curriculum process.
<b>Mrs Yaya</b>	Lecturer in Physical Education	Teaches on HIV and AIDS in her course.
<b>Mr Chongwe</b>	Lectures in Educational Psychology	Handles students in education subjects.

College B is located in Kabwe about 139 kilometres north of Lusaka. It opened as a Teachers' College in 1967 to train teachers for junior secondary school level. The College currently offers a four (4) year Bachelor of Education Degree programme on full time and distance learning modes. It has an enrolment of 5,000 students. When fully established, it will offer fourteen degree programmes in social sciences and enrol a total of 17,000 students. Rapid Infrastructure Development (RID) is currently taking place. The college has now

upgraded and holds a University College Status (UCS). Since this research was done at the time when the status was that of a college, the information is still valid and is being used in this study.

Table 8 below gives information on the Head and lecturers at College B, Mr Andy is the Principal, whereas Mr Bull is a counsellor in the college. On arrival at the college the researcher was told that HIV and AIDS issue were the responsibility of Mr Bull. Mr Bull was chosen to be part of the sample because of his involvement in the HIV and AIDS Education in the college. The other two lecturers, Mr Charlie and Mr Hamper were also chosen because of the subjects that they handled in the college which had some elements of HIV and AIDS components embedded within their subjects.

**Table 8: Background Information of Head and Lecturers Interviewed (College B)**

<b>Lecturer</b>	<b>Background Information</b>	<b>Reasons for Choosing the Lecturer</b>
<b>Mr Andy</b>	An administrator	In-charge of the college
<b>Mr Bull</b>	A counsellor in the college	Patron of the HIV and AIDS club and any other related issues on HIV and AIDS.
<b>Mr Charlie</b>	A lecturer	Lectures in counselling
<b>Mrs Hamper</b>	A lecturer	Lectures in special needs subjects

College C was established in 1971. Since its inception it has undertaken several reforms in its training programmes in its quest to improve and expand the provision of Special Education. In 1980, the college expanded its training programmes from training teachers in areas of hearing impairments and physical disabilities education to the inclusion of the intellectual disabilities education.

At College C, the Principal of the college is Mr Sims. Mr Lume is the counselling lecturer in the college and was responsible for HIV and AIDS Education. Mrs Chen is the lecturer in Special Education whereas Mr. Chang is the lecturer responsible for all Education courses. The Education courses he was responsible for were Philosophy of Education, Sociology of Education and Educational Psychology. All these subjects had the HIV and AIDS Education

well embedded in their courses. In 1994, the college was upgraded to the status equivalent to that of other Colleges of Education. This college is currently offering a diploma programme in Special Education and a diploma in Early Childhood Education, which are underwritten by the University of Zambia. This college has an Assessment Centre used in assessing children with special needs.

**Table 9: Background Information of Head and Lecturers Interviewed (College C)**

<b>Lecturer</b>	<b>Background Information</b>	<b>Reasons for Choosing the Lecturer</b>
<b>Mr. Sims</b>	In-charge of the college	Overseer of the entire college.
<b>Mr Lume</b>	Counsellor	Teaches on HIV and AIDS and gives counselling to students.
<b>Mrs Chen</b>	Special Needs lecturer	Teaches on HIV and AIDS in her subject area.
<b>Mr Chang</b>	Teaches education courses	Teaches on HIV and AIDS and is in charge of all distance students.

College D emanated from the original Jeanes School which was opened in 1939, as a Jeanes Training Centre for Community Teachers (JTCC). This college is located 57 km east of Lusaka in Chongwe District. In the 1950s the college was affiliated to the University of Salisbury – Southern Rhodesia; The College was training both primary and secondary school teachers. The college became exclusively in-service in 1970 to service primary school teachers and administrators and was later renamed.

In 1975, Advanced Primary Course (APC) and Advanced Industrial Arts (AIA) were introduced at the college. These were upgrading courses for primary school teachers who had the necessary school certificate qualifications. These were one-year courses. In 1989 Diploma in Basic Education for Science, Mathematics and English were introduced which in 1995 were affiliated to the University of Zambia under the name of Secondary Teachers' Diploma.

In 2005, Diploma in Education Management by distance learning was introduced. This has continued to date as Education Leadership and Management course. The college now enrolls

pre-serving teachers as well as in-serving teachers in addition to all this it now has courses running through the distance learning mode.

### **Current In-Service Courses**

All the courses currently being offered are underwritten by University of Zambia.

- (i) Primary Teachers' Diploma (PTDDL), (1 year six months duration)
- (ii) Secondary Teachers' Diploma (full time– 2 year duration)
- (iii) Diploma in Guidance, Counselling and Placement (2 years duration commenced in January 2004).
- (iv) Diploma in Educational Management (1 year six months duration).
- (v) At College D, The Principal in charge of the college is Mrs Toyome. This is a college which is now a University College of Education. At the time of the interviews it was still affiliated to the University as a College of Education. Mrs Tickler is in charge of distance education. The study intended to sample how distance students were taught integrated HIV and AIDS Education, this being the reason why Mrs Tickler was included as part of the sample. Subjects like French was another subject that the study decided to include, reasons being that there was need to know how HIV and AIDS Education were handled in French. Mr Jonas the French lecturer hence became part of the sample for this study. Mr Yuyo is a Sociology of Education lecturer and he too had to be included, since HIV and AIDS were included in the course outline for Sociology of Education as cross cutting issues.

**Table 10: Background Information of Head and Lecturers Interviewed (College D)**

<b>Lecturer</b>	<b>Background Information</b>	<b>Reasons for Choosing the Lecturer</b>
<b>Mrs Toyome</b>	In-charge of the college	Overseers all affairs of the college.
<b>Mrs Tickler</b>	In-charge of distance education.	Teaches on HIV and AIDS.
<b>Mr Jonas</b>	A French teacher	Teaches on HIV and AIDS education
<b>Mr Vuyo</b>	Sociology of Education lecturer	Teaches on HIV and AIDS education

#### **4.5 Target Population**

The researcher in this study had an estimated target population of 2,000 people comprising of all teacher trainees, all lecturers, all principals at the four Colleges of Education, University lecturers from three public universities in Zambia, all graduates from four Colleges of Education and all Ministry of Education employees at Teacher Education Specialised Services (TESS) as well as all officers at one Non-Governmental Organisation.

#### **4.6 Study Sample**

The sample for this study was non-randomly selected and homogeneously sampled. Non-random sampling is when every individual in a population has a non-zero probability of being selected. A selection criteria is hence provided. In this study the participants were selected based on their similar characteristics which were of interest to the researcher. This was based on factors other than random chance, e.g. convenience, prior experience or the judgement of the researcher. The sample size was 90 participants, consisting of 4 Principals of colleges, 4 senior lecturers, 4 heads of departments and 4 lecturers, 32 teacher trainees, 2 officers from the Ministry of Education - Teacher Education Specialised Services (MoE, TESS), 31 University of Zambia lecturers - appointed as external examiners for Advisory Unit for Colleges of Education (AUCE), 8 graduates from selected colleges of education over a period of five years and 1 officer from one Non-Governmental Organisation.

The study identified 31 lecturers from the University of Zambia which is a public University to be part of the sample. These lecturers were experts in the following subject areas: Religious Studies, Sociology of Education, Physics and Chemistry, Special Education, Civic Education, Home Economics, Educational Psychology, Guidance and Counselling, Geography, English Language, Physical Education and Mathematics Education. Out of this category of participants twenty (20) were male, nine (9) were female and two (2) did not indicate their gender (see the table below). The male in this sample were in the majority showing 20 (64.5%) and the women were only 9 (29.9). The disparity between the male lecturers and the female lecturers is because the University of Zambia has more men working as lecturers than females. The age range for this sample was between 33 years to 71 years old, 7 participants were in their thirties, 5 participants were in their forties, 7 participants were in their fifties, 4 participants were in their sixties and one participants was in his seventies and 4 participants did not indicate their ages , giving a total of 27 participants.

**Table 11: Gender**

<b>Males</b>	<b>Females</b>	<b>Not Indicated</b>	<b>Total</b>
20 (64.5%)	9 (29%)	2 (6.5%)	31 (100%)

The majority of the participants totalling 26 in number were married whereas one was single and one was widowed. Three did not indicate their marital status.

**Table 12: Marital Status**

<b>Single</b>	<b>Married</b>	<b>Widowed</b>	<b>Not Indicated</b>	<b>Total</b>
1 (3.2%)	26 (83.9%)	1 (3.2%)	3 (9.7%)	31 (100%)

#### **4.7 Sampling Technique**

The study used the non-probability or non-random sampling technique, where each member of the population had unequal chance of being included in the sample. Non-probability or non-random sampling refers to the sampling process in which, the samples are selected for a specific purpose with a predetermined basis of selection. The sample is not a proportion of the population and there is no system in selecting the sample. The selection depends upon the situation. There is an assumption that there is an even distribution of characteristics within the population, believing that any sample would be representative. Sampling does not have information about the entire population, it is non-random, not generalized, less expensive and more convenient. This technique is more prone to bias and sampling errors. This study used this sampling technique for the obvious reasons given above. The purpose was to analyse the integration of HIV and AIDS in Teacher Education Programmes, hence the sample for the study was selected for a specific purpose with a predetermined basis of selection. Selection was based on the subjects that the lecturers taught in Colleges of Education and for the University of Zambia lecturers, it was the courses that they moderated at these Colleges of Education. Therefore the purposive sampling technique was appropriate for this study.

This study further used purposive sampling which can also be called judgemental sampling. The key informants sampling which is also called expert sampling was used to select all the lecturers in this study. The typical case sampling was used to sample the focus groups. The

teacher trainees in the focus groups were picked for their excellent academic performance and the fact that they were final year students. The sample chosen depended mostly on the researcher's judgement. The sample for this study was homogenous, meaning that the sample had similar characteristics which were of a particular interest to the researcher. The advantage of purposive sampling is that the researcher selects participants based on the purpose of the study (Trochim, 2001 in Ogina, 2007). This means choosing participants who have experienced the phenomenon and have first-hand information relevant to the study.

A sampling technique is the process by which the subset of a population from which data is to be collected is chosen. The other advantage was that purposive sampling was convenient in that the researcher was able to reach the participants quickly and the researcher could also choose participants who were willing to provide the relevant data. Purposive sampling was further used to identify the trainee teachers who took part in focus group discussions. There were four major cases in this study. 32 teacher trainees (4 males and 4 females from each college) 8 graduates; 31 UNZA lecturers and 16 college lecturers (for this category of participants, the information collected was triangulated) Stakeholders were 2 Ministry of Education officers and (1) Restless Development employee. The focus groups had open discussions chaired by the researcher, this group was large enough and generated a rich discussion that made everyone feel included in the discussion and not left out. Identification of members to participate in this study was left to the subject teachers who ably identified four male and four female final students to take part in the focus group discussions at each college sampled.

#### **4.8 Pilot Study**

Gall et.al (2007) states that a pilot study is a small-scale preliminary investigation that is conducted to enable the investigator develop and test the measures or procedures that will be used in a research study. Kothari (2009) also in support of Gall, Gall and Borg confirm that a pilot study is used to determine whether individuals in the sample have significant knowledge and understanding to express a meaningful opinion about the topic as well as assess the adequacy of the data collection plan.

The interview guide was subjected to pilot testing at a college offering education courses within Lusaka which was not part of the sampled colleges for this study, though it was

chosen from the population of the main study. The piloted college had its programmes affiliated to the University of Zambia and not the college itself. The pilot study helped the researcher to refine the questionnaires and interview guides that were used in this study by playing back what was recorded and listening to the responses. This helped the researcher to detect weaknesses in the design and instruments as well as reveal any errors which helped the researcher to refine the instruments before the final testing. The college that was used in the pilot study was not included in the sampled colleges for this study.

#### **4.9 Data Collection Instruments**

Five techniques were used to collect data in study, these were: Questionnaires, structured interviews, focus group discussion, document analysis and observational checklists. Questionnaires were used for the 31 lecturers from the University of Zambia. Structured interviews were used for lecturers from 4 Colleges of Education, Ministry of Education officers, Restless Development officers and Graduates for over a period of five years. Focus group discussions were held with teacher trainees (ranging between the ages of 18 and 30 years old) and these were all final year students. The face-to-face structured interviews were done starting with a set of open ended questions to guide the interviews followed by probing questions for depth and clarity as reported by Morse and Field (1995). Participants were able to reveal all that they knew regarding the integration of HIV and AIDS Education. The in-depth information helped this study to explain the phenomenon as also postulated by Creswell (2002) and Rubin and Rubin (2005). The other measure taken was the audio taping and additional descriptive note taking in the journal for verification purposes that the interviews were actually done. Please see Appendices 7, 8, 9 and 10 on pages 180-192 for samples of the questionnaire and interview guides.

The secondary data was derived from desk top reviews of available literature on the integration of HIV and AIDS Education in the major Teacher Education Programmes. Web sources also provided the study with credible information on the integration of HIV and AIDS Education. Other secondary data was derived from journal articles, books and reports. Some classroom observations were also done through the use of observational check lists.

#### **4.9.1 Questionnaires**

This study used self-administered questionnaires (SAQ) which were designed specifically to be completed by participants without intervention from the researcher. In this study questionnaires were used for the thirty-one University of Zambia lecturers. The questionnaire assessed the perceptions of participants on the integration of HIV and AIDS Education in Colleges of Education. For the closed ended questions in the study, the summated scale in the Likert response format was used. The Likert response format requested participants to indicate the following responses, strongly disagree, disagree, undecided, agree, and strongly agree. Kothari (1990:84) reminds us that “In a Likert scale, the participants were asked to respond to each statement, in terms of several degrees, usually five degrees (but at times 3 or 7 were used) of agreement or disagreement. ”The Questionnaires (Appendix 7) were used for lecturers at the University of Zambia because they were convenient for both the researcher and the participants.

#### **4.9.2 Structured Interviews**

In this study structured interviews (Appendix 8, 9 & 10) were used to collect data on the integration of HIV and AIDS Education. Patton (1990) in Kalimaposo (2012:123 ) “identifies interviews as one of the qualitative research methods and states that the purpose of interviewing is to find out what is in someone else’s mind since we cannot observe feelings, thoughts and intentions”.

The duration of the interviews in this study was 20 to 30 minutes. After the interviews the transcription were done using the audio tape and data was coded using Nvivo 11. The themes and sub-themes were derived from the coded data. All the data collected was descriptive and presented the participants perceptions on the integration of HIV and AIDS Education. The tape recorder was used with the permission of the participants to help in the accuracy of recorded data. Notes on some aspects of the interviews that could not be recorded were written down in the journal. Interviews were used for college lecturers in all four Colleges of Education, graduates who had graduated from the four Colleges of Education in the last five years, Ministry of Education Officers and Restless Development Officer.

Structured interviews were also conducted for the stakeholders, who were the Ministry of Education Officers, Restless Development Officers, and four Principals from four Colleges of

Education these took longer than one hour because there was a lot of probing done by the researcher, to which detailed information was given on the integration.

Class observations were done in one subject only, which was Physical Education. The reason for this, was that this was the only subject where interactive methodology was used to teach HIV and AIDS education through play, games and songs. This was a self-administered observational check list intended to measure knowledge of students and lecturers towards the teaching of the integration of HIV and AIDS in Physical Education studies. (See appendix 13 page 198). The picture shows teacher trainees playing the game of *Agode, Agode*.

#### **4.10 Data Analysis**

In this study data were analysed and processed qualitatively. Qualitative data was coded and grouped based on the emerging themes and sub-themes from the narrations of the different participants. Qualitative Solutions and Research International (QSRI) Nvivo 11 a qualitative analysis computer software package was used to sort and arrange the non-numerical data thematically through across case analysis, whereas a Statistical Package for Social Sciences version 16 (SPSS) was used to process data from the questionnaires by generating frequency tables and pie charts. When the data was collected, closely related operations such as establishing categories was done. Later these were condensed into manageable groups and tables for further analysis. Denzin and Lincoln (2003) specify that the qualitative researcher relies as much as possible on the participant's views of the situation being studied and makes knowledge claims based on multiple meanings of individual differences.

Editing in the study was done to improve on the quality of data for further coding which is in agreement with what Kothari (2009) said regarding editing of data, that editing is usually done to improve on the quality of data. This research contained source materials from interview transcripts, audio recordings, and photographs. In order for the study to explore the source materials the following were done:

The sorting of qualitative data was done using Nvivo 11. Nodes which are storage containers for information were used and were central to understanding the workings of QRSI Nvivo. Nodes helped in collecting references about specific themes, cases and relationships in the study. In this study the nodes helped in the pagee gathering of related materials in one place

and the emerging patterns and ideas were amalgamated. This way the study was able to create and organize theme nodes and case nodes. It also became possible to create some relationship nodes. Relationship nodes were used in gathering evidence about the relationship between items in the study. Case nodes are people, places, sites and organizations. Demographic attributes were also used as the basis for comparison.

The research summarised most of the data collected by using QRSI Nvivo, the coding helped to review, merge and refine the work in the study, memoing also helped to place key ideas together, by linking and reflecting on the emerging ideas. Querying the word frequency was done by searching the text, using matrix, as well as using visuals to show how data was analyzed. Case nodes were developed under which the people were interviewed. They were identified as: Case One, case Two, case Three and case Four. There were four cases in total. It is from these cases that data were analyzed from each case node in order for the study to give the readers what each case said regarding the integration of HIV and AIDS Education into the two Teacher Training Programmes. The across case approach was also used and according to Patton (1990) in Kalimaposo (2010:129) “under the across case approach, the researcher puts together answers from different groups of lecturers on common questions in order to consolidate the different perspectives on given themes or issues.”

#### **4.11 Ethical Considerations**

In order to uphold the fundamental principles of human research ethics, which is the respect of persons, beneficence and justice, the participants were all accorded the necessary respect during and after the collection of data. Courtesy was shown to all who participated in the study. Open-mindedness and justice was given to all participants. The researcher allowed the participants to fill in consent forms to participate in the study. None of the participants were coerced into participating in this study. If at any time the participants wished to withdraw from participating, they were not compelled to indicate reasons for deciding otherwise. The information collected from all the participants was treated with strict confidentiality. The data that was collected in this study will be used to disseminate information through conferences and publications. Ethical approval was sought from The Ethics Committee of the University of Zambia for ethical clearance. The transcripts were verified to eliminate any mistakes made during transcriptions. Before data analysis was completed, verifications were made from stakeholders and key participants about the contents to ensure accuracy and

maintenance of inflexibility as postulated by Creswell and Miller (2000). See Appendix 11 page 274.

#### **4.12 Limitations of the Study**

In analysing the integration of HIV and AIDS Education in the Teacher Education Programmes, the study was limited in terms of location, finances to sample the whole country hence limiting the sample size, from a population of 2,000 to a sample of 90 participants. Among the 90 participants there still were some of the participants who did not answer some of the questions and these were included on the no opinion score. The locations were only four Colleges of Education whereas the country had 34 Colleges of Education. The study should be taken in the context of study areas, which were the four Colleges of Education and not generalised as a representation of the whole country.

This study would have added another dimension to it had the study done class observations in all the four Colleges of Education which were sampled but due to limited time this could not be done as the students were finalists who were going on study break.

#### **4.13 Enhancing the Quality of the Study**

There are many different approaches one can take in order to enhance ones research. In this study the research was validated because the instrument that was designed was able to measure what it set out to measure, which was, whether the integration of HIV and AIDS were fully done or not. If this research was measured would it produce the same results under the same conditions? The answer was yes. The best way was to test the same group twice. Field (2012) seems to agree with the above information, because when the information was tested the results had similar scores at both points in time. A reliable instrument should produce the same results twice, in this study a member check was done by focusing on enhancing the credibility, transferability, dependency and confirmability of the study. The credibility of qualitative research was determined during the research process by providing a rich account of the research process and looking for discrepant evidence or other contradictory explanations of the study as advised by (Durrheim and Assernaar, 2002 and Patton, 2002). In addressing credibility, the study made efforts to show a true picture of the phenomenon being studied which was the integration of HIV and AIDS Education. Transferability provided enough detail of the context of the fieldwork which was provided to

enable readers to decide whether the principal environment was similar to another site with which they were familiar with and whether the findings could be justifiably applied to other settings.

The issue of dependability is not easy in qualitative work as postulated by Shenton, (2004). However, this study made room for other future researchers to repeat the study if need be. Finally, to achieve confirmability, steps were taken to demonstrate that the findings that emerged from the data were not the researchers own inclinations. Credibility involved internal validity, which measured and tested what was actually intended. “How congruent were the findings with reality?” Lincoln and Guba (1985) argued that ensuring credibility is one of most important factors in establishing trustworthiness.

This study involved methodological triangulation through the use of across case approach analysis. Triangulation helped to compare responses given by lecturers from the University of Zambia to that from Colleges of Education in the study. Questionnaires were used for University lecturers and interviews were used for the rest of the participants. In this study individual viewpoints and experiences were verified against others and, ultimately, a rich picture of the attitudes, needs or behaviour of those under scrutiny were constructed based on the contributions of a range of people as supported by Van Maanen, (1983). Van Maanen further argues that the researcher should exploit opportunities “to check out bits of information across informants” Such validation may, for example, take the form of comparing the needs and information-seeking action described by one individual with those of others in a comparable position.

In this study participants were not coerced to take part in the study, they agreed to take part in the study willingly therefore eliminating issues of dishonesty on the part of the participants who were ninety in number.

#### **4.14 Summary of this Chapter**

This chapter has presented the methodologies used to collect and analyse data in this study. The constructivism philosophical paradigm was used as a world view to explain what research design was appropriate for this study. The research design used was the descriptive survey research design. Data was collected using questionnaires and interviews for the

different categories of respondents, namely principals, lecturers, Ministry of Education officers and NGO officers which totalled four in number. These cases outlined their experiences and actions in as far as the integration of HIV and AIDS Education in Colleges of Education were concerned. The instruments used were congruent with the qualitative orientation that this research adopted. This chapter also cited justification for enhancing the study so that it could be applied to other settings if need be, especially where the study was to be repeated by other researchers. The chapter finally gave limitations of the study in terms of location, finances for sampling the whole country by limiting the sample size, from a target population of two thousand to a sample of ninety participants, making this study not representative enough for the whole country.

## CHAPTER FIVE

### PRESENTATION OF FINDINGS

#### 5.1 Introduction

This chapter presents the findings that hinge on the research questions of the study as major themes. Each research question in the form of major themes had sub-themes which emerged from the interview transcripts and questionnaires. The major themes which were used were, views from lecturers, teacher trainees, graduates and stakeholders on the appropriateness of content, methods of teaching and learner assessment as elements that support the integration of HIV and AIDS Education in teacher training programmes; establishing challenges lecturers face in teaching on the integration of HIV and AIDS Education in teacher training programmes; investigation on the teacher trainees understanding of the phenomenon of the integration of HIV and AIDS Education in the curriculum, and finally gathering of views from stake holders regarding the various modes of integrating HIV and AIDS Education in teacher education programmes. Some verbatim quotations and written texts of the participants were illustrated to support the major themes and sub-themes. Questionnaires and interviews were used to collect data, meaning that the presentation of results emanated from questionnaires, interviews, observational notes as well as focus group discussions. The first research question which mirrored objective one whose theme bordered on the appropriateness of content, methodology and learner assessments as elements that supported the integration of HIV and AIDS Education. This is explained below.

---

#### **5.2 Research Question One: What were the Views of Lecturers, Teacher Trainees And Graduates on the Appropriateness of Content, Methods of Teaching and Learner Assessments as Elements that Support the Integration of HIV and AIDS Education in Teacher Education Programmes?**

---

The first research question in this study sought to collect views from lecturers, teacher trainees and graduates on the appropriateness of content, methods of teaching and learner assessments as elements that support the integration of HIV and AIDS Education in Teacher Education Programmes. With respect to the above research question, it was evident that the elements were appropriate as is indicated in the table below. The results of the study showed that the majority of the lecturers 11 or (35.5%) agreed that the content, methods of teaching and learner assessment as elements that supported the integration of HIV and AIDS

Education in Teacher Education Programmes were appropriate. The table below gives recorded responses from University of Zambia lecturers who were participants who answered the questionnaires. The findings suggest that, out of the thirty-one (31) lecturers who answered the questionnaires, the majority of the participants, 11 or (35.5%) agreed with the assertion that content, methods of teaching and learner assessments as elements that supported the integration were appropriate, whereas 3 or (9.7%) strongly disagreed, as is depicted in Table 13. The follow up question to the one above on appropriateness of content, methods of teaching and learner assessments as elements that supported the integration of HIV and AIDS Education were whether lecturers taught HIV and AIDS related topics.

**Table 13: Views from Lecturers on the Appropriateness of Content, Methods of Teaching and Learner Assessments as Elements that Support the Integration of HIV and AIDS Education**

<b>Strongly Agree</b>	<b>Agree</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>No response</b>	<b>Total</b>
10 (32.3%)	11 (35.5%)	3 (9.7%)	2 (6.5%)	5 (16.1%)	31 (100%)

This study also provided additional data through triangulation of information from the interviews and the questionnaires in order to get different views on the same information, by using different instruments with which data was collected. The majority of the lecturers from the four Colleges of Education where interviews were conducted also revealed that the content, methods of teaching and learner assessments as elements were appropriate. This study also provided additional information from the majority of participants regarding the issue of the impact of HIV and AIDS Education on learners, and 16 or (51.6%) said that there was moderate impact.

Table 14 provides empirical data on teacher trainees' understanding of the integration in relation to how many times lecturers taught HIV and AIDS related topics to students. The validated data recorded from the participants, indicates that the majority of the participants which was 13 or (41.9%) said the lecturers rarely taught HIV and AIDS related topics to students, whereas 3 or (9.7%) said that HIV and AIDS related topics were not taught at all.

**Table 14: Do Lecturers Teach HIV and AIDS Related Topics to Students?**

Very often	Rarely	Not at all	No response	Total
4 (12.9%)	13 (41.9%)	3 (9.7%)	11 (35.5%)	31 (100%)

Another important and interesting finding was that the majority of the participants which was 16 or (51.6%), see Table 15, were not sure whether content had been adequately packaged, whereas 8 or (25.8%) said that content had not been adequately packaged. The lecturers from the colleges had divergent views to this question. The majority of the lecturers from Colleges of Education reported that they were not sure whether the content had been adequately packed or not. One lecturer, Mr Lume from college ‘C’ had this to say about the issue of packaging of content:

*Content is enough though more research needs to be done. The integration when it is done has only basic information. Teachers need to read more to adequately teach. It is very important that information is being offloaded but some lecturers do not teach it because it has stigma attached to it.*

It was also reported that even when packaging was adequately done, unpacking it was different from group to group. One group of participants in this study felt that people did not care how the packaging and the unpacking of the content was done, as long as content was taught.

**Table 15: Adequacy of Packaged Content for Teacher Trainees**

Definitely	Definitely Not	Not Sure	No Response	Total
4 (12.9%)	8 (25.8%)	16 (51.6%)	3(9.7%)	31 (100%)

### 5.2.1 Content

Content in this regard means the body of knowledge and information that teachers teach and that students are expected to learn in a given subject. In this study the content that was referred to was in the following subjects :Physics and Chemistry; Religious Knowledge; Special Education; Sociology of Education; Civics Education; Home Economics; Educational Psychology; Guidance and Counselling; Geography; English Language; Physical Education and Mathematics Education. Content in all these subject areas refers to facts, concepts, theories, and principles that are taught and learnt in these specific academic courses as are

depicted above rather than related skills such as reading, writing, or researching that students also acquire in Colleges of Education.

#### **5.2.1.1 Content in Different Subject Areas Taught in Colleges of Education and Analysed in this Study**

##### **Physics and Chemistry**

The lecturers in this subject area reported that HIV and AIDS Education appeared as topics on cross cutting issues. The lecturer further said that the literature for referencing was available but the scientific details of how the virus affected the human body was missing resulting in some lecturers not having enough knowledge to teach in this subject matter. This was one of the challenges that lecturers faced in this subject area, that of lack of teaching and learning resources. The lecturing was done through lecture and demonstration methods, as well as through campaign posters and classroom activities which incorporate HIV and AIDS messages. The awareness campaigns by government were described as not being widespread. The lecturers also reported that both lecturers and learner responses to the teaching of the integration of HIV and AIDS Education were positive though there were partial cultural factors that made lecturing uncomfortable, despite this, the lecturers strongly believed that this area of education had brought sexual responsibility to the learners. Introducing HIV and AIDS Education in this subject area meant that the teacher trainees learnt about cells and germs in different diseases and the science student's level of achievement resulted in satisfactory responses.

##### **Religious Education**

In this subject area, the following were some of the findings: lecturers felt that the integration was not fully done though textbooks did reflect the integration. In this subject areas it also showed that primary and secondary teacher programmes had integrated HIV and AIDS Education to some point though not with all the intricate details. The lecturers also reported that the lecturers who were handling this subject needed to have expert knowledge though some part of the HIV and AIDS needed to be handled by medical personnel. It was further said that the government and NGO's had provided enough literature on this subject through workshops and research, this valuable information was meant to be disseminated to a lot of the targeted areas such as colleges of education. This subject area of Religious Education also reported that cultural factors inhibited open sharing of sexual matters. Another point that

came out strongly from interviewing this category was that no lecturer had a qualification of teaching HIV and AIDS Education in these Colleges of Education so it was difficult to find expert information for teacher trainees. In the area of Social Spiritual and Moral Education, it was reported that there was need for specialisation in this area and so more had to be done to explore the issue independently so that it could be successful. Another point is that HIV and AIDS prevention was not well conducted in Colleges of Education because it was common knowledge that a lot of teacher trainees were engaged in illicit sex as this was seen from a number of pregnancies that were reported. On the whole the lecturers felt that the integration was partially successful.

### **Special Education**

This subject area reported that HIV and AIDS Education had been integrated in Special Education though some colleges were still struggling with the integration. This resulted in very little information being covered in this subject area as was revealed by some participants. It was said that, the only knowledge that most of the lecturers had was from attending HIV and AIDS seminars and workshops. Students also got knowledge from attending Anti-AIDS clubs. Lecturers themselves did not have any training on how to teach HIV and AIDS Education in this subject area. However, in Teaching Methods, Devices and Material Production elements of HIV and AIDS Education were seen in the course content. The teaching of HIV and AIDS Education though having a lot of challenges, both lecturers and teacher trainees had witnessed a lot of positive responses in this subject area. It was also reported that teacher trainees were fully aware of its progression and the devastating effect these subjects had on education, though it usually came as a health problem. The lecturers in this category also talked about cultural challenges pertaining to the mentioning of certain vernacular words which were regarded as insults while delivering HIV and AIDS Education.

The study revealed that one graduate participant explained how parents brought disabled children to their school and abandoned them without finding them anywhere to stay. A woman, who felt sympathy accommodated the children, fed them and brought them to school daily. The parents only showed up during the holidays to pick their children. One of the children died as a result of contracting HIV and AIDS virus. This was an indicator that even children with special needs needed to be fully exposed to HIV and AIDS Education to protect

themselves from would be predators who might pounce on these vulnerable children. This is what the graduate respondent said:

*Most of the children at this centre do not have anywhere to stay, one person volunteered to house all the children for free until during holidays when their parents collect them. This group is combined with females and males all in grades 4 to 6.*

Another graduate at the same school said that their school had made it a policy to give health talks on Mondays during assembly time. These health talks duration was only for five minutes. This was meant to sensitize the pupils and teachers on issues of HIV and AIDS.

### **Sociology of Education**

In this subject area it was reported that HIV and AIDS Education were being taught as cross cutting issues. All the study areas were expected to articulate this information whenever it occurred in the delivery of lectures. Since they were not offered as discrete subjects they were not timetabled. The subject lecturer said that the integration of HIV and AIDS Education were not a guarantee that there was adequate coverage of these subjects, however these subjects were sometimes taught at the discretion of the lecturers. The method that is usually used in teaching HIV and AIDS were expository method. It was also reported that some Colleges of Education had mounted vigorous awareness raising campaigns among students through drama, music, debate, art and essay writing. Administrative support in prioritising HIV and AIDS activities were also vital in the life of the college. Some administrators did not plan and budget for HIV and AIDS activities for various reasons. Since these subjects were taught as cross cutting issues it was difficult to gauge the lecturers and students responses to the teaching and delivery of these subjects. The lecturers also felt that there was need to have Continuous Professional Development (CPD) in the teaching of HIV and AIDS Education. The participants however, reported that there was very little impact on both lecturers and teacher trainees in the above mentioned subject areas.

### **Civic Education**

Lecturers in this course said that HIV and AIDS Education were not at all captured in their course. As such they were not well informed to comment on the integration of HIV and AIDS Education.

### **Home Economics**

Lecturers in this subject area felt that HIV and AIDS Education were just topics like any other topics. The lecturers also said that they had very little knowledge on this subject matter. Government responses on this subject area was also said to be effective and teacher trainees and lecturers responses were also very positive. In Home Economics HIV and AIDS Education were said to be rarely taught even though they were adequately packaged. This made the impact of HIV and AIDS Education moderate.

### **Educational Psychology**

Lecturers in this subject area felt that HIV and AIDS Education had been integrated in some topics, though the lecturers did not have formal education to give student expert knowledge. This meant that lecturers were at liberty to add any useful information on HIV and AIDS. Lectures and discussion methods were preferred as good methods for teaching on HIV and AIDS Education. The lecturers in this subject area felt that government should have directed the Curriculum Development Centre (CDC) to have full topics on HIV and AIDS Education. In this subject as well, it was also observed that lecturers were at liberty to add whatever information they deemed fit as they taught on HIV and AIDS Education. The lecturers in this subject area further reported that it was the responsibility of Colleges of Education to agree to teach or not teach on HIV and AIDS Education. They further reported that as a result of all this there was moderate impact in as far as teaching of HIV and AIDS Education was concerned, though responses from students and lecturers were seen to be positive and HIV and AIDS books were being produced to make this a success.

### **Guidance and Counselling**

Lecturers in this subject area felt that HIV and AIDS Education were being taught as cross cutting issues because they seemed to appear in a lot of subject areas in the college. It was also reported that some lecturers did not have enough knowledge in this subject area, Data in this study revealed that the Advisory Unit for Colleges of Education did not package the course content but that Colleges of Education did the packaging. The lecturers in this subject area mentioned that they were not sure whether there was any behavioural change in learners and lecturers as a result of teaching HIV and AIDS Education.

## **Geography**

The lecturers in this subject area stated that HIV and AIDS Education were in the curriculum, though most of the lecturers did not have enough knowledge in the subject areas to teach effectively. The lecturers further said that HIV and AIDS Education were reflected in the policy framework and that there were enough campaigns on HIV and AIDS Education to help lecturers understand the importance of teaching on HIV and AIDS. The lecturers in this subject area on the whole viewed HIV and AIDS prevention education being conducted in Colleges of Education as successful. It was also felt that the impact in these subjects were moderate.

## **English Language**

Lecturers in this subject area reported that HIV and AIDS Education were included in the syllabus as cross cutting issues but they were not examined nor assessed in course work. It was further reported that there was no course that trained lecturers to teach on HIV and AIDS in the colleges. All that lecturers learnt were through seminars and workshops on HIV and AIDS Education which were not adequate to prepare lecturers to teach on the subjects. It was also felt that there was no budget line in support of HIV and AIDS activities in Colleges of Education. Some of the lecturers had very strong negative sentiments regarding these subjects not being examinable and that it was a sheer waste of time to teach them, considering the lack of teaching and learning materials. They reported that posters in some instances were used for teaching and impacting knowledge to the learners though at a minimal level. These subjects had no clear guide lines, and no monitoring and evaluations were being done. External examiners did not moderate HIV and AIDS Education, so it was very difficult to judge the level of satisfaction from the learners who were the recipients of this education, reason being that since this course was not assessed students did not take it seriously.

## **Physical Education**

One lecturer in this subject area reported that Physical Education had HIV and AIDS Education integrated within the subject. He further said that this has been possible because all Colleges of Education had been receiving teacher and learner support from the Ministry of Education as well as non-Governmental Organisations. However, the lecturer did not understand how they were being taught as cross cutting issues. In most cases as mentioned

earlier Colleges of Education work with Non-Governmental Organisations (NGO's) who besides the Ministry of Education offer support on the teaching of HIV and AIDS Education, through Student Partnership Worldwide Programme (SPW). These NGO's created student friendly corners where students went for HIV and AIDS support services. The lecturers also reported that the lack of training in these subject areas made it difficult to establish how comfortable teacher trainees were when it came to being taught on HIV and AIDS Education. The formal training on HIV and AIDS Education were not there except when one attended workshops and seminars on HIV and AIDS. However in most Colleges of Education, HIV and AIDS Education had brought about attitudinal changes towards issues of HIV and AIDS.

### **Mathematics Education**

The lecturers in this subject area said that they had seen questions in the examination at Colleges of Education on HIV and AIDS Education. They also said that they hoped to see an interface between HIV and AIDS Education and teaching of mathematics. Instead of what was perceived concerning the questions which related exclusively to HIV and AIDS Education and nothing on Mathematics.

A follow up question below raised the issue of whether HIV and AIDS Education had been fully integrated into the teacher training programmes or not. The results below depict what was said by the 31 lecturers who answered the questionnaires. Table 16 below shows the findings:

The majority of the students depicting 16 or (51.6%) agreed that HIV and AIDS were fully integrated in the two Teacher Education Programmes, whereas 4 or (12.9%) strongly disagreed that the integration had been fully done. To give more clarity to table 16 below the participants explained how the integration was done. The participants indicated that the integration was taught as cross cutting issues. Deliberate efforts had been made to include HIV and AIDS Education. Some of the participants mentioned that the integration was not fully done but partially done. The participants also observed that some textbooks and examination papers reflected this integration. It was further reported that awareness were done, though it was felt that someone's status in terms of HIV and AIDS infection should not be a deterrent to work. Some other participants also stated that the integration was done in educational curricular at all levels. Out of the 31 lecturers about 23 could not give reasons for the answers they gave in Table 16.

**Table 16: The Integration of HIV and AIDS into Teacher Training Programmes.**

<b>Strongly Agree</b>	<b>Agree</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>No response</b>	<b>Total</b>
2 (6.5%)	16 (51.6%)	4 (12.9%)	5 (16.1%)	4 (12.9%)	31 (100%)

In answering the question of the extent of the integration, one lecturer from one of the four Colleges of Education said that the integration had been done and she further said that the integration was critical since it looked at an individual's life. She also complained that it was difficult to teach on HIV and AIDS, but when the teaching was done teacher trainees were very receptive to the information. Sometimes teacher trainees asked questions like:

*Do we get HIV and AIDS by eating in the same plate with an infected person?*

Another lecturer, Mr. Killie reported that he was privileged to attend a meeting at Teacher Education Specialized Services (TESS) offices where he went to make a follow up on the implementation of the new curriculum for primary schools. Mr. Killie raised concerns regarding how the young ones could be taught using the new curriculum, when the teacher trainees themselves were not availed with the new curriculum. This meant that the teacher trainees were going to be ill- prepared to teach effectively when the time came for them to be deployed to their new stations. Mr. Killie said that everything had been left hanging and teacher trainees would fail to grasp the new curriculum when they got deployed to their new stations. This was because there was no link between the college curriculum and school curriculum. Another lecturer, Mr. Chongwe said that the content on HIV and AIDS Education were not enough, therefore, more research needed to be done. He suggested that besides the curriculum content there was need to have open seminars where students could participate. HIV and AIDS Education being taught as an optional course was not the option, because some students opted to take other courses instead of HIV and AIDS Education thus missing out on the most needed HIV and AIDS information.

In view of this question which was taken from objective one based on the lecturers HIV and AIDS content knowledge on the subject. Table 17 shows that some participants strongly agreed that they had content knowledge, some however, disagreed. The majority of the participants 11 or (35.5%) agreed that lecturers who teach on HIV and AIDS Education had content knowledge on the subject whereas 4 or (12.9%) disagreed with this.

**Table 17: Content Knowledge on HIV and AIDS Education**

<b>Strongly Agree</b>	<b>Agree</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>No response</b>	<b>Total</b>
1 (3.2%)	11 (35.5%)	4 (12.9%)	8 (25.8%)	7 (22.6%)	31 (100%)

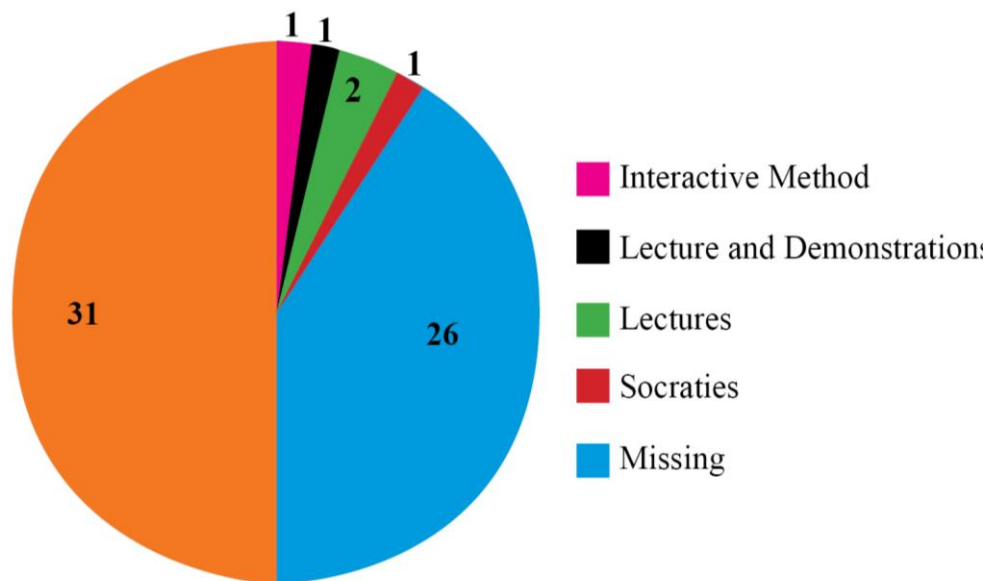
When the participants were asked to give reasons for the answers given in Table 17, some of the respondents reported that HIV and AIDS Education were complex and vast, and also that since HIV and AIDS Education had been on the world scene as a topical issue for two decades, lecturers should have the content knowledge. Another also agreed that the content knowledge was there but not detailed enough. Some other lecturers also felt that there was very little information for referencing but when it came to the scientific details, of how the virus affected the human body, they seemed not to know. They further went on to add that they lacked content knowledge because they did not do enough in terms of research and had no formal training in HIV and AIDS Education, except attending a day's workshop which was not enough time to grasp the concepts of HIV and AIDS Education.

All the principals from all the four Colleges of Education sampled reported that the integration or issues related to HIV and AIDS should be done as teacher trainees undergo training. They further reported that when the colleges were offering certificates HIV and AIDS were well documented in the course outline but with the introduction of secondary teacher's diploma this had been underplayed. It was further reported that as far back as 2005 topics on HIV and AIDS were documented and they all cut across all the different subject areas. Most education subjects had the HIV and AIDS Education well integrated and it was compulsory that the topics be taught. One principal, Mr. Chanda said that Physical Education and Sports had the HIV and AIDS Education well integrated in the subjects. Another principal, Mr. Andy made reference to Anti-Aids Clubs which schools had that inculcated HIV and AIDS Education in the minds of the learners. Principals Mrs. Toyome reported that some lecturers had been consulted regarding the integration of HIV and AIDS Education through varied consultative meetings. Each college was given the opportunity to say how the teacher education curriculum should be done. Another principal, Mr. Sims on the other hand had this to say about the suitability of linkages to particular topics in as far as teaching of HIV and AIDS Education were concerned:

*HIV and AIDS is taken as cross cutting in every subject, there are some aspects of suitability of linkages to particular topics. Environmental courses are fused with HIV and AIDS education though it is limited to some extent. As they say, you are either infected or affected or both, he chuckled.*

### 5.2.2 Methodology of Teaching.

Teaching methods are the general principles, pedagogy and management strategies used in classroom instruction. The methods of teaching depend on the classroom demographic, subject areas and the school mission statement. Most teachers in Zambia have neither been trained to deal with HIV and AIDS Education nor been provided with appropriate teaching and learning materials. As a result, the teachers are not knowledgeable enough to pass on correct and complete information. In this study the methods of teaching the integration of HIV and AIDS Education in teacher education programmes were important. The findings in this study revealed that lecturing could not be properly done without choosing a method that would best suit the teacher trainees that were being taught. Teaching methods are many, this study therefore provides evidence that indicate that lecturers use many methods to teach HIV and AIDS Education, such as interactive methods, lecture and demonstration methods, and socraties methods. Among the 31 respondents, 26 or (83.9%) did not respond, one mentioned interactive method, one said lecture and demonstration method, 2 said lectures only and one mentioned Socrates method. See Figure 6.



**Figure 6: Methods Lecturers Use to Teach HIV and AIDS Education**

This study provides additional evidence in respect to two games in Physical Education cited by some lecturers in the Colleges of Education that were used to lecture on HIV and AIDS Education. These games used were very handy because there were no foreign materials needed to teach but only local materials. The study further revealed that the content was adequate for learners though it was traditionally taboo to talk to small children about sex. The participants further explained that HIV and AIDS content was incorporated in all the teaching subjects for all the different grades to help in the interpretation of how the virus was contracted and so forth. This was well depicted in the pictures below regarding the two games which were being played by teacher trainees, as was reported by the lecturer who took the course, to which the researcher was privileged to observe.

In this game of ***Agode Agode***, the teacher trainees were prepared for the game, they were told to make a circle. After forming a circle and sitting on the floor with legs crossed they were told to get some stones and whilst seated they passed the stones around whilst singing the Agode song. The song went like this: ***“Agode, Agode, Adoge ni chisilu x2 Chiligogogo chilipaiwe, chiligogogo chilipaiwe x 20 depending on the number of children taking part in the game.”***

The stone was passed in a rhythmic way until it reached a person who was slow and in the event of being slow accumulated many stones. The individual who ended up with many stones was said to be one who did not want to share information on HIV and AIDS. The circle in this game signifies unity. As the stone passed from one person to another it means that the information is freely flowing. The information on HIV and AIDS Education can be acquired through friends, teachers, parents, or any other people through interactions. The stone is said to be a seed that needs to be shared. If the person does not want to share with others, consequences and repercussions are many. When teacher trainees go for their Teaching Practice, they incorporate these games into their teaching of HIV and AIDS Education in the schools where they are deployed to.



**Figure 7: Game of Agode, Agode: Being Played by Teacher Trainees from College ‘B’ During Lectures (Observed Lesson).**

*A picture of student teachers playing Agode Agode game in a Physical Education lecture.*

### **Observed Lesson in Physical Education**

A game of *Shomba* was another way one lecturer said she used to teach Physical Education. This is a game of five people, two on one side and two on the other side, the person to be hit by the ball is positioned in the centre. *Shomba* is a word in vernacular meaning “to be hit by a ball”. The two students on either side will try to hit the student in the centre with the ball. The ball signifies the virus.

The persons in the centre will try by all means to dodge the ball (virus). If the ball hits the persons in the centre it means they are infected and are eliminated from the game, if one is not hit it means that they are free from infection. When the teacher trainee is hit by the ball he is told to sit in the centre without moving. This game is meant to give knowledge to the students regarding the HIV and AIDS virus. The lecturer, Mrs. Yaya explained how this game was meant to remove stereo typing and stigmatisation. It was also meant to encourage those infected to go for counselling and testing.



**Figure 8: Game of Shomba: Being Played by Teacher Trainees from College ‘B’ during Lectures (Observed Lesson)**

*A picture of student teachers playing shomba game in a Physical Education lecture.*

Mrs. Yaya went further to explain that in every lesson at least 5 to 7 minutes is termed as HIV and AIDS Education warm up, 20 minutes is for the main activity which is usually sporting skills. Last part of the lesson 5 – 10 minutes incorporates HIV and AIDS activity again. In every lesson the content is supposed to contain life skills, as well as social skills because the learners need both these skills. Mrs Yaya also stated that regarding the integration of HIV and AIDS Education consultations had been done through international and national workshops. Traditional games were said to be one of the ways in which HIV and AIDS Education could be taught. She further revealed that late Mr Kakuwa who was a lecturer of Physical Education at the University of Zambia wrote quite a number of books on Zambian games. It was hoped that through Sports in Action teacher trainees could learn a lot on HIV and AIDS Education as cross cutting issues. It was further testified that almost all the lecturers handling Physical Education taught content and methodology. She went further to give a word of caution by saying the following words:

*Everyone should have access to this information because ignorance has no defence across the board in all subject areas. At least if one becomes careless it*

*should be that they were careless on their own. HIV and AIDS is taught through play form and teacher trainees seem to enjoy the lectures. Young children enjoy these lessons even more, through interactive methodologies that are used.*

Mrs Yaya placed a lot of emphasis on why games and songs were more interactive as a method of teaching HIV and AIDS Education than other teaching methods.

### **5.2.3 Learner Assessments**

Findings in this study indicated that the majority of the participants felt that the learner assessments were not adequately utilised. HIV and AIDS Education were not examined in most subject areas. In some subject areas no assignments were given, in others only one or two questions were captured in the examinations. It was felt that this was not adequate. The participants however, felt that if these subjects were being handled as a stand-alone subject, then there would be need to examine them. The participant also indicated that assessment elements should be designed to be integrated into all the subject areas. It was further said that assignments and assessments should be part of the normal teaching of HIV and AIDS Education. Examples of assignments were reports, essays, role plays, songs, drama and dance (MoE, 2009). Teacher trainees further reported that learner assignments were given to them in different subject areas, but they were not graded. The Ministry of Education officer attributed the non-examining of HIV and AIDS Education to lack of teacher and learner materials for the subject. This is what he said:

*Lecturers cannot examine students when there are no teacher and learner materials, so how can they examine the learners.*

Reports from some of the participants indicated that learner assessments should be creative, expressing opinions backed up by factual information and well developed theories. In all this it was expected that the lecturers should give feedback to learners on how they were fairing in these areas. However, it was reported by the majority of the teacher trainees that this was not done. Whereas the teaching was done the assessments in some cases were given, but not marked. Some participants also indicated that when assignment were given they were all theoretical instead of being practical, they felt that this meant that they would graduate as none experts in the subject area.

---

### 5.3 Research Question Two: How did the Teacher Trainees Understand the Phenomenon of the Integration of HIV and AIDS Education in Teacher Education Programmes?

---

The second research question mirrored the second objective which targeted at the teacher trainees' understanding of the phenomenon of the integration of HIV and AIDS Education in Teacher Training Programmes. The question that was asked to the lecturers was how did the teacher trainees understand the integration of HIV and AIDS Education and if they did, what were their contribution? The following were the answers as depicted in Table 18.

**Table 18: Responses of Teacher Trainees Understanding of the Integration of HIV and AIDS Education in the Curriculum.**

Positive	Negative	Undecided	No response	Total
11 (35.5%)	3 (9.7%)	7 (22.6%)	10 (32.3%)	31 (100%)

In view of this question which was asked to the lecturers regarding the teacher trainees understanding of the integration of HIV and AIDS Education in the curriculum, the responses represent 11 or (35.5%) lecturers said it was positive, others 3 or (9.7%) said it was negative whereas 7 or (22.6%) were undecided. The rest of the lecturers depicting 10 or (32.2%) did not answer this question. The picture below therefore shows that the majority of the respondents felt that the response of teacher trainees to the integration was positive.

Table 19 gives the focus group discussants profiles in terms of gender and codes. The composition of the group discussants were four males and four females from each College of Education. This meant that the discussants were gender balanced and their views and perceptions regarding the HIV and AIDS Education came from diverse groups of the college fraternity. When the question in Table 18 was posed to the teacher trainees themselves, they indicated that the understanding was based on the following six sub-themes: The extent of the integration in terms of the subject areas, content, methods of teaching as well as assessment areas, teaching materials, receptiveness of both the teacher and the learners regarding the content on sexuality, time allocated to teaching on HIV and AIDS Education, the implications of HIV and AIDS Education as cross cutting issue and the expertise of the lecturers lecturing on HIV and AIDS Education.

**Table 19: Focus Group Discussants Profile**

Discussant	R1A	R2A	R3A	R4A	R5A	R6A	R7A	R8A
FG1 College 'A' Gender	M	F	F	M	F	F	M	M
Discussant	R1B	R2B	R3B	R4B	R5B	R6B	R7B	R8B
FG2 College 'B' Gender	F	M	M	M	F	F	M	F
Discussant	R1C	R2C	R3C	R4C	R5C	R6C	R7C	R8C
FG3 College 'C' Gender	F	F	F	F	M	M	M	M
Discussant	R1D	RD2	RD3	RD4	RD5	RD6	RD7	RD8
FG4 College 'D' Gender	M	F	M	F	M	F	F	M

### 5.3.1 Awareness of the Integration and Extent to which this was Experienced

The study revealed that R1A said that they were aware of the integration because the college had an Anti-Aids Club. The peer clubs had brochure issues on HIV and AIDS. R3A also concurred and said that the previous year Restless Development came to the college and taught them on the effects of HIV and AIDS. The students also mentioned that besides peer clubs, subjects such as History, Zambian languages, English, Civic Education, Mathematics, Religious Education, and Physical Education had HIV and AIDS Education well integrated. R3A also said that assignments were also given in these subject areas, whereas R1B mentioned that HIV and AIDS education in the college covered issues of sexuality and child abuse. R4B added VCT as well. R5B had this to say:

*Assignments are all theoretical instead of being practical.  
If they were practical it would mean that as we graduate,  
we can go out as experts. HIV and AIDS Education is not  
only for the Ministry of Health as people say.*

When asked whether it was the feeling of everyone, there was a long murmur of *Eeeeeeeeeeeeeeh (agreeing)*, whereas RD2 mentioned that they were taught HIV and AIDS Education in Education Studies, which comprised Sociology of Education, Educational Psychology and Philosophy of Education, Religious of Education and Physical Education. In these courses the causes and effects of HIV and AIDS were taught, as well as blood policy which talked about accidents, transmission of blood and so on. In Civic Education the effects of the economy also included HIV and AIDS Education.

### **5.3.2 Teaching Materials**

This study revealed through R3A that it was difficult to teach on HIV and AIDS because of lack of teaching and learning materials. R2A agreed with R3A regarding learning and teaching materials, whereas R6B said that the HIV and AIDS were adequately packaged in their college. She went further to say that what she did not know was whether where she was going to be deployed to, she was going to find a similar situation of none availability of teacher and learner materials. Her exact words were:

*The attitude of some Administrators is bad so they might not see HIV and AIDS Education as being important and this might somewhat pose a challenge to us as teachers.*

R6B went further to give a detailed account of what was happening in the college regarding the teaching of HIV and AIDS Education. She said that HIV and AIDS Education was well supported in the college. She mentioned that behind the school library was a club which was run by Restless Development. The NGO brought different peer educators every year to teach student teachers on HIV and AIDS. She mentioned that the peer educators used interactive methods to teach, this helped to combat HIV and AIDS and avoidance of further proliferation in the communities was truncated. Another good thing was that teacher trainees were given brochures, textbooks on how HIV and AIDS could be prevented at school level, however R3D said that it was easy to go through HIV and AIDS Education because the college had a lot of books which were readily available.

### **5.3.3 Sexuality**

Another finding in this study was revealed by R3A who said that it was difficult to teach on HIV and AIDS because one could not talk to the young ones about sex education, whereas R5B did not agree with R3A, she said that on top of other information on HIV and AIDS there was need to talk about sex education, she further said that if sexuality was not talked about at schools and colleges where there are professionals and experts in these areas who else would be better placed to talk on issues of sexuality in schools than them?

### **5.3.4 Time Allocated to Teaching on HIV and AIDS Education**

R5A talked about the time allocated to teaching about HIV and AIDS Education, she said that time was not adequate for these subjects. Usually HIV and AIDS Education were given 20 minutes which was not enough. As for the AIDS clubs, she said it was usually from 17 to 18 hours which again was not enough time to talk about HIV and AIDS related issues. She

further complained that when the assignments were given in civic education which had some components of HIV and AIDS infused in the assignments they were not evaluated. R6B refuted the above assertion by saying that, there was adequate time allocated to the teaching of HIV and AIDS Education in the college, what was wrong was the negative attitude of the teacher trainees and lecturers handling the subjects.

### **5.3.5 Cross Cutting Issues**

It was reported through R6A that HIV and AIDS Education were taken as cross cutting issues and as a result they were integrated in all the subject areas. She further went on to say that all the teacher trainees in the college should take HIV and AIDS Education, because if they were left as extra-curricular subjects, most of the teacher trainees would not want to attend clubs especially those who had no any interest in HIV and AIDS Education. R8A had this to say:

*HIV and AIDS affects everyone. It is either you are infected or affected.*

R7A also asked his colleagues whether sisters (Nuns) and Father (Priests) also contracted HIV and AIDS since they did not marry. This attracted a lot of laughter from his colleagues. One of his colleagues, R3A said that there was no age to HIV and AIDS, and also that HIV and AIDS was a threat to everyone, because you could be pricked by a needle and get the virus. R7A from the same college still wanted to know more so he probed:

*So someone can, someone can get infected without knowing?*

His colleagues answered him in unison and said yes. R2A responded thus:

*knowledge is power without knowledge people perish*

R2A mentioned traditional dances and drama, as a means of communicating about HIV and AIDS Education. She said that people did not have time to visit hospices and as such they do not believe that there is HIV and AIDS in this world. She attributed this to remote places not getting HIV and AIDS information. R7A drew laughter from his colleagues when he said that HIV and AIDS were found everywhere. Whereas R6A said that teaching of HIV and AIDS Education gave information to young children by making them aware of the scourge and making them take preventive measures, “*Catching them young*” as some experts on HIV and AIDS say. It seemed that R2A was getting apprehensive about her colleagues talking

about HIV and AIDS because she later told everyone that talking too much about HIV and AIDS publicly was not a good idea as they would be misunderstood by people passing by.

### **5.3.6 Expertise**

Another finding came through R8A who revealed that expertise was an important component in the sharing of information on HIV and AIDS Education instead of having only basic information which was not adequate enough. It was further reported that there was need for lecturers to become more knowledgeable and skilful than they were so that they could adequately teach on HIV and AIDS Education, whereas R2D refuted this by stating that expertise was not an important factor as far as she was concerned.

---

## **5.4 Research Question Three: How do the Graduate Teachers Practice the Integration of HIV and AIDS Education in the Schools where they are Serving?**

---

The third research question of this study is as indicated above and it mirrored objective three that inquired on the graduate's practice of the integration. The graduates were interviewed and revealed through a number of sub-themes that emerged, which were: Awareness of the integration and extent to which this was experienced; accessibility of teaching and learning materials; HIV and AIDS support to infected children; administrative influence; availability of HIV and AIDS information and lastly pressure from colleagues on the importance of HIV and AIDS Education.

---

### **5.4.1 HIV and AIDS Support to Infected Children**

One of the most interesting finding in this study was that in schools where some graduates were deployed to, it was reported that the schools had systems in place that supported children who were infected with the HIV and AIDS virus. The children were given medication at given times as prescribed by doctors with the permission of their parents or guardians. This arrangement worked very well because the children did not feel stigmatized in any way. They all reported to the teachers/nurses responsible for giving them medicines at the appropriate times. Those that needed feeding were also helped in one way or another. Some parents who did not disclose their children's HIV and AIDS status displeased most of the teachers, because this made it difficult for them to assist their children. Some parents to some infected children with the HIV and AIDS virus could not open up to the teachers

regarding their children's HIV and AIDS status. Some teachers felt that this was a hindrance to proper medical assistance that the school administration was meant to give to the pupils. The administration of medicines was not easy as one of the schools complained, implying that the school staff were finding it difficult to be responsible for giving pupils their medicines at the expected times when they were supposed to be given. Whereas this should have been the practice in primary and secondary schools, this was not the case in other schools as some administrators did not give the necessary support to the teaching and administration of HIV and AIDS Education. The issue of teacher and learner materials were therefore left to teachers who outsourced for the materials by themselves. The administrative influence was none existent. These sentiments came from all the graduates from all the four Colleges of Education.

#### **5.4.2 Availability of HIV and AIDS Information**

All the graduates from the four Colleges of Education indicated that there was enough information on HIV and AIDS Education except that it was not getting to the intended people. They attributed this to cultural and other constraints which made it impossible for many young people to receive information on HIV and AIDS Education that could help to protect them from this scourge. Discussions in classrooms, usage of the available learning tools would also have helped to open up more dialogue with the teacher trainees, however the revelation in this study was that this was not being adequately done. It was also reported that if information were available to the teacher trainees, then parents would also end up being beneficiaries of the same information as information sharing has a multiplier effect in that it is considered to be a win-win situation for everyone,

#### **5.4.3 Pressure from Colleagues on the Importance of Teaching HIV and AIDS Education**

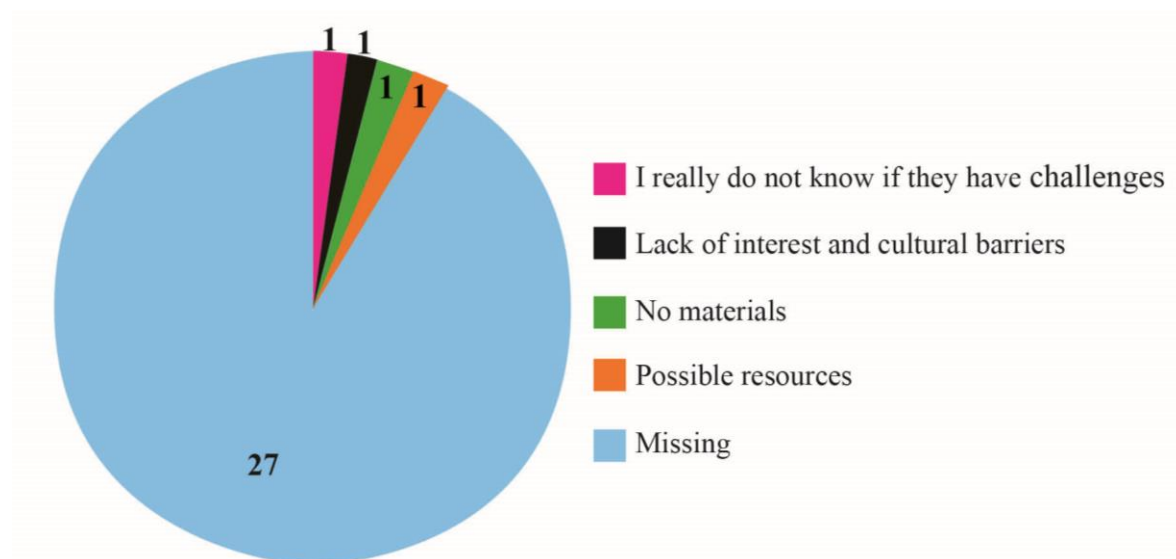
Another finding from the graduates from all the four colleges was that there was a lot of pressure in the form of stigmatization from colleagues in these Colleges of Education on the teaching of HIV and AIDS Education. The participants reported that anyone who was seen as an advocate of HIV and AIDS Education campaign in as far as teaching was concerned they were perceived as being HIV and AIDS infected persons. The members of the society also were seen to stereotype these lecturers who taught HIV and AIDS Education as being infected with the virus. The pressure from colleagues and the society made it difficult for the lecturers to push the agenda of lecturing on HIV and AIDS Education.

---

### 5.5 Research Question Four: What Challenges did Lectures Face as they Taught Integrated HIV and AIDS Education in Teacher Education Programmes?

---

The fourth Research Question which mirrored the fourth objective targeted the challenges that lecturers faced as they taught integrated HIV and AIDS Education in Teacher Education programmes. The lecturers at Colleges of Education indicated that they faced a number of challenges as they taught HIV and AIDS Education. In answering this question some sub-themes emerged. The issue of the extent of the integration was very clearly spelt out by all the categories of participants that were interviewed. Lecturers at the University of Zambia when asked about the challenges that lecturers in Colleges of Education faced as they lectured on the integration of HIV and AIDS Education they had this to say, please see Figure 9.



**Figure 9: Challenges Lecturers Experienced with the Integration.**

The question on the challenges that lecturers experienced as they taught HIV and AIDS Education was taken from objective two, which inquired of challenges lecturers faced in teaching integrated HIV and AIDS Education in Teacher Education Programmes. The majority of the participants, 27 or (87.1%) did not give any response to this question. One mentioned lack of interest and cultural barriers as challenges. Two participants cited lack of teacher and learner materials. On the other hand the lecturers in the colleges cited more than just teacher and learner materials. They cited HIV and AIDS status of the lecturer, marital status, behavioural changes, administrative challenges, identification of the best approach of

delivery HIV and AIDS Education, consultations on HIV and AIDS Education, best way of delivery the HIV and AIDS Education to the teacher trainees and improvement brought about by the integration of HIV and AIDS Education, which were the 10 sub-themes that emerged from the interviews with the lecturers and two that emerged from the questionnaires giving a total of 10 sub-themes.

#### **5.5.1 The Status of Teachers as one of the Challenges in the Integration of HIV and AIDS Education in Teacher Education Programmes.**

The finding on the above sub-theme was that the Principals indicated that the status of someone did not affect the way they taught the HIV and AIDS Education. This was based on the theory ‘do as I say and not as I do’. The principals also believed that if a lecturer was infected with the virus, they would be more passionate in disseminating information to those who were not infected, so that they did not fall prey to the virus. Among the lecturers it was also felt that the status of someone did not influence the way in which he delivered HIV and AIDS Education. It was reported that some lecturers did not want to teach on HIV and AIDS Education because they took it that the teacher trainees already knew what they needed to know about the virus. One lecturer, Mr. Lume said that some married lecturers were irresponsible, because even when they knew about the consequences of acquiring HIV and AIDS they still went ahead to propose the young teacher trainees. He raised the question, “*what impression did they hope to achieve?*” From this question it is assumed that the lecturer wanted to know what the motives of these affected lecturers were.

#### **5.4.2 Marital Status as a Challenge in the Integration of HIV and AIDS Education in Teacher Education Programmes**

This study also discovered that Principals felt that people who were free to talk about HIV and AIDS were those who were married because the unmarried ones only based their knowledge on theories. One principal, Mr. Sims went further to say that experience was the best teacher, he qualified this by stating that married people had no problems talking about HIV and AIDS Education, whereas this was not the case with the unmarried ones who feared repercussions from the society. This study however observed that both male and female lecturers were very conscious about talking on issues of HIV and AIDS Education. If one talked about HIV and AIDS Education it was attributed to the fact that one was interested in the female folk or that one was already infected with HIV and AIDS. It is this notion that

stopped most lecturers from teaching freely on HIV and AIDS Education. One lecturer, Mr. Yuyo also counter reacted by saying that it did not matter whether one was married or not, talking about HIV and AIDS were important, since it was about life in general. Another lecturer from College “A” Mrs. Yaya said that being a female, teaching on HIV and AIDS had adverse effects, because even the age of a lecturer was a factor as far as teaching on HIV and AIDS Education was concerned.

### **5.5.3 Behavioural Changes as a Challenge in the Integration of HIV and AIDS Education in the Teacher Education Programmes**

One Principal, Mr. Chanda in this study reported that it was difficult to determine whether the integration had brought about behavioural change in the learners and the lecturers. He however, said that a lot of lecturers had become fully involved in HIV and AIDS Education. This included the setting up of forums for drama and poetry as a form of sensitization. Since a lecturer was meant to teach on HIV and AIDS Education, it was also compulsory that he also learn the subjects. On second thought Mr. Chanda exposed that some lecturers and students had actually had some behavioural change. Another Principal, Mr. Sims had this to say about the issue of behavioural change:

***Chuckled ...Challenging question.** We cannot say that people do not have the knowledge but some people have still chosen to live as if they do not know anything about HIV and AIDS. To some extent yes it has brought some behavioural changes but how far is a debateable issue. Some people are still reckless as if they have no knowledge of the consequences of HIV and AIDS. Taking into account the large population of teacher trainees, we still have a lot of challenges to deal with. Matrons and watchmen have been giving reports about misbehaviour among members of the opposite sex, after they have had some social outing at a pub in a social club nearby, within the institution where they go to relax. Yes and No, to the question of behavioural change.*

One lecturer, Mr. Killie reported that they had not been given the opportunity to teach on HIV and AIDS Education as they would have loved to. If allowed to teach as they would have loved to, they would have made sure that information would have reached the targeted groups so as to have behavioural changes. One lecturer, Mr. Bull said that behavioural change was relative in some kind of way. He however said that there were behavioural changes as the lecturers implemented the taught HIV and AIDS Education. He further

observed that teaching on HIV and AIDS Education had brought about improvements in the relationships between lecturers and teacher trainees.

When Principals were asked regarding the improvements that had been brought about by the integration of HIV and AIDS Education, the finding indicated that there were some improvements but there was need to have more revisions from time to time to perfect the integration of HIV and AIDS Education. One of the principals, Mr. Sims laughed and had this to say:

***Laughing** -- This has been taken as cross cutting issues especially by the primary school teachers who study their diplomas through distance education. There is a particular module which looks at HIV and AIDS as environmental issues. Volunteers from one NGO usually came to teach for a whole term. These are referred to as peer educators. The NGO known as Restless Development, sends its peer educators to Colleges of Education to conduct lessons on HIV and AIDS Education. Their lessons are actually timetabled for the whole term and a forum is provided for them. Their teachings also include reproductive health. This is not so widespread as such, more regarding HIV and AIDS still needs to be done.*

To the question regarding the best way of teaching HIV and AIDS, one of the principals, Mrs. Toyome had this to say:

*The best way is based on one's opinion. Teachers have a multiplier effect – Teaching should also be done by NGOs through drama etc. Street shows would be an added value to the teaching.*

Another Principal, Mr. Chanda also wanted to know whether HIV and AIDS Education had not reached the targeted group until now. The researcher did not answer this question she chuckled and threw it back to the one of the principals she was interviewing. He responded that there was some kind of information fatigue in his opinion, because there has been too much talk on HIV and AIDS.

The lecturers from College 'A' felt that the new curriculum for schools had HIV and AIDS Education well integrated. They said that this was a starting point. They also felt that the stand alone was the best approach to adopt as the learners would be examined at the end of the year unlike what was the case with the present approach that government had adopted which was that of crosscutting the HIV and AIDS Education into various subject areas.

#### **5.5.4 Integrated Content Prepares Teacher Trainees to Effectively Teach on HIV and AIDS Education**

Some of the principals revealed that HIV and AIDS Education was usually talked about in lectures for just 5 minutes, which was very rudimentary, whereas certain subjects did not even make mention of HIV and AIDS Education, thereby ill preparing teacher trainees for teaching in primary and secondary schools. The principals went further to say that peer education was done through seminars meaning that when HIV and AIDS Education were taught, they were only taught as basic education. It was further reported that teachers needed to read more to be adequately able to teach on HIV and AIDS. Another way that was mentioned by the Principals was that there was need to involve different HIV and AIDS organisations to give teacher and learner support groups more information on issues of HIV and AIDS Education. However, a French lecturer, Mr. Jonas reported that there was a lot of literature in French which he initiatively used from textbooks, as well as from the internet. He added by stating that all the teaching materials in French were very supportive, these being in the form of audio materials and projections in books which made teaching of HIV and AIDS Education very easy. He echoed agreed the sentiments of the other lecturers in saying that there were no consultations and that different courses integrate into each other and thereby enriching the information given to the teacher trainees. Another lecturer, Mr. Charlie also stated that content was enough but what was required was the issue of intensifying research in the area of HIV and AIDS Education. Another lecturer, Mr. Hamper from one of the four colleges said that it was important for all lecturers in Colleges of Education to handle both content and methodology, this way teacher trainees would be adequately prepared to teach in schools where they were deployed to.

#### **5.5.5 Integration of HIV and AIDS Education is the Best Way of Delivering HIV and AIDS Education to Teacher Trainees**

Some of the findings revealed that the majority of the Principals indicated that there were no challenges in teaching HIV and AIDS Education because the teaching did not require a lot of equipment. College “C” Principal, Mr. Sims however, emphasised that some teachers were not interested in teaching HIV and AIDS Education because they took it lightly. One Principal, Mr. Andy was not in agreement regarding HIV and AIDS Education being taught as stand-alone subjects, which he considered to be a bad idea as some lecturers would be influenced not to teach the subjects. On second thoughts, he felt that teaching HIV and AIDS Education would make the subjects to be examinable and graded. Most of the lecturers

interviewed had opposing views because they felt that teaching HIV and AIDS subjects as stand-alone would be the best way of delivering HIV and AIDS Education. Seminars for both lecturers and learners, Anti-Aids clubs, games, songs, drama were other methods that were considered to be useful in dissemination of HIV and AIDS Education.

#### **5.5.6 Administrative Challenges in the Integration of HIV and AIDS Education in the Teacher Education Programmes**

This finding indicated that College “C” Principal, Mr. Sims said that administrative challenges were there especially in respect of the curriculum. The primary teacher diploma did not have adequate information on HIV and AIDS Education. Several workshops had been conducted to emphasise on what should be included and what should not be included in the teaching of HIV and AIDS Education. However teachers were encouraged to talk about HIV and AIDS Education briefly at assembly briefly but not so much in the classrooms. Some lecturers said the administrative challenges were many. Such as lack of teacher and learner materials which made it difficult for teachers to address HIV and AIDS Education. To the question of how often did the administration give them teaching Materials? One lecturer, Mr. Chang had this to say about teaching materials:

*Teacher and learner resources are always donated by NGOs or we source for them on our own. In the past 17 years that I have been at this college procurement of teaching materials has been very poor.*

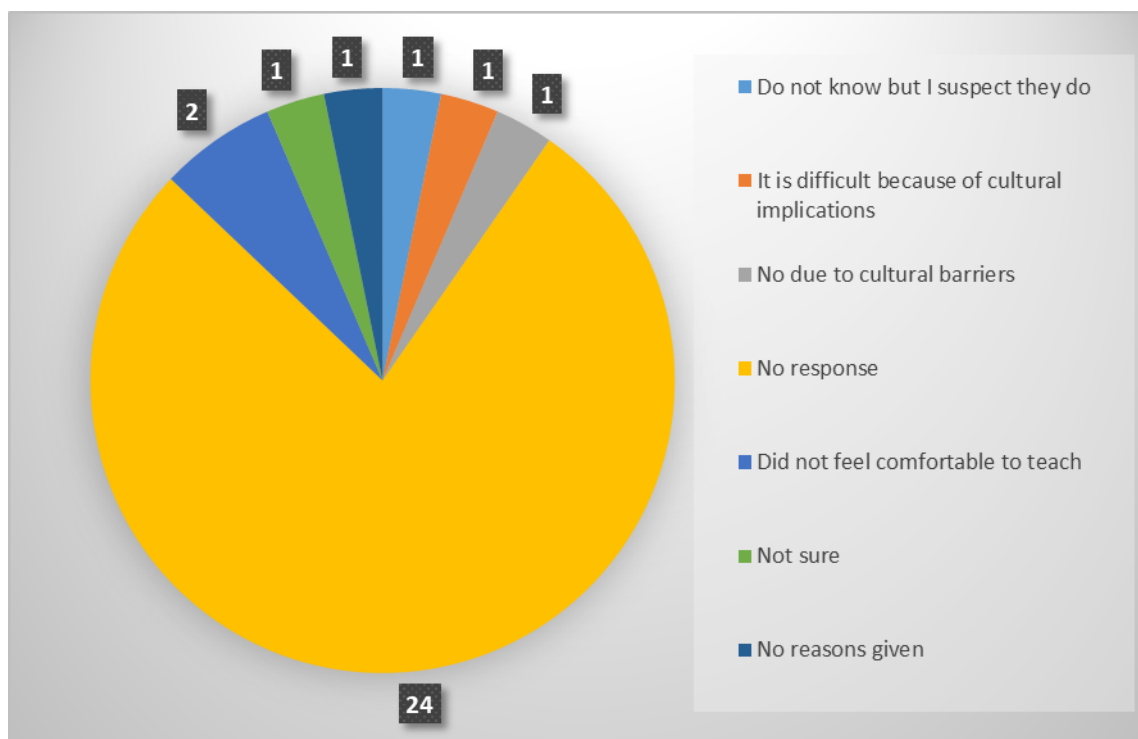
#### **5.5.7 Consultations Done on the Integration among the Lecturers as Another Challenge in the Integration of HIV and AIDS Education in Teacher Education Programmes**

To answer the question on consultation, this study revealed that the issue of the integration of HIV and AIDS Education was already in the new curriculum, though the consultations were not widely publicized. College ‘C’ lecturer, Mrs. Chen however, said that talks had been there, in respect of some programmes which were initiated by one non-governmental organisation on HIV and AIDS and Teacher Education. The lecturers also reported that consultations were not widely done, though some seminars were held in some colleges to sensitize the lecturers on HIV and AIDS Education.

Among the principals and lecturers who were interviewed, the majority opted for the stand-alone subject approach, here the argument was centred on the fact that HIV and AIDS

subjects would be examined and the students would be well versed in the subjects, as well as the understanding of its importance.

This question was taken from research question four, which looked at the challenges that lecturers face in teaching integrated HIV and AIDS Education in Teacher Education Programmes. It was observed that among the challenges was the comfortability in delivering lectures on HIV and AIDS Education by the lecturers. The majority of the participants from the University of Zambia, 24 or (77.4%) did not respond to this question. Some of the participants did not answer this question at all and some cited cultural implications and cultural barriers as factors that made it difficult for them to lecture on HIV and AIDS Education. There were some participants who did not feel comfortable teaching on HIV and AIDS but could not give their reasons. One lecturer, said that they were not sure, whereas others said that they just did not feel comfortable teaching on these subjects but could not give reasons.



**Figure 10: Lecturer's Comfortability in Delivering Lectures on HIV and AIDS**

The lecturers from all four Colleges of Education unlike those from the University of Zambia gave more detailed information regarding what they meant by cultural factors. They reported that most of them felt uncomfortable to lecture on sexual issues because culturally it was taboo for older people to talk to young children regarding sex education. Some of the parents attributed the sexual harassment of their children as a result of teachers being very free to talk to their children about sex. However when the lecturers were asked whether these cultural factors made lecturers uncomfortable to teach on HIV and AIDS Education really existed, the study revealed that the majority of the participants felt that the cultural factors existed, this was depicted by 14 or (45.2%) whereas 8 or (25.8%) said that they were not sure. Some of the lecturers felt that they were not knowledgeable enough to comfortably teach HIV and AIDS Education because the subjects were complex and only medical personnel would be the best disseminator of this information. It was further reported said that if lecturers were expected to teach on HIV and AIDS Education, then they should be sent for more specialised training in the area of HIV and AIDS.

**Table 20: Cultural factors that Make Lecturers Feel Uncomfortable to Teach on HIV and AIDS Education.**

<b>Partially there</b>	<b>They are there</b>	<b>Not Sure</b>	<b>No response</b>	<b>Total</b>
6 (19.4%)	14 (45.2%)	8 (25.8%)	3 (9.7%)	31 (100%)

---

#### **5.6 Research Question Five : What are the Views of Stakeholders Regarding the Various Modes of Integrating HIV and AIDS Education in Teacher Education Programmes?**

---

Stakeholders in this study were referred to as the Ministry of Education Officers at Teacher Education and Specialised Services offices and Restless Development personnel. The lecturers were asked about government's response to the integration and this is what was recorded in the questionnaires as depicted in Table 21 below. In view of the question which inquired into government's responses to the delivery of the integration of HIV and AIDS Education, taken from objective five, the finding was that the majority of participants which were 11 or (35.5%) said government responses were effective, whereas 7 or (22.6%) said

they were not effective however the stakeholders themselves had dissimilar views regarding the integration.

**Table 21: Government's Response to the Integration of HIV and AIDS Education**

<b>Effective</b>	<b>Not Effective</b>	<b>Not Sure</b>	<b>No response</b>	<b>Total</b>
11 (35.5%)	7 (22.6%)	8 (25.8%)	5 (19.5%)	31 (100%)

When asked to give reasons to the answers in Table 22. Some lecturers commented on campaign posters and classroom activities which needed to be incorporated into HIV and AIDS messages. Other lecturers agreed and said that governments' use of related materials to improve on the integration of HIV and AIDS Education were not adequate, and that the Government needed to do more. There were other lecturers who did not answer this question because they said that they did not have relevant information on the subject, however some of the participants had conflictual views such as that, government officials felt that HIV and AIDS were punishment for the infected ones as they got what they deserved so there was no need to spend government's resources on this cause. Among the participants who answered this question there were some who still felt that Government had already done its' part because the HIV and AIDS Education were already handled as cross cutting issues. The lecturers at UNZA talked about Preventive Education in regard to HIV and AIDS being successful. This is what was reported. See table 22 for details. Regarding the views on HIV and AIDS Prevention Education being conducted in schools, the majority which was 16 or (51.6%) said it was partially successful. Another group 6 or (19.4%) said it was not successful. There were other participants who did not answer this question. The general picture is however depicted in Table 22.

**Table 22: Views on HIV and AIDS Prevention Education Being Conducted.**

<b>Partially successful</b>	<b>Not successful</b>	<b>No response</b>	<b>Total</b>
16 (51.6%)	6 (19.4%)	9 (28.9%)	31 (100%)

When the participants were asked to give reasons to Table 22 regarding Preventive Education being taught. The majority of the participants 23 or (74.2%) did not respond to the question. Among those who answered the question, one lecturer said that the awareness appeared to be

widespread, because it seemed to be taught as a pedestrian subject because the revelation was that there were indicators in the department showing that issues of HIV and AIDS Education had been integrated. Another reason, given by one participant was that there was inadequate teacher preparation, lack of teaching materials and negative attitudes of lecturers and teacher trainees towards the integration. Some participants still felt that despite all this, HIV and AIDS Education was still integrated into the curriculum, though due to some lecturers negativity they did not teach these subjects, causing the rate of HIV infection to remain extremely high. Some lecturers attributed all this to various factors such as culture and lack of emancipation.

**Table 23: Profile of stakeholders (Ministry of Education officers and Restless Development officer)**

Pseudo-name	Code	Organisation	Years of Service	Age
Mr Zunga	M1	MoE	Over 20years	50s
Mr Chenie	M2	MoE	Over20 years	50s
Mr Zungugulu	RD1	RD	Over 10 years	
Mr Zungugulu	RD1	RD	Over 10 years	40s

### **5.6.1 Ministry of Education Partnerships**

This study discovered that the Ministry of General Education and Restless Development partnered so as to help teacher trainees to experience the HIV and AIDS Education. In doing so, Restless Development established mini libraries where information on HIV and AIDS were being made available to teacher trainees. MI said that Restless Development had a monitoring tool which separated sexuality and HIV and AIDS Education, so that when teacher trainees went for teaching experience they would be able to handle the challenges that came with the two aforementioned programmes. The two stakeholders made a lot of headway in making sure that information sipped in the communities where the teacher trainees and their pupils came from. Restless Development's mandate was to deploy peer educators to Colleges of Education to help train teacher trainees on issues of HIV and AIDS Education. All Colleges of Education had interventions from Restless Development except one college which was a faith based college and did not believe in the ABC of HIV and AIDS Education that Restless Development was teaching on. ABC of HIV and AIDS stood for Abstinence, Be faithful or Condomize. It was the aspect of condomization that one college did not agree

with, because it was against their Christian values. The rest of the Colleges of Education worked extremely well with this NGO. Certification was given to the teacher trainees who completed the short courses that Restless Development organized for them. The Ministry of Education on the other hand made positive efforts in ensuring that the teacher trainees were taught in HIV and AIDS Education, and many studies were also done to help in finding solutions to the HIV and AIDS pandemic.

### **5.6.2 Cultural Beliefs**

This study discovered that besides other respondents commenting on the cultural beliefs as barriers to teaching on HIV and AIDS, The Ministry of Education through M1 also reported on cultural beliefs. M1 felt that barriers set by tradition is what made it difficult for adults to teach young children on sexuality and HIV and AIDS Education. M1 further reported that there was a wider traditional virus in terms of barriers because adults did not feel comfortable teaching on HIV and AIDS Education. Changing sexual behaviours was another barrier that the Ministry official explained hindered the understanding of HIV and AIDS Education.

### **5.6.3 Extent of the Integration**

M2 said that in 2006 Ministry of Education partnered with Changes 1 and 2. In 2007 massive integration of HIV and AIDS was done. Students were also expected to write examination questions on HIV and AIDS. In the broader sense he said that in 2007 Ministry of Education introduced some courses in colleges which integrated the HIV and AIDS Education into Special Education as well as Guidance and Counselling. The bigger component of the information was fused into Guidance and Counselling. He further went on to say that the new innovations in terms of training teachers multifaceted in an effort to bring Guidance and Counselling and Special Education together. Restless development provided all Colleges of Education with skills in HIV and AIDS Education in which they provided certification on completion of the course. The NGO also encouraged colleges to have HIV and AIDS clubs in their colleges. Later on colleges were provoked to seek for more adequate information on HIV and AIDS. The Southern African Consortium for Monitoring (SACMEDS 2 and 3) was introduced in order to promote quality education. The SACMEDS 2 and 3 did a survey to find out how much knowledge there was among teachers and learners. Their findings were that teachers had the knowledge about HIV and AIDS to teach the learners but the learners did not have achievement levels. This revelation indicated that there were challenges in the

transfer of knowledge. The teacher had no skills which meant that there was a pedagogical gap to teach the learners.

M1 made his own submissions on the extent of the integration. He said that he was not an expert on HIV and AIDS Education to tell how the integration should be done. He further went on to say that the Ministry took on board the integration and made sure that it was uniform in all Colleges of Education. UNICEF and UNESCO had tried to take on more HIV and AIDS-related issues in education at school level but not at college level. He went on to say that colleges affiliated to the University of Zambia had their own way of handling issues of HIV and AIDS Education. However, he reported that the Ministry of Education and Restless Development did two major things. The Ministry of Education in collaboration with Colleges of Education offered teaching and Restless Development on the other hand offered a service. M1 further said that, in his view the actual integration of HIV and AIDS Education was not fully and competently done. Each college had its own way of handling HIV and AIDS issues. There were no policies on HIV and AIDS and as such some Colleges of Education did not even have HIV and AIDS workplace policy.

This study found that lecturers actually taught HIV and AIDS Education, M2 reported that that what lecturers failed to access on HIV and AIDS Education they managed to access from their teacher trainees. The new syllabus for primary schools had HIV and AIDS well integrated as life skills. UNICEF and TESS worked together to improve on Life Skills in 2010-2013. Life skills and HIV and AIDS Education were all integrated in teacher education. During the aforementioned period, M2 reported that there were some challenges that were encountered, such as understanding life skills and implementation of the same. Life Skills, Guidance and Counselling as well as Special Education were meant to help strengthen the teachers in teaching. He went on to mention a few colleges and their areas of concentration. Nisticol he said their concentration was in Maths; Nkhrumah it was Social Sciences; Mukuba former COSECO it was Sciences; DALICE Maths and Social Sciences; ZAMISE Special Education. He reported that NISTICOL was an in-service college found in Chalimbana whose courses were all tailor made for primary school teachers to help strengthen their teaching skills. In actual sense he said that the teachers were actually retrained for upgrading to a Diploma level so that they could be able to teach grades 8 and 9. Research was continually being done at these colleges to check for gaps and weaknesses and

then prepare programmes to help strengthen the teachers teaching skills. The lack of teaching staff for Grades 10, 11 and 12 is what saw the emergent of Nkhrumah and Mukuba (COSECO) to supplement this deficiency. ZATEC prepared teacher trainees for three years after which they got a Teachers Diploma. From a certification of a primary school teacher, a teacher upgraded to a diploma and then left the primary school to teach at a secondary school. This resulted in high attrition rates of teachers from primary to secondary schools leaving primary schools to be understaffed. He further reported that universities needed to emphasize HIV and AIDS Education in their curriculum however the Ministry of General Education had the policy framework on HIV and AIDS already in place. M2 commended the work that UNICEF was doing by assisting the Ministry of General Education in terms of taking charge of all the HIV and AIDS-related issues.

Another structured interview was held with one of the directors at the Ministry of General Education who revealed that Books for primary schools were being printed by CDC and these books had HIV and AIDS Education clearly spelt out. One workshop had already been held and at the time of this interview which was April, 2015 the Ministry of General Education under CDC were having another workshop in Kabwe to review books that had been printed by CDC with HIV and AIDS Education well integrated in them.

#### **5.6.4 Not Examinable**

M1 said that HIV and AIDS Education were not examinable and teaching materials were not available. He argued that the teachers could not examine students when there were no teaching materials. He felt that in most colleges, the concentration was on the core subjects only. He therefore suggested that the best way was to marry the teaching and the service delivery so as to cement what was being taught in the related programmes.

On the methods of teaching, the M2 reported that the Primary Teachers' Programme had the inclusion of ICT and Guidance and Counselling plus Special Education as cross cutting issues. He went further to say that the same channel should be used for sexuality and HIV and AIDS Education. He reported that the above subjects be handled as in-depth cross-cutting issues. The ZATEC programme which was for three years was poorly package, as such it needed to be repackaged to accommodate all the subject areas.

### **5.6.5 NGO – Restless Development**

A structured interview was done with Restless Development which revealed the following information using the following sub-themes.

#### **5.6.5.1 Colleges of Education**

This study discovered that Restless Development had no capacity to go nationwide especially to go to all Colleges of Education. Teacher Aids Action Programme (TAAP). TAAP, 2006 was able to build capacity for teachers. SRH was also able to prepare programmes in the schools where they went to serve. Peer led approach was able to send graduates to different Colleges of Education to teach teachers on SRH. Ten (10) Colleges of Education so far had been captured for this programme. These were Nkhrumah, Mukuba, Kitwe College of Education, Malcom Moffat, Mongu, Solwezi, Chipata, Zamise, Dalice, Nisticol except for Charles Lwanga which was not included, because they refused by stating that they already had a similar programme running in their college. Research done revealed that the college was not comfortable with the packaging which was quite comprehensive. The packaging included the ABC which meant abstinence, condomize and be faithful. The college being a Christian college was not comfortable with the C for condom. Restless development invited the college to a meeting to which they attended. These were strategic teacher meetings. As a result of teacher training colleges, a book, 80/20 meaning 80 per cent of the world is poor and 20% is rich was being used in Zambia. When teacher trainees graduated the 80/20 book was given to the graduates.

#### **5.6.5.2 Information Sharing**

This study further revealed that Restless Development reported that comprehensive sexuality curriculum in the area of Guidance and Counselling helped to set standards around the information sharing. Teachers were trained in Guidance and Counselling, meetings were held and resulted in a Guidance and Counselling handbook. Another tool was piloted in the mainstream to help monitor the implementation of sexuality education in schools under the Ministry of General Education. This was to help monitor the teaching of Maths, as well as comprehensive SRH in schools. School boards in Chibombo were trained on how to use the tool so that they could monitor, polish and share with the Ministry of General Education and eventually start working with TESS. Eventually the tool had been accepted by Ministry of

General Education. The trained experts helped in these three main areas. 1. Livelihoods, 2. Civic participation 3. Areas such as SRH. The complaint came about SRH, they said that the pupils got HIV and AIDS by going out with sugar daddies, who helped them with pocket money for their personal expenses.

Restless Development reported that concerts and festivals were usually big gatherings where information was easily shared among the youths, which is a positive undertaking. Youth resource centres were initiated in Colleges of Education for the purpose of information sharing, additionally messages on SRH were also disseminated at assemblies. A five minute message at the beginning and at the end of a lecture were encouraged, all this and more were some of the measures that Restless Development initiated to make certain that HIV and AIDS Education were shared with the target groups. This information was found easy to implement especially on behalf of School Health Education Programme (SHEP). As a result of the many successes of SHEP, Restless Development was asked to extend their programme which started in the central province to the other parts of Zambia.

#### **5.6.5.3 Extent of the Integration**

In Colleges of Education, the revelation was that HIV and AIDS Education were taught as cross cutting issues, just like child abuse and gender based violence. All these were not examinable. The HIV and AIDS Education were not taught in detail but taught through clubs. It was further revealed that during examinations only a few course asked questions on HIV and AIDS Education. Sometimes HIV and AIDS Education were taught in Social Development studies even then it was not examinable. When the subject was offloaded to pupils it was not congruent to their ages. Children got information from televisions, movies etc. They tried to find information on their own which was not detailed enough. The Ministry reported that barriers were there in terms of knowledge gaps, but monitoring what was schemed for each week on HIV and AIDS Education was only mentioned at school assemblies.

#### **5.6.5.4 Partnership**

It was also discovered that Restless Development had a conference in Tanzania to which the Ministry of General Education of Zambia attended. When the Ministry of Education saw the link between Restless Development and Tanzania, Zambia decided to do similar works in its

schools. In 2004, Restless Development targeted school pupils. Their aim was to give information on Sexual and Reproductive Health (SRH). Restless Development wanted to build the school capacity in similar programming. The idea was to implement the HIV and AIDS policy especially where HIV and AIDS Education were not implemented. The aim of Restless Development was to also provide manpower via volunteer interns to help implement the HIV and AIDS policy. HIV and AIDS committee was formed, clubs were also formed especially the HIV and AIDS Anti Action Clubs. In some cases the infected personnel would not want to be part of it.

University of Zambia lecturers were also asked if the integration of HIV and AIDS had brought in any improvements in the teacher education programmes. The majority which was 23 (74.2%) did not answer this question. The other participants felt that awareness has been intensified and the result was that there was a change in the sexual behaviour of most people. It was further reported that HIV and AIDS as cross cutting issues gave people enough knowledge on their sexual responsibilities. Other participants still held contrary views, they felt that very little if any improvements had been made at all. The participants hence reported that they still needed to do more on HIV and AIDS Education than they had done already.

#### **5.6.6 Improvements that the Integration of HIV and AIDS Education Has Brought in the Teacher Education Programmes**

Findings in this study regarding improvements that HIV and AIDS Education had brought into the Teacher Education Programmes were taken from objective five which inquired of the stakeholders' views regarding the various modes of integrating the HIV and AIDS Education. The majority 23 (74.2%) did not answer this question. Some of the participants said that awareness has been intensified, and the result was that there was change in sexual behaviour of people. It was further reported that HIV and AIDS were integrated as cross cutting issues. It was further said that people now have knowledge on HIV and AIDS and have sexual responsibility. Other participants still held contra views. They felt that very little if any improvements at all were made.

#### **5.6.7 Rate of the Current Impact of HIV and AIDS Education**

The finding on the rate of impact of teaching HIV and AIDS Education, the majority of the participants which is 16 (51.6%) said that there was moderate impact and 6 (19.4%) said

there was little or no impact. A small number of participants 5 (16.1) said that they did not know.

When data from the University lecturers was triangulated with data from Colleges of Education lecturers both set of lecturers reported that government was effective in its delivery of HIV and AIDS Education. When the participants were asked regarding the packaging of content which was taken from objective one, the participants from both groups gave divergent views, the University of Zambia reported that they were not sure whether content was adequately packaged or not, whereas the participants from Colleges of Education said that it was adequately packaged. One lecturer, Mr. Chang from college 'C' had this to say about the issue of packaging of content:

*Content is enough though more research needs to be done. The integration when it is done has only basic information. Teachers need to read more to adequately teach. It is very important that information is being offloaded but some lecturers do not teach it because it has stigma attached to it.*

It was also reported that even when packaging was adequately done, unpacking it was different from group to group. Whereas another group of participants in this study felt that people did not care how the packaging and the unpacking of the content was done, as long as content was taught.

### **5.6.8 Summary**

This chapter presented the findings of the study. The majority of the participants agreed with the assertion that content, methodology and assessment elements that supported the integration were appropriate. The findings also indicated that the integration of HIV and AIDS Education were being handled as cross cutting issues in Zambia. The majority of participants also indicated that most lecturers had HIV and AIDS knowledge but, the information was not detailed enough, however the following methods of teaching HIV and AIDS Education were said to be the best, and these were the demonstration and Socrates methods of teaching. Finally it was agreed that the stance the Government of Zambia had taken in handling this pandemic which was cross cutting issues of HIV and AIDS Education was not enough more, still needed to be done.

## CHAPTER SIX

### DISCUSSION OF FINDINGS

#### 6.1 Introduction

This study, in its quest to analyse the integration of HIV and AIDS Education in Teacher Education Programmes, first of all, discusses all the five objectives, which are the main themes in line with content, methods of teaching and learner assessments as elements that support the integration of HIV and AIDS Education. The two categories of lecturers from the University of Zambia and the four Colleges of Education had their information triangulated in order to explain what they both said regarding the integration of HIV and AIDS Education from the questionnaires and the interview guides. Data from UNZA lecturers and college lecturers were collected through structured interviews, questionnaires, classroom observations, as well as desk reviews.

#### **6.2 Objective One: The Views of Lecturers, Teacher Trainees and Graduates on the Appropriateness of Content, Methods of Teaching and Learner Assessments as Elements that Support the Integration of HIV and AIDS Education in Teacher Education Programmes**

With respect to the above objective, this study revealed that it was apparent that lecturers from all the institutions sampled namely: the four Colleges of Education and the University of Zambia, considered the elements which supported the integration of HIV and AIDS Education to be appropriate. However, what was surprising was that despite the fact that the elements were seen to be appropriate, some lecturers still had contradictory sentiments expressed regarding the inappropriateness of the elements. This was strongly expressed by those who felt that the packaging was not adequately done.

Bruner (1980) explains that in the act of learning three processes take place: Acquisition of new information, transformation of knowledge acquired and assessment of learning processes. This therefore means that, when students enrol at Colleges of Education they look forward to acquiring as much knowledge as possible so that when they become experts they can proficiently disseminate information to their learners, if this is not feasible the teacher trainees then become disoriented and fail to perform.

This study was able to demonstrate that new knowledge was acquired. HIV and AIDS were taught whereas learner assessments were not adequately managed, this subsequently meant that because this was not adequately done, what was actually learnt could not be measured. A student teacher is required to discern that whatever is communicated is adequately assessed through tests, assignments and examinations. When assessments are not given students feel outraged and complain as was deduced in this study. It is appropriate and decent that students get feedback from whatever is being taught so that they know how they are progressing in their studies.

The officers from the Ministry of General Education asserted that HIV and AIDS Education were not examinable at Colleges of Education. They attributed this to the in availability of teacher and learner materials and as such most lecturers only focused on core subjects where teacher and learner materials were available. The Ministry of Education officer suggested that the only way to minimise on the lack of examination in this area was to have core-subjects and HIV and AIDS Education combined. Combining the two subjects would solve the problem of conflict between curriculum content of core subjects and that of HIV and AIDS Education, this is in agreement with what was reported by Banda and Mulenga (2015) That this conflict would actually lead to the hindrance of the actual process of teaching HIV and AIDS Education in the classroom. The combination in this case is the same as integrating HIV and AIDS Education into another subject which would actually solve the problem of HIV and AIDS not being examinable.

### **6.2.1 Appropriateness of Content**

The appropriateness of the HIV and AIDS Education content, in this study was not properly packaged and hence needed repackaging. This was because some subjects such as Mathematics, English, History, Religious Education and Geography barely made mention of HIV and AIDS Education in their subject areas.

The aspect of teachers in Zambia not being trained to deal with the HIV and AIDS Education nor provided with appropriate teacher and learner materials, as a result they were not knowledgeable enough to pass on correct and complete information to students was reported

by Chiwela and Mwape, (1999). Subjects such as French, Civic Education, Physical Education, Sociology of Education, Guidance and Counselling as well as Environmental Education had some aspects of HIV and AIDS Education integrated within them, their content ranged from how HIV and AIDS was acquired, to consequences of the virus, as well as cultural and traditional practices that influenced the delivery of HIV and AIDS Education. The issue of in availability of teacher and learner materials was exposed as being factual in this study. This was evidenced by the way in which most of the participants reacted to this particular issue. It was very clear that lack of teacher and learner resources did hinder the operational way of delivering HIV and AIDS Education to teacher trainees.

The Zambian society considers it as taboo for elders to teach young children about issues pertaining to sex and HIV and AIDS. The discovery in this study was that some lecturers and teacher trainees felt that some of the HIV and AIDS content were not suitable for certain age groups that the teacher trainees were going to teach upon completion of their training. The issue of age was also observed by Muzumara (2011). This mostly borders on Cultural and traditional practices which were also observed by Chikwanda (2015) in Breidlid, Cheyeka and Farag, (2015) (Eds).

Another issue that surfaced was the issue of not covering the content due to time constraints. (Kelly, 2002) also recognised the issue of lack of curricular time and orientation in addressing HIV and AIDS Education. In some instances the time table was already overloaded with core subjects hence, it was difficult to include HIV and AIDS Education. Indeed with an overloaded timetable including other new subjects would have been impossible to implement. HIV and AIDS were hence being taught as cross-cutting issues especially in primary and secondary teacher training programmes, this meant that HIV and AIDS was integrated into already existing subjects.

Some respondents in this study suggested that their fellow lecturers should be encouraged to handle both content and methodology because what was obtaining at the moment was that content was handled by different lecturers and methods of teaching by some other different lecturers. This therefore, made it very difficult for the learners to comprehend the information. There are a number of factors that were identified in this study that regulated what methods lecturers needed to use in order to achieve a given learning outcome regarding

the HIV and AIDS Education. Muzumara (2011) also mentioned the issue of teaching methods, and he mentioned demonstration, Socratic and interactive methods which the lecturers in this study also adopted as being the best methods to use in teaching HIV and AIDS Education.

Public speaking on HIV and AIDS Education were considered to be a bad idea as people often misunderstood such messages. Expertise in HIV and AIDS Education were said to be important, contrary to only having basic information on the subject to enable one teach effectively. Some participants mostly lecturers and teacher trainees felt that some of their colleagues taught using only information that they were familiar and comfortable with to teach. Hence, this mode of teaching led to selective teaching which was not in any way beneficial to the teacher trainees as recipients of the knowledge. This was also reported by Banda and Mulenga (2015) and Nzioka and Ramos (2008). This study discovered that selective teaching disadvantaged a lot of the teacher trainees, in the sense that they received very little information on the virus instead of being taught everything that was timetabled.

Some Principals attributed the poor packaging of HIV and AIDS Education to the introduction of diploma courses. This is what one Principal said:

*Teachers should be taught content as they undergo training, when we had certificate holders the HIV and AIDS content was well documented, however with the introduction of diploma courses this has been stopped.*

The principals in this study mentioned social influence as one factor that contributed to the negativity towards the integration of HIV and AIDS Education. This meant that if some lecturers were negative towards issues of HIV and AIDS Education then the student teachers would equally have a negative attitude towards the subject. This study observed that content in some subject areas was actually lacking, because in most of the subject areas there was no mention of HIV and AIDS Education. Some lecturers could not answer some of the questions in the interview guide because they had no information to give pertaining to the integration of HIV and AIDS Education. Though it has been reported by many scholars that teachers are conduits of the HIV and AIDS Education, in some subject areas this was a big challenge as HIV and AIDS Education were actually avoided by the same teachers who are supposed to be conduits of HIV and AIDS Education. This is in line with what Banda and Mulenga (2015) indicated when they said that conflict between curriculum content and

expectations is what hinders the actual process of teaching HIV and AIDS in the classroom. Other studies have also observed that as long as content is not responsive to social issues, and not giving room to change around information then teachers will find it difficult to teach.

Moral standards was another factor that some lecturers said hindered effective delivery of HIV and AIDS Education to the teacher trainees. These moral standards included heavy drinking and promiscuity. The researcher in this study was equally persuaded that cultural practices and tradition can hinder some lecturers from teaching content as it should be taught to the learners especially in instances where some learners were much younger than the lecturers delivering the lecture or lesson. This assertion is in line with what Kelly (2006) said regarding there being a lot of constraints that influence and shape the teaching of HIV and AIDS Education, he further postulated that teaching of HIV and AIDS in young learners brought fear in teachers of offending parents of the young learners. Kelly's reasons were that the parents might see this as a way of encouraging learners into promiscuity with teachers. These sentiments made by Kelly were also noted in this study, additionally Weiler and Weiler (2012) also agrees with Kelly (2006) by saying that in many African cultures, young children including teachers are not comfortable to openly discuss issues related to sexuality with an adult who maybe of a different gender.

Another factor that surfaced in this study which hindered the effective delivery of HIV and AIDS Education was the marital status of the lecturers. Single female lecturers were said to be more prone to shyness in teaching on sexual issues than their male counterparts. The researcher did not agree with this assertion as most of the people that were interviewed reported that HIV and AIDS Education were mostly taught by female lecturers in their Colleges of Education.

The appropriateness of content in the HIV and AIDS Education raised a lot of concerns, one of the issue raised was that since HIV and AIDS Education were taken as cross cutting issues responses were mixed from all the category of participants. One college reported that it had prepared modules for distance students and components of HIV and AIDS Education were fully embedded in the document, whereas other courses integrated HIV and AIDS Education only as a biological issue.

Reports from this study indicated that cross cutting was an appropriate way of disseminating the HIV and AIDS Education because each field was catered for in terms of suitability linked to a particular subject. In college C it was also observed that those who were most passionate about HIV and AIDS were those teachers who were infected with the virus. Implying that these teachers would actually teach the learners based on experience. The work that volunteers from Restless Development had done was commended by some principals, it was reported that Restless Development peer educators reported at colleges of education for a whole term to teach on HIV and AIDS Education. These subject areas were timetabled and taught. The teaching of HIV and AIDS Education also included the component of reproductive health though this was not widespread, and more still needed to be done.

The content, according to some principals, had very basic information on HIV and AIDS Education. It was therefore suggested that there should be some information upgrade to the HIV and AIDS content with clear avoidance of information overload. This concurs with what the Zambia Curriculum Framework reported in its document on cross cutting issues when it said that when HIV and AIDS Education is integrated in the curriculum it should not be unduly fragmented or overloaded or else the curriculum would not be implemented effectively (MoESVTEE, 2013). Overloading it, would mean that the lecturers would not teach the topics but instead skip the topics or not teach at all thereby producing ill equipped teachers. This also agrees with what Carmody (2004) stated when he said that he wondered how a clustered curriculum which did not allow coverage of detailed content, skills and methodologies would produce quality teachers. The strong sentiments that came from the majority of the Principals were that there was a lot of talk on the issue of integration for a long time, what they saw was that there was not much progress in that area. They further stated that it would be because there were too many components which were too difficult for the learners to comprehend that is why the arrangement was not succeeding.

The issue of content being for two categories of teacher trainees was also mentioned, these being the pre-serving and in-serving teachers. When asked whether the content was adequate or whether the content adequately prepared the teacher trainees to effectively teach. One Principal laughed and said that HIV and AIDS Education were taken as a cross cutting issue especially for primary and secondary diploma at distance level. He stated that there was a module prepared by the college which looked at HIV and AIDS and some other

environmental issues. In short he was saying that the content was not adequately packaged for the teacher trainees to go out and teach. Most of the teacher trainees indicated that they were not sure whether content had been adequately packaged or not basing their information on what was happening in the different subject areas.

### **6.2.2 Methods Used in Teaching HIV and AIDS Education**

Interactive methodologies through games such as: *shomba* and *agode*, *agode nichisilu*, which are Zambian game songs were used to teach on HIV and AIDS Education to all learners, especially those taking Physical Education subjects. Educating Our Future, (MoE, 1996) also recommended interactive methods of teaching in the promotion of life skills. It was also reported that in most schools HIV and AIDS Education was mentioned at assemblies, and in different subject areas. This initiative was meant to help impact some HIV and AIDS Education knowledge to those lecturers who lacked HIV and AIDS Education. The negative attitude of most of the lecturers as well as some teacher trainees towards HIV and AIDS Education was also another factor that contributed to lack of HIV and AIDS Education, therefore there was need to integrate HIV and AIDS Education into other subject areas because individuals living with HIV and AIDS virus were seen to shun HIV and AIDS topics or partially lecture on HIV and AIDS Education by considering it to be monotonous in nature.

Sex Education was not well received in most rural communities especially where teachers were the ones who talked about it. Most parents saw this interaction among teachers and their children as another way through which teachers incited their children to have sex with them. Time allocated on the teaching of HIV and AIDS Education was another major factor that disadvantaged the lecturers who wanted to teach this subject. What seemed not to be clear to most of the participants was that integrating HIV and AIDS Education in all the subject areas meant that no time was set aside for the HIV and AIDS Education alone which in the researcher's view was possible. Whereas, it was reported that the timetable was already overloaded with the core subjects leaving no time for other new subjects such as HIV and AIDS Education from all indications, it was clear that the participants did not want HIV and AIDS Education to be taught separately on the timetable. It was hence reported that since HIV and AIDS was being handled as cross cutting issues, this meant that it was already integrated in some of the subject areas. The discovery in this study was that the participants

failed to understand that the integration could be done in five different ways as had already been explained in this study.

One focus group in a Christian teachers' college of education shocked everyone by insinuating that clergy men and women such as sisters (Nuns) and Fathers (Priests) were not infected with the virus because they did not marry. This was an indicator that knowledge on HIV and AIDS was still minimal. The Southern and Eastern Consortium for Monitoring Educational Quality (SACMEQ) III project research results affirmed the fact that teacher and pupil knowledge on HIV and AIDS was minimum, the consortium therefore recommended that the government of Zambia should address this issue, especially regarding prevention education programme focusing on the upper grades of primary schools (Musonda, 2011). Since most of the teachers who teach these children undergo primary teachers' training in colleges of education, it seemed that the trainee teachers were not well trained in HIV and AIDS Education.

Some college principals in this study favoured having the HIV and AIDS content to be taught through drama and street shows. They felt that this was the best way of disseminating HIV and AIDS Education. Further revelations were that content being taught was only basic. There was need for lecturers to become more skilful than they were so that they could adequately teach on HIV and AIDS Education. It was suggested that group teaching be encouraged to remove the notion of un-skilfulness. As far as most of the respondents were concerned HIV and AIDS Education were not fully integrated into the various core subjects. It was further suggested that HIV and AIDS Education be taught as a stand-alone subject, for effectiveness and completion of the integration.

Methods used in teaching on HIV and AIDS Education were considered to be appropriate by some principals. Examples were given of courses like Physical Education that were taught through interactive methods such as songs, games and dance. This is consistent with what Mweti (2007) and Hellevwe et al. (2011) said in Weiler and Weiler (2012) regarding the methods of teaching which are well suited to teach HIV and AIDS Education to teacher trainees, in the form of role plays.

Majority of lecturers emphasised that focus be on varied methods of teaching HIV and AIDS education in different subject areas and not only limited to one method since this information

was meant to benefit all, those infected and those who were affected. In looking at methods of teaching, one contentious issue which surfaced was that of married lecturers and the problems they faced regarding the methods of teaching on HIV and AIDS Education. The majority of the participants felt that married lecturers did not have as many problems when teaching on HIV and AIDS as did their single counterparts, who found the teaching of HIV and AIDS content very difficult. One method despite the views described above, which was recommended for teaching HIV and AIDS was the demonstration method, which helped the teacher to give clearer information or explanations to the teacher trainees, so that the teacher trainees could carry out the activities or illustrations on their own. This is in agreement with what Jenkins and Whitfield (1974) in Muzumara (2011) said regarding the demonstration method.

### **6.2.3 Learner Assessments**

Learner assessments in terms of tests, assignments and examinations were not given in most subject areas but had the integration of HIV and AIDS Education within some core subjects. Another revelation in this study was that assessments in both primary and secondary teacher training programmes were not adequately managed because, HIV and AIDS Education being taught as cross cutting issues meant that some lecturers did not include the HIV and AIDS Education in the tests and examinations for the teacher trainees. What was discovered in most of the colleges of education sampled was that, they were in conflict with what UNESCO (2008) documented regarding the integration of HIV and AIDS. UNESCO specified that the integration of HIV and AIDS should have examination questions included. It is the researcher's conviction that examining learners in any subject area is meant to give feedback to the learners and if this is not done, it meant that that education system has somewhat failed. The HIV and AIDS Education in this study were not examinable. It was discovered that in some subject areas only one question or two would be captured in the examination and this was not adequate. The participants however felt that if this subject was being handled as a stand-alone subject then probably it would be properly examined. They also blamed this on the poor way of packaging the HIV and AIDS Education. It is the researchers opinion that learner assessments are supposed to improve pupil performance through proper feedback if this is not done it means that somehow the whole purpose is defeated and the learners are highly disadvantaged.

### **6.3 Objective Two: The Teacher Trainees Understanding of the Phenomenon of the Integration of HIV and AIDS Education in Teacher Training Programmes**

The discussants profile in terms of gender and codes is shown on page 90, Table 27 of the results section of this study.

#### **6.3.1 The Extent of the Integration**

The information in this segment is based on the focus group discussions. All the teacher trainees were grouped in focus groups of eight. All these participants experienced the integration in different ways. However the subthemes were grouped according to the views coming from different Colleges of Education. Some teacher trainees felt that the integration was not fully done and others felt that the integration had been well done. It was also reported that it was the attitude of the lecturers and learners towards the integration of HIV and AIDS Education that was erroneous.

Most of the students from college 'A' took time to explain what the integration meant to them, because the general picture at this college was that most of the teacher trainees did not understand what integration meant. R1A said they were not aware of the integration in the two teacher education programmes. However they said that they had an Anti-Aids peer club in the college. R1A further said that the peer club gave them information on the effects of HIV and AIDS. R2A additionally said that some of the subjects that teacher trainees took at their college were as follows: History, Zambian Languages, Maths, English, Civic Education, and Religious Education to mention but a few. R2A further said that History had some components of HIV and AIDS in the subject, as well as Physical Education which taught on the causes and effects of HIV and AIDS. Some topics in Civic Education and PE had some assignments on HIV and AIDS Education.

If teacher trainees in this particular college did not understand the term integration, it sent negative signals to the researcher that the integration was not well done, as the trainees were ignorant of the integration. This is something that should be of major concern to the curriculum specialists as well as technocrats about the HIV and AIDS Education situation in the teacher training colleges. It should be clearly understood that information is not getting to the intended learners. However, those subjects that integrated HIV and AIDS Education, took great effort to assess the HIV and AIDS component as well as the core subject areas, this

was well appreciated by most participants. Topics taught included child abuse, issues of sexuality and VCT. R5A said that the evaluation was not properly done. The HIV and AIDS content was only taught theoretically but there were no practical done. This is the reason why this study suggested that most Colleges of Education should include teaching methods on HIV and AIDS Education so that graduates from these colleges can graduate as experts on HIV and AIDS Education.

Another issue of great concern at most colleges was the issue of teacher and learner resources which was mentioned by almost all the participants in this study. This was seen as a clear indication that the teaching of HIV and AIDS Education was very difficult in almost all the Colleges of Education sampled in this study. However it was not so disheartening to know that subjects such as French indicated that teacher and learner materials were available through the initiative of the subject lecturers which made the teaching of their subject areas bearable. These materials were in form of audio materials and books. Whereas in some cases books were readily available on HIV and AIDS Education, some participants argued that using books alone was not sufficient, other teacher and learner materials needed to be made available. Videos on how the disease was transmitted and its consequences was another method of beefing up on the teacher and learner resources being used in the teaching of HIV and AIDS Education. This concern of non-availability of teaching materials was seen to be a challenge not only in Colleges of Education but also at the schools were they were going to be deployed to after graduation.

It was the researcher's opinion that the Ministry of Education needed to do some on the spot checks at most of these colleges to determine the situation regarding the lack of HIV and AIDS learner and teacher materials as mentioned by most of the participants. By doing these checks more lasting solutions would be found of subsidizing what colleges were already doing in term of outsourcing for teacher and learner materials.

### **6.3.2 Teaching Young Ones**

One unanticipated finding was that most of the teachers reported that teaching the young ones proved to be problematic as tradition did not allow older people to talk to children about sex and HIV and AIDS. When asked to comment on the integration generally, R5A reported that 20 minutes out of 50 minutes was the time allocated to the teaching of HIV and AIDS in each

lecture hour. In the Anti AIDS club teacher trainees, met only once per week from 17 hours to 18 hours, the teacher trainees considered this time to be inadequate for the teaching of HIV and AIDS Education. The lack of administering assignments to evaluate the understanding of the subject was another disheartening factor. Most teacher trainees revealed that teaching of HIV and AIDS Education across all subject areas was far better than teaching it as an extra-curricular subject since few teacher trainees attended and benefitted from the Anti-AIDS club. In line with the other assertions by the majority of the discussants, the researcher's position was also that teaching of HIV and AIDS needed to be enhanced, for better results, as expressed by most participants in this study. Leaving the teaching of HIV and AIDS to the Anti-AIDS club alone was not sufficient.

### **6.3.3 Acquisition of Knowledge on HIV and AIDS Education**

Ignorance regarding how people contracted the HIV and AIDS virus, was one finding that shocked the researcher. An example of this ignorance is when one teacher trainee questioned whether Nuns and Priests who did not marry were also prone to contracting the HIV and AIDS virus. This question brought out a lot of laughter from his colleagues who retorted that HIV and AIDS could be acquired through many ways such as transmission of blood, infected injections and needles and so on. It was consequently very clear from this discussion that some teacher trainees did not actually know how one contracted the HIV and AIDS virus. This brings the realisation that HIV and AIDS information was not freely flowing as was being envisaged by many people in the Colleges of Education in Zambia. Sensitization on HIV and AIDS is supposed to be an ongoing process, people should discard the issue of HIV and AIDS fatigue because there are many people in this country who are still very ignorant regarding HIV and AIDS issues. R2A reported that there were people in this world who did not believe that HIV and AIDS was real. The researcher will borrow the following phrase from one of the participants *'knowledge is power and without knowledge people perish'*.

### **6.3.4 Teaching of Sexuality Education Among the Young Learners**

Some discussants brought in the issue of the rural settings and misconceptions regarding HIV and AIDS, which they stated could not be discussed publicly or else the society would misunderstand somebody. To this statement other participants felt that disregarding the misunderstanding, there was a dire need to talk to teacher trainees about HIV and AIDS especially on preventive measures and awareness, using the Organisation Restless

Development choice of words, “Catching them Young”. It was observed by the researcher that issues of sexuality were not talked about freely among the members of the society. This was seen in the way most of the participants tried to avoid talking about sexual issues. It is the researcher’s belief that this had to do with the cultural way of handling sexuality among the Zambian people. Sexual issues were traditionally not talked about freely, as a result many young people got pregnant due to lack of knowledge. The young people did not only get pregnant but also became vulnerable and susceptible to infections such as STI’s and HIV and AIDS infections.

### **6.3.5 Peer Educators**

Some of the participants indicated that peer educators from Restless Development were sent to teach them in their Colleges of Education. These peer educators reported at their colleges year after year. Restless Development worked with teacher trainees in Colleges of Education so as to build capacity of teacher trainees in Comprehensive Sexuality Education (CSE), so that when these teachers were deployed after completion of their training they would be able to incorporate CSE in schools where they would be deployed to. Restless Development uses modules to help teach on HIV and AIDS Education. These courses run for three to six months after which certificates are awarded to the teacher trainees.

Restless Development still continues to monitor trainee teachers even after they go for teaching practice to make sure that they use the knowledge that they were taught by using some monitoring tools. The peer educators use interactive methodologies and a lot of other materials are given out to the trainees on how to combat the disease as well as to avoid its proliferation. Brochures and textbooks on how to best prevent the virus at school level and in the society were given out to Colleges of Education. To the question whether Zambian beliefs and other inclinations play a great influence on how the curriculum is delivered. The answers were somewhat varied, some of the participants indicated that everything hinged on tradition.

The participants revealed that certain words when said in English did not sound bad but when said in the vernacular language, they sounded insulting. The fact that teachers might be using insulting words when teaching the learners, in itself was considered as a barrier to teaching because information was in some cases misinterpreted. It was further believed that some parents also thought that some teachers were interested in their children especially in the situation of male teachers teaching about sex to a girl child, society did not take this very

lightly as such it was a hindrance to effective implementation of the curriculum, thereby hindering the achievement of impacting the teacher trainees with HIV and AIDS Education. Tradition therefore makes it difficult to implement a well prepared curriculum. Looking at the way forward, and asking whether this could be achieved, could only be directed to the technocrats to comment on.

Participants in this study also talked about the different approaches of teaching on HIV and AIDS Education, most of the participants preferred the stand alone approach, reasons being that much time needed to be allocated to the teaching of the subjects. Other participants disputed this by say that HIV and AIDS were very small component to teach, as such they did not need to be taught as stand-alone subjects. Merging them into other subject areas was the best way to go about doing it.

#### **6.4 Objective Three: The Graduates Practice of the Integration of HIV and AIDS Education in Schools Where they were Serving**

Table 24 shows the composition of the graduates, their gender as well as their work experiences. The graduates interviewed were eight in number.

**Table 24: Profile for the Graduates**

<b>Name of College</b>	<b>Graduates Pseudo-Names</b>	<b>Gender</b>	<b>Work Experience</b>
<b>College A</b>	Mrs Shambala	F	5
	Mrs Zondiwe	F	6
<b>College B</b>	Mrs Zuwoni	F	5
	Mr Zulu	M	6
<b>College C</b>	Mrs Changwe	F	6
	Mrs Banda	F	5
<b>College D</b>	Mr Chememe	M	8
	Mrs Shongiwe	F	7

In order to discuss the above objective the following themes were used:

##### **6.4.1 Application of the Integration**

It was reported by the graduates that the application of HIV and AIDS has not been fully done and as such it had not benefitted the lecturers and the learners. The cultural and administrative influences have not helped much either. Female lecturers in most cases found

it difficult to teach on HIV and AIDS. One graduate participant from college 'A' complained about how she was forced to teach English instead of Physical Education that she was trained to teach because there was no equipment for teaching Physical Education. In the instances where she had tried to teach Physical Education she had faced resistance from the parents of the children, who told their children that since the subject was not examinable there was no need to waste time on the subject. It was from this background that the school decided to discontinue the teaching of Physical Education. She however, felt strongly that since children learnt through play, Physical education was the best subject in which to teach HIV and AIDS Education. She further stated that some cultures are the ones that perpetuate HIV and AIDS instead of helping to reduce it. This is the researcher's position as well, because this is true of most cultures in our society, where parents encouraged their children to benefit only from some core-subjects such as Mathematics, English Language, History, Geography and so on but discard subjects such as Physical Education and Home Economic.

#### **6.4.2 Extent to Which the Integration is Experienced**

Some graduates' responses indicated that taught subjects such as Commerce, Office Practice and Business Studies for grades 8 and 9 did not have components of HIV and AIDS Education within their content. In primary schools, topics such as abstinence were covered in some subject areas, which were considered to be the six study areas, which were Literacy and Languages, Integrated Science, Mathematics, Social Studies, Technology Studies and Expressive Arts Education. Besides the integration of HIV and AIDS Education, Life Skills Education was also integrated as reported by a study done by Nzioka and Ramos, (2008). This study also acknowledged all this through the responses that came from the graduates as they practiced the integration in schools where they were deployed to. A lot of books were now being sent to schools through CDC which had incorporated HIV and AIDS Education in them. It was hoped that with these books in the various study areas mentioned above would enable the young learners to end up being fully equipped with the HIV and AIDS Education.

According to lecturers in all the three Colleges of Education and one College University, HIV and AIDS Education has been integrated in the Teacher Education Programmes so as to control the scourge. Other studies have also shown that the integration of HIV and AIDS Education into the teacher education curriculum has also been another way of curbing and controlling this scourge which is permeating the world scene today.

### **6.4.3 HIV and AIDS Support to Infected Children**

Most of the teachers discouraged their pupils from segregating anyone who was infected with the HIV and AIDS virus. Most of the children living with HIV and AIDS were on medication. The schools got approval from the parents of the infected children to have their children's medications administered by the teachers. This was done in such a way that the other children did not get wind of the fact that their friends were HIV positive and receiving medications.

### **6.4.4 Accessibility of Teaching Materials**

This was a big challenge in most Colleges of Education as well as schools to which the graduates were deployed. The participants in this category reported that teaching materials were not available, as such, it was difficult to carry out lessons and meet the needs of the learners. The graduates from college "B" reported that whereas HIV and AIDS was fully taught in colleges of education, it had proved to be difficult to teach on HIV and AIDS in primary and secondary schools. The issue of none availability of teaching materials was very real. Books were available in some course but not in others, such as Business Studies and Integrated Science.

Another factor was inadequate teacher preparation, lack of teaching materials and negative attitudes of lecturers and students towards the integration. The inadequate teacher preparation proved to be poor. This is because most teacher relied on rote learning which promoted an academic overly scientific interpretation of the HIV and AIDS Education as reported by Kelly, 2003; UNESCO, 2002; Action Aid, 2003. As a result of some of these negative attitudes towards effective teaching of the subject, content was not fully explored even as cross cutting issues. Lecturers still did not teach on HIV and AIDS, thereby propagating the increase of HIV infection amongst educators and learners. These and many other factors attributed to cultural barriers and lack of emancipation in as far as HIV and AIDS Education was concerned. The issue of cultural influence clearly surfaced from all the participants who were interviewed. The teacher trainees revealed that most parents did not like the idea of their children being taught on issues of sex by grown-ups especially male teachers. They assumed it was a way of encouraging their children to be promiscuous.

#### **6.4.5 Administrative Influence**

Some administrators, as reported by some graduates did not support the teaching of HIV and AIDS Education and so they made the acquisition of teaching materials for this subject to be very difficult. It is this same laxity among the administrators that made it difficult for teachers to teach subjects such as Physical Education, which in most schools had been abolished due to in availability of teaching and learning materials. This meant that the administrators had to force Physical Education teacher to teach other subjects. Some of the graduates felt that the administrators did not see the reason why HIV and AIDS Education should be given prominence at all instead of the core subjects which were examinable.

A graduate who did her training at College ‘C’ reported that she was happy that she had done her training at College ‘C’ because the training she got is what was helping her to teach better at the school where she was deployed. She also said that teachers were the best vehicle for disseminating HIV and AIDS Education. She further suggested that Colleges of Education should continue to give the trainee teachers the necessary knowledge and skills for effective teaching of HIV and AIDS Education.

#### **6.4.6 Availability of HIV and AIDS Information**

Reports coming from some graduate participants were that subjects such as Social Developmental Studies and Integrated Science had HIV and AIDS components well embedded in the subjects. It was also reported that television was another medium that has helped the children to know more about HIV and AIDS. One participant mentioned that an eight year old child cautioned her fellow pupils against touching each other’s blood, stating that if they touched each other’s blood they would get sick.

*“ Do not touch each other’s blood. You can get sick.”*

From the above comment by the pupils, some participants supported the integration of HIV and AIDS Education by testifying that very vibrant clubs had been introduced in schools for the sole purpose of information sharing which helped in the dissemination of correct information regarding the virus. It was revealed that if teachers were exposed to updated information on HIV and AIDS Education, they too would teach effectively. However, when insufficient information on how HIV and AIDS are contracted is not fully explained to young children it somewhat becomes a deterrent to learning. In contrast to this, when basic

information on the modes of acquiring the virus was taught to small children in lower grades it was usually diluted, this was because some of the children were only 5 to 8 years old. The issue of teaching HIV and AIDS information and considering the age appropriateness of a child was also reported by Muzumara (2011). This, therefore means that the lower grades should be taught watered down information, whereas the grade 4s can be taught deep syllabus on Sexual Education from conception to contraception. The graduate participants felt that some books were at times more advanced for the children to comprehend. Publishers like Breakthrough, Macmillan and MK had all their books written with some aspects of HIV and AIDS Education in them. This meant that information being taught at primary and secondary schools were adequate. Though, it was not confirmed at what level these books were.

The graduate participant from college 'C' said that what had made teaching easy for her had been the course that she underwent which was the Primary Education Course Diploma which was for 1 year 6 months but has now been changed to three years. In her school the teachers all planned together on what to teach on HIV and AIDS Education so that they all taught similar information. HIV and AIDS Education awareness was also being intensified resulting in a change in sexual behaviour of teacher trainees and lecturers through having deep sexual responsibility. Through all this it was recorded that the stakeholders now were all aware of what HIV and AIDS Education was all about.

#### **6.4.7 Pressure from Colleagues on the Importance of HIV and AIDS Education**

This study revealed that in some cases colleagues discouraged their fellow lecturers from lecturing on HIV and AIDS Education, believing that the teacher trainees would stigmatise them. The perceived notion by some people was that only those infected with the virus would want to lecture on it. This perception by some lecturers was as a result of negative attitudes of some Educators towards HIV and AIDS Education. This is consistent with what was also reported in a study of science teachers that was done in the United States by Lin and Wilson, (1998) where it was found that teachers' attitudes toward teaching about HIV and AIDS were the most significant of various factors examined in predicting intentions, such as stigmatization of teachers.

#### **6.4.8 Children with Special Needs**

Findings from the participants in one primary school revealed that children with special needs were not excluded from HIV and AIDS infections and as such they too needed the HIV and

AIDS Education. Some participants observed that HIV and AIDS Education was being taught in the form of counselling, whereas some policies such as HIV and AIDS policies were now operational and deaf children were now receiving sex education as well. This was necessitated by the fact that a lot of children with special needs were being sexually abused by the society in which they lived, especially the deaf who seemed to be exposed to abortions as early as at 10 years old. Teaching of HIV and AIDS to the deaf children was now made possible, because teacher and learner resources were now available, especially the books with pictures of people with HIV and AIDS.

Most of the children at one unit on the Copper belt had a number of disabled children whose parents had abandoned them without even concerning where their children were going to be accommodated. A woman whose name was not disclosed felt sympathy and accommodated all the children, she fed these disabled children and brought them to the unit everyday. The parents of these children only show up during the holidays to pick them up. One of the children died and the friends told their teacher that she had died of AIDS. This in itself was a reflection of what disabled children went through at the hands of their own parents. This is also an indicator that even disabled children are susceptible to contract the HIV and AIDS virus, so in order for them to be protected from this scourge they also needed to be fully exposed to HIV and AIDS Education to protect themselves from would be predators' who might pounce on these vulnerable children. One consolation was that the unit made it a policy to give what it termed as health talks on every Monday of the week.

## **6.5 Objective Four: Challenges that Lecturers Faced as they Taught Integrated HIV and AIDS Education in Teacher Education Programmes**

In answering objective 2, the issue of the extent of the integration was paramount.

### **6.5.1 The Extent of the Integration**

This study established that there were many challenges that lecturers faced as they taught HIV and AIDS Education. The biggest challenge that lecturers faced was the integration itself. The lecturers felt that the integration was difficult to put across. It was observed that teacher trainees did not understand what the HIV and AIDS Education was, though there were some positive responses from the teacher trainees regarding Physical Education, as was observed throughout this study that lecturers who taught Physical Education took it upon

themselves to explain what HIV and AIDS was all about to the learners through interactive methodologies.

The Physical Education lecturers went even further to explain what HIV and AIDS was all about, and that HIV and AIDS was just like any other disease it needed to be handled with caution. Another lecturer handling Physical Education narrated how she incorporated HIV and AIDS Education into her subject through the use of games to reduce on the challenges faced in teaching on the subject. These two games (*Agode Agode* and *Shomba*) were part of the lesson that the researcher observed by use of an observational check list, to be found in the (Appendix section 12 on page 259). The two games mentioned here have been paraphrased and also appear in the presentation of findings section.

### **6.5.2 Physical Education**

The researcher observed Physical Education lectures in two colleges, one in Livingstone and one in Lusaka. Both these colleges used the interactive method to teach. A game of *shomba* and *Agode Agode* were two games that were used. In this study the two games were captured and are depicted in this study through photographs (see Appendix 13 & 14 on pages 201 and 202). The observational check list was used to record what the researcher observed during the lectures.

The two games of Game of *Shomba* and *Agode Agode* were played by teacher trainees. The teacher trainees were to incorporate these games into their teaching of HIV and AIDS Education when they went for teaching practice in the schools where they were to be posted to. Songs, drama and dance were taught in such a way that the topics were considerate of the age group of the learners. CHANGES- 2 also mentioned age appropriateness when it purposed to provide support to colleges of education. CHANGES-2 was mandated to develop knowledge and skills for trainee teachers to teach HIV and AIDS related topics in an age appropriate manner when they were deployed in schools. Muzumara (2011) reaffirms the above sentiments by stating that there are a number of factors that determine what methods teachers should use to accomplish a given learning outcome, one of them being the age of pupils, time allocated to the teaching, weather conditions, and availability of teaching and learning resources. It was envisioned that most of the games taught were child friendly and were meant to send very clear messages on HIV and AIDS Education.

In some subject areas like Physical Education, the first 5-7 minutes was usually warm up where a talk on HIV and AIDS was given to the learners. The next 20 minutes was usually the main activity e.g. sports and last part of the lesson which was 5-10 minutes was also infused with HIV and AIDS information. In every lecture the content of life skills, social skills and health skills were taught. It was observed that because HIV and AIDS issues were taught in play form a lot of teacher trainees loved the subject. The lecturer mentioned that interactive methods of teaching were well appreciated and enjoyed by both the learners and the lecturers. The materials used to conduct these interactive lectures were also inexpensive and could be acquired locally.

### **6.5.3 Methods used in Teaching HIV and AIDS Education in Colleges of Education**

This study revealed that whereas the learners used the Harness discussion method in discussing issues of HIV and AIDS, by motivating and controlling their discussions, the teacher was still present to give expert knowledge even when the teachers observed the direction of the discussion. Both the teacher and students acted as a team. Especially in the case of the songs and plays in Physical Education that were part of the lessons. This study agrees with the sentiments of von Glasersfeld (1989) who said that it is important to take note of the learner's culture throughout the learning process. This also refers to the teacher's culture as well. Throughout the interviews it was discovered that learning could not actually take place because some of the participant's cultural inclinations interfered with the learning process.

Despite having proper methods of teaching HIV and AIDS Education, there was still a dire need to adhere to what Bruner (1986) believed regarding sequencing as being a very important aspect for presentation of materials. Whether games or songs, sequencing of the presentation of information is imperative. Some members of the focus group suggested that drama, pictures and workshops should also be used to teach people about HIV and AIDS Education.

### **6.5.4 The Integration of HIV and AIDS Education into the New Curriculum**

Another reflection from some lecturers from one college was that despite the fact that the new curriculum was well appreciated by most people, it was not availed to the graduates

before being deployed to primary schools. It was felt that there should be a linkage between college information on the new curriculum and primary schools. Some lecturers said that many Colleges of Education were not involved in the new curriculum process. The researcher totally agrees with the views advanced by the participants, that there was need to have linkages between Colleges of Education on information regarding any new curriculum for primary schools and secondary schools, since it was the graduates from the colleges who went to teach at these schools.

Additionally, preparing them in advance with the necessary tools of what to expect when they were deployed to their new places of work would enable them teach effectively and efficiently. Lack of adequate preparation in terms of what to teach at primary schools is what resulted in many children not getting the accurate knowledge on the importance of HIV and AIDS Education. This was in line with what Akoulouze, Rugalema and Khanye (2001) said regarding the fact that most of the interventions focused on learners only with very few focusing on equipping teachers to deliver the integration of HIV and AIDS Education. Coombe (2002) also talked about teachers going to the battle field unarmed. If teachers were not availed with the new curriculum before it got to the learners, then they would go to the battlefield unarmed and ill prepared.

Some of the lecturers felt that the curriculum was not adequately developed to prepare teachers to teach content and methodology in schools where they were serving. This being the case the majority of the teachers were considered to be ill prepared to handle both content and methodology, this notwithstanding some of the teachers preferred to handle only content and not methodology. Some of the college lecturers indicated that they were not teaching HIV and AIDS Education in isolation but as mere topics and not as stand-alone subjects. Addressing some of the issues outlined above would help in making certain that teachers were well equipped to teach valid and important HIV and AIDS Education to the learners.

#### **6.5.5 Integration of HIV and AIDS in Different Subject Areas**

This study discovered that HIV and AIDS Education had been fused into Special Education especially in health impairment topics. Lecturers of Special Education said that HIV and AIDS were seen as a cause of many disabilities. One of the lecturers in Special Education alluded to the fact that on that same day of the interview she had been teaching on disabilities

and HIV and AIDS. She further stated that in her view the content in her course was adequately covered in terms of integrating HIV and AIDS Education. She additionally said that people needed the HIV and AIDS information, lack of this information is what lead persons to visit witchdoctors instead of going to the hospital when infected with the virus.

In most African cultures, disabilities are associated with witchcraft or sorcery. She also said that it was common among most people that when a child is born and the child is discovered to be disabled the first thing that comes to their minds is that someone in the family or in the neighbourhood had bewitched their child. She contradicted this by saying that education proved the above assertion to be wrong. Some scholars also said that HIV and AIDS were health impairments because they bordered on psychological health. The neuro cognitive ability becomes impaired because HIV and AIDS are transmitted through the blood stream and affects the brain. This is in agreement with an article by Hanass-Hancock and Nixon (2009) which states that HIV and AIDS is an episodic disability, which is multidimensional in nature and is characterized by unpredictable periods of wellness and illness. In other words, HIV and AIDS are disabilities in themselves, though according to the UN convention of the Rights of Persons with disabilities persons with disabilities are people who have a long term physical, mental, intellectual or sensory impairment which when interacted with various barriers may hinder their full and effective participation in society on an equal basis with others (Law, 2008). Well researched information has shown that teaching learners on the ills and causes of disabilities would help them to understand HIV and AIDS issues more. From this perspective it is clear that HIV and AIDS can cause disabilities or can be referred to as an episodic disability.

The majority of the participants reported that sometimes lecturers did not want to talk about HIV and AIDS Education because they took it for granted that their learners knew about it. The findings in this study revealed that some lecturers did not have current information on the virus as such given a chance to teach with the latest information would create a very big difference in how HIV and AIDS Education was taught.

#### **6.5.6 Different Approaches of Integrating HIV and AIDS Education in the Two Teacher Education Programmes**

The issue of teaching HIV and AIDS Education in the two Teacher Education Programmes as stand-alone subjects was favoured by the majority of the lecturers and teacher trainees, they

indicated that teaching the subject as stand-alone subjects approach would mean that the HIV and AIDS Education would be examinable, and a certain kind of importance would be attached to it. There were some opposing views on the stand-alone approach. Some lecturers viewed this as another way of asking people to shun attending the subject. It was cited that a “person who feels it, knows it.” This was clarified by saying that if a lecturer is passionate about HIV and AIDS and has accepted his HIV and AIDS status he might feel free to talk about it, but if he or she was shy, he or she might shun the subject.

Some lecturers felt that the integration of HIV and AIDS Education in some subject areas would help enrich these subject areas and result in behavioural change of teacher trainees and lecturers. One French lecturer went further to say that lecturing in French made it difficult to have the subject infused with the HIV and AIDS component. However, he said that he had tried to mention it in his lectures with support materials from books and the internet which ended up in making the course more educative and enjoyable. He also said that despite the fact that many subject areas had their curriculum revised, his course was not affected.

Another contra observation by some respondents was that those who were infected with the virus were the ones who delivered the content better. Content alone was considered to be inadequate and it was suggested that more research needed to be done in order to improve the content delivery of HIV and AIDS Education. Another suggestion was that besides improving the content, there was to have open seminars where students could also participate. Since HIV and AIDS Education was an optional course in most Colleges of Education some teacher trainees opted to take other subjects and missed out on learning about HIV and AIDS. This was considered to disadvantage some learners, hence fusing it in all the core subject areas was considered to be the best approach of handling this matter, as Zambia has done by allowing HIV and AIDS Education to cut across all subject areas. Some lecturers complained about HIV and AIDS fatigue, meaning that they were tired of HIV and AIDS information and hence they did not want to learn or teach any more on the subject. Restless Development, a non-governmental organisation, sent peer educators to most of the Colleges of Education every year to disseminate HIV and AIDS Education. The colleges of Education provided Restless Development personnel with a resource rooms where they conducted their lectures. These peer educators acted as facilitators. When the teacher trainees completed their programme on HIV and AIDS Education, they were awarded with certificates. Some lecturers indicated that teaching of HIV and AIDS Education had become boring over the

years, they intimated that it was as a result of the way the HIV and AIDS messages were being communicated. They further observed that when HIV and AIDS Education was being taught by peer to peer, it generated better results than when it was handled by lecturers in classrooms because fewer teacher trainees attended the lectures. This is in agreement with what Breidlid (2015:14) in Breidlid, Cheyeka and Farag (2015) said regarding peer to peer influence being another way in which peers functioned constructively through peer education. It is clear from what most of the participants said regarding the integration of HIV and AIDS Education that HIV and AIDS Education could also be learned through visitations to hospices that housed infected and terminally ill patients, though on further consideration some of the participants indicated that this could probably be unethically unacceptable and might not be allowed by the hospital management. Emphasis was also made on the fact that teaching on the integration of HIV and AIDS Education was a big problem for most lecturers. The lecturers suggested that it would help if the Ministry of General Education would adopt the stand-alone approach regarding the teaching of HIV and AIDS Education. Another lecturer from College 'B', Mr. Charlie stated that being a lecturer in Guidance and Counselling he found himself having a lot of teacher trainees to counsel on HIV and AIDS that he had to abandon some of his other classes. He also suggested that HIV and AIDS Education should be taught as stand-alone subjects, where trained lecturers would handle the subject.

#### **6.5.7 Negative Pressure from Colleagues on the Teaching of HIV and AIDS Education**

Some of the lecturers complained of the negative pressure from their colleagues on the teaching of HIV and AIDS Education, saying that it was a very bulky subject. They claimed that in the past it had taken time from other subject areas, as a result other subject lecturers feared to integrate it in their teaching. Courses such as Guidance and Counselling were an exception, as for Mathematics it was reported that the lecturers rather preferred to teach content Mathematics than HIV and AIDS Education. This is contrarily to what is obtaining in South Africa according to the study by Van Laren (2011) where Mathematics Education was integrated with HIV and AIDS Education, this study revealed that teachers consistently translated their knowledge of Mathematics and pedagogy into practice through filtering of their beliefs.

The study of Van Laren shows that it is possible to integrate Mathematics Education with HIV and AIDS Education which was not the case with what was reported in this study where it was reported that Mathematics and HIV and AIDS could not be integrated. It would

immensely help the Zambian Mathematics teachers to take a toll from Linda Van Laren's study of 2011 and translate their Mathematics and pedagogy into practice through the filtering of their beliefs. Most of the college lecturers in this study were unaware that they were in a very high risk group because they interacted more with students than with other sections of society. Those lecturers who were infected with the virus made light of the scourge by saying that there were many people who died of Malaria than those who died of HIV and AIDS. It is this type of attitude that spills over to the teacher trainees who are unaware that this virus can affect their entire lives and future.

Some of the participants in this study informed the researcher that HIV and AIDS had been on the world scene as a topical issue for two decades therefore there was no excuse for lecturers being ignorant and not having knowledge on the matter. Other participants contributed to this assertion by saying that knowledge was available but not detailed enough because it lacked scientific details, making it inadequate for referencing purposes. The scientific details, of how the virus affects the human body, was said to be lacking. It was further observed that lecturers who lacked knowledge as a result of not doing enough research and not having formal training, except attending a few days' workshops which were not sufficient should find ways of inculcating this knowledge through knowledge seeking initiatives of their own.

#### **6.5.8 Marital Status**

It was interesting to note that the majority of lecturers from colleges 'B' and 'C' felt that the status of someone did not matter because HIV and AIDS talked about life and how dreadful HIV and AIDS were. It was further reported that in some cases the marital status of someone did affect the way information was taught. Mr Killie a lecturer from college 'A' felt that because of the way some lecturers behaved, some onlookers felt that married people were irresponsible even when they knew about HIV and AIDS they still went ahead to propose and have sexual relationships with their learners. This allegation was refuted by some lecturers who said that the status of someone in terms of whether they were HIV-positive or not did not influence the way HIV and AIDS Education was taught. The revelation in this study was that most members of staff in the colleges sampled were married so the issue of not giving correct information to students did not arise. It was further reported that there were instances however, where some male single lecturers married teacher trainees, their delivery of HIV

and AIDS information took a negative turn in that even their own teacher trainees viewed them as being useless and commented as follows:

*Bakamba kamba chabe aba bamuna ni  
bachiwelewele. Banakwatila kamwana ka schoolu,  
futi bayende yenda chabe nabakazi babene.*

She retorted by saying that the marital status of someone mattered, and the way how one got married also matters. The statement above is a confirmation of their thoughts and is translated as follows:

*he just talks too much, this man is useless. He got married to a  
school girl and he also has relationships with peoples' wives.*

This implies that sometimes married people need to take their life styles very seriously and not be promiscuous otherwise even when they teach on an important subject like HIV and AIDS Education learners will not take them seriously.

The above scenario happens a lot especially among the youths. This is the reason why it is important to teach on HIV and AIDS so that learners and lecturers alike can fully understand the consequences of the HIV and AIDS pandemic. Leaving a girl pregnant with HIV and AIDS is spelling disaster. Though with Antiretroviral Treatment (ART), the future seems to be bright for many youths and adults alike.

Other important predictors in this study were teacher's knowledge of HIV and AIDS Education. Some of the lecturers showed lack of knowledge on HIV and AIDS however Dawson et.al (2001) in Visser (2006) did a study by Action Aid (2003) where it outlined the difficulties of communicating about HIV and AIDS in Kenyan and Indian schools. The study established that most of the teachers engaged in selective teaching, the teachers left out sensitive and sexually explicit materials and presented content that was overly scientific in nature. The study concludes that selective or abstract teaching contributed to the perception that HIV and AIDS was linked to immorality and perpetuated the belief that HIV and AIDS was about them and not us. The same study also revealed that female lecturers were more positive in teaching about HIV and AIDS than male lecturers.

## **6.6 Objective Five: The Views of Stakeholders Regarding the Various Modes of Integrating HIV and AIDS Education into Teacher Education Programmes**

The stake holders revealed that the integration had been done though they explained that as stakeholders they could not tell how much of the integration had been done because the University of Zambia had its own way of doing things. The stakeholders talked about two things which stood out very clearly as far the integration was concerned and these were service and teaching. The Ministry of Education as a service provider had done its part in ensuring that policies were developed to help with the integration, though the subject of HIV and AIDS Education was not examinable. They felt the subject was not examined because most of the lecturers concentrated on the core subjects only. The fact that a course is not examined is another major reason for people not to pay much attention to a particular course. Reasoning being that a taught course or subject needed to be examined for the lecturers to take the course seriously.

The stakeholders also felt that deliberate efforts were made by themselves and other cooperating partners to include HIV and AIDS Education into the two Teacher Education programmes, which resulted in full integration though it was disputed by some participants in this study. The participants acknowledged that the integration was partially done, with this partial integration educational curricular at all levels had some text books and examination papers developed to reflect the integration to some extent. Whereas some other participants in this study said that HIV and AIDS awareness were done though some of them strongly felt that a person's status was deterrent to work, this was said not to be true. The study observed that though some of the stakeholders felt that the integration was fully done, the lecturers were not comfortable with the way it was done.

### **6.6.1 Core Subject Areas**

The stakeholders at the Ministry of Education indicated that ICT, Guidance and counselling and Special Education were some of the core subjects that had the HIV and AIDS Education well integrated. The inclusion which was done as cross cutting issues lacked depth as far as the integration was concerned resulting in the integration not being well done. The stakeholders felt that ZATEC which was a three year Teacher Education Diploma Programme had attempted to include the integration but only managed to give basic information on HIV and AIDS. The packaging was also not well done. The stakeholders

further mentioned three types of frameworks which were developed and used in Colleges of Education namely HIV and AIDS Framework, Life Skills Framework at school level and Sexuality Education Framework. Another stakeholder Restless Development was used to fill the gap of teaching on HIV and AIDS Education. The Ministry of Education partnered with this NGO to do what the Ministry could not do on its own. This NGO provided the teacher trainees with certificates at the end of the course as a way of encouraging them to join HIV and AIDS clubs. This was a good thing however Restless Development needed to improve in the area of recruitment as more peer educators were needed to help in the teaching of HIV and AIDS Education to teacher trainees. Having only two or three peer educators deployed to Colleges of Education was considered not to be adequate. This was also observed by some lecturers at these Colleges of Education that were sampled.

### **6.6.2 Time Allocated for the Teaching of HIV and AIDS Education**

Stakeholders felt that time allocated for the teaching of HIV and AIDS Education was well specified especially in the manual produced by Restless Development. The first 10 minutes of a lecture and the last ten minutes of a lecture were meant for HIV and AIDS sensitisation. It was well documented but the implementation of this was what was difficult. The lecturers observed that the timetable did not have enough time for HIV and AIDS Education. This is also affirmed by Kelly's study (2000) in which he said that teachers often lacked the curricular time and orientation to adequately address the issue of HIV and AIDS Education within schools. The issue of time allocated for the teaching of HIV and AIDS Education was discussed at length, It was observed that most lecturers favoured teaching subjects that had to do with their subject content and not including HIV and AIDS Education meaning that less time was spent on teaching the Mathematics content, and less time spent on teaching Mathematics methodology because the HIV and AIDS content took up most of the time. In accordance with the prevailing results in this study, the reality was that lecturers were not prepared to teach the HIV and AIDS content because they were not skilful enough. Their HIV and AIDS knowledge was poor. This is in line with what was explained in the study done by SACMEQ - 1 (1995-1998) in which it was reported that HIV and AIDS knowledge skills for the majority of teachers was poor.

When a curriculum is overcrowded, teachers will also be less inclined or able to take the time to facilitate active learning activities on SRH, HIV and AIDS. The subject may be skipped altogether if there is no specific time allocation and if not examinable (Miedema, 2006). The

issue of timetabling HIV and AIDS Education was an important factor because most of the lecturers made excuses for not teaching HIV and AIDS Education stating that the timetable was already overloaded with information from core Subjects. This issue was also mentioned in the study done by Jemema and Sharma, (1979) where it was observed that teachers complained of time as being a hindrance to effective teaching of HIV and AIDS Education to teacher trainees. Though some of the lecturers said that time was inadequate to teach HIV and AIDS Education, some other lecturers appreciated that HIV and AIDS Education was integrated in different subject areas.

The understanding by the lecturers was that HIV and AIDS Education was not fully integrated in the different subject areas. Some participants said that all lecturers should handle content and methodology issues related to HIV and AIDS Education so that they could learn a lot from other colleagues handling content and not methodology. Additional lecturers who only handled content on its own and methodology on its own were being encouraged to handle both content and methodology together so that each lecturer could find ways of integrating HIV and AIDS into their various subjects areas thereby saving on time.

According to some Lecturers if content was taught alone then lecturers would find that content was adequate and that they did not need to teach anything else. Furthermore those Colleges of Education that train secondary school teachers did not have HIV and AIDS Education well integrated in the programme, whereas those training primary school teachers had HIV and AIDS Education well integrated into their different subjects areas. Information provided for by the Advisory Unit at the University of Zambia, states that all UNZA external examiners should strive to gain ample knowledge of the college diploma syllabuses in their subject areas for both content and methodology component, if this is the case with the external examiners, then the same should apply to all the primary and secondary teacher training colleges as well. The issue of teaching content and methodology was well appreciated by all the participants.

### **6.6.3 Teaching Materials**

Teaching materials such as books printed by Curriculum Development Centre (CDC) had issues of HIV and AIDS Education well spelt out. To this effect workshops were conducted in February, 2015 and April, 2015 with the view to reviewing the books which had HIV and AIDS well embedded within them. The Ministry of Education under the supervision of

Curriculum Development Centre at the time of this interview were in the process of conducting yet another workshop in Kabwe, Central province to review the books that had just been printed by Curriculum Development Centre. Encouraging praises go to CDC for making a lot of effort to make sure that information on HIV and AIDS Education was well documented into the textbooks that were being written by Zambian writers. It was further reported that these workshops were meant to help the officers in the Ministry of Education to review these textbooks and make suggestions of how they could further be improved upon.

Miedema (2006) stated that there was need to use teaching and learning tools designed for role plays, student fieldwork, case studies, games and so for teaching HIV and AIDS Education. Shortcomings of teaching HIV and AIDS Education were due to lack of the materials mentioned above, as well as cultural barriers. It was perceived by some participants that campaign posters and classroom activities needed to be incorporated into HIV and AIDS messages and used as teaching aids. It was interesting to note that the Government of the Republic of Zambia had tried with the integration by using related materials but, more still needed to be done. Despite some lecturers not having relevant information on HIV and AIDS Education it was assumed by some lecturers that government officials believed that HIV and AIDS was a punishment for promiscuous individuals and that those who were infected got what they deserved, so teaching on the subject as far as they were concerned was a sheer waste of time. This thought was refuted by some participants who acknowledged the work done by the Ministry of General Education in handling HIV and AIDS Education as cross-cutting issues and not as pedestrian subjects as some of the participants indicated.

#### **6.6.4 Accessibility of Teaching Materials**

Teaching and learning materials facilitate in the teaching of HIV and AIDS Education. Most scholars in this study mentioned lack of teaching and learning as being major hindrances in the delivery of most subjects in the curriculum. In this study it was further discovered that teaching and learning materials were also a factor in terms of what lecturers and teachers had to do to make proper teaching a reality. The revelation by some participants in this study was that incorporation of HIV and AIDS Education into different subject areas was a good move, though there was need to have experience in order to deliver messages effectively through the usage of localized materials. Some lecturers commented on the issue of availability of teaching materials as not being as issue to be concerned about, because with the introduction of the new curriculum HIV and AIDS Education would be effectively delivered with teacher

and learner materials being provided as well. The issue of teacher and learner materials was indeed a very big challenge in most Colleges of Education as well as schools to which the graduates were deployed. The participants reported that the issue of teacher and learner materials made it difficult for them to carry out lessons and meet the needs of the learners. However, though HIV and AIDS Education was fully taught in Colleges of Education, it had proved to be difficult to teach on HIV and AIDS Education in Primary and Secondary schools. The issue of none availability of teaching materials was very real. Books were available in some courses but not in others, such as Business Studies and Integrated Science.

#### **6.6.5 Application of the Integration**

The application of HIV and AIDS were not fully done, and as such it did not benefit lecturers and teacher trainees. The cultural and administrative influences did not help much either. Whereas some revelations were that female lecturers in most cases found it difficult to teach on HIV and AIDS Education, this study however discovered that both male and female counterparts equally found it difficult to teach on HIV and AIDS Education. This is disturbing to hear in the sense that the participants felt that the lecturers and the teacher trainees had not benefitted much from the integration. It can be argued that probably repackaging the HIV and AIDS Education as was suggested by some participants in this study could help this situation. The aspect of female lecturers finding it difficult to teach HIV and AIDS was one aspect that the researcher totally disagreed with, because what was observed in this study was that most of the lecturers who were found teaching HIV and AIDS Education in their various subject areas were female lecturers. The cultural and administrative influences also disadvantaged the teaching of HIV and AIDS Education. Young children could not benefit from the HIV and AIDS because it was deemed culturally wrong for grown-ups to talk to young children about sex, and yet it was reported in this study that some studies done elsewhere reported on the ‘Window of Hope’ referring to the same young children who should be the recipients of the HIV and AIDS Education so that they can be grounded in HIV and AIDS knowledge and skills whilst young.

#### **6.6.6 Extent to which the Integration is Experienced**

A graduate participant from college ‘C’ reported that she taught Commerce, Office Practice and Business Studies to grades 8 and 9 and yet most of these subjects did not have components of HIV and AIDS within its content, this is not an encouraging situation. This study found that the Secondary Schools did not benefit from the integration of HIV and AIDS

Education like the Primary Schools, which had topics such as abstinence integrated in their various subject areas. Another revelation was that most of the Primary Schools had HIV and AIDS Education well integrated in most of the six study areas, which were Literacy and Languages, Integrated Science, Mathematics, Social Studies, Technology Studies and Expressive Arts Education. Nzioka and Ramos (2008) also reported on the integration of HIV and AIDS and life skills Education in all the six study areas at primary school level. This is somewhat a departure from the fact that some teachers did not want to teach HIV and AIDS Education when it was already integrated in their various subject areas due to cultural inclinations which acted as barriers to effective delivery of this subject.

This study's finding also revealed that subjects like Social Developmental Studies, Integrated Science had HIV and AIDS components well embedded in the subjects. Electronic media such as television was another medium that helped the children to know more about HIV and AIDS Education. Programmes such as: '*Taonga Market*' radio programme found in rural areas was another very useful tool in disseminating information on HIV and AIDS. Children who could not afford television sets had the opportunity of accessing important and useful information through that mode. One teacher mentioned that some eight year olds usually had the fear of touching another child's blood, because they did not want to contract the HIV and AIDS virus.

The Full information on how HIV and AIDS was contracted was not fully explained to young children. However the basic information on the modes of acquiring the virus was explained. This was because some of the children were only 5 to 8 years old. It was also reported that grade 4's were taught deep syllabus from conception to contraception. Books were sometimes more advanced for the children to comprehend. Publishers like Breakthrough, Macmillan and MK had all written books that had aspects of HIV and AIDS education within them. This meant that information being taught at primary and secondary schools was adequate to some extent. It was however not confirmed to what level these books were. It was for this reason that Primary Education Course Diploma should integrate HIV and AIDS Education so that teacher trainees could benefit from this information and deliver it skilfully to their learners.

### **6.6.7 HIV and AIDS Support to Infected Children**

This research revealed that most teachers informed their pupils in the classes which they handled that they should not segregate anyone who was infected with the HIV virus. It also came to the researcher's attention that most children who were infected with the virus were on medication, and these medications were ably administered by the school nurses with prior arrangements with the children's parents. In the majority of cases the infected children also received rations of food stuffs to help them with the aspect of nutrition. Most of the Primary and Secondary Schools that offered ratios of foodstuffs should be commended for the effort that was being made to make certain that children with HIV and AIDS had a conducive and appropriate environment in which to learn from. It would be a worthwhile addition to school rules and regulations if most schools would adopt this arrangement of feeding children who were infected with the virus in schools with the partnership of various NGO's who deal with HIV and AIDS related issues, with the view to help the infected children lead productive lives.

### **6.6.8 Administrative Influence**

Administrators are meant to help in the effective running of their schools, however, it was not the case in some of the schools sampled. One participant complained about how she was forced to teach English instead of Physical Education that she was trained to teach because there were no equipment for teaching Physical Education. In instances where she had tried to teach Physical Education she had faced resistance from the parents of the children, who told their children that since the subject was not examinable there was no need to waste time on the subject. This revelation by this participant showed that some administrators did not see the importance of teaching HIV and AIDS Education in their schools. This is very discouraging because it is from this same background that some primary schools decided to discontinue the teaching of Physical Education, which in this study was seen to be the best subject in which teaching HIV and AIDS Education could be effectively done. Researches have shown that children learn better through play and song, which is what Physical Education was offering.

Further revelations regarding some administrators not supporting the teaching of HIV and AIDS Education and making the acquisition of teaching materials for this subject to be difficult. It is once again seen that some school administrators did not see the reason why

HIV and AIDS education should be given prominence at all instead of the core subjects which were examinable. This being the case it was important to sensitize some administrators about the importance of teachers as the best vehicles for dissemination of HIV and AIDS Education, denying them the necessary materials for teacher and learner materials would greatly disadvantage the trees of tomorrow who are the young children. *'Imiti iyikula epanga'* This is a saying in Bemba that says, *'the trees that grow are the ones that make the forest'* If we want our young ones to grow then we need to give them the necessary HIV and AIDS Education so that they can grow into strong healthy and responsible citizens of Zambia. This can be done by making certain that teacher and learner materials are made available for teaching HIV and AIDS Education. The providence of teacher and learner materials would also improve on the poor teacher attitude towards the subject, which was also observed in this study.

#### **6.6.9 Pressure from Colleagues on the Importance of HIV and AIDS**

Findings in this study revealed that some teachers discouraged their colleagues from teaching on HIV and AIDS insinuating that learners would stigmatize them. The perceived idea was that only infected people were the ones who needed to teach on this on HIV and AIDS Education. This perception by lecturers is as a result of the poor attitudes of people towards HIV and AIDS Education. This was also reported in a study of science teachers in the United States (Lin and Wilson, 1998) who found out that teachers' attitudes towards teaching HIV and AIDS was the most significant of various factors examined in predicting intentions.

#### **6.6.10 HIV and AIDS Status of Teachers**

Another empirical finding in this study provides a new understanding on the fact that the HIV status of someone did not in any way affect the way HIV and AIDS Education was delivered to the learners. This was based on the theory *'do as I say and not as I do'*. One Principal expressed his views by stating that if a lecturer was infected with the virus, they should then be more passionate in disseminating HIV and AIDS Education to those who were not infected, so that they would avoid acquiring the virus. This may be argued from some other participant's points of view especially those who felt that the status of someone did to some extent influence the way in which HIV and AIDS Education was delivered to learners. It was the feeling of some respondents that when someone was infected with the virus they blamed the society for their misfortune and hence looked for opportunities to spread the virus and avoided sharing HIV and AIDS Education with others. The concern that some of the

participants had was that the infected teachers would want others to acquire the virus as well. The above views may be argued that this was based entirely on some participants' perceptions and should not be generalised to everyone.

#### **6.6.11 Methods of Teaching**

The most interesting finding in this study was the one regarding time meant for the teaching of HIV and AIDS Education, which was said to be insufficient. The curriculum was said to be already overloaded with the core subjects such as Mathematics, History and so forth. HIV and AIDS Education though being necessary to combat the culture of silence could not be included on the timetable, this was also reported by Kelly (2002) who said that the teachers often lacked curricular time and orientation to adequately address the issue of HIV and AIDS within schools. Kelly went further to also say that teachers relied on rote learning which promoted an academic overly scientific interpretation of this subject (Kelly, 2003; UNESCO, 2002; Action Aid, 2003).

The above assertions are what made the majority of participants to suggest that HIV and AIDS should not be treated as an optional subject, because some students opted to enrol for other courses instead of HIV and AIDS Education thereby missing out on vital information that they needed on HIV and AIDS Education. The two games, *Agode Agode* and *Shomba* which were used to teach on HIV and AIDS Education were reported to be more appropriate in the dissemination of HIV and AIDS Education in this study. In lesson observation, where games were used to teach on HIV and AIDS Education, the researcher noted that most of the teacher trainees were happy, relaxed and seemed to enjoy the lectures more than when the subject was taught theoretically. This means that HIV and AIDS Education is better taught using interactive methods of teaching than the traditional conventional ways of teaching such as lecture methods.

#### **6.6.12 Sexuality Education**

The finding on Sexuality Education indicated that lecturers sensed that the parents of most of the children did not want teachers talking to their children about sexuality. As far as they were concerned it was taboo for the elders to discuss issues of sexuality with young children. A trainee teacher in one focus group said that some people did not believe that there was HIV and AIDS in this world that is why they found it difficult to teach learners on this subject. Even in instances where it was taught, the content did not say much about the consequences

of HIV and AIDS. This study reported that content was found to be taught selectively, because teachers felt uncomfortable to teach on sexuality to the young learners. It is the opinion of the researcher that most people are very sensitive about issues of sexuality and so talking freely about it is very difficult for them. Sexuality is a very sensitive topic for the majority of people, in this regard, this study revealed that most of the interviewed participants gave very little information on this subject.

#### **6.6.13 Acquisition of Knowledge on HIV and AIDS Education**

The finding on acquisition of knowledge was that, most participants explained regarding acquisition of knowledge as being very important, even though with the discovery of EBOLA some participants indicated that HIV and AIDS was not as deadly as EBOLA. I supplicate to differ with this belief because HIV and AIDS is even more deadly than EBOLA, though both of them have no cure yet. The acquisition of knowledge on both EBOLA and HIV and AIDS would reduce on the stereo-typing and stigmatization that has been attached to those infected with the virus. It is sad that people still feel that HIV and AID is not as dangerous as EBOLA, and yet 23.5 million people are living with AIDS in sub-Saharan Africa (UNAIDS, 2012).

#### **6.6.14 Religious Beliefs and Cultural Beliefs**

Some of the cultural and religious beliefs of some of the teachers and lecturers made it impossible for them to talk about sexuality to anyone. It is the researchers' view that people tend to hide behind religion when they do not want to engross in something. I believe that there is nowhere in the book of life where it says people cannot talk about sexuality. If people do not talk about these issues, it means that issues of HIV and AIDS will continue to remain sacred to some people and thereby disadvantaging the young ones who need to be told the truth. Cultural beliefs are there but there is a way that culture deals with issues of sexuality that can be explored to the full so that the young ones can be exposed to Sex Education and HIV and AIDS messages without corrupting their morals. AVERT (2014) in Breidlid, Cheyeka and Farag (2015:11) define sex education as the process of acquiring information and forming attitudes and beliefs about sex, sexually, identity, relationships and intimacy. The teaching on Sex Education to young children would indeed help them make good choices and avoid being cheated by unscrupulous individuals.

## **6.7 Student's Role in the Learning Process According to Bruner, 1960**

Learners are meant to discover and construct knowledge. In the pursuit to analyse the integration of HIV and AIDS Education, the four points advocated by Bruner (1960) were not ignored. What were the attitudes of learners towards learning their core subjects and HIV and AIDS Education? Using the theory by Bruner and using the four ways of constructing knowledge. The study revealed that learners at Colleges of Education were receptive to the information given except that they complained about teaching and learning materials not being available. They also complained about the lack of assessment elements in the various subject areas because the lecturers did not take the courses seriously, since they were taken as cross cutting issues.

The methodology which is what is referred to as the presentation of knowledge to accommodate student learning abilities were also discussed. The study indicated that the interactive methodologies were more preferred by the learners than other modes of teaching HIV and AIDS Education. The HIV and AIDS Education whenever taught they were usually presented in sequence by subject lecturers. There were no rewards and punishments given to learners who took part in this subject because not much attention was given to it. In some cases the HIV and AIDS Education were not taught at all. The main focus in this study was to analyse the integration of HIV and AIDS Education, but in order for this analysis to be fully understood, the issue of how the learners were taught was very important in this study. This particular theory was adopted in order to explain the relationship between what is learnt and the experience that learners bring with them to the classroom. This did not in any way side track the research from pursuing the route of analysis. If anything the issue of constructivism shed more light on some of the observations that were made by the participants who were interviewed. This is fully explained in the discussion chapter.

The responses given by participants from both the University and Colleges of Education showed that the integration was only in some subject areas and not in all the subject areas that were taught at these Colleges of Education. The lectures in some cases showed lack of knowledge in HIV and AIDS Education, this lack of knowledge rendered it difficult for them to teach adequately. It was also observed that a number of subject areas revealed that though the subjects were meant to be taught as cross cutting issues, it was not at all done. This

brings us to what UNESCO (2008) said about the fact that policies are formulated but implementation has always been very difficult.

This study revealed that teacher trainees who were mostly adults needed to be allowed to openly and freely discover, enjoy, interact and arrive at their own conclusion socially with the verified version and truth regarding HIV and AIDS Education. This is also confirmed by Savery (1994) who said that the more structured the learning the more difficult it is for learners to construct meaning based on their conceptual understanding of the said learning.

In analysing the HIV and AIDS Education in Teacher Education Programmes, the application of the integration was very important in this study. The people interviewed had different views regarding how the integration was done. One graduate participant from College 'C' complained about grade one learners, whom he said should be discouraged from learning about detailed information on HIV and AIDS because they were too young. He claimed that the books being used to teach on HIV and AIDS were too advanced for the young ones, and that most teachers felt uncomfortable to teach such information to the young learners. This is congruent with what Weiler and Weiler (2012) said regarding the above assertion, they reported that in many African cultures, children were not comfortable to openly discuss issues related to sexuality with an adult who was of a different gender. Reference was made to Breakthrough publishers, MK publishers and Macmillan publishers for more information regarding the teaching of HIV and AIDS Education to primary and secondary school pupils.

A pilot project known as the HIV and Teacher Education Pilot Project was initiated under HEAIDS Phase 2 and was premised on the critical importance of the capacity of the education and training system to deal with the challenges posed by teaching and learning in an HIV and AIDS affected and infected society. This project was to specifically enhance the personal and professional competencies of teacher education graduates through the provision of support of the piloting of an HIV and AIDS Teacher Education Module in Teacher Education Faculties and the identification, evaluation and dissemination of effective strategies for incorporation of HIV and AIDS related education into teacher education and other curricula (HEAIDS, 2003).

## 6.8 Summary of the Discussion

The study identified thirty-one lecturers from the University of Zambia which is a public university to take part in this study. The demographic data consisted of thirty-one participants. Out of these thirty-one participants twenty were male and nine were female, two did not indicate their gender, the reasons for the omissions were not given as to why they did not include their gender. The lowest age was thirty-three and the highest age was seventy-one. The categories were as follows: seven in their thirties, five in their forties, seven in their fifties, four in their sixties and one in their seventies, giving a total number of twenty-seven participants with four people not indicating their ages, again reasons were not given why they omitted their ages. The participants came from different provinces of Zambia. Two from Eastern province, Twenty-two from Lusaka province, one from Northern province and one from Southern province, five failed to indicate which provinces they came from giving a total of thirty-one participants all working at the University of Zambia. The other data came from lecturers in colleges, trainee teachers, graduates and other stakeholders.

The conceptual framework **context** dealt with issues of content, methods of teaching and learner assessment systems. The findings reported that the teaching of content was partially done, meaning that despite the information being integrated in some subject's areas lecturers still employed selective teaching.

Methods of teaching needed to be re visited in terms of improvement by adopting more interactive methods of teaching HIV and AIDS Education. The Constructivism theory emphasized that learning takes place through interacting with other teacher trainee, teachers and the world at large (Vygotsky, 1978). In this study it was observed that games which the Physical Education teachers taught through the use of interactive methods of teaching were very useful in the teaching of HIV and AIDS Education. According to Bruner this is because acquisition of knowledge and participation are considered to be synergistic strategies in learning situations. The aspect of assessment systems were almost absent in that summative assessments did not at all take place in most subject areas. This is backed by what some of the lecturers said regarding assessments.

Ministry of General Education said that there was no curriculum for HIV and AIDS Education. The Ministry said there were attempts by UNESCO and UNICEF to incorporate

more HIV and AIDS activities at school level and a few at college level. Ministry of Education Teacher Education and Specialized Services (TESS) said that Guidance and Counselling was proposed to be one of the subjects through which the teaching of HIV and AIDS Education could be done. College 'B', Mr. Charlie Lecturer in Guidance and Counselling said that materials to teach this course were in place. It was also observed that HIV and AIDS Education was mostly taught by peer educators in various Anti-clubs which did not include everyone as it was optional. It was either a learner belonged to the club or not. Those who did not belong to the clubs missed on the HIV and AIDS Education that was being taught.

In summary, the appropriateness of content, methods of teaching and learner assessment elements that supported the integration of HIV and AIDS Education in Teacher Education Programmes were inadequate in most subject areas. This was because HIV and AIDS Education cuts across many subject areas such as Sociology of Education, Mathematics, English, History, Geography, Environmental Science, Civic Education, Religious Studies etc leaving it fragmented in an already overloaded curriculum. This made the delivery of content difficult. Time constraint was another factor that made it impossible for the content to be well taught. MoE (2013) states that, cross-cutting issues when integrated in the curriculum should not be unduly fragmented or over-loaded or else the curriculum will not be implemented effectively. This somewhat implies that HIV and AIDS Education were already marginalised by the technocrats and policy makers. The fear of stigmatization also compromised the teaching of HIV and AIDS Education amongst some lecturers even though it appeared in their course outlines.

Some lecturers did not want to teach HIV and AIDS Education because they lacked the skills and knowledge of the subject and so they felt that they could not teach on issues that they themselves, did not understand. This consequently led to selective teaching, where a lecturer only taught what they knew and were comfortable to lecture on. The interactive methods which were employed to help teach on HIV and AIDS Education were well appreciated by both the learners and the lecturers themselves. Learner assessments were partly ignored according to the results of this study. Lastly some subject areas were already overloaded with information in their core subjects; therefore, some participants in this study proposed that

HIV and AIDS Education be taught as stand- alone subjects where the lecturers and learners would pay more attention to the subject.

## **CHAPTER SEVEN**

### **CONCLUSION AND RECOMMENDATIONS**

#### **7.1 Overview**

The concluding chapter of this study attempts to show that the research questions raised in chapter one of this study have been answered. The study also shows that the identified literature gaps in knowledge have also been filled. In this chapter a reminder of the nature of the study is also brought to the fore and the summary of the main research findings are presented. This chapter therefore presents the study's recommendations, the theoretical and practical implications of the results, as well as the contribution to new knowledge. The suggestions for future research are also highlighted.

This study analysed the integration of HIV and AIDS Education in Teacher Education Programmes in Zambian Colleges of Education. The research questions of the study were to: firstly, collect views from lecturers, teacher trainees and graduates on how appropriate the content, methodology and assessment elements were that supported the integration of HIV and AIDS Education in teachers training programmes secondly, secondly investigate how trainee teachers understand the phenomena of the integration of HIV and AIDS Education in the curriculum thirdly to find out how the graduates teachers practice the Integration of HIV and AIDS Education in the schools where they are serving, fourthly, to establish challenges that lecturers faced in teaching integrated HIV and AIDS Education in Teacher Education Programmes and finally, to gather views from stakeholders, regarding the various modes of integrating HIV and AIDS Education in Teacher Education Programmes. The study was conducted in four Colleges of Education affiliated to the University of Zambia. In order to conceptualize this study Context, Input, Process and Product (CIPP) conceptual framework and the constructivism theory were used. The model provided the study with a systematic way of looking at different aspects of the teacher training programmes. The study employed the constructivism philosophical paradigm with a descriptive survey research design.

#### **7.2 The Main Research Findings and Conclusion**

The main summary presented here was guided by the five research questions. Based on research question one, the collected views on the appropriateness of content, methods of teaching and learner assessments elements that support the integration of HIV and AIDS

Education in teacher training programmes was said to be partially done. Lack of HIV and AIDS knowledge and skills in most of the lecturing staff somewhat affected the way in which the information was disseminated to the teacher trainees. This was confirmed by the way in which most of the core subject areas had the omission of HIV and AIDS Education in their subject content matter.

Additional evidence with respect to HIV and AIDS being taught as cross cutting issues was that some lecturers employed selective teaching to avoid teaching HIV and AIDS Education, This is where lecturers taught what they felt comfortable to teach and left out information that they felt uncomfortable to teach. Selective teaching was also observed by many other scholars such as (Mulenga and Banda, 2015; Kelly, 2006; UNESCO, 2008). What this meant was that important issues were left out making the delivery of HIV and AIDS education to be incomplete and not fully dealt with in all the study areas. It was evident in this study that selective teaching was a result of sensitive and sexually explicit materials which most grown-ups felt uncomfortable to talk about to young learners whom they considered to be like their own children. This was very common in rural areas where teachers exercised their own judgement on what to teach and what not to teach.

The second research question was based on the investigation of how trainee teachers understood the phenomena of the integration of HIV and AIDS Education in the curriculum. The majority of the teacher trainees did not fully understand the phenomena of HIV and AIDS Education and its relationship to Teacher Education, however their contribution to the integration of HIV and AIDS Education was considered to be positive and satisfactory. The results from the teacher trainee participants suggested that the timetabling of HIV and AIDS Education needed to be considered, as the time allocated to the teaching of HIV and AIDS Education was not adequate to make any meaningful impact in their minds, making the phenomena not to be fully understood and ill preparing them for teaching. The results in this particular research question also indicated that the trainee teachers did not understand the rationale behind the teaching of sexuality to the young learners which they considered to be an abomination, and they felt that this should be discouraged at all costs.

The third research question was based on the graduate teacher's practice of the Integration of HIV and AIDS Education in the schools where they are serving. The graduates practiced the

integration by practically giving support to the young children infected with the virus to positively cope through the support systems that the schools had in place. The children were supported with medications as well as good nutrition for maintenance. The administrative influence was said to be non-existent, the in availability of teacher and learner materials was a big hindrance in the propagating of HIV and AIDS Education to the young learners, though personal efforts were being made to outsource for HIV and AIDS teaching materials. The schools where they were serving made some efforts to purchase books from Longmans, and MK publishers and in some case Curriculum Development Centre (CDC) provided the schools with teaching materials in form of books. Graduates, indicated that the Non-governmental Organisation that was attached to most Colleges of Education to teach HIV and AIDS Education were understaffed and hence could not meet up with the demands of disseminating HIV and AIDS Education making them ill prepared to teach on HIV and AIDS in the schools where they were serving.

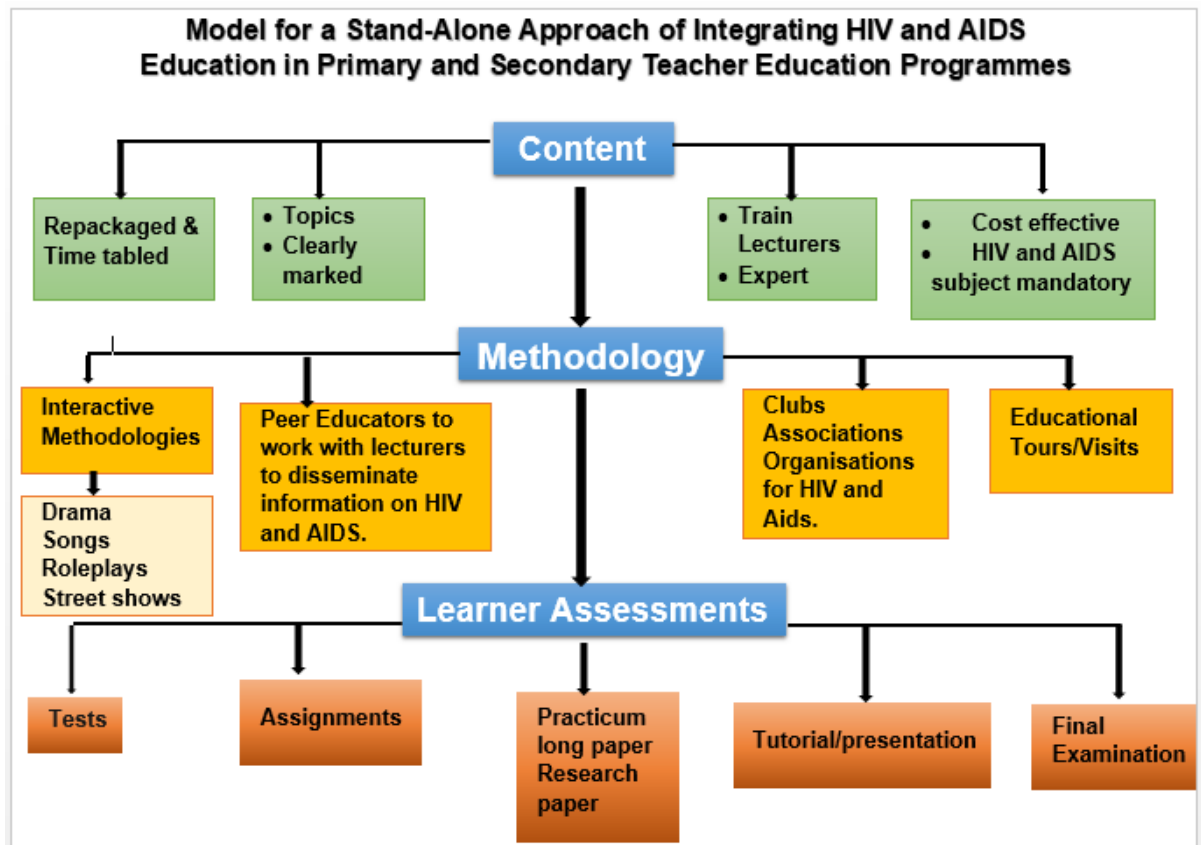
The fourth research question was based on challenges faced by lecturers in teaching integrated HIV and AIDS Education in Teacher Education Programmes. The teachers faced numerous challenges in their teaching of HIV and AIDS Education. Among the challenges were cultural implications and cultural barriers that inhibited the teaching of HIV and AIDS Education as well as marital status of some lecturers. It was also felt that the government's intervention in the teaching of HIV and AIDS Education was not adequate, and the government needed to do more. It was felt that campaign posters, and classroom activities were not adequate. Some other evidence that emerged from this study, was the fact that people were asking too much from the Government, HIV and AIDS was said not to be Government's problem. Some other challenges which surfaced in this study and are worth mentioning were: time allocated to teaching the subject, peoples religious beliefs, traditional values, negative attitudes of some administrators, lack of expertise, lack of teacher and learner materials, these were among some of the barriers that made the teaching of HIV and AIDS difficult. In instances where this subject was taught it was taught adequately through the use of interactive methodologies.

The fifth research question was based on the views of stakeholders regarding the various modes of the integration of HIV and AIDS Education in Teacher Education Programmes. Although the stakeholders were expected to have been exposed to various modes of

integrating HIV and AIDS Education. This study showed that they were to some extent exposed to the integration that was adopted by Zambia. The stakeholders observed in this study that there was evidence of teacher ill preparedness to teach on HIV and AIDS as a major contributory factor as well as negative attitude of teachers that made the teaching of HIV and AIDS difficult. Ministry of General Education in Zambia partnered with Restless Development, an NGO responsible for training of peer educators sent to Colleges of education to teach HIV and AIDS Education. Changes 1 and 2 were meant to help bridge the gap in the transfer of knowledge regarding the integration of HIV and AIDS Education into Teacher Education Programmes. The study also examined the different stakeholders understanding and implementation of the integration of HIV and AIDS Education in all sectors of the Education System. The stakeholders in this study confirmed that HIV and AIDS Education was complex in nature, therefore, there was need for lecturers to gain expertise in the delivery of HIV and AIDS through intensive trainings and other knowledge acquisition methods.

The other categories of players known as major stakeholders were the Ministry of Education. In general therefore, this study evidenced that effective school-based education on HIV and AIDS ideally encompassed two elements: curriculum development and training of teachers. All these two elements were partially achieved in Zambia as indicated by this study. The study therefore put the argument forward that the teaching of HIV and AIDS be taught as stand-alone subjects. Below is a model developed for a stand-alone approach of integrating HIV and AIDS in Primary and Secondary Teacher Education Programmes. The model is developed based on the research findings of this study. Figure 11 is a model which shows that content needs to be repackaged and timetabled with all the topics clearly marked. The model also shows that the lecturers need to be trained so that they can become experts in HIV and AIDS Education. IBE (2006) HIV and AIDS Curriculum Manual – tool 5 on Integrating HIV and AIDS reported that though the start-up costs might be quite high due to the need for trained teachers, the tool however states that in the long run the costs would be minimized. The model in this study reviewed the issue of high costs mentioned in tool 5 and therefore suggested that regarding cost effective measures a few members of staff should be trained at a time, to cut down on costs. The main methodologies suggested were interactive methods. The engagement of peer educators would help in the dissemination of information. Clubs, Associations and Educational tours is another way in which teacher trainees could acquire

information. As regards learner assessments the following were suggested as continuous forms of assessments: tests, assignments, practicum, long paper, tutorials and presentations. The summative assessment would be the final examination.



**Figure 11: A Model for a Stand-Alone Approach**

Developed by Edith Jere-Bedding, 2019

### 7.3 Practical implications of the study

The findings in this study have teaching implications related to HIV and AIDS Education. It is therefore clear in this study that teacher trainees and lecturers all lacked HIV and AIDS expert knowledge and skills. This was evidenced by the poor packaging of the content, methods of teaching and learner assessment elements. In order to produce effective lecturers to teach on HIV and AIDS Education the lectures need to be well trained to be able to pass on correct and complete information to students as reported by (Chiwela and Mwape, 1999; Molambwe, 2000). This has been well captured in the developed model above. The other notable finding to emerge from this study was the issue of not covering the content due to

time constraints this was also recognised by (Kelly, 2002). In this study it was acknowledged that the timetable was too overloaded with other core subjects for it to accommodate HIV and AIDS Education. This is why these subjects were being taught as cross cutting issues, however it was established that this too was partially done.

#### **7.4 Theoretical Implication of the Study – Constructivism Theory**

The constructivism theoretical perspective was used as a learning theory to analyse the problem of the integration of HIV and AIDS Education, making the work to stand out as far as the issue of constructivism was concerned.

The theoretical implication in this study was that instead of the teacher trainees relying on the lecturers information and accepting it as truth, the constructivism theory used in this study stated that the teacher trainees were exposed to data, primary sources and the ability to interact with other learners so that they could learn from each other through their incorporated experiences. The classroom experiences that the teacher trainees shared among themselves as well as the experiences from their countless different backgrounds made it easy for them to amalgamate and analyse information and ideas on HIV and AIDS. They therefore learnt a lot through interactive methodologies. The teacher trainees when they graduated, they became constructors of knowledge through the different avenues that were availed to them in their classrooms. This therefore meant that the graduates when deployed to primary schools were able to improve on lesson delivery as indicated by the constructivists even at the point of delivery.

In order for teacher trainees to become experts in the teaching of HIV and AIDS Education it was important that they asked questions, explored, and assessed what they knew. The HIV and AIDS knowledge was consonant with previous knowledge and not dissonant. This study observed that learner's construction of new ideas and concepts were based on their past knowledge, the information which the learners selected and transformed were done by making decisions on what to keep and what not to keep for future use.

People's prior knowledge comes from their past experiences, culture and their environment. Generally prior knowledge is good, but sometimes misconceptions and wrong information can be a hindrance. In all this, lecturers, trainee teachers and stakeholders all needed to collaborate if learning was to take place. The understanding and interpretation of HIV and

AIDS Education seemed to be too complex for all the stakeholders who were given the task to teach. Education given to Africans was just the 3R's. Reading, Writing and Arithmetic, which were translated to mean literacy and numeracy. Today the education is more dynamic and should include more than what has been mentioned above. Issues of HIV and AIDS even though regarded as complex knowledge can be overcome. HIV and AIDS knowledge if lacking can draw teachers back from teaching on HIV and AIDS Education. It was observed that the teaching of this subject was actually very basic.

This was also observed by Chiwela and Mwape (1999), who mentioned that the levels of HIV and AIDS awareness seemed to be very basic among the teacher trainees, therefore there was need to improve their knowledge base so as to reduce the risk of HIV and AIDS infections. The scholars further stipulated that there were a lot of constraints that influenced and shaped the teaching of HIV and AIDS Education such as fearing to offend the parents of the children whom they felt might perceive the teaching of HIV and AIDS Education as a way of them encouraging promiscuity among the young learners.

#### **7.5 Conceptual Framework Implication of the Study – Context, Input, Process and Product (CIPP) Evaluation Model**

This study analysed the integration of HIV and AIDS Education in Teacher Education Programmes by using the CIPP model to analyse the different aspects of the Teacher Education Programmes. This model assisted the study to make judgements, suggestions of programme effectiveness and informed the stakeholders about possible future programming. It was not possible to do this study by using one, two or even three concepts of this model, however this study used all the four concepts. This way the **context** which looked at the readiness of the environment, the **input** which had to do with the entry requirements for teacher trainees, the elements that supported the integration in-terms of content, methodology and assessments, the **process** which was the actions addressed by stakeholders to make certain that the integration of HIV and AIDS Education was taught, as well as the **product** which was the outcome, the graduates and where they were deployed upon graduation were all attended to. The main questions which were: Did the programme succeed? Using the CIPP Model it was evidenced that the programme partially succeeded. Did it accomplish all its goals, did it measure, interpret and judge the integration of HIV and AIDS Education? The CIPP helped in answering all the questions which needed to be addressed to a larger

extent. Other questions which were not fully answered as expected by the CIPP Model were as a result of the inability of some participants to fully answer questions and those who answered did not have the full knowledge of what the integration of HIV and AIDS entailed. This model aptly helped this study to get answers to some very pressing issues in as far as the integration of HIV and AIDS Education was concerned.

## **7.6 Contribution to Science**

This study made visible of the findings and results but it also made cognisance of the fact that the results of this study would also inform and expand the theory and conceptual frameworks used in this study.

## **7.7 Recommendations of the Study**

Arising from the findings, the study made the following recommendations:

1. There is a definite need for the Ministry of General Education through its Policy makers and technocrats to revisit the policy on management and mitigation of HIV and AIDS in the Education Sector by adopting the stand-alone subject approach as the mode of teaching on HIV and AIDS Education in Colleges of Education. The mainstreaming of these subjects into the existing curriculum should be done across all levels of the education sector.
2. The findings of this study had a number of implications for future practice, one of them being that the Ministry of General Education with relevant stakeholders such as experts on HIV and AIDS Education should train more peer educators, to help deliver HIV and AIDS related messages in order to reduce risk behaviours among the teacher trainees and lecturers and promote learner motivation and learner confidence.
3. Teacher Education Specialised Services (TESS) under the Ministry of General Education, and Non- Governmental Organisations (NGO's) should consider having appropriate linkages among themselves to help conduct more HIV and AIDS Education and Teacher Education related researches.
4. Finally the Ministry of General Education to consider adopting the Model proposed in this study to teach HIV and AIDS Education as stand-alone subjects with the view to help curb this scourge of HIV and AIDS, through Education which is considered as a 'social vaccine'.

## **7.8 Areas for Future Research**

Research is always being improved upon and revised. Scholars have continued to do more advanced researches in different disciplines. The following are suggested areas of study:

1. Further research should be conducted in different settings such as other Colleges of Education which were not sampled in this study to see if the results would be comparable with those generated from this study.
2. Further research should be conducted by increasing the sample size and using a different method of orientation, such as the quantitative orientation.

## REFERENCES

- Adeyemi, M. B., and Adeyinka, A. A. (2003). The principles and content of African Traditional education. *Educational Philosophy and Theory*, 35(4), 425-440.
- Alexander, J. (2005). *An Analysis of pre-service teachers HIV AND AIDS knowledge, attitudes and self-efficacy and their HIV and AIDS teaching tasks*. (Masters). UCT – Cape Town.
- Akoulouze, R., Rugalema, G., and Khanye, V. (2001). Taking stock of the promising approaches in HIV/AIDS and Education in Sub-Saharan Africa: What works, why and how-A synthesis of country case studies. In *Biennial Meeting of the African Ministers of Education held at the Arusha International Conference Centre, Tanzania*.
- American Institute for Research. (2009). *CHANGES2 Program Final Report*. USAID/Zambia.
- Amineh, R. J., and Asl, H. D. (2015). Review of constructivism and social constructivism. *Journal of Social Sciences, Literature and Languages*, 1(1), 9-16.
- Anti AIDS Teachers Association of Zambia. (2018). *Facilitation guide for school peer educators*. Lusaka.
- Ballatine, J. and Hammack, F. (2009). *The Sociology of Education: A Systematic Analysis* (6th ed.). New Jersey: Pearson Prentice Hall.
- Banda, M. and Mulenga, C. (2015). Teacher Education and HIV and AIDS: Investigating Teacher Education Position in The teacher of HIV and AIDS and Life Skills Education: A Case of one Primary Teacher Training College in The Copperbelt Province of Zambia. *Vol. 2*(9). doi: 2349.
- Baxen, J., Wood, L., and Austin, P. (2011). Reconsidering and repositioning HIV and AIDS within teacher education. *Africa Insight*, 40(4), 1-10.
- Beane, J. (2000). *The Modalities of Subject Integration in Education*. New York: Teachers College Press.
- Beane, J. (2002). *The need for subject integration in learning institutions*. New York: Teachers College Press.
- Bello, J. (2005) *Basic Principles of Teaching*. New York: John Wiley and sons.
- Bennars, G., Otende, G. and Boisrest, R. (1994). *Theory and Practice of Education*. Nairobi: East African Publishers.
- Bennars, G., Otende, G. and Boisrest, R. (1994). *Theory and Practice of Education*. Nairobi: East African Publishers.
- Bennell, P. (2003). The impact of the AIDS epidemic on schooling in sub-Saharan Africa. In Background paper for the Biennial Meeting of the Association for the Development of Education in Africa.
- Bishop, G. (1985). *Curriculum Development a Textbook for Students*. London: Macmillan Publishers.

- Braxen, J. and Breidlid, A. (2009). *Researching HIV and AIDS and Education in Sub-Saharan Africa; examining the gaps and challenges*. Cape Town: ICT Press.
- Braxen, J. and Breidlid, A. (2009). *Researching HIV and AIDS and Education in Sub-Saharan Africa: Examining the Gaps and Challenges*. In Baxen, J. and Breidlid A. (Eds) *HIV and AIDS in Sub-Saharan Africa: Understanding the Implication of context* (pp.3-14).. Cape Town: ICT Press.
- Breidlid, A., Cheyeka, A. M., and Farag, A. I. (Eds.). (2015). *Perspectives on Youth, HIV/AIDS and Indigenous Knowledges*. Springer.
- Brownstein, B. (2001). Collaboration: The foundation of learning in the future. *Education*, 122(2).
- Bundy, D., Kagia, R., Doka, A., Drake, L. and Maier, C. (2000). *A Window of Hope: Education and the Global Epidemic of HIV and AIDS*. Washington D.C.: World Bank.
- Bundy, D., Aduda, D., Woolnough, A., Drake, L., & Manda, S. (2009). *Courage and hope: stories from teachers living with HIV in Sub-Saharan Africa*. The World Bank.
- Burns, R. B., & Burns, R. B. (2000). *Introduction to research methods*, London: Sage Publications
- Bruner, J. (1960). *The Process of Education*. Cambridge, MA: Harvard University Press
- Harley, 1995 Retrieved from <http://tip.psychology.org/bruner.html>, LeFrancois, 1972; Sahakian, 1976.
- Bruner, J. (1999). *A Landmark in Educational Theory*. Harvard University Press: Cambridge, Massachusetts.
- Bryman, A. (2008). *Social Research Methods*. New York: Oxford University Press.
- Brooks, J. G., & Brooks, M. G. (1993). In search of understanding. *The case for constructivist classrooms*, 101-118.
- Brooks, J. G. (1999). *In search of understanding: The case for constructivist classrooms*. ASCD.
- Boler, T., and Jellema, A. (2005). *Deadly inertia: a cross-country study of educational responses to HIV/AIDS*.
- Carmody, B. P. (2004). *The evolution of education in Zambia*. Bookworld Publishers.
- Cashman, R., and Darcy, S. (2008). *Benchmark games*. Benchmark Games.
- Centre for Disease Control (1992). *Programs that work*. CDC, Atlanta.

- Central Statistical Office. (2007). Zambia Demographic and Health Survey 2007. Lusaka, Zambia: CSO Retrieved from <http://204.12.126.218/dhs/pubs/pdf/FR211/FR211%5BRevised-05-122009%5D.pdf>.
- Central Statistical Office of Zambia (2011) “Aids and HIV Statistics” Retrieved on 17 October 2016.
- Chediel, R. W. (2009). *The management of educational changes in primary education in Tanzania* (Doctoral dissertation).
- Chifunyise, T., Benoy, H., and Mukiibi, B. (2002). An impact evaluation of student teacher training in HIV/AIDS education in Zimbabwe. *Evaluation and Program Planning*, 25(4), 377-385.
- Chikwanda, T. (2015). HIV and AIDS and Teacher Education in Zambia. In *Perspectives on Youth, HIV/AIDS and Indigenous Knowledges* (pp. 61-76). Sense Publishers, Rotterdam.
- Child Rights Focused Civil Society Organisations In Zambia (2008). Child Rights Focused Civil Society Organisations In Zambia Related to the Zambia Universal Periodic Review 2<sup>nd</sup> Session. Children’s Rights in Zambia: Key Issues of Concern.
- Chisala F.C, Phiri D, Sakala E. and Shampile, L. (2006). *Breakthrough to Integrated Science*. Lusaka, Longman Zambia.
- Chiwela, M. J., and Mwape, K. G. (1999). Integration of teaching HIV/AIDS prevention and psychosocial life skills into school and college curricula in Zambia. *Lusaka, Zambia: UNESCO*.
- Cohen, L. and Marion, L. (1980). *Research Methods in Education*, London: Groom Helm.
- Coombe, C. (2000). *Managing the impact of HIV/AIDS on the education sector in Africa. Paper commissioned by United Nations Economic Commission for Africa (UNECA) in preparation for the Africa Development Forum 2000*. Addis Ababa, UNECA.
- Coombe, C. (2000b). *Keeping the Education System Healthy: Managing the Impact of HIV and AIDS on Education in South Africa. Current Issues in Comparative Education* (New York, NY), vol. 3, no. 1. Online version: [www.tc.columbia.edu/cice](http://www.tc.columbia.edu/cice).
- Coombe, C. (2002). Mitigating the impact of HIV/AIDS on education supply, demand and quality. *AIDS, public policy and child well-being*. G. Cornia. Florence, UNICEF Innocenti Research Centre.
- Coombe, C. (2003). *HIV and AIDS and Teacher Education: A Consultative on HIV and AIDS and Teacher Education in East and Southern Africa*. In Went.

- Coombe, C. (2004). *HIV and AIDS Teacher Education: Consultation on HIV and AIDS and Teacher Education in East and Southern Africa*. Germany, InWent Education Division.
- Crotty, J. (2009). Structural causes of the global financial crisis: a critical assessment of the 'new financial architecture'. *Cambridge journal of economics*, 33(4), 563-580.
- Degazon-Johnson, R., and Degazon-Johnson, R. A. (2008). *Gender, HIV/AIDS and the Status of Teachers: Report of the Third Commonwealth Teachers' Research Symposium: Pestana Rovuma Hotel, Maputo, Mozambique, 19-21 February 2008*. Commonwealth Secretariat.
- Denzin, N.K. and Lincoln, Y.S. (2003). *Discipline and practice of qualitative research*. In N. K. Denzin and Y.S. Lincoln (eds) *Strategies of Qualitative Inquiry* (2<sup>nd</sup>end.) (pp 1-45) London: Sage
- Education for All. (2008). *Global Monitoring Report*. Paris: UNESCO. Eenet (2001)
- Esau, O. (2010). Breaking culture of silence the in checkmating HIV/AIDS as a teacher-researcher. *South African Journal of Higher Education*, 24(1), 66-83.
- Ezewu, E. (1983) *Sociology of Education*, London: Longman. [Http://www.avert.org/aids-Zambia.htm](http://www.avert.org/aids-Zambia.htm). Retrieved on July 15, 2013 at 14.14 hours, from the World Wide Web. [http://en.wikipedia.org/wiki/HIV/AIDS\\_in\\_Zambia](http://en.wikipedia.org/wiki/HIV/AIDS_in_Zambia). Retrieved on July 15, 2012 at 15.18hrs from the World Wide Web.
- Field, A. (2012). *Discovering statistics using IBM SPSS statistics* (4<sup>th</sup> Edition) London, Sage Publications limited.
- Fitzpatrick, J. L. (2012). An introduction to context and its role in evaluation practice. *New Directions for Evaluation*, 2012(135), 7-24.
- Fossey, E., Harvey, C., McDermott, F., and Davidson, L. (2002). Understanding and evaluating qualitative research. *Australian and New Zealand journal of psychiatry*, 36(6), 717-732.
- Gachuhi, D. (1999). *The Impact of HIV/AIDS on Education Systems in Eastern and Southern Africa Region. draft*, New York: UNICEF.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2007). *Educational Research: An Introduction*. New York: Person Education.
- Grunseit, A.C. and Aggleton, P. (1998). *Lessons learned: An update on the published literature concerning the impact of HIV and sexuality education for young people*. *Health Education* 98(2), 45-54.

- Guba, E. G. (Ed.). (1990). *The paradigm dialog*. Sage publications.
- Guskey, T. R. (1985). *Staff development and teacher change*. Educational leadership, 42(7), 57.
- Hanass-Hancock, J., and Nixon, S. A. (2009). The fields of HIV and disability: past, present and future. *Journal of the International AIDS Society*, 12(1), 28.
- Helleve, H., Flisher, A.J, AOnya, H., Kaaya,S., Mukoma, W., Swai, C. and Klepp, K (2009). Teachers' Confidence in Teaching HIV and AIDS and Sexuality in South African and Tanzanian Schools: *Scandinavian Journal of Public Health*, 37 (suppl 2), (55-64).
- Holderness, W. L. (2012). Equipping educators to address HIV and AIDS: A review of selected teacher education initiatives. SAHARA-J: *Journal of Social Aspects of HIV/AIDS*, 9(sup1), S48-S55.
- Honebein, P. C. (1996). *Seven goals for the design of constructivist learning environments. Constructivist learning environments: Case studies in instructional design*, 11-24.
- Isa and Forest (2011). *A qualitative case study of the implementation of education programs at the National gallery of Victoria (NGI) Austria*.
- Jenkins, E., and Whitfield, R. (1974). *Readings in Science Education*. A Source Book.
- Kalenda, M. (2007). Applying the Subject All through Constructivism Approach During Science Lessons and Teacher's Views. *Journal of Environmental and Science Education* 2 (1): 3-13 ISSN-2052-6350 (print) 2052-6369 (online)
- Kalimaposo, K.K. (2010). *The Impact of Curriculum Innovations on Pre-Service Primary Teacher Education*. A PhD Thesis. Unpublished: Lusaka.
- Kamuwanga, C., and Ngoma, C. M. (2015). Perceptions of Child Sexual Abuse among Convicted Prisoners in Zambia. *Medical Journal of Zambia*, 42(3), 139-143.
- Kapungwe, Augustus Kasumpa (2009). Youth and Governments Fight Against HIV and AIDS in Zambia: A closer look at some underlying assumptions. African Books Collective: ISBN: 9789994455393.
- Kasonde-Ng'andu, Sophie (2013) *Writing a Research Proposal in Educational Research*, Lusaka: University of Zambia Press.
- Kelly, M.J. (1998). *The Inclusion of an HIV and AIDS Component in BESSIP*, Lusaka: University of Zambia.

- Kelly, M.J. (2000). *“What HIV and AIDS can do to Education and What Education can do to HIV and AIDS”*. Lusaka: University of Zambia.
- Kelly, M.J. (2001). *Challenging the Challenger: Understanding and Expanding the Response of Universities in Africa to HIV and AIDS. A Synthesis Report for the Working Group on Higher Education (WGHE) Association for the Development of Education in Africa (ADEA)* Paris: ADEA.2001.
- Kelly, M. J., & Bain, B. (2005). *Education and HIV/AIDS in the Caribbean*. Ian Randle Publishers.
- Kibera, L.W. and Kimokoti, A (2007). *Fundamentals of Sociology of Education with Reference to Africa* .Nairobi, University of Nairobi Press.
- Kirby, S. L., Greaves, L., & Reid, C. (2006). *Experience research social change: Methods beyond the mainstream*. University of Toronto Press.
- Kirk, J., Miller, M. L., & Miller, M. L. (1986). *Reliability and validity in qualitative research* (Vol. 1). Sage.
- Knowles, M. S. (1968). Andragogy, not pedagogy. *Adult leadership*, 16(10), 350-352.
- Kothari, C.R. (2009). *Research Methodology – Methods and Technique* (2<sup>nd</sup> Ed) New Delhi: New Age International (Pty) Limited Publishers.
- Kruger, R.A. (1988). *Focus Group: A Practical Guide for Applied Research*: U.K.
- Laren V.L. (2011). Preparing teachers for HIV and AIDS education: Integrated and Interdisciplinary pre-service teacher education. *South African Journal of Education* University of Kwazulu: Natal. ISSN: 0256-0100.
- Law, N. (2008). Teacher learning beyond knowledge for pedagogical innovations with ICT. In *International handbook of information technology in primary and secondary education* (pp. 425-434). Springer, Boston, MA.
- Lavrakas, (2008). *Research Methods*. United Kingdom: Sage. Print ISBN: 9781412918084.
- Lincoln, Y.S. and Guba, E.G. (1985). *Naturalistic Inquiry*, Beverley Hills: Sage
- Longe, R and Chiputa, S.S. (2003). *National Capacity Building of Lead Teacher Training Institutions – A Mission to Zambia*. UNESCO: Lusaka.
- Maanen, (1983). *The Fact and Fiction in Organisational ethnography in Qualitative Inquiry*. Ed, Beverley Hills: Sage.

- Maybry, L., (2008). *Case study in social research*, in P. Alsuutari and J. Branen (eds). *The Sage handbook of Social Research Methods* (pp214-227). London: Sage.
- Manouchehri, A. (1997) in Van Laren, L (2011). *School mathematics reform: implications for mathematics teacher preparation*. *Journal of Teacher Education*, 48(3): 197-209
- Mascolo, M. F., Fischer, K. W., & Fischer, K. W. (2005). Constructivist theories. *Cambridge encyclopedia of child development*, 49-63.
- Miedema, E. (2014). A curriculum response to HIV/AIDS. *International Institute for Educational Planning*. Retrieved October, 22.
- Merriam, S.B. (1998). *Qualitative Research and Case Study Applications in Education: Revised and Extended from Case Study to Research in Education*. San Francisco: Jossey Bass.
- MoE (1996). *Educating Our Future. National Policy on Education*. Lusaka: Ministry of Education.
- MoE (2007) *Education Sector National Implementation Framework 2008-2010*, Lusaka: Republic of Zambia, Ministry of Education: 2007
- MoE (2006). *Zambia Fifth National Development Plan (FNDP)*. Lusaka: Republic of Zambia, Government Printers. Ministry of Finance and National Planning (2011).
- MoE (2006). *Zambia Teacher Education Syllabus* Lusaka, Zambia: Curriculum Development Centre:
- MoE (2008). *Teaching in the Window of Hope: HIV/AIDS Education for Zambian Teachers*: Lusaka. Venus Stationery limited.
- Ministry of Education, Science, Vocational Training and Early Education (2013). *Handbook on Guidance and Counselling for Colleges of Education*. Ministry of Education, Science, Vocational Training and Early Education.
- Ministry of Education (2002). *Training and Resource Manual for Education Staff*. Lusaka: Ministry of Education Zambia.
- Mitchelle, C. and Smith, A. (2003). 'Sick of AIDS': *Life, literacy and South African Youth. Culture, Health and Sexuality*, 5:513-522.
- Morgan, D.L. (1988). *Focus Group as Quantative Research*, United Kingdom: Sage.
- Morse, J. M., and Field, P. A. (1995). *Qualitative research methods for health professionals*.

- Mugimu, C. B., and Nabadda, R. (2009). The role of pre-service and in-service teacher training (PITT) programmes in preparing teachers for HIV curriculum integration. *Prospects*, 39(4), 383-397.
- Musonda, L. (2003, January). From 'Donors' to 'Cooperating Partners': A Change in Nomenclature or Reality. In *Development Policy Management Forum (DPMF) Bulletin* (Vol. 10, No. 1).
- Muzumara M.P. (2011). *Teacher Competencies for Improved Teaching and Learning*. Lusaka, Bhuta Publishers.
- Ngussa, B. M., and Makewa, L. N. (2014). Sse and Field (1995) voice in curriculum change: a theoretical reasoning. *International Journal of Academic Research in Progressive Education and Development*, 3(3), 23-37.
- Nampanya-Serpell N. (2000). *Social and Economic Risk factors for HIV and AIDS Affected Families in Zambia. Presented at AIDS and Economics Symposium*. Durban 7-8<sup>th</sup> July, 2000. Retrieved from [http:// www.iaen.org](http://www.iaen.org). July 16. 2013.
- National AIDS Council (2006). *National HIV and AIDS Strategic Framework 2006-2010*. Republic of Zambia, Lusaka: National AIDS Council.
- Ngaroga J.M. (2007). *PTE Revision Series Education for Primary teacher Education*. Nairobi, East African Educational Publishers.
- Nzioka, C. and Ramos, L. (2008). *Training Teachers in HIV and Aids Context: Experiences from Ethiopia, Kenya, Uganda and Zambia*: Nairobi.
- Ogina, T.A. (2007). *Redefining the role of Educators in managing the needs of orphaned Learners*. Pretoria, University of Pretoria.
- Okech, J.G and Asiachi, A.J. (1986). *Curriculum Development for Primary Schools*, Nairobi: Kenyatta University.
- Olouch G.P. *Essentials of Curriculum Development* (1982). Nairobi: Elimu Bookshop Ltd.
- One International. Fact sheet on HIV and AIDS Issue No. 1118, Retrieved November 1, 2012 from the World Wide Web: [www.on.org/HIV/AIDS](http://www.on.org/HIV/AIDS).
- Organisation and Management in Primary Health Care (Zambia). <http://www.idrc.ca> Accessed 14 February 2008. Jesuit Centre for Theological Reflection (2006).
- Patton, M.Q. (2002) (3<sup>rd</sup> Ed.) *Qualitative Research and Evaluation Methods*. Thousand Oaks: Sage Publications.

Piaget, J. (1970). Piaget's theory.

Prewitt, K. (1995). *Research Methodology: Uganda*, Makerere University Press.

Restless Development (2013). *Peer Leader Toolkit Facilitators Guide*.

Republic of Zambia Ministry of Education (2002). *HIV and AIDS Strategic Plan*. Lusaka, UNZA Printers.

Ramos, L. (2006). *Analysing the Response of a teacher Training Institution to HIV and AIDS: A Case study from Zambia*, Paris: UNESCO BREDA: 2006.

Republic of Zambia Ministry of Education (2008). *Teaching In the Window of Hope: HIV and AIDS Education for Zambian Teachers Tutors guide*. Lusaka, Venus Stationery Limited.

Republic of Zambia Ministry of Education (2008). *Teaching in the Window of Hope HIV and AIDS Education for Zambian teacher's*. Lusaka, Ministry of Zambia.

Republic of Zambia Ministry of Education (2008). *Peer educator Activity Manual*. Lusaka, Ministry of Education.

Republic of Zambia Ministry of Education Science Vocational training and Early Education (2013). *Education Curriculum Framework*. Lusaka, Curriculum Development Centre.

Rubin, D. B. (2005). Causal inference using potential outcomes: Design, modeling, decisions. *Journal of the American Statistical Association*, 100(469), 322-331.

Rugalema, G., and Akoulouze, R. (2003). Identifying Promising Approaches in HIV/AIDS and Education. *Reaching Out, Reaching All*, 245.

Sanghavi, D. M. (2006). What makes for a compassionate patient-caregiver relationship? *The Joint Commission Journal on Quality and Patient Safety*, 32(5), 283-292.

Sarma, H., and Oliveras, E. (2013). Implementing HIV/AIDS education: impact of teachers' training on HIV/AIDS education in Bangladesh. *Journal of health, population, and nutrition*, 31(1), 20.

Savery, J. R., and Duffy, T. M. (1994). Problem based learning: An instructional model and its constructivist framework.

Seale, C. (2000). *The Quality of Qualitative Research*. London: Sage Publications.

Seidman, I.E. (1991). *Interviewing as Qualitative Research: A Guide for Researchers in Education and Social Science*. New York: Teachers College Press.

- Shaeffer, S. (1994). *The Impact of HIV and AIDS on Education: A Review of Literature and Experience. Background Paper Presented to an IIEP Seminar, Paris, 8–10 December, 1993*. Paris: International Institute for Educational Planning.
- SPW (2009). *Teaching Strategies and resources* .80:20.
- Shenton, A.K. (2002). *The Characteristics and Development of Young people's Information urerserses, PHD Thesis, Northumbria University*.
- Silverman, D. (2000). *Doing Qualitative Research: A Practical Handbook*, London: Sage.
- Sixth National Development Plan 2011-2015. Lusaka: Government Printers. Ministry of Finance (2011).
- Smith, M. K. (2002). *Malcolm Knowles, informal adult education, self-direction and andragogy*. Infed, the Encyclopedia of informal education.
- Stake, R.E. (1995). *The Art of Case Study Research*. London: Sage.
- Stewart, D.W. and Shamdsani, P.N. (1990). *Focus Group: Theory and Practices*, United Kingdom: Sage.
- Strauss, A., and Corbin, J. M. (1997). *Grounded theory in practice*. Sage.
- Stufflebeam, D. L. (1983). The CIPP model for program evaluation. In *Evaluation models* (pp. 117-141). Springer, Dordrecht.
- Stufflebeam, D. L. (1986). *Standards of Practice for Evaluators*.
- The JCTR Basic Needs Basket: A Comprehensive Overview. (2006) edition, Lusaka. <http://www.jctr.org.zm>. Accessed 14th February 2008. JSI Research and Training Institute (n.d.).
- Trochim, W.M.K. (2001). *Research Methods knowledge base* (2<sup>nd</sup> ed.). USA: Atomic Dog.
- UNAIDS (1999). *Listen, Learn, Live! World AIDS Campaign with Children and Young People. Facts and Figures*. Geneva: UNAIDS.
- UNAIDS (2008). *Report on the Global AIDS pandemic*. Geneva: Switzerland.
- UNESCO (2008). Booklet 3: *Educator Development and Support. Good Policy and Practice in HIV & AIDS and Education (booklet series)*. Paris.

- UN-HABITAT (2005). *Land Tenure, Housing Rights and Gender in Zambia Vol. 3, of Land Tenure, Housing Rights and Gender in Zambia, United Nations Settlements Programme Law, Land Tenure and Gender Review: Southern Africa* ISBN: 9789211317749.
- Van Laren, L. (2011). *Drawing in and on Mathematics to promote HIV&AIDS preservice teacher education*. In *Picturing Research* (pp. 133-146). Sense Publishers.
- Van Maanen, J. (1983). *Qualitative Methods Reclaimed* (No. TR-20-ONR). ALFRED P SLOAN SCHOOL OF MANAGEMENT CAMBRIDGE MA.
- Visser, M. (2002). *Where Teachers Fear to Tread - Communicating About HIV and AIDS in Mozambique. Paper presented at the Association for Educational Communications and Technology (AECT), Dallas, Texas.*
- Von Glasersfeld, E., (1989). *Cognition, Construction of Knowledge, and Teaching. Synthese*, 80(1), pp.121-140. Amherst, MA, USA. Retrieved on 06/05/2020 <http://doi.org/10.1007/BF00869951>
- Vygotsky, L. (1978). *Interaction between learning and development. Readings on the development of children*, 23(3), 34-41.
- Vygotsky, L.S., (1978). *Mind in Society*. Cambridge, MA: Havard University Press.
- Weiler, J. M. and Weiler, C.J.M. (2012). Addressing HIV and AIDS Education: A Look at Teacher Preparedness in Ghana. Vol. 2 No. 1: *Journal of International Social Studies*: Retrieved on 18/05/2017 <http://www.iajis.org>.
- World Bank (1999). *Intensifying Action against HIV and AIDS in Africa: Responding to a Development Crisis. Africa Region, the World Bank*. Washington, DC: The World Bank.
- World Bank (2002). *World Education and HIV and AIDS, A Window of Hope*. Washington DC:
- Yin, R.K. (1994). *Case Study Research: Design Methods*, 2<sup>nd</sup> edition, Thousand Oaks: Sage, Applied Social Research Method series, Vol. 5.
- Zaki, W.M. (1975). *Education Planning in Pakistan UNESCO Regional Office for Education in Asia*, Bangkok, Pakistan.
- Zhang, G., Zeller, N., Griffith, R., Metcalf, D., Williams, J., Shea, C., & Misulis, K. (2011). Using the Context, Input, Process, and Product Evaluation Model (CIPP) as a Comprehensive Framework to Guide the Planning, Implementation, and Assessment of Service-learning Programs. *Journal of Higher Education Outreach and Engagement*, 15(4), 57-84.

## APPENDICES

### APPENDIX 1: LETTER FROM THE HEAD OF EPPSE DEPARTMENT



UNIVERSITY OF ZAMBIA

SCHOOL OF EDUCATION

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY, SOCIOLOGY  
AND SPECIAL EDUCATION

12<sup>TH</sup> October, 2014

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

**SUBJECT: REQUEST TO COLLECT RESEARCH DATA FROM COLLEGES OF  
EDUCATION.**

This letter serves to introduce Mrs. Edith Jere-Bedding, a member of staff in the Department of Educational Psychology, Sociology and Special Education.

Mrs Edith Jere-Bedding is conducting a study entitled: *An Analysis of the Integration of HIV and AIDS Education in Teacher Education Programmes of Zambia*. This study is under the supervision of the University of Zambia, School of Education.

I would be grateful if you could facilitate her collection of data from your officers.

Yours sincerely,

Beatrice Matafwali (PhD)  
Head of Department  
c.c. Dean, School of Education

## **APPENDIX 2: LETTER FROM DEAN POSTGRADUATE**



### **THE UNIVERSITY OF ZAMBIA SCHOOL OF EDUCATION**

**Telephone: 291381  
Telegrams: UNZA, LUSAKA  
Telex: UNZALU ZA 44370**

**P.O. Box 32379  
LUSAKA, Zambia  
Fax: +260-1-292702**

---

Date: 17-10-2014

#### **TO WHOM IT MAY CONCERN**

Dear Sir/Madam,

**RE: FIELD**

#### **WORK FOR MASTER/PhD STUDENTS**

The bearer of this letter Mr/Ms EDITH JERE-BEDDING computer number 513808061 is duly registered student at the University of Zambia. School of Education.

He or she is taking a Masters/PhD programme in Education. The programme has a fieldwork component which she has to complete.

We shall greatly appreciate if the necessary assistance is rendered to her.

Yours faithfully,

Daniel Ndhlovu (Dr)

**ASSISTANT DEAN POSTGRADUATE STUDIES – SCHOOL OF EDUCATION**

Cc: Dean – Education  
Director – DRGS

### APPENDIX 3: INFORMATION SHEET



#### THE UNIVERSITY OF ZAMBIA SCHOOL OF EDUCATION

**Project Title:** *An Analysis of the Integration of HIV and AIDS Education in Teacher Education Programmes of Zambia: A Case of Four Colleges of Education in Lusaka, Central and Southern Provinces.*

**Principal Investigator:** Name of Candidate: Mrs. Edith Jere-Bedding,  
Cello phone Number: 0977217260/0966454609,  
E-mail Add. [Edemaje@yahoo.com](mailto:Edemaje@yahoo.com)  
[jebedding@unza.zm](mailto:jebedding@unza.zm)

**Advisors:** Dr O.C. Chakulimba – Principal Supervisor  
BAEd.UNZA, Ed. M. Harvard, PhD. Toronto

Dr E. Mbozi - Co-Supervisor  
BA UNZA, M.Ed. University of Toronto, PhD. Cornell

**Department:** Educational Psychology, Sociology and Special Education,  
School: Education.

**Aim of the Study:** This research aims at analysing the Integration of HIV and AIDS Education in teacher education programmes.

**Confidentiality:** The information provided by the respondents will be confidential. No name will be written on the questionnaires. Respondents will be expected to co-operate and be truthful in answering the questions. The Ethics Committee of the University of Zambia has cleared this research.

I will write a report on the study but I will not use your name, I will use pseudo names, such as Mr X or Mrs X therefore people will not know who you are. You do not have to be part of this study if you don't want to take part. If you choose to be in the study, you may stop taking part at any time, no one will blame or criticise you. If you decide to take part in this study you will be asked to sign an assent form. If you have any questions please feel free to ask me. Do not sign the form until you have all your questions answered and you have understood what I would like you to do.

## APPENDIX 4: CONSENT FORM



### THE UNIVERSITY OF ZAMBIA SCHOOL OF EDUCATION

**Project Title:** *An Analysis of the Integration of HIV and AIDS Education in Teacher Education Programmes: A Case of Four Colleges of Education in Lusaka, Central and Southern Provinces of Zambia.*

**Principal Investigator:** Name of Candidate: Mrs. Edith Jere-Bedding,  
Cello phone Number: 0977217260/0966454609,  
E-mail Add. [Edemaje@yahoo.com](mailto:Edemaje@yahoo.com)  
[jebedding@unza.zm](mailto:jebedding@unza.zm)

**Advisors:** Dr O. C. Chakulimba – Principal Supervisor  
BAEd.UNZA, Ed. M. Harvard, PhD. Toronto

Dr E. Mbozi - Co-Supervisor  
BA UNZA, M.Ed. University of Toronto, PhD. Cornell

**Department:** Educational Psychology, Sociology and Special Education,  
School: Education.

**Participants Name:** -----

I have read the information presented in the information letter about the study: *An Analysis of the Integration of HIV and AIDS Education in Teacher Education Programmes: A Case of Four Colleges of Education in Lusaka, Central and Southern Provinces of Zambia*. I have had the opportunity to ask any questions related to this study, and I have received satisfactory answers to my questions, and have added any additional details I wanted. I am aware that I have the option of allowing my interview to be audio recorded to ensure an accurate recording of my responses. I am also aware that excerpts from the interview may be included in publications to come from this research, with the understanding that the quotations will be anonymous. I was informed that I may withdraw my consent at any time without penalty by advising the researcher. With full knowledge of all foregoing, I agree, of my own free will, to participate in this study.

Participants Name (Please print): -----

Participant Signature: -----

Researcher Name: (Please print) -----

Researcher Signature: -----

Date: -----.

**DO NOT SIGN THE FORM IF YOU HAVE ANY QUESTIONS. ASK YOUR QUESTIONS FIRST AND ENSURE THAT SOMEONE ANSWERS THOSE QUESTIONS BEFORE YOU SIGN.**

## **APPENDIX 5: LETTER REQUESTING ONE TO PARTICIPATE IN THE STUDY**

Dear Respondent,

This letter is an invitation to consider participating in a study I, Edith Jere-Bedding am conducting as part of my research as a doctoral student entitled: *An Analysis of the Integration of HIV and AIDS Education in Teacher Education Programmes of Zambia: A Case of Four Colleges of Education in Lusaka, Central and Southern Provinces*. Permission for the study has been given by the School of Education and the University of Zambia Ethics Committee. I have purposefully identified you as a possible participant because of your valuable experience and expertise related to my research topic.

I would like to provide you with more information about this project and what your involvement would entail if you should agree to take part. The importance of the integration of HIV and AIDS Education in teacher education programmes is substantial and documented. There is however, little empirical research to inform the stakeholders on the performance of this curriculum, this is what necessitated this study. In this interview I would like to have your views and opinions on this topic. This information can be used to improve the delivery of HIV information to the learners and educators.

Your participation in this study is voluntary. It will involve an interview of approximately 15 minutes in length to take place in a mutually agreed upon location at a time convenient to you. You may decline to answer any of the interview questions if you so wish. Furthermore, you may decide to withdraw from this study at any time without any negative consequences.

With your kind permission, the interview will be audio-recorded to facilitate collection of accurate information and later transcribed for analysis. Shortly after the transcription has been completed, I will send you a copy of the transcript to give you an opportunity to confirm the accuracy of our conversation and to add or to clarify any points. All information you provide is considered completely confidential. Your name will not appear in any publication resulting from this study and any identifying information will be omitted from the report. However, with your permission, anonymous quotations may be used. Data collected during this study will be retained on a password protected computer for 12 months in my locked office. There are no known or anticipated risks to you as a participant in this study.

If you have any questions regarding this study, or would like additional information to assist you in reaching a decision about participation, please contact me at 0977217260 or by e-mail at [Edemaje@yahoo.com](mailto:Edemaje@yahoo.com) or [jebedding@unza.zm](mailto:jebedding@unza.zm).

I look forward to speaking with you very much and thank you in advance for your assistance in this project. If you accept my invitation to participate, I will request you to sign the consent form which follows on:

Yours sincerely,

**Edith Jere-Bedding**

## **APPENDIX 6: FOCUS GROUP DISCUSSIONS (FGD) GUIDE FOR TEACHER TRAINEES**

### **INFORMAL INTRODUCTION**

**Before you start recording the FDG, researcher to:**

- Introduce himself or herself to the group and vice versa.
- Tell the participants about the aim of the research.
- Verbal consent from participants that you will record the discussion on tape.
- That they will not be identified by name when recording or when writing reports (you may wish to give them pseudo names for purposes of directing speakers e.g. Mr X and Mrs X)
- Allow for questions to be raised by participants before proceeding.

### **Recording (on tape)**

Introduce yourself to the group again and state the aim of the research and its future prospects. Acknowledge participants verbal consent allowing you to record the discussion on tape and reassure them on confidentiality and anonymity.

### **EXAMPLE OF FOCUS GROUP.**

#### **CONFIDENTIALITY AGREEMENT**

I \_\_\_\_\_ grant consent that the information I share during the group discussions focus group interviews may be used by the researcher, **Mrs Edith Jere-Bedding**, for research purposes. I am aware that the group discussions will be digitally recorded and grant consent for these recordings, shared in the group discussions to any person outside the group in order to maintain confidentiality.

Participant's Name (Please print):

Participant Signature:

Researcher's Name: (Please print):

Researcher's Signature:

Date:

## **Research Questions**

1. What constitutes the integration of HIV and AIDS Education into teacher education programmes in your college?
2. Tell me what topics in HIV and AIDS education do you find difficult to learn?
3. Are there any topics that you feel should be included in your subject area pertaining to HIV and AIDS Education?
4. Tell me what you understand by the integration of HIV and AIDS Education in teacher education programmes?
5. Do you have some suggestions on how the integration can be improved upon?
6. Is the integration of HIV and AIDS in teacher education programmes ideal in terms of content and context coverage?
7. Do your lecturers come with appropriate support materials and have adequate time slots in which to deliver this curriculum?
8. Tell me some of the Zambian cultural beliefs and inclinations that play a big influence on how HIV and AIDS education can be delivered?
9. Briefly comment on the integration of HIV and AIDS education on teacher education programmes.
10. What do you think of the integration of HIV and AIDS education in teacher education programmes?

## APPENDIX 7: ADVISORY UNIT COLLEGES OF EDUCATION QUESTIONNAIRE:

### SECTION A

#### Demographic Data

##### Instructions:

Complete the questionnaire by ticking [V] the appropriate response or where necessary writing the response on the dotted line in the space provided.

#### Characteristics

1. Gender: ----- Phone Number: -----  
Male [ ] Female [ ]
2. Age at last birthday: [ ]  
..... Years old
3. Marital status:  
Single [ ]  
Married [ ]  
Separated [ ]  
Divorced [ ]  
Widowed [ ]
4. Provincial/district:  
Name of province: .....  
Name of district: .....
5. Place of employment:  
Special Education College [ ]  
Maths and Science College [ ]  
Mixed Groups College [ ]  
T.V.T.C (technical college) [ ]  
Christian College [ ]  
University of Zambia [ ]  
TESS [ ]

6. Would you agree that content, methods of teaching and learner assessment as elements that support the integration HIV and AIDS Education are appropriate in teacher education programs?

Strongly agree [   ]

Agree [   ]

Strongly disagree [   ]

Disagree [   ]

Undecided [   ]

Give reasons for your answer.

---

---

---

---

---

7. Would you agree that lecturers who teach HIV and AIDS education have enough knowledge in this area?

Strongly agree [   ]

Agree [   ]

Strongly disagree [   ]

Disagree [   ]

No response [   ]

Give reasons for your answer.

---

---

---

---

---

---

8. What challenges do lecturers experience in lecturing on HIV and AIDS content in teacher education programs? Explain your answer.

---

---

---

9. What methods do lecturers use in lecturing about HIV and AIDS?

---

---

---

---

10. How would you define the Zambian Government's response to the delivery of the Integration of HIV and AIDS education in teacher education programs?

Very effective [   ]

Effective [   ]

Not effective [   ]

Not sure [   ]

No response [   ]

Give reasons for your answer.

---

---

---

---

---

11. Would you say that lecturers are comfortable delivering HIV and AIDS content knowledge in their lectures?

---

---

---

---

12. How do you view HIV and AIDS prevention education being conducted in Colleges of Education?

Successful [   ]

Partially successful [   ]

Not successful [   ]

No response [   ]

Give reasons for your answer.

---

---

---

---

---

13. What has been the response of student teachers to the integration of HIV and AIDS education?

Positive [   ]

Negative [   ]

No response [   ]

14. Are there any cultural factors that you think may make some lecturers to feel uncomfortable as they teach on HIV and AIDS content?

Not there at all [ ☐ ]

Partially there [ ☐ ]

They are there [ ☐ ]

Not sure [ ☐ ]

No response [ ☐ ]

15. Some people believe that HIV and AIDS is a medical issue and so should be handled by medical personnel. Do you think that the teaching of HIV and AIDS topics is appropriate for lecturers to teach?

Strongly agree [ ☐ ]

Agree [ ☐ ]

Strongly disagree [ ☐ ]

Disagree [ ☐ ]

No response [ ☐ ]

16. From your position as experts in teacher education, would you say that lecturers are well informed on HIV and AIDS education to comfortably teach on these topics?

Yes [ ☐ ]

No [ ☐ ]

Give reasons-----

17. What improvement has the integration of HIV and AIDS Education brought in Colleges of education?

---

---

---

---

18. Is the content in the integration of HIV and AIDS education adequately packaged to prepare student teachers to teach on HIV and AIDS effectively in primary and secondary schools?

Definitely [ ☐ ]

Definitely not [ ☐ ]

Not sure. [ ☐ ]

No response [ ☐ ]

19. Do you think as AUCE lecturers could have done more than what you have already done in terms of packaging the course content of teacher education with HIV and AIDS components?

Definitely not [ ☐ ]

Definitely [ ☐ ]

Not sure. [ ☐ ]

No response [ ☐ ]

20. How would you rate the current impact on the integrated HIV and AIDS Education into the teacher education programs?

Little or no impact      moderate impact      severe impact      do not know

--	--	--	--

21. How many times do lecturers assess HIV and AIDS related topics to student teachers in a term?

Very often      rarely      Not at all      do not know

--	--	--	--

22. What has been the response of student teachers to the integration of HIV and AIDS education? Explain the level of satisfaction.

Very satisfactory [    ] satisfactory [    ] Not satisfactory [    ] No response [    ]

## **APPENDIX 8: INTERVIEW GUIDE FOR MINISTRY SENIOR OFFICIALS:**

### **UNIVERSITY OF ZAMBIA SCHOOL OF EDUCATION DEPARTMENT OF EDUCATION, PSYCHOLOGY, SOCIOLOGY AND SPECIAL EDUCATION**

Name of Ministry: -----

Name of Department: -----Date

of interview: -----

Position of person interviewed in the department: -----

Section of department in which interviewed person works: -----

Responsibilities of person interviewed: -----

1. Are you aware of the integration of HIV and AIDS education in teacher education programs?
2. What is the vision and mission of the Ministry regarding the integration of HIV and AIDS education in teacher education programmes?
3. When was HIV and AIDS education first integrated in the teacher education programs? Explain.
4. What policies, programs or strategies does the Ministry have to support the integration of HIV and AIDS education?
5. Are there any barriers to the implementation of this integration?
6. If there are barriers, what strategies has government put in place to address this?
7. Do you think that this integration has brought any new innovations in the education of teachers?

8. Is the integration of HIV and AIDS education in teacher training programs the only way of delivering HIV and AIDS information to student teachers? Kindly explain your answer.
9. Is the content, methods of teaching and learner assessments as elements of this curriculum adequate to prepare student teachers to go and teach on HIV and AIDS in primary or secondary schools?
10. From the way HIV and AIDS has been integrated in the curriculum, would you say that the HIV and AIDS education is adequate, and that the lecturers actually teach all the content? Explain.
11. Do you as Ministry of Education follow up colleges of teacher education to check on whether colleges actually implement the integration of HIV and AIDS Education in teacher education programs?
12. Since the Ministry of Education is the employing agency, Does the Ministry Inspect the lecturers/teachers as they teach using the content that has HIV and AIDS education integrated within it.
- 13.** Has the Ministry received any compliments/comments on the implementation of the integration?

## **APPENDIX 9: INTERVIEW GUIDE FOR PRINCIPALS OF COLLEGES AND LECTURERS**

**UNIVERSITY OF ZAMBIA  
SCHOOL OF EDUCATION  
DEPARTMENT OF EDUCATION, PSYCHOLOGY, SOCIOLOGY AND SPECIAL  
EDUCATION**

Name of Institution -----

Name of Department: -----Date  
of interview: -----

Position of person interviewed in the department: -----

Section of department in which interviewed person works: -----

Responsibilities of person interviewed: -----

### **Questions:**

1. Are you aware of the integration of HIV and AIDS Education in teacher education programs?
2. Do you agree that the status of lecturers affect the way they talk about HIV and AIDS Education? Explain your answer.
3. Do you also think that the marital status of someone influences the way they deliver HIV and AIDS information to student teachers? Explain
4. Has the teaching of HIV and AIDS education brought any behavioural change among lecturers? Explain your answer
5. What improvements can you say has been brought about by the integration of HIV and AIDS education in teacher education programs?
6. Is the content, methods of teaching and learner assessments as elements of the Integration of HIV and AIDS Education in teacher education programs adequately prepare student teachers to go and effectively teach on issues of HIV and AIDS?
7. Do you consider the integration to be the best way of delivering HIV and AIDS education to student teachers?
8. Do you face any administrative challenges in teaching this content?
9. Are Lecturers consulted in the curriculum innovation process? Explain your answer.
10. If you were given an opportunity to choose how HIV and AIDS Education should be taught in Teacher Education Programs, which approach of integration would you choose:
  - a) Standalone subject. [    ]

- b) Integrated in one main carrier subject [   ]
- c) Cross-curricular subject [   ]
- d) Infused through the curriculum [   ]
- e) An extra-curricular topic [   ] (IBE – UNESCO, 2006)

Give reasons for your answer

---

---

---

---

---

## **APPENDIX 10: INTERVIEW GUIDE FOR GRADUATES:**

**UNIVERSITY OF ZAMBIA  
SCHOOL OF EDUCATION  
DEPARTMENT OF EDUCATION, PSYCHOLOGY, SOCIOLOGY AND SPECIAL  
EDUCATION**

Name of Institution -----

Name of Department: -----Date

of interview: -----

Position of person interviewed in the department: -----

Section of department in which interviewed person works: -----

Responsibilities of person interviewed: -----

### **Questions:**

1. How are you using the curriculum that has the integration of HIV and AIDS education within it in your school?
2. What elements of the integration of HIV and AIDS Education do you cover in training teachers?
3. How comfortable are you in using the HIV and AIDS content, methods of teaching and learner assessments as elements in your school? Please explain your answer.
4. How substantial is the integration of HIV and AIDS education, in meeting the needs of the pupils that you teach? Explain your answer.
5. Is the integration of HIV and AIDS education adequate to improve delivery of HIV and AIDS information to learners and educators?

6. How has the training you got from Teacher Training College imparted on the way you deliver HIV and AIDS education to your learners?
7. Have you had any other training on HIV and AIDS Education other than the
8. Training you received from your teacher training college? Give reasons.
9. Answer the following question by ranking the different options on the Likert scale of 1-5. For this Likert scale statements indicate your answers with an (X) in the appropriate block.
  1. Most important
  2. Important
  3. Neutral
  4. Less important
  5. Least important

Which of the following factors have had a direct influence on your classroom delivery of the HIV and AIDS Education.	1	2	3	4	5
1. Curriculum structure					
2. Marital status					
3. Expertise					
4. Cultural influence					
5. Lack of teaching materials					
6. Administrative influence					
7. Gender					
8. Age					
9. Non exposure to the latest information on HIV and AIDS.					
10. Lack of interest					
11. Pressure from other teachers regarding the importance of HIV and AIDS education					
12. Economic change					

## APPENDIX 11: EXEMPTION ETHICS LETTER



# THE UNIVERSITY OF ZAMBIA

## DIRECTORATE OF RESEARCH AND GRADUATE STUDIES

Telephone: +260-1-290258/2917777 Ext.2208  
Fax +260-1-290258/253952  
E-mail [drgs@unza.zm](mailto:drgs@unza.zm)

P.O. Box 32379  
Lusaka. Zambia

15<sup>TH</sup> April, 2015

Mrs Edith Jere-Bedding,  
C/O Department of Educational Psychology,  
Sociology and Special Education,  
University of Zambia,  
P.O. Box 32379,  
Lusaka.  
ZAMBIA.

Dear Mrs Jere-Bedding,

RE: EXEMPTION FROM FULL ETHICAL CLEARANCE

With reference to your research proposal entitled:

**“An Analysis of the Integration of HIV and AIDS Education in Teacher Education Programmes: A Case of Four Selected Colleges of Education in Lusaka. Lusaka, Central and Southern Provinces of Zambia.”**

As your research project does not contain any ethical concerns, you are hereby given an exemption from full clearance to proceed with your research.

ACTION: APPROVED  
DECISION: 15<sup>TH</sup> April, 2015  
EXPIRATION DATE: 14<sup>TH</sup> April, 2016

Please note that you are expected to submit to the Secretariat a Progress Report and a copy of the full report on completion of the project.

Finally and more importantly take note that notwithstanding ethical clearance given by the HSSREC, you must also obtain authority from the Permanent Secretary, Ministry of Education, before conducting your research. The address is Permanent Secretary, Ministry of Education, Science Vocational Training and Early Education, P.O. Box 50095, Lusaka. Tel +260-211-253594.

Yours sincerely,

Dr Mildred Nkolola-Wakumelo,  
CHAIRPERSON, HUMANITIES AND SOCIAL SCIENCES RESEARCH ETHICS  
COMMITTEE

c.c.: Director, Directorate of Research and Graduate Studies  
Assistant Director, Directorate of Research and Graduate Studies  
Assistant Registrar (Research) Directorate of Research and Graduate Studies

## APPENDIX 12: OBSERVATIONAL CHECK LIST

## Lecture Observational Check List

Name of Lecturer: Observation No: .....

Name of Subject: ..... Date: .....

1= Not observed                      2= Integration of HIV and AIDS                      3= Integration visible  
Needs to be emphasised.                      And accomplished.

## Content knowledge

- |  |   |   |   |
|--|---|---|---|
| 1. Was the HIV and AIDS education integrated | 1 | 2 | 3 |
| 2. Was content difficult or complex          | 1 | 2 | 3 |
| 3. Topics were presented in sequence         | 1 | 2 | 3 |
| 4. Paced content appropriate                 | 1 | 2 | 3 |
| 5. Emphasized important points               | 1 | 2 | 3 |

## Methodology

- |  |   |   |   |
|--|---|---|---|
| 6. Used interactive methodologies        | 1 | 2 | 3 |
| 7. Used songs and dances                 | 1 | 2 | 3 |
| 8. Used Role play                        | 1 | 2 | 3 |
| 9. Emphasized varied methods of teaching | 1 | 2 | 3 |
| 10. Integrated HIV and AIDS education    | 1 | 2 | 3 |

## Assessment

- |  |   |   |   |
|--|---|---|---|
| 11. Presented materials appropriate to the subject | 1 | 2 | 3 |
| 12. Evaluated the subject                          | 1 | 2 | 3 |
| 13. Lecturer demonstrated command of subject       | 1 | 2 | 3 |
| 14. Students responded appropriately to questions  | 1 | 2 | 3 |

### Summary comments:

1. What were the weaknesses in the presentation of the lesson with the integration of HIV and AIDS Education?
2. What suggestions do you think should be included to improve lesson Presentation.
3. How can you rate the lesson, very good, good, fair or poor in terms of integrating it with HIV and AIDS?

**APPENDIX 13: Figure 8: Game of *Agode*, *Agode*: Being played by student teachers from College ‘B’ during lectures (observed lesson).**



*Picture taken with the permission of the college*

**APPENDIX 14: Figure 9: Game of *Shomba*: Being played by student teachers from College 'B' during lectures (Observed lesson).**



*Picture taken with the permission of the college*

## APPENDIX 15: Administrative Block



*Picture of a College of Education in Zambia – Central Province (2015)*

**APPENDIX 16: TABLE 5-1 KEY FEATURES, MAIN ADVANTAGES AND CHALLENGES OF MAIN CURRICULAR APPROACHES TO INTEGRATING HIV & AIDS EDUCATION INTO THE CURRICULUM**

<b>SRH,HIV AND AIDS taught</b>	<b>As a Stand-Alone subject</b>	<b>In a Main Carrier subject</b>	<b>As a Cross –curricular subject</b>
<b>1. Key features of the curricular approaches.</b>	<ul style="list-style-type: none"> <li>The topic is clearly labelled and is earmarked in the school timetable. It addresses all relevant issues relating to SRH, HIV and AIDS education</li> </ul>	<ul style="list-style-type: none"> <li>Teaching and learning of most of the relevant material is addressed within the framework of one main carrier subject.</li> </ul>	<ul style="list-style-type: none"> <li>SRH, HIV and AIDS education is integrated in a limited number of subjects which bear a close affinity with the topic(in no more than 1/3 of the total number of subjects in the curriculum)</li> </ul>
<b>2. Main advantages of the curricular approaches</b>	<ul style="list-style-type: none"> <li>The topic becomes more visible and as such can gain more prominence.</li> <li>It becomes possible to recruit and train suitable teachers.</li> <li>Can be cost-effective as there is a limited number of teachers to train and support.</li> <li>Specific timetabling of the subject does not in itself guarantee quality of teaching-learning on the subject, but it does make it possible to cover important issues which would not naturally arise in other subjects.</li> <li>Monitoring of the quality of education is simplified</li> </ul>	<ul style="list-style-type: none"> <li>It is relatively straightforward where and when to include the topic in the curriculum and subsequently, which teacher will primarily be responsible for supporting this kind of learning.</li> <li>Fewer teachers need to be trained than when using the cross-curricular approach.</li> </ul>	<ul style="list-style-type: none"> <li>By integrating SRH, HIV and AIDS education in a number of subject, it is possible to achieve a comprehensive coverage of the topic, providing this is done in a coordinated manner.</li> <li>In principle this allows for a sharing of responsibility for delivering the various aspects relating to the topic.</li> <li>It enables learners to see the significance of SRH, HIV and AIDS for different parts of life and can make the subject more a responsibility for the whole school.</li> </ul>
<b>3. Main challenges of the curricular approaches</b>	<ul style="list-style-type: none"> <li>It is critical the subject is made mandatory otherwise there may be the risk that teachers will not take the time to</li> </ul>	<ul style="list-style-type: none"> <li>One needs to take into account that integration is one existing subject brings the risk that education on the topic is not comprehensive, e.g. if integrated within</li> </ul>	<ul style="list-style-type: none"> <li>The cross-curricular approach involves training larger number of teachers.</li> <li>What can be interpreted as an advantage, i.e. the sharing of responsibility</li> </ul>

	<p>teach it.</p> <ul style="list-style-type: none"> <li>• When a subject is taught in this manner, it may become disconnected from every day life and the other subject matters in the school's curriculum. Learners may then have difficulty to integrate the lessons learned into their own life practices and or relating the information to other subjects that they are taught in school.</li> <li>• The start up costs can be quite high due to the need for training of specialized teachers. In the long run however, these training costs are not as high as would be the case in the cross curricular approach.</li> </ul>	<p>science, the focus may be on scientific aspects, neglecting among others, social dimensions and communication skills.</p> <ul style="list-style-type: none"> <li>• Examination pressure may lead to quiet use of the time slot reserved for SRH, HIV and AIDS education for (additional) activities to prepare learners for exams</li> </ul>	<p>of teaching this topic, can also be termed a disadvantage, especially since there are few teachers who are really able to teach effectively on these matters. I.e. teachers cannot be selected for their personal qualities.</p> <ul style="list-style-type: none"> <li>• This approach also requires close and consistent coordination to ensure coherent coverage is achieved across the selected subjects.</li> <li>• Monitoring of quality of education is more complicated.</li> </ul>
--	--	---	--

*HIV & AIDS Curriculum Manual – Tool 5 – Integrating HIV & AIDS*  
*Source: International Bureau of Education – UNESCO – July, 2006*

**APPENDIX 17: TABLE 5-2 KEY IMPLEMENTATION ISSUES OF MAIN CURRICULAR APPROACHES TO INTEGRATING HIV AND AIDS EDUCATION INTO THE CURRICULUM**

	<b>As a Stand-Alone subject</b>	<b>In a Main Carrier subject</b>	<b>As a Cross – curricular subject</b>
<b>A. Teaching and learning on SRH, HIV and AIDS: Where</b>	<p>Possible titles of a stand-alone subject on SRH, HIV and AIDS: ‘Sexual and Reproductive Health’, ‘Family life and health education’, Living in a world with HIV and AIDS”</p> <p>N.B. the label of the subject can be adapted – e.g. to ‘Family Health Education’ The contents should however, remain the same – including all four models defined in tool 4</p>	<p>One will need to study the curriculum to see which subjects bear an affinity to the contents of SRH, HIV and AIDS education.</p> <p>The following subjects are examples of possible relevant subjects that are generally included in the curriculum for the 10-12 age group:</p> <p>Family health/life Health education Social studies Civic education biology</p>	<p>One will need to examine existing learning areas in the curriculum in one’s context and :</p> <ol style="list-style-type: none"> <li>Identify where elements of the various modules are located.</li> <li>Suggest ways in which SRH, HIV and AIDS elements could be reinforced in this learning area.</li> <li>If you cannot identify any SRH, HIV and AIDS related elements in certain relevant learning areas, suggest ways that they could integrated.</li> </ol>
<b>B. Links with overall educational goals</b>	<p>Ensure that clear links are made with the broader educational goals defined in the Curriculum Framework. i.e. how does this subject contribute to the overall educational goals?</p>	<p>Ensure that clear links are made with the broader educational goals defined in the Curriculum Framework. i.e. how does this – revised – subject contribute to the overall educational goals?</p>	<p>Ensure that clear links are made with the broader educational goals defined in the Curriculum Framework.</p>

<p><b>c. Time allocated and creating space for new contents in existing curriculum</b></p>	<p>It is critical that ‘dedicated and scheduled time’ is allocated within the main carrier subject and subsequently, the school timetable.</p> <p>It will be necessary to revise the overall curriculum in order to make space and time for the new subject. It is possible this will require revising existing subjects and defining what is absolutely essential for young people to learn and what may be less relevant (relative to education on SRH, HIV and AIDS).</p>	<p>It is critical that ‘dedicated and scheduled time’ is allocated within the main carrier subject and subsequently, the school table.</p> <p>It will be necessary to revise the main carrier subject in order to make space and time for these (new) contents.</p> <p>If no additional time is scheduled for this main carrier subject, it will be necessary to revise the carrier subject, keeping only what is essential for young People to learn on that matter.</p>	<p>It is critical that ‘dedicated and scheduled time’ is allocated within the various carrier subjects and the school timetable.</p> <p>It will be necessary to revise the overall curriculum in order to make space and time for the modules within the various subjects. It is possible this will require revising existing subjects and defining what is absolutely essential for young people to learn and what may be less relevant (relative to education on SRH, HIV and AIDS)</p>
<p><b>d. Specifying teaching-learning goals to existing system</b></p>	<p>The goals are currently defined per 2 4 year period, this will need to be adapted to the current system used in your context, i.e. is teaching-learning organized per year, cycle, other?</p>		
<p><b>e. Anticipating and resolving possible challenges.</b></p>	<p>It will be important to explore the possible challenges of applying this curricular approach in your context, such as those described above and how one can overcome and or resolve these.</p> <p>One of the critical issues of this approach is that one needs to</p>	<p>It will be important to explore the possible challenges of applying this curricular approach in your context, such as those described above and how one can overcome and/or resolve these.</p> <p>One of the critical issues of this approach is ensuring the time that is meant to be dedicated to these</p>	<p>It will be important to explore the possible challenges of applying this curricular approach in your context such as those described above and how one can overcome and/or resolve these.</p> <p>One of the critical issues of this approach is one needs to make sure that teaching – learning on this subject is closely coordinated to ensure coherent coverage across the selected carrier subjects.</p>

	make sure learners understand the linkages between this stand-alone topic and other relevant subjects in the curriculum. E.g. linkages between the module on basic knowledge and natural sciences and /or biology	contents is not used for teaching on issues.	
<b>f. Implications for teacher gaining and support.</b>	<p>Suitable teachers need to be selected, trained and supported.</p> <p>N.B. They will need to clarify to learners what the linkages are between the 4 thematic modules and other subjects.</p>	<p>Teachers will need to be trained and supported to teach on SRH, HIV and AIDS.</p> <p>N.B. They will need to clarify to learners what the linkages are between the 4 thematic modules, the main carrier subject and other subjects.</p>	<p>All Teachers teaching the selected carrier subject will need to be trained and supported to teach on SRH, HIV and AIDS and specifically on the contents that will be integrated in their subjects (i.e. social science teacher trained especially on Human Rights, HIV and AIDS).</p> <p>N.B. They will all need to be able to clarify to learners what the linkages are between the modules and other (carrier) subjects.</p>
<b>g. Implications for material development</b>	<p>New materials may need to be developed (n.b. can be based on (compilations of existing materials, such as those listed in sheet.)</p> <p>In the development of new materials it is important to include references to other relevant subjects in the curriculum to support learners</p>	<p>New materials may need to be developed for the lessons on SRH.HIV and AIDS (n.b. these can be based on (compilations of) existing materials, such and those listed in sheet.)</p> <p>In developing of new materials, it is important to include references to the issues addressed in the</p>	<p>New materials may need to be developed (n.b. can be based on (compilations of) existing materials such as those listed in sheet...) In development of new materials it is important to include references to the other carrier subjects in the curriculum to support learners to make linkage between topics.</p>

	to make linkages with these other topics (e.g. lessons on human rights in social studies, communication skills practiced during language lessons etc.)	main carrier subject as well as in other relevant subjects in the curriculum to support learners to make linkages with these other topics.	
<b>h. Implication for assessment</b>	One will need to determine how assessment of the quality of teaching-learning will take place (also see sheet....)	One will need to determine how assessment of the quality of teaching-learning will take place within the context of the main carrier subject (also see sheet....)	One will need to determine how assessment of the quality of teaching-learning will take place) also see sheet...)

*HIV and AIDS Curriculum Manual – Tool 5 – Integrating HIV and AIDS*

*Source: International Bureau of Education – UNESCO – July, 2006*

**APPENDIX 18: TIMELINE OF THE INTEGRATION OF HIV AND AIDS  
EDUCATION IN TEACHER EDUCATION PROGRAMMES OF ZAMBIA**

Year	Activity	Rationale
<b>2001 – 2006</b>	Logical framework activity 2.7 – Ministry of Education included the integration of HIV and AIDS into the ZATEC curriculum.	Part of its activities for Basic Education Sub-Sector Programme (BESSIP)
<b>2005</b>	Changes Programme-2- collaboration between USAD, Ministry of Education in Zambia and Teacher Education Specialised Service (TESS) developed, piloted and institutionalised HIV and AIDS Pre-service course – Teaching in the Window of Hope (TWH)	<ul style="list-style-type: none"> <li>➤ Provide support to basic community schools, High schools and Colleges of Education.</li> <li>➤ Develop teachers’ skills on how to teach HIV and AIDS Education.</li> </ul>
<b>2008</b>	The integration of HIV and AIDS now included counselling and care.	To teach on ways of counselling and care for the infected and affected in society.
<b>2013</b>	ZATEC and University of Zambia degree programme integrated HIV and AIDS Education in the Education Programmes.	In its quest to train teachers in both theory and practice.
<b>2013</b>	Zambia developed the Zambia Education Curriculum Framework	Targeting the already infected members in the ministry of Education and other sections of society.
<b>2013</b>	Ministry of Education developed HIV and AIDS Policy.	Emphasized on the integration of HIV and AIDS as cross cutting issues.