Biennale on Education in Africa
(Maputo, Mozambique, May, 5-9 2008)

Beyond Primary Education:
Challenges and Approaches to Expanding Learning Opportunities in Africa

Keynote Speeches

HIV and AIDS in Formal and Non-Formal Post-Primary Education and Training in Africa
A Review of Selected Initiatives and Interventions

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Working Document
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• Original Version in English •

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Contents

ABSTRACT **4**

1. BACKGROUND ....ERROR! BOOKMARK NOT DEFINED.

1.1. INTRODUCTION 5
1.2. THE SCOPE OF POST-PRIMARY EDUCATION AND TRAINING 7
1.3. OBJECTIVES OF THE STUDY 8
1.4. THE CHALLENGE OF HIV AND AIDS TO PPET 8
1.4.1. A vulnerable age group *8*
1.4.2. The need for expanded non-formal PPET *9*
1.5. RESPONDING TO THE HIV AND AIDS EPIDEMIC IN THE EDUCATION SECTOR 10
1.5.1. Responses focused on students and learners *10*
1.5.2. Mitigation issues *10*
1.6. LIMITATIONS TO THE STUDY 11
1.7. SUMMARY OF PART 1 12

2. DISCUSSION OF FINDINGS **14**

2.1. THE SCOPE OF PPET STUDIED 14
2.2. HIV AND AIDS IN FORMAL EDUCATION AND WORK PLACE PROGRAMS 22
2.2.1. General secondary education: Student Partnership Worldwide (SPW) *22*
2.2.2. Developing an HIV and AIDS workplace policy for the education sector in South Africa and Kenya *26*
2.3. RESPONSES TO HIV AND AIDS IN OTHER TYPES OF FORMAL AND NON-FORMAL EDUCATION 28
2.3.1. HIV and AIDS in TVET: The Botswana Training Authority (formal TVET). *29*
2.3.2. Orphans and Vulnerable Children (OVCs) in non-formal PPET *30*
2.3.3. Responses to HIV and AIDS in tertiary and higher education: "I Choose Life – Kenya" *33*
2.4. ANALYSIS AND INTERPRETATION OF FINDINGS 40
2.4.1. Identification of the responses of PPET to HIV and AIDS *40*
2.4.2. The effectiveness of the identified responses in protecting not only the learners and instructors but also the teaching-learning- process *41*
2.4.3. What are the policy implications for such responses in relation to the current drive to expand PPET systems in Sub-Saharan Africa? *41*
2.5. SUMMARY OF PART 2 42
2.5.1. Achievements in formal education and training *43*
2.5.2. Achievements in non-formal education and programs *43*

3. POLICY IMPLICATIONS AND RECOMMENDATIONS **45**

3.1. AFFIRMING THE IMPORTANCE OF HIV AND AIDS IN THE DEVELOPMENT OF PPET IN AFRICA 45
3.1.1. The need to introduce and reinforce HIV and AIDS issues in TVET and tertiary education *45*
3.1.2. The need for an expanded approach to HIV and AIDS-related learning in secondary education *45*
3.1.3. The need to include HIV and AIDS considerations in low-prevalence countries 45
3.1.4. The need to adapt and open TVET programs to adolescent girls *46*
3.1.5. The need to provide flexible alternative forms of education and training for OVCs 46
3.1.6. The need to have a significant and expanded source of funding for HIV and AIDS activities in PPET *46*
3.2. STEPS IN DEVELOPING PPET HIV AND AIDS-SENSITIVE POLICIES AND ACTION PLANS47
3.2.1. Build on exiting policy frameworks *47*
3.2.2. Take innovative programs to scale *47*
3.2.3. Mobilize advocacy *48*
3.3. DEVELOPING MONITORING AND EVALUATION TOOLS FOR PPET 49
3.4. FUNDING OPTIONS FOR RESPONSES TO HIV AND AIDS IN PPET 49
3.5. SUMMARY OF PART 3 50

3.6. CONCLUSIONS 51

4. APPENDICES 52

APPENDIX 1: DATA ON POST-PRIMARY EDUCATION AND TRAINING IN SUB-SAHARAN AFRICA 53

APPENDIX 2: HIV AND AIDS AS AN EDUCATIONAL ISSUE 54

APPENDIX 3: OVERVIEW OF THE IMPACT OF THE HIV AND AIDS EPIDEMIC IN AFRICA 56

APPENDIX 4: SUMMARY OF FINDINGS 59

APPENDIX 5: ADDITIONAL EXAMPLES OF RESPONSES TO HIV AND AIDS IN PPET63

5. REFERENCES 68

List of Tables

Table 1: Estimates of HIV infection Rates among 15 – 24 Year Olds in Selected African Countries 9
Table 2: Breakdown of the programs reviewed........ 20

List of Graphs

Figure 1: Transition rate from primary to secondary education, 2002 – 2003........ 20
Figure 2: Breakdown of GFATM Funding by Type of Recipient........ 54

LIST OF ACRONYMS AND ABBREVIATIONS

ACU	AIDS Control Unit
ACBF	African Capacity Building Foundation
ADEA	Association for the Development of Education in Africa
AIDS	Acquired Immuno-deficiency Syndrome
AfDB	African Development Bank
AFT	American Federation of Teachers
ART	Anti-Retroviral Therapy
ARV	Anti-Retroviral
ASRH	Adolescent Sexual and Reproductive Health
BOTA	Botswana Training Authority
CBO	Community-Based Organization
CCM	Country Coordinating Mechanism
COMSEC	Commonwealth Secretariat
DED	*Deutcher Entwicklungsdienst* (German Development Service)
ECOWAS	Economic Community of West African States
EDC	Education Development Center
ELRC	Education Labor Relations Council
EMIS	Educational Management Information Systems
ERNWACA	Educational Research Network of West and Central Africa
FAO	Food and Agriculture Organization
FBO	Faith Based Organizations
FHI	Family Health International
GCE	Global Campaign for Education
GFATM	Global Fund against AIDS Tuberculosis and Malaria
GTZ	*Deutsche Gesellschaft für Technische Zusammenarbeit*
HAMU	HIV/AIDS Management Unit
HEARD	Health , Economics, AIDS and Research Department
HIV	Human Immuno-Deficiency Virus
IATT	Inter-Agency AIDS Task Team
ICL	I Choose Life
IEC	Information, Education and Communication
IIEP	International Institute of Educatonal Planning
ILO	International Labour Organization
IRI	Interactive Radio Instruction
JASA	Junior Achievement South Africa
JFFLS	Junior Farmer Filed Life Schools
JSE	Junior Secondary Education
KENEPOTE	Kenya Network of Positive Teachers
KNUT	Kenya National Union of Teachers
K-VOWRC	Kenya Voluntary Women's Rehabilitation Centre
LCN	Lesotho Council of Non-Governmental Organizations
LUCS	*Ligue Universitaire Contre le Sida*
MDG	Millennium Development Goal
MTT	Mobile Task Team
NEPAD	New Partnership for Africa's Development
NFE	Non-Formal Education
NGO	Non-Governmental Organization
NYC	National Youth Corps
OVC	Orphaned and Vulnerable Children
PIASCY	Presidential Initiative on AIDS for Communication to Youth
PLWA	Person Living with AIDS

PPET	Post-Primary Education and Training
PTA	Parents Teachers Association
SADC	Southern Africa Development Community
SADTU	South African Democratic Teachers' Union
SHEP	School Health Education Programme
SPW	Student Partnership World-wide
STI	Sexually-Transmitted Illness
TVET	Technical and Vocational Education and Training
UNAIDS	Joint United Nations AIDS Program
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
VCT	Voluntary Testing and Counseling
VT	Vocational Training
WFP	World Food Program
YDN	Youth Development Network

ABSTRACT

The study is an exploratory effort to identify issues and entry points for the consideration of HIV and AIDS in post-primary education and training (PPET) in Africa. The areas of education covered are general secondary and tertiary education as well as various types of non-formal education and training focused on preparing youth for employment. The study documents the importance of the HIV and AIDS issue by showing that the clients of PPET (particularly aged 12 to 18) are highly vulnerable to HIV infection because the are, in most cases, unmarried adolescents; young men and women preparing to enter their most productive years. Adolescent girls and young women are particularly vulnerable to HIV because of gender roles and physiological factors. It is therefore important that PPET play a more prominent role in protecting African youth from HIV infection in low-prevalence as well as in high-prevalence countries.

The study notes that the response to HIV and AIDS in the education sector is mostly located in general secondary education. However, the curricula used are generally outside of the official syllabi and teachers are often inadequately trained to teach about HIV and AIDS or life skills. Despite these findings, research indicates that higher levels of education are associated with lower rates of risk behavior among youth, and particularly girls, emphasizing the importance of expanding enrolments in PPET to reduce the dangers of HIV infection among youth.

Fourteen examples of PPET are highlighted in order to illustrate how very diverse programs ranging from general secondary and tertiary education to non-formal agricultural training are addressing HIV and AIDS issues for youth or teachers. While generally promising in nature, the lack of evaluation data on the programs makes it difficult to recommend them as solutions to the needs of African youth and teachers. It was found that most of the programs are less than five years old, indicating that responses to HIV and AIDS in PPET are generally too recent to show concrete results.

Formal secondary education
In the context of formal education, the analysis includes two tools to study the impact of the epidemic and to develop responses to support teachers and pupils. The first tool is a qualitative study of the impact of the epidemic on formal education in Burkina Faso. While the study includes both primary and secondary education, its methodology is a flexible and productive approach to understanding important HIV and AIDS issues in education. The second tool is an extensive quantitative study of HIV prevalence among South African teachers and educational administrators. This approach is recommended as a way of providing essential data for developing programs to mitigate the impact of the epidemic on education sector staff.

Higher education
The study features an institutional response to HIV and AIDS in Rwanda in which a university has organized a variety of AIDS services for its students and staff using its own budget to leverage additional international funding support. A related institutional response is an AIDS curriculum on CDs developed by a South African university. The study also covers several student-led initiatives that concentrate on prevention in Kenya, Mozambique and Nigeria.

Formal technical and vocational education
The Botswana Training Authority (BOTA) is cited as a good example of a program that has integrated HIV and AIDS prevention in its work. It shows how a donor-led initiative can become part of a national institution with national funding.

Non-formal education

Non-formal education is an important area for developing programs that include HIV and AIDS considerations. Such programs can provide literacy and vocational skills for youth who have little or no formal education. Non-formal education also offers flexible learning options to orphans and vulnerable children who have difficulty studying in formal education. Innovative practices cited include interactive radio instruction in Zambia and agricultural training for rural orphan adolescents in several East and southern African countries.

Conclusions and recommendations

The need for a coordinated effort by all actors in the education sector – national and international – is required in order to create a "platform" for funding and managing the diverse field of PPET programs. The variety of partners who sponsor different branches of PPET (ranging from ministries of education to ministries of labor, NGOs, international agencies and faith-based organizations) poses a problem for policy development and coordinated action. The recommendations of the study (such as those cited below) require significant policy changes, sustained advocacy and committed leadership.

Responses to HIV and AIDS must meet the needs of instructors as well as learners
Effective responses to HIV and AIDS in PPET must address not only the needs of pupils or trainees but also instructors and administrators. For those reasons, HIV and AIDS work place policies are of vital importance to PPET at all levels.

More opportunities for girls are needed in technical and vocational education
It is important that youth have a choice among diverse programs that suit their needs, allowing for movement between different programs at different times in their educational career. In order to do so, several measures apply. Many forms of technical and vocational education and training cater to boys, reflecting gender roles that assign many trades to men. Expanded training and employment opportunities are needed for young women.

Alternative forms of education and training are needed
Hard-to-reach youth in locations such as rural areas or urban slums need flexible and modular forms of education and training. Distance learning via interactive radio is one of the forms of educational delivery to be considered, particularly for orphans and vulnerable children/youth.

Coordination between formal and non-formal education
PPET will be strengthened if there are organized means of moving from formal to non-formal education or training programs and vice-versa. The study cites one such example in Tanzania that merits further study and expansion.

Monitoring and evaluation tools
AIDS-sensitive EMIS and impact studies are valuable tools for planning and monitoring PPET programs that address HIV and AIDS issues.

Expanded funding for PPET
The study notes the need for considerable financial efforts and cites several potential sources of funding for responses to HIV and AIDS in PPET, including grants from the Global Fund against AIDS, Tuberculosis and Malaria. Public-private partnerships to support HIV and AIDS-sensitive PPET are also possible. Similarly, coordination among partners including the World Bank, the African Development Bank and sub-regional cooperation organizations like ECOWAS are needed to bring more resources to PPET.

1.1. Introduction

This study was prepared to provide policy guidance on issues of HIV and AIDS in post-primary education and training to several audiences. These are, on the one hand, African ministries of education, particularly the ministers and their technical advisers and planners. On the other hand, the study addresses a variety of national and international partners of the education sector. Such partners include national organizations such as teachers unions, NGOs and other bodies concerned with education and HIV and AIDS. The international NGOs, multilateral and bilateral donors are also part of the audience of the study, as their funding and technical support is vital to the education sector.

The study has outlined major concepts and issues and reviews how responses to the epidemic in the education sector have been developed in the areas of policy and strategy, curriculum; the needs of infected and affected learners and staff. The study also outlines options for developing partnerships to provide leadership, advocacy and funding to strengthen post-primary education and training in an AIDS environment.

The study is divided into three main parts plus appendices and list of references. Part I, the introductory section, reviews the concept of post-primary education and training (PPET) and identifies its target age group in relation to the theme of the 2008 ADEA biennale. The introduction also highlights the challenges of HIV and AIDS[1] as a threat to the development of PPET and provides an overview of responses to the epidemic in the education sector as a whole. Finally, Part I describes how data were collected for the study.

Part II presents the findings of the study in the form of vignettes or brief case studies derived from the literature on nine promising examples of PPET initiatives that also respond to the challenges of HIV and AIDS. The case studies reflect the following categories of PPET:

- General secondary education;
- Other types of formal and non-formal post-primary education and training. These urban or rural programs include technical and vocational training for youth in general or programs for youth with special needs, such as orphans and vulnerable children (OVCs);
- Tertiary and higher education.

The examples of PPET chosen for this study have succeeded in addressing HIV and AIDS considerations in ways that are appropriate to the needs of learners. To the degree possible, the case studies identify the assumptions and goals of each program as well as lessons learned and concerns related to their sustainability. The examples are also chosen because they illustrate individually and collectively how the teaching and learning process can be protected and strengthened in different institutional settings in an overall AIDS context. For that reason, HIV and AIDS work place programs are discussed, as they are essential to protecting not only teachers but also students.

The examples chosen are all from countries with relatively high HIV prevalence. However, because of their implications for overall educational quality and adolescent reproductive health, they are adaptable to low-prevalence countries, which need to take preventive measures to avoid further spread of HIV[2].

The third part of the study is devoted to policy implications and seeks to provide guidance for ministries, NGOs, donor agencies and other partners involved in supporting PPET in an AIDS environment. Both high- and low prevalence countries will benefit from recommendations such as strengthening EMIS and establishing HIV and AIDS work place policies. The latter address basic rights and provide protection against sexual harassment, not only of teachers but of students as well. Finally, the recommendations for new

[1] HIV *and* AIDS is used in this document as opposed to the more common term, "HIV/AIDS". The purpose of this choice is to distinguish clearly between infection by the human immuno-deficiency virus (HIV), which does not produce visible symptoms for several years, and the Acquired Immuno-deficiency Syndrome (AIDS), a condition in which the body's immune system is suppressed to the point at which it can no longer fight off "opportunistic infections", such as tuberculosis. Persons living with AIDS inevitably die unless given anti-retroviral therapy (ART).

[2] The "low- HI- prevalence" countries in Africa are those with less than 3% of the adult population infected with HIV. They are Benin, Burkina Faso, the Comoros, Eritrea, the Gambia, Ghana, Guinea, Madagascar, Mali, Mauritania, Mauritius, Niger and Senegal.

funding to support HIV and AIDS initiatives in PPET will strengthen educational management and quality as a whole. In essence, responding to the challenges of HIV and AIDS in PPET is an investment in educational quality.

The appendices provide statistical data on HIV prevalence in Africa and particularly among children and youth, particularly those in the age group covered by PPET. Appendix 4 provides a summary table of the findings about each form of PPET included in this study and highlights of five of the 14 programs reviewed for the study..

1.2. The scope of post-primary education and training

The 2008 Biennale of ADEA will focus on post-primary education and training (PPET) from the perspective of facilitating access to and completion of both formal and non-formal training and education for youth aged 12 and above. ADEA seeks to provide policy guidance to ministries of education and their partners on how to develop and support a variety of "trajectories" to facilitate the movement of youth from basic primary education into general secondary, vocational and other forms of education and training that support the Millennium Development Goals (MDGs) in a framework of sustainable development. For the purposes of the Biennale, PPET has the following characteristics:

- It follows primary education or its equivalent;
- It is in principle open-ended, and possibly life-long;
- It encompasses all forms, modes (formal and non-formal) and types of education and training (general, technical and vocational, including literacy and practical skills);
- Its ultimate goal is to prepare learners for life, for, work, further learning and contributing to society;
- It accommodates multiple providers and resources, ranging from vocational schools, distance learning modalities, public, private and informal sector providers.

Strengthening post-primary education and training is a vital component of sustainable development in Africa as well as a response to the threat of HIV and AIDS to youth. However, it is not easy to develop accurate program analyses of and formulate appropriate strategies in this sector. Among the challenges are the facts that enrolments in formal PPET are fairly low in sub-Saharan Africa and female enrolments are typically less than 50 percent (see Appendix 1). There is also a lack of information on enrolments and learning outcomes in many non-formal types of PPET, as they are not supervised by ministries of education.

1.3. Objectives of the study

The key aim of this study is to identify mainly *home-grown or innovative and promising* strategies which can form the basis for the development of appropriate and effective policies and programs to curb the rapid spread of HIV and AIDS in the PPET sector. In line with its *Praxis* approach[3], ADEA has commissioned country case studies and background papers on existing experiences and practices to learn from policies and strategies geared towards expanding and developing relevant and efficient post-primary and training systems. For that reason, this study seeks to identify promising examples of PPET that respond to HIV and AIDS that could serve as models for wider dissemination and policy development.

The objectives of the study are to answer the following three interrelated questions:

1. Given the vulnerability of the learners and their educators (teachers/instructors) to HIV and AIDS within the sub-systems of the education system covered by ADEA's definition of PPET, what kinds of responses are currently being formulated and implemented within formal secondary education (including TVET) and NFE education and training programs?
2. How effective are these responses in protecting not only the learners, instructors and administrators but also the teaching-learning- processes (quality)?
3. What are the policy implications for such responses in relation to the current drive to expand PPET systems in Sub-Saharan Africa?

1.4. The Challenge of HIV and AIDS to PPET

1.4.1. A vulnerable age group

HIV and AIDS represent significant challenges to ensuring that youth enter and move through the trajectories and are able to find or create sustainable employment. This is because the age group concerned is mainly unmarried adolescents and young women and men who are becoming sexually active. Within this youth cohort, girls and young women are particularly vulnerable to infection and need special protection including protection from sexual harassment from male teachers and peers. Education on sexual and reproductive health, HIV and AIDS should start as early as possible, and in any case before the average age of sexual debut. Age- and sex-appropriate learning materials are useful in preparing children to understand basic information about HIV and AIDS while developing a non-discriminatory attitude toward those who are affected or infected. Teaching-learning should be provided until at least the end of compulsory schooling, but preferably longer, i.e. until the end of secondary school and during tertiary education. However, because many children do not complete primary school or enter secondary school, PPET (and particularly programs that accommodate youth that have little or no prior formal schooling) has a critical role to play in HIV and AIDS prevention. Current and potential learners in PPET institutions comprise the category of people considered to be most vulnerable to HIV infection. Most of the young people in PPET are in the 15 to 24 year old category, and according to UNAIDS data, these are the people most vulnerable to HIV infection. Continent-wide, HIV prevalence is extremely variable. However, 1.5 percent of young men aged 15 to 24 are

[3] The praxis approach is based on the concept of "*learning through action, learning from action to develop and improve action*," grounded in lessons that have been learned from country studies and set against the background of regional and international experience. It is a participatory approach that values, above all, the documentation and the exchange of experiences by participants in the reform processes and the sharing of knowledge between countries in order to develop a broadened vision, a cultural anchoring and the strengthening of institutional and technical capacities for continuous improvement. This interactive process of learning assumes that each country learns from its own policies and actions by evaluating them and sharing these experiences with others in the region so that successful and/or promising experiences in improving the policy issue at hand may be identified and analyzed.

HIV-positive but 4.3 percent of young women in this age group are living with the virus, or more than twice the rate among their male peers (see Table 1, below).

Table 1: Estimates of HIV infection Rates among 15 – 24 Year Olds in Selected African Countries

Country	HIV prevalence rate % young women (15-24) 2005	HIV prevalence rate % young men (15-24) 2005
Sub-Saharan Africa	4.3	1.5
Botswana	15.3	5.7
Ghana	1.3	0.2
Kenya	5.2	1.0
Mozambique	10.7	3.6
South Africa	14.8	4.5
United Republic of Tanzania	3.8	2.8
Zimbabwe	14.7	4.4

Source: UNAIDS (2006)

In the seven countries represented in Table 1, in only two countries (Ghana and Tanzania) are there HIV prevalence rates of under 5 percent among young women. On the other hand, in only one country (Botswana) is the HIV prevalence rate among young men 5 percent or more. These data show how important it is for PPET to play a role in preventing and mitigating the impact HIV and AIDS on youth, and especially young women. Low-prevalence countries have significant risk factors for infection, such as youth having multiple sex partners, not using condoms consistently (if at all) in a context of high levels of migration and poverty. In other words, the majority of the youth in the target age group needs information and counseling about staying free of infection. In addition, significant numbers of youth who are infected need counseling and access to treatment. Therefore, it is critical for PPET curricula and ancillary support programs to respond to the needs of learners in the areas of both prevention and treatment.

1.4.2. The need for expanded non-formal PPET

Because *formal* Technical and Vocational Education Training (TVET) provides training for a paltry 1 to 5 percent of the target group, youth aged 12-18 years there is a dire need for *non-formal* TVET initiatives to support skill development for work in the informal economic sector. This is where over 90 percent of African youth seek employment in both rural and urban areas. It must be noted, however, that investments in formal education and in economic development will be needed in order to provide youth with more learning and employment opportunities, including self-employment. A further issue in highlighting a broad array of non-formal types of PPET is that many types of formal TVET are heavily, and even exclusively, male in their recruitment and staffing. In light of the need to give adolescent girls and young women post-primary education and training that helps to protect them from HIV infection, it is important to identify models that cater to or include them while providing appropriate instruction on HIV and AIDS issues. This study will highlight promising emergent but still small-scale initiatives that provide AIDS-sensitive non-formal pre-employment or agricultural training to out-of-school 12-to-18 year-olds..

1.5. Responding to the HIV and AIDS epidemic in the education sector

Responding in an effective and sustainable way to the epidemic in the formal education sector requires a policy framework supported by a strategic framework and sub-sectoral action plans. Although the education sector was late in responding to HIV and AIDS, African ministries of education now have either policy documents or strategies to deal with HIV and AIDS. At the central, ministerial level, AIDS Control Units (ACUs) are often created to develop, implement and monitor strategies. District Education Offices may have HIV and AIDS focal points. At the school level, teachers are usually responsible for HIV and AIDS-related activities. However, in the areas of PPET that are outside the control of ministries of education (rural and urban vocational and technical training, for instance), there is not necessarily a policy framework or strategy to address the challenges of HIV and AIDS. The following discussion *highlights* issues concerning students, teachers and educational management.

1.5.1. Responses focused on students and learners

Curriculum responses are by far the most common way of attempting to protect children and youth from HIV infection. HIV and AIDS issues are presented in different ways:

- as an element of life skills education,[4] school health, science or another "carrier subject";
- as a stand-alone subject, sometimes referred to as "preventive education".

In most cases, teachers provide instruction on HIV and AIDS, although peer education can also be provided in "anti-AIDS clubs" or in other extra-curricular settings. Sometimes, specialist resource persons, such as doctors or nurses, may be called upon to speak to students about HIV and AIDS. Because HIV and AIDS is not always well taught-or even an examinable subject- in-class instruction may not necessarily have a lasting impact on student attitudes and risk behaviors.

1.5.2. Mitigation issues

The existence of policy documents and ACUs does not ensure that effective responses to HIV and AIDS are actually implemented and institutionalized because the issues and strategies are rarely *mainstreamed* into the core business of ministries of education or schools. In other words, the education sector and TVET in other sectors lack the committed leadership, coordination and the tracking of outcomes of multiple activities linked to the epidemic and which are needed in order to avoid fragmentation and consolidate successes.

- An important example of the inadequate capacity in mitigation of HIV and AIDS in education is the failure to monitor HIV and AIDS impact on student enrolments, attendance and teacher attrition. One of the challenges to strengthening the ability of PPET to respond to the needs of infected and affected learners and teachers is the lack of relevant data. Certain indicators of probable HIV and AIDS impact (proxy indicators) include declining enrolments during the school year, increasing rates of pupil and teacher absenteeism and increasing numbers of orphans. However, the general weakness of educational management information systems (EMIS) in Africa is such that few data are collected that could assist educational managers to develop targeted responses to the epidemic. The rare AIDS-sensitive EMIS that

[4] Life skills are defined as a set of psycho-social competencies that shape informed behaviour. Life skills include *reflective skills* such as critical thinking and problem-solving, *personal skills and qualities* such as self-esteem and tolerance, and *interpersonal skills* such as communication and negotiation (UNICEF, forthcoming).

have been created on the continent are pilot projects that are not integrated into the institutional practices of collecting and using educational statistics for planning and management purposes.

- The personal needs of teachers and administrators infected or affected by HIV and AIDS are beginning to come to light. Because many suffer from stigma and discrimination, support groups are starting to be organized and teachers' unions are starting to respond to the needs of infected or affected members. HIV and AIDS work place policies are emerging in the "education work place", particularly in the most affected countries.

- For the most part, teachers are given training on how to teach HIV and AIDS issues through occasional in-service workshops. This ad-hoc approach is inadequate and many teachers complain that they are ill-prepared to discuss HIV and AIDS in the classroom. Pre-service training is beginning to include HIV and AIDS in teacher education programs but the practice is not widespread.

- One of the challenges to the designers of PPET programs is how to respond to the needs of orphans and other vulnerable children and youth (OVCs). More than 12 million of these live in Sub-Saharan Africa, where it is currently estimated that 9 percent of all children have lost at least one parent to AIDS. By 2010, it is predicted that there will be around 15.7 million "AIDS orphans" in Sub-Saharan Africa. Children orphaned by AIDS may miss out on school enrolment, have their schooling interrupted or perform poorly in school as a result of their situation thus not be able to proceed on to higher levels of education. For more data on the impact of the HIV and AIDS epidemic on Africa, see Appendix 3.

1.6. Limitations to the Study

This is an *exploratory* desk study with several limitations. These are due to the lack of adequate documentation on many programs, particularly in the area of non-formal education and training as well as tertiary education. Ministries of education are not the only service providers in the education sector; NGOs, religious groups, and even teachers' organizations have programs of HIV and AIDS prevention and mitigation in different parts of the sector. In an environment characterized by many independent actors, collaboration and coordination are lacking, it is therefore difficult to ascertain which programs are the most effective in preventing and mitigating HIV infection and which are sustainable. Existing research on HIV and AIDS issues in the education sector focuses on formal education, particularly at the primary and secondary levels, and is concerned for the most part with student issues such as changes in attitudes and behaviour influenced by teacher- or peer-led instruction on life skills and sexuality issues. Research on HIV and AIDS impact on teachers/instructors at all levels is an emergent process and few studies exist on the subject. Because of these limitations, the study will cite *promising* programs and issues that merit further investigation in view of creating an expanded strategic plan for HIV and AIDS prevention and mitigation including both learners and instructors in PPET.

The information used in this report was obtained from the Internet and documents provided by various international organizations and NGOs that sponsor or support various PPET programs in Sub-Saharan Africa. However, there is little detailed information available via the Internet or the promotional literature on various web-sites to assess the *sustainability and impact* of many programs. Most are less than five years old and few have been evaluated.

Phone calls to advisers to American Federation of Teachers project to respond to HIV and AIDS in the teaching profession in South Africa and Kenya. The information and data obtained aimed at shedding light on the existing policies and programs/activities relating to HIV and AIDS in post-primary and vocational training institutions in Africa.

1.7. Summary of Part 1

The introduction to this study has presented the importance of HIV and AIDS as an issue for PPET. This is mainly because this sector includes a broad variety of institutions of formal and non-formal education and training catering to youth. Data from many sources show that the age group concerned is highly vulnerable to HIV infection because it is sexually active. Adolescent girls are particularly vulnerable because of gender roles and the pressures they experience to engage in pre-marital sex. Poverty and orphan status are also risk factors for HIV infection and low participation in education. The exploratory nature of the study, based on a documentary review, limits the breadth and depth of its analysis. In addition, the lack of data on enrolments in many forms of PPET and on the impact of HIV and AIDS on learners and instructors is cited a major problem to be overcome. On the other hand, the data presented are useful in highlighting issues and guidelines for policy and program development to ensure that PPET addresses HIV and AIDS issues. The section summarizes ways in which ministries of education are responding to HIV and AIDS while noting the need to mainstream HIV and AIDS concerns at all levels of operations of ministries and schools.

2. DISCUSSION OF FINDINGS

2.1. HIV and AIDS as an educational issue

Before discussing specific examples of PPET responses to the challenge of HIV and AIDS, it is important to review *why* a health problem – an epidemic – is being treated as an educational concern. It has now been sufficiently documented that HIV and AIDS have a negative impact on the education sector. The epidemic is crippling access to education by undermining the supply of both learners and teachers and eroding the quality of education by hindering the normal teaching-learning process within the classroom or instructional setting. Teacher absenteeism and attrition linked to HIV and AIDS means larger class sizes and increasingly numerous lost days of instructional time. Until this diagnostic, first made in 1994 (Schaeffer, 1994) and reinforced in 2000 (Matlin, 2000), HIV and AIDS were considered to be a problem for the health sector.

2.1.1 The impact of education on HIV and AIDS

Studies in Zambia and other countries have shown that the more schooling young people have, the less likely they are to have casual partners and the more likely they are to use condoms. Other countries show similar patterns. In 17 countries in Africa and four in Latin America, better-educated girls tended to delay having sex and were more likely to insist that their partner use a condom. Although reported rates of premarital sex vary considerably across countries, in most cases, girls aged 15 to 17 who are still enrolled in school are much less likely to have had premarital sex than girls of the same ages who are not in school (Lloyd, 2007).

Another factor that mediates the influence of schooling on adolescent sexual behavior is the *quality* of education. Research in Kenya (Mensch et al. 2001) found that girls were more likely to engage in premarital sex and likelier to drop out of schools where they received poor treatment. Several studies document cases of bullying and sexual harassment of girls by boys and male teachers resulting in the exchange of sex for money or grades (Leach et al. 2003). Nevertheless, youth enrolled in school are less likely to report having had sex that non-enrolled youth, which appears to indicate that even bad schools could provide some protection for youth. The research cited implies that curricula on health, life skills and sex are likely to have little impact in schools whose teachers have inadequate training and motivation and where students have not achieved minimum learning levels. For this reason, community-based and non-formal approaches to teaching life skills and HIV prevention are a useful complement to school-based methods. The most successful approaches inform students about a variety of ways of reducing risk and avoiding infection (or pregnancy) rather than preaching abstinence from sex as the only method.

2.1.2 Responses to HIV and AIDS in the education sector

Before 2000, few African ministries of education acknowledged that HIV and AIDS posed a serious threat to national education systems. The ADEA 2001 Biennale, did, however, explicitly recognize that HIV and AIDS posed a threat to EFA goals and made the following recommendations to the African Ministers of education:

1. Curriculum must be adapted to respond to the challenge of the epidemic. Both teacher-led and peer-mediated instruction and sensitization are required
2. Leadership at all levels is essential to progress in fighting HIV and AIDS. Ministers, Members of Parliament as well as education sector and community leaders must speak openly to overcome the silence and stigma shrouding the epidemic.
3. The media (radio in particular) have a vital role to play in changing behavior.
4. Educational planning and management must respond to the epidemic; extra teachers must be trained and deployed to fill gaps left by sick and dying teachers; double-shift classes and other measures are

needed to ensure that students are not deprived of instruction. Approaches include the use of volunteer teachers, and multi-grade teaching, based around community schooling and non-formal education. Overall, greater flexibility is required in the whole approach to education—emphasizing learning rather than schooling and bringing in practical skills and entrepreneurship that young people will need for their survival.

5. Educational managers need appropriate information about the impact of HIV and AIDS on the education sector in order to make informed decisions.
6. The greater vulnerability of girls and women to HIV infection should be addressed (Akoulouze, Rugalema, and Khanye, 2001)

.
Since then, ministries have begun planning, and experimenting with various and sometimes innovative strategies and interventions in an effort to counter the adverse effects of HIV and AIDS on education systems. Typically, international partners provide technical expertise and training in the development of responses to HIV and AIDS in the education sector. For example, UNESCO and UNICEF provide guidance to the development of life skills and AIDS-related curricula. The American Federation of Teachers, working through USAID, has given technical support to the South African Democratic Teachers' Union (SADTU) to develop HIV and AIDS workplace policies for HIV-positive teachers. In other cases, national initiatives have provided effective responses to various HIV and AIDS-related problems with financial support from international partners. The development of the "Schools as Centres of Care and Support", a South African program that uses the school as a centre of providing services to OVCs and youth in need, was developed by a national NGO and expanded with international funding.

Available literature shows that the responses to HIV and AIDS in the education sector can be grouped into the following categories: policy/strategic responses, curricular responses, responses to infected and affected learners and teachers, programmatic responses in partnership with civil society organizations and advocacy responses.

2.1.2.1 Policy and/or strategic responses

A study conducted by Global Campaign for Education (GCE) shows that in Africa, ministries of education have made different levels of progress in developing and implementing HIV and AIDS strategies (HEARD/MTT, 2004). These countries have since developed education sector policies and strategic or action plans on HIV and AIDS. In turn, individual educational and training institutions such as teacher training colleges, polytechnics and universities have also developed their own institutional policies and strategies (Otaalla, B; Lutaaya, E and Ocquaye, M, 2004) The implementation of most of these strategic plans has, however, been very limited (GCE, 2005).

Ministries of education have also established AIDS control Units (ACUs) at the central level, and also at the district/regional level. In many countries, there are designated HIV and AIDS focal points at different levels in the education system. The duties and responsibilities of these officers include the management and coordination of the ACUs. In many cases, however, the designated focal points have other primary responsibilities, and HIV and AIDS coordination is just but an additional task to these other responsibilities. For that reason, HIV and AIDS do not always receive priority attention from the ACUs.

Ministries of education do always not keep accurate reports on their expenditures[5], but education budgets for mainstreaming HIV and AIDS are generally low and to a large extent heavily donor-dependent. Even when funds for HIV and AIDS in the education sector become available, in an effort to reach the EFA goals, most governments have focused their attention on the provision of HIV and AIDS education in formal secondary schools. Therefore, very limited funding is finding its way into tertiary TVET or non-formal educational institutions and programs.

[5] Budgeted resources are not always spent the way they were intended. Similarly, the phenomenon of "ghost teachers", or persons who are no longer teachers but whose salaries continue to be paid, is widespread.

Most of the HIV and AIDS-related activities in the non-formal sector targeted at out-of-school youth are supported by NGOs/religious organizations and donor agencies. Even in the formal sector, government efforts are heavily subsidized by NGOs and religious organizations. This raises the fundamental question of whether the current levels of HIV and AIDS activities and programs in PPET are significant enough to produce the desirable effects.

In some countries ministries of education are offering bursaries/free meals and counselling to affected and infected children, to ensure that HIV and AIDS-infected and affected learners stay in school. However, where they exist, bursary schemes have been criticised for being piecemeal and under-resourced (GCE, 2005). This has prompted NGOs and other charity organizations to step in and fill this gap.

2.1.2.2 Curriculum responses

According to the Report on the Education Sector Global Readiness Survey (2004), education is an essential component of an effective national response to HIV and AIDS. Ministries of Education have made most progress in the area of HIV and AIDS curriculum development, an area that is frequently supported by donors. HIV and AIDS can be integrated into the main curriculum through different entry points, one of which is the *life skills approach.* In brief, life skills education is a participatory, learner-centred approach to clarifying values and goals in life so that learners can acquire skills to make informed choices about their immediate and long-term health and well-being. To be successful, HIV and AIDS education within a life-skills approach to learning needs to be led or guided by trained professionals (whether they be teachers or outside resource persons such as nurses or counsellors). Peer-led discussions, sometimes in single-sex groups, are an important means of reinforcing the impact of teacher- or resource-person-led instruction and discussions. An important venue for peer-led discussions is in the context of clubs and youth associations, which have taken an important position in the fight against HIV and AIDS. In Burkina Faso, for example, the Ministry of Education, the National AIDS Council and the Bureau of Research and Programs in Secondary Education have established Anti-AIDS Clubs in more than half of the secondary schools, reaching about 30,000 young people. The main focus of the anti-AIDS clubs is to raise awareness and to promote risk reduction (UNDP, 2003).

In any event, life skills education on HIV and AIDS for secondary school students needs to provide well-sequenced learning that reflects the emotional, physical and cognitive developmental stages of youth moving through adolescence toward adulthood.

One of the most difficult issues is deciding at what stage, and how, students should be taught about sex. Although many countries have made efforts to include HIV and AIDS education in secondary school curricula, the following challenges remain:

- Teaching about sex and HIV requires certain skills and many teachers do not feel adequately trained and confident to discuss such sensitive issues.
- Curricula at the secondary level are already very full and the strong focus on examinations can reduce the priority given to HIV and AIDS education.
- Some communities resist the introduction of sex education in the schools and not enough effort has gone into building community understanding and support.
- Instruction on HIV and AIDS often focuses on medical and epidemiological issues to the exclusion of psycho-emotional issues such as the problem of gender roles and pressures to have sex.
- Girls are often reluctant to participate in co-educational classroom discussions about HIV and AIDS, as showing “too much” knowledge or curiosity about sex is often interpreted as a sign that a girl is sexually active.
- Issues of stigma and discrimination against seropositive persons are sometimes poorly covered.
- HIV and AIDS curricula often exclude detailed discussions on the sexual transmission of HIV, thus failing to provide young people with the information necessary to reduce their vulnerability.

- There is great reluctance among educators to allow discussions and demonstrations of condoms as a prevention measure for fear that such knowledge will encourage promiscuity among youth.

Besides the challenges cited above, implementation of curricula on life skills/HIV and AIDS can encounter problems in implementation, particularly since such curricula are not integrated into the general syllabus but left on the margins. In some cases they are ignored all together. Implementation failure can be traced to four problems:

i) Non-involvement of the civil society groups and teachers in the design of HIV and AIDS curriculum, in most cases leading to a lack of ownership and a perception that the curriculum is 'donor-driven' or culturally inappropriate.
ii) Failure by most counties to invest adequately in pre-service and in-service training to equip teachers to handle HIV and AIDS topics, and
iii) Piece-meal implementation of HIV and AIDS education resulting from distribution of insufficient quantities of HIV and AIDS learning materials from various sources.
iv) In many countries, life skills and other responses to HIV and AIDS issues are not compulsory or examinable subjects.

In some countries where AIDS education is carried out, it is either incorporated into science lessons, with students being taught purely about the biological aspects of the subject or treated as stand-alone subject. The former approach has advantages in that it is more adaptable to teachers who have not received any training to teach about AIDS and avoids the cultural and religious barriers that make it difficult for teachers to talk about sex in the classroom (Boler and Jellema, 2005). At the same time, most experts agree that programs that address the social side of HIV and AIDS are more effective than purely scientific approaches, which can make it difficult for students to appreciate the 'human' side of the topic (GCE, 2005).

Conflicting and multiple messages on HIV and AIDS are delivered when NGOs determine the contents of HIV and AIDS education according to their own ideology or religious beliefs. For example, research has determined that showing young people how to use condoms does not lead to precocious sexual activity.

2.1.2.3 Teacher readiness

Although HIV and AIDS, sexuality and life skills education are being introduced into many school systems, teacher preparation and development programs are not keeping pace with these advances. As a result, schools are endeavouring to infuse HIV and AIDS, sexuality and life skills into their programs before anything similar has been undertaken in teacher training institutions or, in many cases, in university faculties of education. Countries have made attempts through in-service training to redress this situation, but for the greater part, these programs have not offered the fullness of knowledge or the depth of comprehension needed to bring serving teachers to the level of competence required for teaching in this area. Such programs as are offered tend to be unsystematic, *ad hoc*, and poorly followed through (UNAIDS, 2004).

A survey carried out by the Kenya National Union of Teachers (KNUT) showed that Kenyan teachers are generally not well prepared for lessons and that many are not well informed about the subject. Only 45 percent of the teachers surveyed understood that HIV had no cure, whereas 24.4 percent and 12.4 percent respectively thought that herbs and traditional medicines as well as witchdoctors could cure infection. More positively, the study found that Kenyan pupils were generally happy to learn about HIV and AIDS: at least 55.7 percent of students had a positive attitude towards the topic, with only 14.4 percent displaying a negative response (Kakar and Kakar, 2001).

2.1.2.4 Preventing and mitigating HIV infection of education and training staff

Until very recently, the personal issues of education and training staff in relation to HIV and AIDS were largely ignored. The issues tend to fall into two categories. The first category is the risk of teachers infecting students through unprotected sex and the second is the problems of teachers who are themselves infected or affected by HIV and AIDS. In the case of teacher-pupil sexual relations, male teachers and principals are usually the ones who take advantage of female pupils, offering them good grades and other favours in return for intimacy. Single male teachers or teachers posted away from their spouses appear to be the ones likeliest to seek sex with pupils. Some teachers are said to consider this behaviour a "benefit" to compensate for poor pay and living conditions. In higher education, liaisons between professors and female students are common. In some countries, like South Africa, codes of professional ethics are being developed to fight against teacher-pupil sex.

On the other hand, teachers who are HIV-positive face special problems, partly because HIV and AIDS are highly stigmatised. Relations with colleagues, students and parents become strained making it a mammoth task for the infected teacher to even come to school (Tamukong, 2004). To date, teachers unions have done little to combat such practices (UNESCO and Education International, 2007). In particular, because teachers have an important role in society as guardians and role models for children, the host of negative symbolic meanings associated with AIDS serve to vilify HIV-positive teachers even more than other HIV positive people. The situation is further aggravated as the teachers are less likely to disclose their status because of the lack of confidential voluntary counselling and testing (VCT) services, and free or affordable access to anti-retroviral (ARV) treatment. Ministries of education are ill-prepared to deal with potential impact of HIV and AIDS on teachers. South Africa is one of the few countries to have to put laws, policies and procedures in place to prevent discrimination against HIV-positive teachers. In addition, few governments are able to monitor teacher absenteeism and mortality, or have a plan to tackle AIDS-related teacher attrition.

In **Kenya,** the Kenya Network of HIV-positive Teachers (KENEPOTE), founded in 2003 by two HIV-positive teachers, aspires to create an environment where teachers with HIV and AIDS will be free from fear, shame, denial, stigma and discrimination. KENEPOTE seeks to avoid further spread of HIV and AIDS among its members. To this end it focuses on preventing re-infection; ensuring access to information, education, care, treatment and support for its members as well as orphans and vulnerable children. KENEPOTE upholds the dignity and professionalism of teachers to ensure that these values are not compromised, regardless of one's HIV status, so that teachers can continue to serve as productive agents of change in the community. Through the network, many HIV-positive teachers have disclosed their status and have started working with local CBOs dealing with HIV and AIDS through which the teachers are also providing care and support for OVCs. The network has immensely helped to reduce stigma and discrimination against teachers living with HIV and AIDS and orphans in and out of school. The network also works to strengthen the capacity of members to ensure implementation and management of their program activities. However, challenges related to regular transfers of teachers, ridicule by students, fellow teachers, parents and the community, and the heavy work load in schools still abound and need to be addressed.

2.1.2.5 Work place policies

Some countries have, however, put in place workplace policies to respond to the needs of HIV-positive teachers. A study conducted in Nigeria found out that a significant proportion of educators has negative attitudes towards colleagues who are living with HIV, calling for urgent adoption and implementation of the draft 'National HIV and AIDS Workplace Policy for the Education Sector'. More openness regarding HIV and AIDS can also be achieved through better access to counseling and treatment centers and provision of such facilities in schools, institutions and youth centers (Chinyere and Dayo, 2004). The American Federation of Teachers (AFT) highlights support to Nigerian Teacher Unions in areas such as HIV and AIDS education and prevention, counseling and referral, and care for teachers and their families affected by AIDS.

The **South African** Democratic Teachers' Union (SADTU), the largest union of educators in South Africa representing about 230,000 members is involved in advocacy work for the protection and right HIV and AIDS positive teachers, training of staff, reviewing benefits and conditions of service such as medical aid/treatment, sick leaves, rights to non-discrimination and privacy. The union also provides condoms and encourages leaders to speak out on their status.

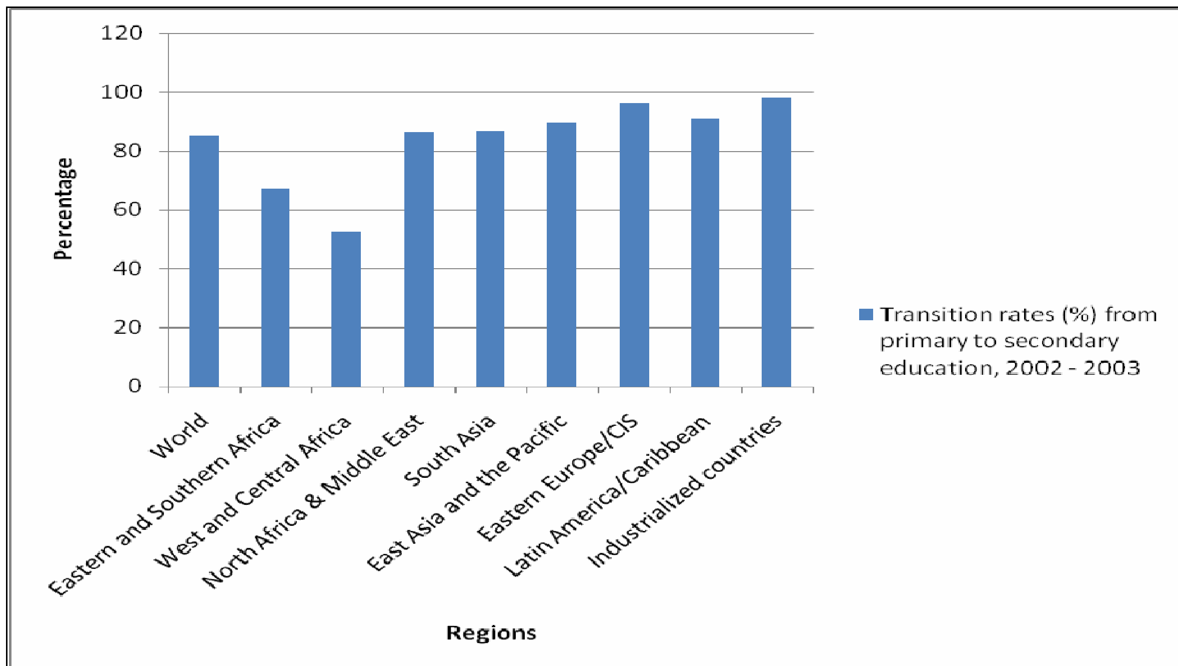
In **Angola,** human resource policies within the education sector have been amended to minimize vulnerability and susceptibility to HIV and AIDS (HEARD/MTT, 2004). School authorities, sometimes assisted by Parent Teacher Associations (PTAs), have adopted a variety of strategies to cope with infected teachers: (1) they have recruited replacement and temporary teachers to cover for those who are absent or have died; (2) infected and sick teachers are transferred out of the classroom to less demanding posts so that they can continue to justify their earning. These measures bear financial consequences that have not yet been researched (Tamukong, 2004).

With regards to the management of human resources, **Burundi** is committed to establish staff protection and prevention programs. An AIDS solidarity fund for the support of Teachers Living with HIV and AIDS and the provision of ARV already exist although it suffers from a lack of funds (UNESCO, 2003). For the most recent guidelines on education sector work place policies, see UNESCO 2008 (c).

2.2. The scope of PPET studied

In most countries in the world, 85 percent of children in the last grade of primary school go on to attend secondary education, the largest component of PPET (see Fig. 3). However, data from the Global Education Digest 2005 by UNESCO indicate that few children in Africa continue their education past the primary level. Eastern and Southern Africa region and West and Central Africa regions have the lowest transition rates in the world of 67.1 percent and 52.4 percent respectively. Transition rates are highest in the industrialized countries (98.2 percent) and in Eastern Europe and the CIS countries (96.1 percent).

Figure 1: Transition rate from primary to secondary education, 2002 – 2003



Source: UNESCO Institute for Statistics (2005)

In the Eastern and Southern Africa region, several countries have succeeded in increasing primary school enrolments largely by abolishing school fees and recruiting more teachers. However, transition rates for children from primary to secondary school remain relatively poor. Burundi, Mozambique, and Tanzania, for example, have transition rates of below 35 percent, meaning fewer than four out of every 10 children make it to secondary school. Botswana, Kenya, Namibia, and South Africa are among the better performers at more than 85 percent transition from primary to lower secondary and formal TVET. The low transition rate implies that there is a high drop out rate for children from school at a critical period in their life, and at a time when they most probably need HIV and AIDS prevention education.

Formal TVET is very heterogeneous and includes both urban and rural schools that train a wide variety of graduates, ranging from policemen and public works technicians to secretaries and postal workers. However, this section will cover the responses to HIV and AIDS in formal and nonformal PPET. This is a selective choice of post-primary education and training, focusing on the under-researched *non-formal* branches of PPET in addition to general secondary and tertiary education. The following components of PPET are illustrated by 14 brief examples below:

Table 2: Breakdown of the programs reviewed

1. General secondary education, including a sector impact study and HIV and AIDS work place programs	Three programs reviewed in Part II.
2. Technical and vocational training for youth (formal and non-formal examples)	Three reviewed in Part II, four in Appendix 5.
3. Tertiary and higher education	Three programs reviewed in Part II, one in Appendix 5.

The nine programs discussed in the text of Part II below have the most data about program assumptions, results and sustainability. They are also particularly useful in providing evidence of effective responses to HIV and AIDS issues affecting both learners and staff. The other five programs are reviewed in Appendix 5. They show considerable originality, pertinence and apparent effectiveness in responding to the needs of learners but lack data on sustainability and sometimes impact.

Because the literature on HIV and AIDS responses in the curricula of general secondary education is well developed, this part of the study concentrates on emergent forms of non-formal education or training. Although formal TVET is limited in scope and enrolments, examples are included from this sub-sector where virtually no research has been done on HIV and AIDS issues. Formal TVET is accessible by graduates of formal primary education. Since there is a low rate of transition from primary to lower secondary and formal TVET in Africa, it is important to explore schools and programs for un-schooled or de-schooled youth, recalling that they have few alternatives and are vulnerable to HIV and AIDS, especially adolescent girls. Some of the examples of PPET covered in this study are of very recent creation and still small-scale in size. They generally lie outside the HIV and AIDS policy frameworks of the formal education sector. Nevertheless, the examples presented have some valuable lessons for developing larger-scale sustainable interventions to provide both practical employment skills and HIV and AIDS-related learning and services. In addition, HIV and AIDS work place programs for teachers are included. This emerging practice is inspired by that of the private sector and is beginning to be developed for formal education (primary, secondary and tertiary), although is a piece-meal way (ILO/UNESCO, 2006 and UNESCO, 2008 (c).

2.3. HIV and AIDS in formal education and work place programs

This section presents an example of student-oriented prevention/life skills education in general secondary school as well as an analysis of HIV and AIDS work place programs for teachers.

Although most young Africans between the ages of 12 and 18 are not in any kind of formal education, the largest portion of this age group that is in school is enrolled in general secondary education. In general, less than 50 percent of the relevant age group is enrolled in secondary education and female enrolments are generally low (see Appendix 1). Secondary education is also the only area of PPET where there is any meaningful effort to provide HIV and AIDS-related services to teachers.

Secondary schools provide an important mechanism for reaching large numbers of learners with education about HIV and AIDS during a critical period in their lives when they are undergoing puberty and maturing sexually. Most students (and particularly girls) at this level are at a significant risk of HIV infection. Although enrolments at secondary level in Africa have been increasing by five percent annually since 1998, the lower secondary ratio is still low, at 45 percent. Only 29 percent of the relevant age group is enrolled in upper secondary education. Furthermore, 22 African countries still enroll less than 20 percent of the age group and eight of these countries have figures below 10 percent. There is also low enrolment in formal technical and vocational education, accounting for only 10 percent of the total secondary school population in sub-Saharan Africa.

2.3.1 Assessing the impact of the epidemic on education

Impact studies have been used to determine how the HIV and AIDS epidemic affects different aspects of educational systems in Africa. Such studies are needed in order to determine and prioritize areas for policy and program intervention. Two important initiatives are featured below. While they cover both formal primary and secondary education, the findings are important in developing policies and programs to mitigate the effects of the epidemic on teachers, administrators and students. The first example is a qualitative study of HIV and AIDS impact on teachers and students in Burkina Faso, a country with a relatively low HIV prevalence. The study was designed to provide policy guidelines for the government and its partners. The second example is a quantitative study of HIV and AIDS prevalence among teachers and administrators in South Africa, a country with very high HIV prevalence.

2.3.1.1 HIV and AIDS impact on formal education in Burkina Faso

In 2005, the UNESCO International Institute of Educational Planning (IIEP) organized a qualitative assessment of how the epidemic was affecting teachers and students in Burkina Faso. Although the study covered both formal primary and general secondary education, the results concerning secondary education are highlighted below.

- *Rationnale and assumptions*

Burkina Faso had already launched some initiatives in the area of curriculum and peer education related to HIV and AIDS. However, it was not known whether the programs were appropriately targeted and whether they were having an impact. In planning the study, IIEP felt that qualitative research using purposeful

sampling, could yield valid conclusions about knowledge attitudes and behaviours related to HIV and AIDS among students, teachers and administrators in primary and secondary education. The study, entitled *L'impact du VIH et du sida sur le système éducatif du BurkinaFaso,* had the following objectives :

- To assess the impact of HIV and AIDS on the supply and demand for education ;
- To analyze sector policies and strategies related to the epidemic;
- To assess prevention activities at the school level and particularly those targeting girls;
- To assess the situation of OVCs and interventions led by NGO and development partners in the context of their responses to educational problems in Burkina Faso;
- To formulate proposals and strengthen relevant existing strategies and responses to the epidemic in primary and secondary education.

- *Coverage*

The research was conducted in two phases. The first was in Ouagadougou, where ministry and national AIDS officials as well as donor representatives were intereviewed about policies and strategies relating to HIV and AIDS in the education sector. The research team also analysed relevant policy documents and studies in order to determine what knowledge base already existed relating to the research questions. The field work was conducted at the school level in two provinces, where both teachers and students participated in the study. The city of Bobo Dioulasso, in Houet Province was chosen to explore issues in 17 schools in an urban/suburban environment with an estimated HIV prevalence of 4.3 %. Eleven rural schools were selected in Sanmantega Province, where prevalence was estimated to be 3.6 %. According to a 2004 study the national level (Centre Muraz (2005) in Akpaka and Yaro (2007), HIV prevalence among teachers was 2.7 %, close to the national average among adults[6]. Among students, prevalence was 1.6 % in secondary schools and 0.8 % among university students. Administrative staff was affected far worse (11 % seropositive).

- *Program summary*

A total of 1,029 primary school and 398 secondary school students responded to questionnaires or participated in focus group discussions (both mixed and single-sex). Two hundred fifteen teachers filled out questionnaires or participated in focus group discussions. Additional interviews were conducted with 2,357 principals, district officials, parents, health workers, representatives of NGOs and PLWAs in the target communities.

- *Success factors (findings)*

There was not a visible impact of HIV and AIDS on the supply and demand for education. However, considerable numbers of teachers and supervisory staff were periodically absent from work "for health reasons". Between 1999 and 2004, the number of teachers dying before retirement increasesed steadily, particularly among male teachers. It was, however, impossible to determine the degree to which HIV/AIDS was responsible for this poor performance and attrition, as ministry records do not mention if AIDS was a cause of death.

Given the HIV prevalence among teachers and among adults in the target provinces, the researchers expected to find evidence of educational supply constraints due to the presence of seropositive teachers increasingly unable to teach on a regular basis. On the other hand the level of seroprevalence among adults (parents of school children) was expected to manifest as orphans experiencing difficulties in enrolling and staying in school. As with teachers, it was found that many children were out of school for a wide variety of reasons besides HIV and AIDS, ranging from poverty and the need to work to a lack of interest in studies.

The study's major findings indicate that HIV and AIDS worsens existing dysfunctions in the educaton system. The major findings with policy implications were the following:

[6] 21.7 percent of primary and secondary school teachers volunteered to take HIV tests in 2004. The rest refused to do so for fear of revealing their (feared) serostatus.

- Information, education and consciousness-raising about HIV and AIDS is inadequate. None of the members of the two education ministries' AIDS control units (AUCs) are PLWAs or members of a teachers' union. This was true both at central and at district levels. ACU outreach to secondary school teachers, to whom the units are expected to provide information about HIV and AIDS, is negligible. Parents and pupils are not included in the activities of the ACUs.
- While about half of secondary school teachers speak "occasionally" about HIV and AIDS, almost none speak "systematically" about this subject with their pupils.
- Teaching materials about HIV and AIDS are very scarce.
- Although a fund exists to provide income supplements to PLWAs and up to two affected family members, the administration of the fund is irregular. Uptake of the funds is low, as most PLWAs are afraid to reveal their serostatus.
- In-service training on HIV and AIDS issues is provided to teachers via the ACUs. Findings reveal that despite the training of 1,000 persons between 2002 and 2004,
- A minority of teachers has received training on HIV and AIDS: 47.3 % among secondary school teachers and only 22,6 % among primary school teachers.
- HIV and AIDS are still negatively viewed in the education sector as well as the country as a whole. Large percentages of students have inadequate knowledge of what is AIDS, how it is transmitted and treated, Fear of and discrimination against seropositive persons is widespread.
- False information and stigma against PLWAs are commong among secondary school students.
- Sexual liaisons are frequent between male teachers and female students.

The highlights of recommendations based on the findings cover both primary and secondary education:

1. Organize age- and sex-appropirate preventive education at all levels, supported with adequate teaching and learning materials. 2. Provide access to HIV testing for pupils, students, teachers and administrative staff. 3. Provide material and psycho-social support to OVCs	4. Combat stigma at all levels, including the community. 5. Monitor the impact of HIV on teachers, pupils, administrative staff and families 6. Improve coordination of responses by involving PLWAs, teachers and pupils 7. Monitor and evaluate education sector policy on HIV and AIDS

2.3.1.2 Responding to HIV and AIDS in general secondary education: Student Partnership Worldwide (SPW)

The SPW School Health Education Program is a British development charity working in eight countries across Sub-Saharan Africa and South Asia. It mobilizes young people by recruiting and training 18-28 year olds to serve as volunteer peer educators living full time in rural communities for seven to nine months and leading health, environmental and education programs. The volunteers are A-level graduates who are planning to matriculate in university after their period of volunteer service. In Tanzania, the program benefits from the fact that secondary school graduates have a period of nine months free before starting university. Volunteers receive three weeks of pre-service training before going to their host communities. SPW was chosen as an example for this study because its approach in using trained youth volunteers to lead participatory discussions about HIV and AIDS and related issues overcomes some of the inherent limitations of relying on teacher-led instruction. In addition, the volunteers are able to mobilize community support for responses to HIV and AIDS so that students have reinforcement for their learning both in school and in the community.

- *Rationale and Assumptions*

The program is built on the premise that youth-led activities on the prevention of HIV and STI infection can be more effective than teacher-led instruction because of the lack of inhibitions among youth in discussing intimate subjects with one another. The program also assumes that:

- young volunteers can effectively develop community support for HIV and AIDS-related education and prevention activities;
- foreign and national youth can work together
- teachers and head masters will accept the contribution of the young volunteers.

- *Coverage and Impact*

The program has over 800 volunteers, 85 percent of whom are from the host programme countries who work in partnership with volunteers from Europe, North America, and Australia. SPW-Tanzania is the organisation's largest programme with over 240 Tanzanian volunteer Peer Educators working on its Community Resource Programme and School Health Education Programme (SHEP).

In terms of impact, according to SPW educators and staff, there has been a "significant" change in attitudes in the host schools. Monitoring visits from SPW staff found, for example, that girls are more assertive of their rights and willing to discuss issues of gender and ASRH. There has also been a decrease in the rates of teenage pregnancy. Out-of-school youth and community residents are exposed to ASRH and HIV and AIDS messages via the festivals organized by the SPW volunteers.

- *Program summary*

  The program comprises three main components: a) classroom activities; b) extra-curricular activities; c) festivals.

  - Classroom activities: Each participating secondary school has two peer educators (usually one Tanzanian and one foreign). The school allocates one hour per week to ASRH classes run by the peer educators. Each week, a different topic related to reproductive health is discussed. The topics include communication skills, teenage relationships and sexuality; sexually-transmitted infections; HIV and AIDS history, facts, figures and impact.

    Appropriate expert educators from NGOs or the health sector are sometimes brought in to give talks and demonstrations on subjects about which the peer educators are less qualified to speak. The students of participating schools select one or more "Guardian" teachers who are trained by SPW on ASRH issues. The Guardians' role is to support the peer educators and the student counseling activities.

  - Extra-curricular activities*:* The SPW peer educators organize a variety of activities around the performing arts (drama, traditional dance, and poetry) and sports. They also organize ASRH activities with anti-AIDS messages in after-school youth clubs.

  - Festivals: The SPW volunteers organize seven to eight festivals per year in their communities. These events involve expressive art competitions, talent shows, health quizzes, video shows, public marches, candlelit memorial ceremonies, talks by PLWAs and NGO experts. The whole community is invited to participate.

Evaluation is done by giving the students quizzes on ASRH issues at the beginning and the end of the program. Peer educators keep weekly records of their activities. Principals write evaluation reports at the end of the program, giving their appreciation of its impact. SRH also conducts monitoring visits to meet with peer educators and attend their events.

- *Success Factors*

The program requires highly motivated volunteers who are willing to work for little remuneration in remote areas. The program also requires pre-service training and orientation for the volunteers and advance sensitization and acceptance of their services by the host schools. The SPW office in Iringa, Tanzania provides on-going support while SPW headquarters in London handles international recruitment of foreign

volunteers willing to pay their way to Tanzania. Each foreign volunteer raises 3,600 pounds to support his or her service. SPW, a registered charity, does international fund-raising to support the Tanzanian volunteers and local administrative costs .

- *Sustainability*

The main limitation of the program is its dependency on foreign fund-raising and administration. The program needs to be integrated into the Tanzanian National Youth Development Policy, a multi-sectoral approach with a hierarchy of provincial, district, ward and village youth councils. These structures could be mobilized to support a wider extension and ongoing support of the program in collaboration with the National Multi-Sectoral Strategic Framework for HIV and AIDS. Furthermore, SPW is obliged to renew its cadre of volunteers every year, which is a costly process.

2.3.2. Developing an HIV and AIDS workplace policy for the education sector in South Africa and Kenya

HIV and AIDS programs are only beginning to emerge in the education sector. They originated in the private sector of Africa, where worker attrition due to AIDS-related causes in the 1980s led to discriminatory hiring and firing practices until companies realized the need to stabilize their labor force. An HIV and AIDS work place policy is essentially a code of conduct and legal guidance on how to respond if the code is violated. A workplace policy will typically include regulations regarding prevention; care and support; confidentiality; stigma and discrimination; planning, management and impact mitigation; grievance procedures and universal precautions. The example included here covers formal education, including teachers in both secondary and primary education. Unlike curriculum, policy interventions like work place programs are not significantly different within the various levels of formal education and training. The example included is a composite one, combining elements from South Africa and Kenya in order to sensitize policy makers to the importance of responding to the needs of teachers and instructors in PPET, as most HIV and AIDS interventions focus on the needs of students or learners only. The discussion here is important because the South African and Kenyan initiatives cited are pioneering ones that shed light on a long-neglected area: the needs of teachers who are infected or affected by HIV and AIDS.

- *Rationale and Assumptions*

Teachers can be both affected or infected by HIV and AIDS, either because they are seropositive themselves or because they are responsible for the care of others who are infected or affected. Women, who are particularly numerous in the profession, are disproportionately affected by virtue of their roles as care-givers in the family. Absenteeism, abandonment and death have taken their toll in the teaching profession of Africa. There are numerous cases across Africa in which teachers suspected or known to be HIV-positive have been fired or subjected to various forms of discrimination. The development of current education sector work place policies assumes that:

  - Parents, principals, teachers and teacher unions will fully support the policy.
  - Educators needing ART will have access to counseling and treatment.
  - It will be safe for HIV-positive teachers and administrators to reveal their status to colleagues and students.
  - Schools will be able to ensure that classes are covered when HIV-positive teachers are absent because of treatment needs or illness.

- *Coverage and Impact*

<u>The process of needs assessment in South Africa</u>

Few countries have investigated the extent of HIV infection among teachers as thoroughly as South Africa, where the Education Labor Relations Council (ELRC) undertook a survey with voluntary HIV testing in 2004-2005 among 24,200 public school teachers and administrators in 1,766 schools. Forty per cent of the sample was working in secondary schools. Besides the need to know how many teachers and staff needed treatment for infections, the study also yielded information on teacher attrition. Overall, 12.7 per cent of the sample tested positive; however, prevalence varied considerably by race and location. African respondents had a prevalence of 16.3 per cent compared to other groups (whites, Asians and coloureds) who had a prevalence of less than 1 per cent. Prevalence varied widely from one province to another. KwaZulu-Natal and Mpumalanga had over 19 per cent prevalence among educators while Western Cape had a prevalence of 1.1 percent. These findings are important because they can be used to develop policies to target the needs of educators. One of the most important tools to be developed to meet the needs of teachers infected or affected by the epidemic is an HIV and AIDS work place policy.

- *Program summary*

The process of policy development in Kenya

Although Kenya has not had a national program of HIV testing for teachers, it has launched a process of developing a work place program for the education sector, described below.

A steering committee developed a policy framework and identified key stakeholders. These included community-based organizations, student organizations, teachers' unions, universities and faith-based organizations. The draft policy framework was presented to all those involved in order to reach a consensus on the text and, thus, adopt the policy. The consultation with all stakeholders for reaching consensus was by far the most challenging step of the process. In addition to being time consuming and more expensive than anticipated, the consultation had implications for wording around some sensitive issues (e.g., the policy does not contain the word 'condom' after reaching consensus). Once the policy was adopted, evaluation and indicators were established and a multi-level policy implementation plan (with priorities identified) was developed. District-level implementers supported a process of refining policy priorities based on the needs of local needs. Funds and partners were separately identified for each district.

- *Success Factors*

In order for a work place policy to succeed in the education sector there are four minimum requirements:

1. Reaching consensus among key stakeholders including religious leaders, unions, teachers and gender activists;
2. Reaching a consensus on not only the issues but what needs to be done to provide access to care and support as well as protection from discrimination.
3. Appropriate costing of all of the steps in the process.
4. Translating policy into action at central, district and school levels.

- *Sustainability*

The experience in Kenya has provided the following insights about the sustainability of an HIV and AIDS work place policy:

- It is important that all stakeholders agree on the policy content and take ownership of the policy.
- Budgeting for the consultation and consensus-building process must be adequate and must include sufficient funds to print and disseminate the policy to all district offices and schools.
- The policy should reflect the views of all major stakeholders. These views also shift with time and thus the policy should be seen as a 'living' document to be periodically revisited and updated. For that reason, monitoring and evaluation of work place policies are important, as corrective measures will be needed. Similarly, willingness to revise and update policies is critical. If certain aspects of a policy are

not relevant or enforceable they must be changed. In addition, policies will have to be revised to take into account the medical innovations affecting HIV and AIDS as well as changes in national policy.

- The policy development and implementation work needs to be placed within existing structures in the education sector. It cannot be imposed by an "external" agent, such as a Civil Service Commission.
- Harmonizing work place programs with existing legal frameworks is important, especially if legal action is required in cases of discrimination.
- Having a "watchdog" or advocate body, like the Kenya Network of HIV-positive Teachers (KENEPOTE) is vital to supporting HIV and AIDS work place policies in the long run.

2.4. Responses to HIV and AIDS in other types of formal and non-formal education

The Global Readiness Survey (2004) notes that out-of-school youth is an exceptionally vulnerable group desperately in need of support and assistance yet extremely and persistently difficult to target, though the majority of the countries in this study (75 percent) indicated that they had included the out-of-school youth in the life-skills and HIV and AIDS awareness efforts.

According to the ADEA-COMSEC (2006) report, school-based programs provide only a partial response to the problem of HIV and AIDS and do not reach out to out-of-school youth. In most countries, education sector responses do not have special programs designed for or targeting out-of school youth. This group is assumed to be covered by the health ministries, multi-media programs or NGOs. However, a study conducted by COMSEC found that the majority of the countries surveyed has made effort to include out-of-school youth in life skills and HIV and AIDS awareness efforts through programs delivered by trained volunteers. Some experiences include: Youth clubs in Kenya, Uganda, Swaziland, Zimbabwe and Cameroon which focus on activities such as soccer, netball, volleyball, boxing, drama groups, music, and gender issues. HIV and AIDS education are incorporated and the participating youth are also used as peer educators and behavior change agents (COMSEC, 2006).

In Kenya, there is a program for sex workers in slum areas focusing on prevention. Uganda has a Presidential Initiative on AIDS for Communication to Youth (PIASCY). Cameroon has income-generating activities for rural and urban youth i.e. farming, hairdressing, baking and HIV education activities. The success of these programs has been due to:

- Active involvement of National Youth Councils (NYC) in the coordination of the youth out-of-school activities;
- Programs are youth-led and structured;
- Use of young people, including HIV positive youth as educators and
- Using the youth that are economically empowered as resource persons for disempowered youth (COMSEC, 2006).

An effective AIDS response must, therefore, include special measures to ensure that HIV and AIDS - infected and affected learners are not left out. The plight of AIDS orphans has been highlighted worldwide but some educational responses have been misguided, unsustainable and one-dimensional. The widespread practice of providing school bursaries is a temporary, quick-fix solution, which does not tackle the pressing need to remove user fees and reduce other costs of schooling. Furthermore, school bursaries may reduce the financial barriers facing orphans and vulnerable children (OVCs) but they do not address the pressing psycho-social needs of these highly vulnerable children.

2.4.1. HIV and AIDS in TVET: The Botswana Training Authority (formal TVET)

- *Rationale and assumptions*

Few countries anywhere in the world are as severely impacted by the AIDS epidemic as Botswana, where adult HIV prevalence is 24.1 per cent (UNAIDS, 2006). The vocational training sector offers a unique opportunity for access to an age group, young adults, most affected by the epidemic. Reflecting Botswana's National HIV and AIDS Strategy, the Botswana Training Authority (BOTA) recognized its responsibility to mainstream HIV and AIDS in line with the multi-sectoral approach. BOTA is an important example of PPET because it is a "sector-wide approach" to HIV and AIDS within the national context of vocational education and training. In addition, it is a successful model of institutional development that began as a donor initiative but has been taken over by national authorities and financial resources.

- *Coverage*

BOTA has its own HIV and AIDS policy and a strategy to educate and support its vocational trainees and employees on HIV and AIDS issues. In addition, an HIV and AIDS Division was established in 2002 to coordinate the HIV and AIDS activities in the vocational training sector of Botswana. This Division can provide client institutions with training and technical expertise.

- *Program summary*

The Botswana Training Authority was established in 2000. Its mission is to coordinate vocational training activities in order to achieve better integration and harmonization of the Vocational Training (VT) System, to monitor and evaluate the performance of the system, and to advise the Minister on VT policy.

Some of the main functions of BOTA are to promote access to training opportunities in VT, to register, accredit and monitor both public and private VT institutions (including workplaces), to develop and review national training standards in cooperation with industry, to register and accredit teachers of VT and to regulate assessment and testing.

BOTA developed its HIV and AIDS policy and a strategy to educate and support its employees on HIV and AIDS issues. In addition, an HIV and AIDS Division was established in 2002 to coordinate the HIV and AIDS activities in the VT sector as well as to support the institutions with training and technical expertise.

The Memorandum of Understanding between BOTA, GTZ and DED focuses on HIV and AIDS awareness, development of strategies, policies and activities, development of information, education and communication materials, and the coordination and integration of HIV and AIDS interventions within the vocational training sector, in accordance with the national HIV and AIDS policy and objectives and *Vision 2016.* BOTA's HIV and AIDS activities are as follows:

- inclusion of HIV and AIDS in the formal learning process;
- promotion of coordination and linkages with key stakeholders;
- provision of support to public and private training institutions;
- formal institutionalization of HIV and AIDS in the structures and strategic direction of BOTA.

- *Success factors*

The extremely high commitment to HIV and AIDS is reflected in BOTA's *Strategic Plan 2004–2008* where HIV and AIDS is one of the "Key Result Areas". Other aspects of BOTA's success are the inclusion of HIV and AIDS in the Botswana National Qualifications Framework; the participatory development of guidelines for preparing curricula; a compulsory HIV and AIDS policy and activity requirement for registration and

accreditation of training institutions; the development of a model HIV and AIDS policy for training institutions to cover both learners and staff; the use of 'edutainment' as an HIV and AIDS awareness raising tool; the production and dissemination of the HIV and AIDS newsletter *Emang,* a learner-driven publication aimed at awareness-raising.

- *Sustainability*

Until March 2004, GTZ funded all the activities and equipment of the HIV and AIDS Division. With the implementation of the Second Strategic Plan 2004–2008, BOTA itself took over full responsibility for its HIV and AIDS activities and now funds the majority of such activities out of its own budget. Nonetheless, the success of the project will depend on more systematic BOTA inter-departmental cooperation, integration of HIV and AIDS within all learning areas and the development of different strategies for the various types of partner training institutions, among others. It appears probable that BOTA's HIV and AIDS strategy is a sustainable one.

2.4.2. Orphans and Vulnerable Children (OVCs) in non-formal PPET

More than 15 million children have lost one or both parents to AIDS. In addition to poverty, emotional devastation, and other hardships brought by losing one's parents, orphanhood confers risk for unsafe sexual behaviors (Population Council, 2007). Many orphans are now heads of family units with no place to live. This calls for measures to mitigate the impact of HIV and AIDS on the OVCs. One of the ways in which this can be done is by providing vocational training to OVCs who are not in school in order to equip them with skills for economic and social survival. The following example highlights two innovative programs.

2.4.2.1 The Zambia Interactive Radio Instruction Program for Out-of-School and Vulnerable Children

The Zambia Interactive Radio Instruction Program (IRI) has been used to improve the quality of instruction in classrooms. However, the program has gone beyond its initial purpose in order to deliver basic education to out-of-school children, especially orphans and other vulnerable children, in community learning centers. The out-of-school target population ranges in age from 7 to 17 (wide age ranges are not uncommon in non-formal PPET). This IRI example is significant not only because it reaches out-of-school children and youth but also because it provides good quality instruction, compensating for the limitations of the community mentors who supervise the learning process. The program is also important because it bridges formal and non-formal education and could become an important way of achieving Education for All goals in Zambia. For that reason, it merits further study in view of being replicated in other countries with large numbers of rural children and youth and shortages of trained teachers.

- *Rationale and Assumptions*

The aim of IRI is to provide an educational response to the HIV and AIDS crisis in Zambia by developing a community-based system of radio learning centers utilizing interactive radio instruction methods to reach out-of-school youth, including orphans and other vulnerable children, affected by HIV and AIDS.

- *Coverage*

The Ministry of Education airs 100 daily 30-minute lessons for grade 1 and 200 for each of Grades 2, 3, 4 and 5. These programs follow the Zambian curriculum for mathematics, language arts in English, science and social studies.

Due to the psychosocial needs of many of the listeners, the radio instruction programs include five-minute segments covering life skill themes (such as hygiene, nutrition and social values), and 15-minute programs

are broadcast each day for teachers and other adults that address explicitly issues relating to HIV and AIDS in Zambia.

- *Program summary*

The Zambia Interactive Radio Instruction Program was launched in 2000 as a collaborative effort among communities, national NGOs, the Ministry of Education, the U.S. Peace Corps, and the Education Development Center, an American non-profit consulting firm. Each group has a key role in the development and implementation of the program:

- The MOE's Educational Broadcasting Services develops and broadcasts the programs and develops supplementary learning materials.
- The Ministry of Education trains mentors and provides supervision and monitoring at participating learning centers.
- Participating communities, churches and nongovernmental organizations donate the learning center venues, mentors to facilitate discussions of the radio broadcasts, radio receivers, and some low-cost materials.
- Communities also mobilize out-of-school children to attend the learning centers each day.
- The Education Development Center has trained writers and producers and assisted in developing a training-of-trainers program for the Ministry of Education resource center staff, who in turn, train mentors to run the community-based learning centers.

The program trains community mentors to facilitate daily lessons in the areas of literacy and numeracy as well as life skills education relative to HIV and AIDS awareness and prevention.

- *Success factors*

- An evaluation conducted at the end of 2003 showed the IRI program had a total of 591 organized learning centers spread over all nine provinces of Zambia, and the total enrollment had increased from 9,250 learners in 2001 to 22,773 learners in 2003.
- Approximately 300 centers covering all nine provinces have been established, of which 32 percent of enrollees were orphans, 48.7 percent were female and only about 17 percent of enrollees had received any schooling prior to receiving IRI.
- A literacy skills assessment, based on the Ministry of Education's Grade 1 curriculum, indicates a mean score performance of pupils of 56.5 percent as compared to a target of 47 percent and the conventional primary school standard set for "passing" of 50 percent or better.
- Interactive radio in community learning centers was formally adopted by the Ministry of Education as its primary means for reaching the 800,000 school-age children not in school.

- *Sustainability*

Reliance on external funding for the program raises issues of sustainability. The Zambia Ministry of Education relied on the Education Development Centre (EDC) technical assistance in the design, development and evaluation of instructional programs for the primary grades. It is uncertain how the operating costs of this innovative initiative can be covered once the support of the outside partners ends. Several issues have emerged that affect the sustainability of the initiative:

- There was a high attrition level among mentors, which must be addressed through appropriate supervision and support;

- Communities need to be sensitized to provide on-going support to the learning centers;
- Erratic funding from the government and delays in producing and distributing mentors' guides turned out to be a further obstacle to sustainability;
- Better coordination and greater flexibility is needed among the cooperating partners in order to provide adequate and timely technical and financial support to the IRI program.

2.4.2.2 The Junior Farmer Field and Life Schools

FAO is working with WFP, UNICEF, non-governmental organizations and local institutions to establish Junior Farmer Field and Life Schools (JFFLS) for children and young people in response to the growing numbers of AIDS orphans in rural areas. The JFFLS was chosen for this study because it responds in a unique way to the needs of rural orphans. Based on a successful learning model for adult farmers, the JFFLS initiative can become an important contribution to sustainable development in rural areas, where formal schooling tends to orient students to migrate to cities.

- *Rationale and Assumptions*

The techniques of agriculture are traditionally learned in the family, with parents teaching their children how to do these tasks. However, the impact of the AIDS epidemic is such that as children and adolescents lose their parents they no longer have the learning and mentoring resource of an intact family. The loss of valuable agricultural skills has serious consequences for the development of agriculture and food security in Africa.

In designing the JFFLs, FAO and its partners have made assumptions about the feasibility of ensuring the transmission of agricultural skills to OVCs through a non-formal learning process outside of the traditional family or school settings.

- The JFFLS are designed specifically to support rural adolescent OVCs with special need for psycho-social support as well as skill development not offered by the formal secondary school system.
- The JFFLS approach assumes that youth can acquire the essential skills and attitudes to continue preparing to become successful farmers after one year of instruction and learning.
- The JFFLS also assume that adolescent rural girls will be able to learn the same skills as boys and take on non-traditional roles in farming.
- JFFLS with links to Farmer Field Schools for adults are expected to increase community production and become providers for school feeding programs.

- *Coverage*

FAO has set up 34 Junior Farmer Field and Life Schools for orphaned children in Kenya, Mozambique, Namibia and Zambia, targeting a total of around 1,000 young people. Spontaneous creation of JFFLS in Mozambique is happening without international support.

- *Program summary*

Instruction is given by a team of facilitators composed of a teacher, an agricultural extension worker and a social worker skilled in communication through cultural activities. Each team is responsible for approximately 30 children; half of them girls and half of them boys. Many of these children are not able to farm because their parents could not pass on the necessary agricultural knowledge before dying of AIDS. The JFFLS use the Farmer Field School approach developed by FAO, where a group of farmers facilitated by an extension worker is provided with a plot of land on which to experiment with innovative

farming practices. In addition to learning technical skills, the Farmer Field Schools provide an excellent vehicle for group mobilization and income generating activities. The JFFL schools appear to provide a safe social space for both sexes, where peer support and community care will allow youths to develop their self-esteem and confidence.

JFFLS aim at empowering 12-to-18- year-old OVCs in the agricultural sector by using an active and participatory learning methodology. The programme is designed to pass on agricultural knowledge, entrepreneurial and life skills while cultivating self esteem and equal relations among young men and women. In JFFLS, life skills are developed through creativity, using the local cultures as expressed in the various arts, such as theatre, dance and masks. These techniques facilitate the process of self-expression, empowerment, self-knowledge, resilience, definition of identity and the capacity to define and experiment risks and resources in a safe environment. During the JFFLS day, children are provided nutritious daily meals by WFP. JFFLS are generally created in association with existing primary schools, although this is not an absolute requirement.

The schools cover both traditional and modern agriculture. Children learn about field preparation, sowing and transplanting, weeding, irrigation, pest control, utilization and conservation of available resources, utilization and processing of food crops, harvesting, storage and marketing skills. The field schools also help to recover or sustain traditional knowledge about indigenous crops, medicinal plants, and biodiversity. In addition, the schools address such issues as HIV and AIDS awareness and prevention, sensitivity to girls, child protection and sexual health, while offering psychological and social support, nutritional education, and business skills. The schools provide a safe social space for the students to develop their self-esteem and confidence.

- *Success factors*
    - Girls and boys will question unhealthy gender norms and learn to participate in agriculture – and life – in an equitable manner.
    - Ultimately, transmitting attitudes of male-female equality to the boys and girls depends on the existence of such attitudes among the facilitators.
    - The three-person teams made up of individuals from different sectors (education, agriculture and culture) will work harmoniously together and that replacements will be found when team members are posted elsewhere.
    - Technical resource people brought in to instruct the learners on different aspects of agriculture will be able to adopt a learner-centered facilitation approach.
    - The graduates will have access to land and essential tools for farming.
    - The graduates, particularly girls, will be able to become successful farmers in societies which do not share the gender attitudes of the JFFLs.

- *Sustainability*

National ownership is vital to the sustainability of the JFFLS model, which is a multi-sectoral approach. The program has the advantage of being adapted from successful adult farmer education models already established in the host countries and managed by the respective ministries of agriculture. The low cost and flexible management process of the “schools” are an advantage. The “schools” operate only where there is active community support in terms of making land and adult labor available. On the other hand, these factors may not always be available in the long run. Facilitators who are teachers or extension workers already receive salaries and need no additional incentive to take part in JFFLS; facilitator training strengthens their capacity by equipping them with additional skills and expertise

2.4.3. Responses to HIV and AIDS in tertiary and higher education

Tertiary education began to respond to HIV and AIDS more recently than secondary education. It is a vulnerable environment because all of the actors are sexually active and high-risk behavior is common. On the whole, education sector policies and strategies on HIV and AIDS cover primary and general secondary education. At the tertiary level, individual universities usually take initiatives to develop their own policies and strategies on HIV and AIDS.

Institutions of higher education are directly responsible for the physical welfare and education of a large number of young people many of whom will be leaders of social, economic and political development. However, HIV and AIDS undermine teaching, learning, research and community engagements which are the core businesses of tertiary and higher education institutions. Focusing on HIV and AIDS in tertiary institutions is important because most students in these institutions are young people between the ages of 18 and 24 years. Most of them are therefore sexually active and vulnerable to the dual risks of HIV infection and unwanted pregnancies. Campus life can increase young people's vulnerability through 'a new found freedom', limited on-campus accommodation, sexual mixing among staff and students, risk of exposure to HIV-contaminated fluids in medical or laboratory environments, coercive sex and limited access to condoms or other means of prevention. There are also problems of students engaging in transactional sex for several reasons. In some cases, students have sex in exchange for money because they cannot afford rising fees and other costs. In other cases students (generally females) want to ensure that they get good grades and develop liaisons with professors. Finally, there are students who use sex to improve their standard of living. Other factors associated with high-risk behavior include heavy alcohol consumption among students and this often leads to irresponsible behavior. The high incidence of pregnancy and STIs is also an indication that students engage in unprotected sex. Sexual harassment, rape and violence against women are also common on university campuses. So far, small-scale knowledge, attitudes and practices surveys have been undertaken but few rigorous institutional impact or risk assessments have been undertaken in tertiary institutions and universities. Information on staff and student morbidity and mortality is usually unavailable or only reported anecdotally. Few tertiary institutions have developed formal policy guidelines to address HIV and AIDS or to address the replacement and training costs of those leaving university positions because of illness (Coombe, and Kelly, 2000).

Responses to HIV and AIDS in tertiary education tend to be situated at a) the institutional level and b) the student level. In effect, responses on both levels are important, as student-led efforts to prevent the spread of the virus are limited by the turn-over among students and institution-led efforts to respond to the epidemic need the active support of both faculty and students. The following example highlights a fairly comprehensive institutional response to the epidemicin the area of policy and strategy. It highlights the importance of top-level commitment to policy and stragegy development and the relevance of a multi-sectoral approach to mainstreaming HIV and AIDS in curricula.

2.4.3.1 Response at the institutional level: the National University of Rwanda

- *Rationale and assumptions*

The concept that an institutional policy framework and supporting strategy are necessary for an effective and sustainable response to HIV and AIDS in higher education lies behind the initiative at the National University of Rwanda.

- *Coverage*

The National University of Rwanda is the country's leading higher education institution. Butare, the home of the university is the capital of a province with a population of 800,000 people and an HIV prevalence level of 6.7%. The university community comprises roughly 9,000 people, including staff and students. The university's response to HIV and AIDS covers not only students and faculty on campus, but also the general population of the province through services provided at the university teaching hospital. About 45 people per

day use the university health center. Operating twenty four hours a day, the center provides a range of primary health care services with referrals to the university hospital. [7]

- *Program summary*

The university focal point of the response to HIV and AIDS is the *Ligue Universitaire Contre le Sida* (LUCS). Created in 1999, after an intensive consultation process called by the Rector, this focal point reflects the high-level commitment by the university to both a national and an institutional problem the LUCS provides a base for the university's institutional HIV and AIDS program and is staffed by a full time co-ordinator and the two other officers. Because the university's response to HIV and AIDS is recent, LUCS emphasizes capacity building as a way of supporting the development of appropriate responses to HIV and AIDS in different parts of the university.

The LUCS budget of $10,000 in 2000 grew to $113,000 in 2006, using internal resources supplemented by donor partners as the LUCS developed and elaborated its activities. Current activities form part of a well-developed Strategic Plan for the period 2005-2009. The Plan includes a feedback process aimed at evaluating the quality of HIV and AIDS services and ways in which to target service delivery more effectively. By late 2006, the institutional policy on HIV and AIDS was in its final stages of development and was scheduled for implementation in 2007.

LUCS-sponsored services and activities

- The campus health center.

The LUCS VCT service started in 2001 and initially had slow uptake. Baseline research revealed widespread student anxiety about stigma and disclosure of HIV status. However, increases in testing followed as a result of sensitization campaigns. By September, 2006, an estimated 433 clients had used the testing service. Early estimations of seroprevalence in the university community (among people who chose to be tested on campus) were between 2.2 and 2.8% positive.

Condom distribution features prominently in the prevention strategy with a target of just under 80,000 planned for each trimester.

- A "positive living" support group

The *'Arc en Ciel'* (Rainbow) organization is a group of staff members living with HIV.
Established around 2003, the organization has about 25 members. Importantly, both LUCS and the group's leaders of have noted that the level of stigma that surrounds the organization is a major constraint to its growth. As a result, LUCS is intensifying its campaign against silence, stigma and denial about HIV and AIDS on campus.

- Curriculum integration

Because the National University of Rwanda takes the HIV and AIDS epidemic seriously, it has succeeded in its initial efforts to sensitize all incoming students about the epidemic through an introductory course. However, much work is needed in mainstreaming HIV and AIDS in disciplines other than medicine and health.

Beginning in 2000, the National University of Rwanda participated in a UNDP program on HIV and AIDS curricula mainstreaming. After their training in this program, four university staff members, based in public health, social sciences, education, economics and media studies collaborated on developing a core curriculum for all incoming students. The curriculum, entitled, *HIV and AIDS and Society,* was initiated in 2004. It carries four credits and entails a total of 60 hours of theory and practical work which is assessed by

[7] The university teaching hospital has become a major center of HIV and AIDS services to the province.

examination. In terms of content, it covers the historical, epidemiological and biological aspects of the epidemic, impacts on children, youth and gender, HIV and AIDS and development, human rights issues and lastly, behaviour change and community mobilization. In 2006, all entering 2,000 students completed the course.

Feedback from students indicates an increased interest in knowing their HIV status and that they are encountering a range of HIV-related issues for first time. While the course succeeds in 'de-medicalizing' the epidemic, at present, the course content emphasizes content knowledge more than skills.

The only other curriculum initiatives in the pipeline include plans to introduce HIV-related issues into the Law Clinic in the faculty of law though no formal integration into the law curriculum has yet been planned.

By 2007, the faculty of health sciences was able to include HIV-related skills and content requirements in its instructional programs.

Though clinical research is a priority, it remains a challenge because of the costs involved and related capacity requirements.

- *Success factors*

The university's approach is based on high-level leadership and ongoing commitment to mainstream HIV and AIDS issues gradually into all aspects of operations at the university. The mainstreaming process was done in a participatory, inter-departmental way and resulted in a common course on HIV and AIDS for all in-coming students. Continuing advocacy from the Rector of the University and other partners is necessary to speed up the process of integrating HIV and AIDS into the curricula of all faculties of the university.

- *Sustainability*

By providing a budget for salaries and core operations of LUCS, the National University of Rwanda has done much to ensure the sustainability of the responses to HIV and AIDS. The existence of a policy on HIV and AIDS is another sustainability factor and one that is helpful in attracting outside donor funding. Similarly, the practice of monitoring and evaluation of HIV and AIDS programs is used to clarify problems and failings and ways to overcome them.

The following examples highlights three student-centered responses to HIV and AIDS in tertiary education. An additional example from tertiary education is presented in Appendix 5.

2.4.3.2 Responses at the student level : Groupo dos Activistas Anti SIDA/DTS (GASD) - Universidade Eduardo Mondlane, Mozambique

- *Rationale and assumptions*

The effects of the HIV and AIDS epidemic became evident in Mozambican higher education by the early 1990s. In those days, before the development of ARVs, AIDS was seen as a death sentence death. At the same time, silence, stigma and denial made it difficult to discuss AIDS-related issues openly and people who were seropositive or suspected of being so were often victims of discrimination, including loss of employment. A bottom-up approach to advocacy with grass-roots support and peer education was seen as a critical factor in overcoming stigma and discrimination linked to HIV status in the Universidade Eduardo Mondlane.

- *Coverage*

Both students and university employees are covered by the services of GAS. However, because students are treated as part of the general population at the university's teaching hospital, Maputo Central Hopsital, it is not easy to profile student uptake of VCT services or their potential demand for VCT services. GAS has, however, been called upon to join an expert group to develop a national policy and strategy on HIV and AIDS in the work place.

- *Program summary*

The Universidade Eduardo Mondlane of Mozambique is home to the *Groupo dos Activistas Anti SIDA/DTS* (GASD), founded as a student-staff NGO in 1992 by a former student of the university. The impetus for its establishment came from the university leadership after having participated in an AAU workshop during which the issue of HIV and AIDS was discussed. GASD has since succeeded in establishing itself as an integral part of the university and enjoys both national and international recognition. For example, because of its expertise in HIV and AIDS and advocacy, GASD was one of the partners chosen to work with other important national higher education institutions on developing new workplace anti-discrimination policy which applies to all Mozambicans.

The organization reaches out to the 12,000 fultime university students and the 2,000 university employees. GASD is funded by a university budget of approximately $15, 000 which is supplemented by donor funding. Its offices are housed in one of the university's student residences.

<u>GASD-sponsored services and activities</u>

The core of GASD comprises 26 peer educators (2007 data) and a few full-time employees. GASD provides a range of services and resources including:

- Awareness and sensitization programmes,
- IEC materials,
- Peer education,
- Condom distribution,
- Preparation and dissemination of a news bulletin,
- Counseling.
- Video information sessions.

Peer educators have been active at UEM since 1992. Typically recruited in their second year of study from all the faculties, they receive a short period of training and are then kept on for three to four years. The majority of the peer educators is students, along with some employees. The peer educators' activities are planned on a monthly basis with debriefing meetings at the end of every week.

In terms of partnerships, in 1998 UEM joined an initiative called "Initiativo Conjunto de Prevencao e Reducao do Impacto do HIV no Ensino Superior" whose aim is to bring together both public and private higher education in the fight against HIV and AIDS. EM has since assisted the Catholic University of Beira and other eight higher education institutions in the country to develop HIV and AIDS programs. This initiative has generated a higher level of acceptance, owenership and commitment among university leaders and managers.

GASD also works in partnership with the "Conselho National de Combato SIDA" (CNCS) the locus of the national HIV and AIDS programme in Mozambique. The latter provides GASD with support for its work in research, mitigation and prevention. GASD also works very well with the government of Mozambique, and in particular with the Ministry of Higher Education on matters related to HIV and AIDS. There is no data on the proportion of students using condoms, but a 2005 KAP study revealed a high proportion of students had knowledge of about HIV and AIDS.

- *Success factors*

Quality of service in terms of providing effective counseling and sensitization are at the heart of GASD's success. Access to additional information and sensitization resources on AIDS issues through GASD's partners is another aspect of its success.

- *Sustainability*

Core funding and office space provided by the university ensure the continuity of GASD. Its reputation and 15 years of experience as an effective organization have enabled it to do fund raising.

2.4.3.3 "I Choose Life – Kenya"

- *Rationale and assumptions*

NGOs such as I Choose Life Africa are trying to train young people in institutions of higher learning in life skills, peer education, economic empowerment, career development, and leadership development. The program is student-driven and has shown local results in important areas such as developing awareness of HIV and AIDS issues among students and encouraging behavior change. It is presented here to illustrate how student-led HIV and AIDS programs can operate. It is hoped that such programs can be institutionalized by the development of formal university policies and programs that will complement and support initiatives like I Choose Life.

- *Coverage*

In Kenya, I Choose Life Africa runs a pilot project at the University of Nairobi for the care and treatment of any HIV-positive students. It is also working with the Commission for Higher Education. It has assisted Daystar, Maseno, Moi, Kenyatta, Egerton universities, the University of Nairobi, as well as the Cooperative College of Kenya

- *Program summary*

I Choose Life-Africa is an international NGO with the leading behaviour change peer education programme targeting HIV and AIDS in Kenyan universities today. ICL began as a response to students needs at the University of Nairobi in 2002. A survey was carried out in the institution and it emerged that HIV and AIDS was an issue largely affecting the students. Following the successful establishment of the program at the University of Nairobi, it was rolled out to six other institutions of higher learning across Kenya namely, Kenyatta, Daystar, Egerton, Maseno and Moi universities and the Co-operative College of Kenya. ICL works closely with the Commission for Higher Education and the National AIDS Control Council to reduce the prevalence of HIV among Kenya's youth.

The overall objectives of the intervention were:

- To improve HIV and AIDS related knowledge;
- Delaying sexual debut;
- Decreasing the number of sexual partners;
- Increasing condom use among sexually active students;
- Increasing VCT uptake;
- Decreasing stigmatization against people living with HIV;
- Strengthening HIV and AIDS policy development and implementation with student participation;
- Developing community support for sustained behavior change;
- Providing HIV care and support for students.

In a span of four years, the program has trained an estimated 2,901 peer educators who are expected to have reached more than 40,000 students. It has recorded nearly 4,000 VCT test visits and established 210 post test clubs. Two post test clubs for students living with HIV are also in existence. By 2006, survey data from implementing institutions showed that 86 percent students were using condoms and there had been an increase of 25 percent in the number of students who were tested for HIV. Uptake of VCT was directly linked to exposure to the behavior change program and 78 of students involved in the program reported having tested for HIV. Interestingly, the gaps in the program showed that partner reduction and levels of stigma were taking far longer to overcome.

- *Success factors*

Its relevance to the needs and interests of students is well supported by the numbers of students who have been recruited as peer educators. In a context where the uptake of VCT is highly variable, the effectiveness of this program on one level is evidenced by the numbers of recruits who have tested for HIV. Few other programs have been innovative enough to spawn up to 20 behavior change groups on a university campus based on a host of different interest groups.

- *Sustainability*

The scale on which *I Choose Life* operates has already proven its potential for replication, though without significant external support it is not altogether clear it will be sustainable, despite considerable inputs from volunteers. Peer education is hugely popular but with highly variable outcomes. *I Choose Life* is significant in having established benchmarks and close monitoring and evaluation as part of its methodology.

2.4.3.4 Introduction of HIV and AIDS education into the Electrical Engineering curriculum at the University of Pretoria, South Africa

- *Rationale and assumptions*

Realizing that university students are a high-risk group for HIV infecton, the University of Pretoria, South Africa has launched various initiatives to promote better understanding of the disease among its student population.

- *Program summary*

One such initiative was the dissemination of an HIV and AIDS educational CD developed by the Department of Electrical, Electronic and Computer Engineering, the Department of Telematic Learning and Education Innovation and the Centre for the Study of AIDS, all parts of the University of Pretoria. In essence, the initiative is a curriculum response to the epidemic. The university felt that by asking each department to integrate HIV and AIDS issues into its program of instruction, professors and students would take the epidemic more seriously.

The target “market” for the CD is all undergraduate students in all disciplines, although due to its generic nature, it is relevant to the population at large. It was initially used in the Department of Electrical, Electronic and Computer Engineering at third and fourth year level, as a way of engaging the professors and students with HIV and AIDS issues way in the context of their studies.

The development of the HIV and AIDS educational CD was initiated by the Department of Electrical, Electronic, and Computer Engineering, as part of its program on the modeling and control of HIV and AIDS. The initial idea was to package research on the modeling and control of HIV and AIDS in the CD but it became necessary to provide comprehensive explanation of terms used in the model in order for such a CD to be a stand-alone product. A booklet developed by the Center for the Study of AIDS at the University to

train counselors was, therefore, incorporated to form the basis of required background material. The contents of the CD include topics such as the definition of HIV and AIDS and statistics about the epidemic. The CD also covers prevention, transmission, diagnosis, symptoms, treatment, sexually transmitted infections, counseling, gender issues, law/rights, peer education, and references

The CD was later presented to about 300 third- and fourth-year engineering students. Their knowledge of the subject was tested before and after they were exposed to the material on the CD.

In addition to the other contents on the CD, a mathematical HIV and AIDS model is being incorporated into a third-year control systems course. The model is used to illustrate standard control systems, engineering concepts such as linearization, system stability, feedback and dynamic compensation. Students taking the course are asked to linearize the HIV and AIDS model around suitable operating points, do a stability analysis of the resulting system, set specifications for the viral load and develop open and closed-loop strategies to achieve such specifications in the face of output disturbances. Mathematical HIV and AIDS models that describe the time, evolution of healthy CD4+ cells, infected CD4+ cells, and the virus load make the CD of special interest to engineers. The models are packaged as Java applets, which allow the user of the CD to view the time evolution of these model outputs in graphical form. Model parameters can be adjusted by choosing different treatments and the effects of such treatments can be seen in the model outputs.

- *Success factors*

The success of the CD initiative can be assessed by testing student knowledge, attitudes and behavior about HIV and AIDS before and after using the CD. Similarly, records should be kept to assess the *demand* for the CD, which is used voluntarily, as well as student comments about its usefulness. As for the application of the mathematical model of HIV and AIDS impact on the immune system, professors need to be involved in evaluating the sophistication and accuracy of student attempts to use the model.

- *Sustainability*

Both the CD and the mathematical model should be viewed as *catalytic* efforts to stimulate wider involvement of the university departments in responding appropriately to the AIDS epidemic. The CD will need periodic updates and changes in demand for it will indicate whether it is sought-after by students. The Department of Electrical Engineering (or perhaps other departments) will have to commit to updating and disseminating the CD. The current mathematical model of HIV and AIDS impact on the immune system is useable in a fairly limited sphere. A sign of sustainability would be the number of other departments that create “learning tools” about HIV and AIDS using the methods and concepts of their respective disciplines.

2.5. Analysis and Interpretation of Findings

In reviewing the objectives of the study, it can be concluded that they were partially achieved by the research and analysis conducted.

2.5.1. Identification of the responses of PPET to HIV and AIDS

The study deliberately focused on under-researched branches of PPET to identify programs that respond to the threat of HIV and AIDS to learners and instructors. It cannot therefore be considered comprehensive. Evidence from this study indicates that responses to HIV and AIDS in PPET are recent, dating from the year 2000 and later. The examples found are concentrated mainly in high-prevalence countries in East and southern Africa, where the impact of the epidemic is generalized and visible in terms of illness and mortality. Low-prevalence countries have focused mainly on curriculum initiatives such as HIV and AIDS prevention and life skills in general secondary schools. Because administrative responsibility for PPET includes several ministries or coordinating bodies like BOTA in Botswana, in most countries there is not yet a *comprehensive* policy framework for dealing with HIV and AIDS in the education sector that includes non-formal education

and TVET as well as general secondary education. Similarly, higher education was found to have few responses in terms of comprehensive policy and strategy. It was found that many initiatives are taken by indigenous or international NGOs and international development organizations rather than by national authorities.

2.5.2. The effectiveness of the identified responses in protecting not only the learners and instructors but also the teaching-learning- process

The lack of an AIDS-sensitive EMIS covering PPET and the absence of comprehensive published data on the impact of programs makes it difficult to determine conclusively which of the programs studied are most effective in protecting learners and staff from HIV infection and in facilitating access to care and support for those who are infected or affected by HIV and AIDS. The dearth of longitudinal studies on the HIV and AIDS-related knowledge and behavior graduates of PPET means that it is not possible to state whether the teacher- or peer-led programs are effective in the long term.

Similarly, although certain programs obviously have considerable support from donors, communities, government and other partners, there are few data about the quality of learning outcomes. The exception is the interactive radio instruction program in Zambia, where the listeners scored well on tests. Other programs, such as Envirocare, in Tanzania (See Appendix 5), were successful in preparing learners either to go into secondary school or to find employment, including self-employment. For those reasons, these programs merit further study.

2.5.3. What are the policy implications for such responses in relation to the current drive to expand PPET systems in Sub-Saharan Africa?

The policy implications of the responses studied are discussed more fully in Part III. However, the study identified the following challenges to strengthening the capacity of PPET to respond to the challenges of the AIDS epidemic.

2.5.3.1 The challenge of political will and leadership

Although HIV and AIDS are still widely regarded as a *health sector/medical issue*, many countries in sub-Saharan Africa have taken action towards mitigating the impact of the epidemic on their educational systems. Nevertheless, their efforts have often been constrained by: inadequate leadership and coordination, denial; lack of adequate data on the impact of HIV and AIDS on the sector; lack of understanding about what the sector can do to counter HIV and AIDS; lack of appropriate skills and training among educational planners and administrators; lack of political will; and limited financial and human resources.

2.5.3.2 The challenge of collecting and using data

The provision of HIV and AIDS information in secondary schools, TVET and non formal education has not been very effective for several reasons. Many countries lack a proper quantification of the magnitude of HIV and AIDS impact on PPET. Few studies exist on the impact of HIV and AIDS on educators, but even so, these studies a few and far between, and there is no consensus in and between countries on the authenticity of the results. While ministries of education and many district education offices keep track of teacher attrition through death or abscondment, none indicate specifically if the attrition is due to AIDS-related

causes. The best EMIS data on teacher attrition due to illness is the system piloted in KwaZulu-Natal in 2000-2002. However, for confidentiality reasons, the specific cause of death is not mentioned. The value of the EMIS data in this AIDS-devastated province of South Africa is that reporting school-level data on students and teachers during the school year showed districts and schools with high levels of teacher attrition due to illness. The EMIS in question was used as a management tool, enabling district officials to plan for hiring replacement teachers and assess the need for medical insurance.

2.5.3.3 The challenge of developing adequate policies

While virtually all countries have national education sector policies these policies are either ambiguous or silent on how to target out-of-school youth or trainees in non-formal education programs. In most cases, this category of young people is marginalized or completely ignored in the education sector action plans. Specific manifestations of the policy gaps include the following:

- In many countries there has been little assessment of the education sector response to HIV and AIDS and in particular a careful evaluation of what programs/interventions or strategies that work or do not work. This means that responses to HIV and AIDS are experimental, ad hoc and uncoordinated, and best policies and practices are hardly distilled, disseminated or practiced.
- Lack of clear strategies for targeting out-of-school youth with HIV and AIDS information resources.
- An overloaded curriculum especially in secondary schools, tertiary and higher education institutions that leaves educators (teachers/instructors) with little time to teach HIV and AIDS prevention education and life skills.
- In many institutions, especially teacher training colleges and universities, there are no clear guidelines on condom distribution.
- In most of these institutions, whether in formal or non-formal education settings, the programs are mainly targeted at students, ignoring the HIV and AIDS education and treatment needs for staff.
- Most of the response programs are donor dependent and donor-driven, thus raising the issue of sustainability and long term-impact for the recipients. The problem of financing needs to be faced, as a significant expansion of PPET (including responses to HIV and AIDS) will need new funding. One of the most promising sources of funding, the Global Fund against AIDS, Tuberculosis and Malaria (GFATM) has not yet been adequately involved in the education sector (see Appendix 2 for a break-down of GFTAM funding by type of recipient).

2.6. Summary of Part 2

Despite the challenges cited above, the 14 programs covered by this study have revealed a number of promising achievements in which national and international initiatives are beginning to overcome the lack of engagement on the part of political and institutional authorities. (See Appendix 4 for a summary of the objectives, target groups, outcomes and lessons learned of each initiative.) Because the initiatives studied are recent and because information on impact and financing was rarely available, it is best to view the initiatives as achievements that merit closer study. It is evident that HIV and AIDS responses are fragmentary and limited in PPET. Policies and coordination mechanisms (including monitoring and evaluation measures) do not exist, for the most part. Nevertheless, it is possible to distil some useful conclusions from the examples highlighted in this section of the study.

2.6.1. Achievements in formal education and training

- The Student Partnership Worldwide program in Tanzanian secondary schools presents some useful lessons learned for PPET policy and practice.

  - The SPW model is flexible and adaptable to a variety of different kinds of schools and training programs. Its use of volunteer peer educators would be a good addition to vocational and agricultural programs to train youth for employment.

  - The SPW model is a good practice in developing effective peer educators who are able to communicate effectively on ASRH and HIV and AIDS both in schools and the community.

  - A blend of foreign and national volunteers can be an effective tool in delivering appropriate, participatory instruction on reproductive health and HIV and AIDS in secondary schools, despite the cost of having to recruit foreign volunteers and renew the pool of national volunteers.

  - While it is not known how many students from the SPW schools go on to tertiary education, the well - designed SPW program appears to give the students the attitudes and skills they need to stay in school and avoid HIV infection.

- Work place policies

This is an emerging practice in formal education. The most advanced practices were found in South Africa, the only country on earth that has conducted a national survey of seroprevalence among teachers. While this is a remarkable achievement, policy development and implementation is still in the pilot phase. Work place policies are important elements in ensuring that schools are safe environments not only for teachers but also for students.

KENEPOTE, one of the very few initiatives to provide care and support to HIV-positive teachers, was founded by teachers living with HIV and AIDS and has expanded its membership rapidly in many districts of Kenya. During its brief existence (since 2003) it has grown rapidly in membership and influence. Similar initiatives are needed in other countries where teachers living with HIV and AIDS have no support group of peers.

- Higher education

Relatively little information is available on the responses of higher education to HIV and AIDS and the known responses are usually local initiatives on specific university campuses. Among the available examples, I Choose Life – Africa is doing good work on the university campuses where it is present. It helps to compensate for the lack of a more comprehensive response of the university and ministry authorities to the challenge of the HIV and AIDS epidemic in tertiary education.

- Formal TVET

BOTA, in Botswana, appears to facilitate transition from various types of formal education into formal TVET pre-employment studies. It plays a valuable role in setting accreditation standards and supports the mainstreaming of HIV and AIDS in TVET. BOTA also demonstrates how a donor-sponsored program can become mainstreamed and integrated into the national educational system.

2.6.2. Achievements in non-formal education and programs

- The FAO-sponsored Farmer Field Life Schools, which cater to out-of-school adolescent OVCs, are showing positive results and FFLS are beginning to emerge in different countries *without* FAO support. It is effective in responding to the needs of youth with little or no primary education.

- The Youth Development Network (See Appendix 5) has both formal and non-formal programs, depending on the member organization. YDN appears to play a positive role in facilitating the transition of learners with varying degrees of prior education to pre-employment training. The program cited in this study, the Junior Achievement - South Africa program, favors transition from secondary school to pre-employment training or to tertiary VCT.

3. POLICY IMPLICATIONS AND RECOMMENDATIONS

3.1. Affirming the importance of HIV and AIDS in the development of PPET in Africa

In reviewing the flows of learners into PPET (see Figure 1); the reader will understand that many youth, especially in West and Central Africa, will need to seek education and training opportunities in TVET and non-formal programs of PPET, as they will have had incomplete primary or no primary education. As a result, they will have little or no school-based instruction on HIV and AIDS or life skills. For this reason, including meaningful responses to HIV and AIDS in PPET is critical. Policy development in PPET must take into account the following issues in order to better adapt this sector to the needs of adolescents:

3.1.1. The need to introduce and reinforce HIV and AIDS issues in TVET and tertiary education

Although TVET and tertiary education accommodate sexually-active youth, there is inadequate attention to HIV and AIDS issues in this sector on the whole. The existing programs tend to focus only on the learners and not on teachers or instructors. PPET should also address the needs of staff in these institutions especially those who may be affected by or infected with HIV and AIDS. By doing this, staff will be in a better position to also mind the welfare of those whom they are educating. HIV and AIDS-positive teachers/instructors/professors have a prominent role in shaping the education sector responses to HIV and AIDS. Their participation and engagement in advocacy, identification of needs and design of programs is vital and needs to be supported.

3.1.2. The need for an expanded approach to HIV and AIDS-related learning in secondary education

Current practices on assigning the task of giving lessons on HIV and AIDS to often ill-prepared and reluctant secondary-school teachers leads to poor quality and little learning The example cited in this study suggests that effective learning on HIV and AIDS and life skills can be provided through the use of trained and motivated resource persons (whether youth volunteers or professionals from outside the education sector). In any event, communities, headmasters and secondary-school teachers must be supportive of such supplementary education.

3.1.3. The need to include HIV and AIDS considerations in low-prevalence countries

HIV and AIDS cannot be neglected in low-prevalence countries. Life skills and preventive education can be powerful tools in preventing the spread of the epidemic among youth. Integrating HIV and AIDS issues into school health programs and extending these to TVET and non-formal education can be valuable contributions to strengthening the response of these sub-sectors to HIV and AIDS. While low-prevalence countries will have relatively few OVCs and teachers living with HIV and AIDS, it is necessary to develop care, counseling and mitigation services for these two vulnerable groups. While Senegal has been hailed as a "success story" in reducing its adult HIV prevalence to just under 1% (UNAIDS, 2006), it seems that the health sector, with the support of political, civil society and religious leaders, has contributed more than the education sector to the fight against AIDS[8]. It is important for low-prevalence countries to take the epidemic seriously and take measures to prevent the further spread of the virus through more systematic, skills-based educational efforts in teacher training and classroom instruction.

[8] Seck (2002) states that "…despite the considerable number of initiatives already undertaken, most actors [in the education sector] feel that the fight against AIDS has been given a low priority in the education sector." p.6.

3.1.4. The need to adapt and open TVET programs to adolescent girls

In the case of adolescent girls, their particular vulnerability to infection and already alarmingly high HIV prevalence rates makes them a priority group for special attention. Unfortunately, many components of PPET, particularly vocational and technical education and training, tend to enroll mainly and even exclusively, male students. Therefore, adapting these programs to the needs of young women and being proactive in enrolling them is a priority. Creating additional programs catering specifically to the learning and HIV and AIDS-related needs of young women is also required. Designing and implementing these measures will require appropriate policies. The masculine bias of many TVET programs makes it difficult for girls to enroll and complete their training in a supportive environment.

3.1.5. The need to provide flexible alternative forms of education and training for OVCs

In high-prevalence countries, greater focus is needed on the needs of OVCs. These vulnerable youth face the greatest barriers in the transition from primary to other forms of education, as they encounter pressures to care for younger siblings, ill parents and relatives and the need to earn income. Therefore, they are not often available to attend classes during regular hours. In addition, OVCs have psychological challenges and need appropriate support and guidance in order to stay in school. As a result, initiatives like interactive radio instruction (IRI) can offer accessible alternatives or supplements to traditional formal schooling.

The need to have better articulation between formal and non-formal PPET

The research revealed considerable fragmentation in PPET in that the formal components tend to be managed by ministries of education/higher education, while the non-formal components are sponsored by a wide variety of organizations, ranging from foreign and national NGOs to international organizations. A better articulation between the formal and non-formal components of PPET is essential to ensuring a broader flow of students or learners from primary into post-primary education and training. From the point of HIV and AIDS prevention and mitigation this is an important issue because out-of-school adolescents often have no source of consistent information and support in relation to HIV and AIDS issues. Better articulation of formal and non-formal PPET is advantageous not only for high-prevalence countries but also low-prevalence countries, as this approach will provide educational and training opportunities for hard-to-reach youth in urban and rural areas.

3.1.6. The need to have a significant and expanded source of funding for HIV and AIDS activities in PPET

Because national funding for HIV and AIDS-related education and sensitization is limited mainly to formal primary and general secondary education, more comprehensive and long-term funding is needed to infuse such education and sensitization into PPET, and particularly the TVET, the non-formal and the tertiary components.

3.2. Steps in developing PPET HIV and AIDS-sensitive policies and action plans

The sustainability of responses to HIV and AIDS in PPET requires advocacy, funding and political-administrative support. For this reason, policy development is a critical need. The following are suggested guidelines for developing HIV and AIDS-sensitive policies for PPET. Steps in developing HIV and AIDS policies and strategies for PPET should involve national governmental, non-governmental and international partners.

3.2.1. Build on exiting policy frameworks

Policy development must draw upon and harmonize with existing policy frameworks. All African countries now have national HIV and AIDS coordinating bodies, general policy frameworks on HIV and AIDS and supporting action plans. While these policies and strategies are largely focused on health issues, they usually have some reference to or guidance for the education sector and the "productive" sectors such as agriculture, industry and transportation. Because TVET programs are explicitly designed to provide skills for the productive sectors, the policy frameworks that govern them must be adjusted to take into account HIV and AIDS considerations. Some factors to consider in policy development include:

- Responding to HIV and AIDS in PPET will require building a multi-sectoral platform to coordinate the participation of partner ministries (notably education, labor, agriculture, industry, youth and social affairs) as well as non-governmental bodies. International donors play a significant role in the same sectors and will need to coordinate their technical and financial assistance so as to support the coherence of a multi sectoral platform.

- Guidance and training are needed to help PPET institutions develop and implement appropriate policies and plans and the institutional capacity to implement them. Leadership and resources are needed at all levels to strengthen planning and management skills; to develop workplace policies; to provide appropriate training for educators and curricula for learners; and to remove barriers to education. Developing norms, technical advice and supervision is essential for non-formal PPET. BOTA (Botswana) provides a good example of a TVET coordinating and norm-setting body.

3.2.2. Take innovative programs to scale

The research revealed several very promising approaches that had significant benefits for learners and could be used more widely to strengthen PPET and address HIV and AIDS needs.

- Distance learning can increase the quality and outreach of PPET, particularly for OVCs and girls. The experience of the interactive radio initiative in Zambia showed that radio can address flexible timing of instruction and support the quality of instruction. The OVCs in the program showed satisfying levels of learning from the IRI program.

- The use of national youth services can provide peer education on HIV and AIDS in both formal and non-formal education. Besides training the youth in service on how to avoid HIV infection, these youth can be deployed in a variety of educational venues to work with students or learners on HIV and AIDS issues.

- Volunteerism has proven to be effective in several areas of PPET: pre-employment training (YDI in South Africa), training for OVCs (JFFLS) and HIV and AIDS prevention in general secondary education (SPW Tanzania). While not a replacement for full-time teachers and instructors, Volunteers bring commitment and experience to their work and could be used more systematically in PPET. However, the Zambia experience shows the need to motivate and support volunteers.

The process of scaling up the best programs will involve several phases:

1. Interested ministries of education should hold a meeting with national and international partners to identify promising initiatives in AIDS-sensitive PPET that appear relevant to national needs.
2. An on-site evaluation of the promising programs must be conducted to assess effectiveness in learning outcomes, attrition, costs and other sustainability and quality factors, as the information provided in this study is from often incomplete documentation.
3. A strategy must be developed, identifying the initiatives to be replicated or scaled up. The strategy would include tables identifying and quantifying the inputs:
   - recruitment and training needs;
   - infrastructure costs;
   - equipment;
   - supervision and monitoring needs;
   - links with other components of the educational system
   - links with communities, NGOs and other partners
   - estimated recurrent costs.

4. Policy changes may be necessary, particularly in the area of supporting and integrating various forms of non-formal PPTE in the education sector.
5. Budgeting and fund-raising activities will be needed to implement the plans.

3.2.3. Mobilize advocacy

The multi-sectoral platform will need committed leadership and advocacy. For this reason, in each country, there needs to be a “champion” to lead the cause. One option to consider is the establishment of a collaborative body sponsored by ministries of education, ministries of youth, National AIDS coordinating agencies and others. These potential partners could develop strategic or action plans for education and HIV and AIDS. These plans should be based on a human rights approach and guiding principles include ensuring access to education; policies and codes of conduct to ensure a safe school environment and no tolerance of sexual abuse and violence; promoting a supportive environment; programs for children in difficult circumstances and community involvement. The work of the ministries of youth should particularly target out-of-school youth or young people who are in non-formal education systems, and who are not adequately targeted by the ministries of education. The following are some of the major issues in developing a PPET platform.

- Advocacy is critical to secure support from high-level policy makers, and to promote educational leadership and commitment to HIV and AIDS. Educators in PPET can play a critical role in promoting advocacy. In Kenya, for example, KENEPOTE – an association of teacher living with HIV and AIDS, has been very successful in articulating the needs of HIV – positive teachers and has made considerable gains with the teachers’ employer, the Teacher Service Commission (TSC). Similarly, associations of PPVET teachers and instructors, especially those living with HIV and AIDS, form active groups which can lead to the institutionalization of the rights and welfare of HIV- positive educators in PPET.
- To promote effective MoE responses to HIV and AIDS, there is need for capacity building especially among senior educational planners and managers. These officers should be trained in the managing of HIV and AIDS in the workplace, including in the use and distribution of first aid kits.

- Donor round tables and seminars on education sector issues are also venues for exploring cooperation on promoting coordinated efforts on PPET and responses to HIV and AIDS issues.

3.3. Developing monitoring and evaluation tools for PPET

Governments and the concerned ministries need to develop objective indicators for monitoring and evaluating the HIV and AIDS programs in PPET institutions in their countries. Additionally, schools, TVET and non-formal institution need to develop their own internal monitoring and evaluation indicators in order to measure impact. This way, is would be possible to identify what policies and practices produce the best results and share or replicate these achievements between institutions or countries. Priorities include:

- Working through relevant ministerial sponsors to design and implement an EMIS system to track students/learners in PPET and identify areas of difficulty (dropping out, irregular attendance, OVC status, failure to graduate).
- Organizing a consultative forum for donor (bi-multilateral and NGOs) to liaise with private sector in organizing support for PPET and transition to employment or other areas of education and training. Donor technical support for EMIS and other monitoring tools must be developed to include PPET.
- Organizing selective longitudinal studies on the transition into and out of PPET as well as the impact of instruction on HIV and AIDS.

3.4. Funding options for responses to HIV and AIDS in PPET

The majority of the non-formal education institutions surveyed depends on donor funding. For sustainability, governments need to consider allocating these institutions a certain amount of funds regularly to compensate for gaps in external funding. Additionally, donors should harmonize their efforts to avoid overlapping initiatives. The following guidelines should be considered.

1. Include TVET in a sector-wide approach to developing a cost and financing plan.
2. Identify national sources of funding, including:
    a. Student tuition fees (where appropriate)
    b. Sponsorship by the private sector (vocational-technical training)
    c. Sponsorship by FBOs.

3. Identify international sources of funding and technical support. This is the role of a leading agency or ministry responsible for PPET.

    o Grants from Global Fund against AIDS, Tuberculosis and Malaria for HIV and AIDS prevention, mitigation and treatment (students and instructors). At present, the Global Fund Country Coordinating Mechanisms, or CCMs disburse funds through "Primary Recipient" organizations that circulate calls for proposals from qualified public or private organizations. A national Ministry of Youth Affairs, the Ministry of Education and the Ministry of Health would qualify for a Global Fund grant to support its programs on HIV and AIDS prevention in PPET, particularly if they involved providing access to treatment[9].

[9] In 2003-4, the Ministry of Education (MoE) in Namibia submitted a costed proposal to the Global Fund to fight AIDS, Tuberculosis, and Malaria in response to an invitation from the Ministry of Health. The proposal was developed with education specialists and targets the formal education sector (including adult learners). During Phase 1 (2005-6) the MoE received US$3.2 million and for Phase 2 which will run from 2007 to 2009 the MoE will receive an additional US$3.2 million. The funds have benefited HIV and AIDS programmes in 12 directorates and divisions; including the strengthening of the sector-wide HIV and AIDS Management Unit (HAMU) established in 2003 within the Ministry of Education. The programme specifically addresses awareness raising and empowerment; mainstreaming of HIV and AIDS; strengthening regulatory frameworks; meeting the needs of orphans and vulnerable children; and strengthening the management of the education sector response through establishing effective financial and monitoring systems for the HAMU and Regional AIDS Committee of Education. One of the key elements of successful resource mobilisation

- Public-private partnerships offer special advantages in terms of sustained funding for general secondary or vocational and technical education. Corporations have already shown willingness to invest in schooling in areas where they have operations or where the educational authorities are willing to work with private sector partners. For example, as part of its corporate philanthropy, the USA-based Hess oil company supports basic educational development in Equatorial Guinea in partnership with the national ministry of education and the Academy for Educational Development, an international NGO.

- Multilateral organizations could also provide funding for responses to HIV and AIDS in PPET. The World Bank currently has the MAP as well as FTI and EFA funds that could support such initiatives. Similarly, regional economic and funding bodies such as SADC, ECOWAS, the East African Development Community and the AfDB are potential sources of financing of PPET and its HIV and AIDS components. All of these bodies currently coordinate or fund economic development programs in the member states. Given the role of PPET in economic development, these organizations could be called upon for support.

- NEPAD, or the New Economic Partnership for Africa's Development, has already included HIV and AIDS in some of its sectoral programs, such as agriculture and fisheries.

- While the Africa Capacity-Building Foundation does not explicitly address HIV and AIDS it does make grants to organizations of the sort that could play a valuable role in strengthening PPET programs with a focus on HIV and AIDS, like the JFFLS. For example, ACBF recently made a grant to the Lesotho Council of Non-Governmental Organizations to develop its capacity at human institutional levels to effectively engage the country's development agenda.

- Other organizations can be contacted to support HIV and AIDS initiatives within PPET. The Bill and Melinda Gates Foundation is one of the major foundations that support large-scale initiatives on HIV and AIDS.

3.5. Summary of Part 3

This section has highlighted several policy issues that need to be addressed in developing PPET responsiveness to HIV and AIDS. The issues are essentially the following:

- The need to extend HIV and AIDS responses throughout PPET, particularly in tertiary education and other areas where responses are weak.
- The need to support flexible and innovative forms of PPET, particularly those that can respond to the needs of OVC and girls.
- Better articulation is needed between formal and non-formal types of PPET. Instances where formal schools cooperate with non-formal PPET programs can build bridges for learners in non-formal programs to enter formal education. Similarly, non-formal programs, like IRI, can provide education for learners who cannot remain in traditional formal schools.

Section 3 also explored steps in developing AIDS-sensitive policies and action plans in PPET. In essence, while such initiatives need to build on existing policy frameworks, expanded PPET will need a new, multi-sectoral platform to ensure coordination, funding flows and other forms of support. Coalitions of partners at the national level (ministries of youth, ministries of education), NGOs, FBOs and international partners will be needed to develop and maintain platforms of support and integration of formal and non-formal education.

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was that the Ministry of Education worked closely with the Ministry of Health to jointly submit proposals to the Global Fund (UNESCO, 2008 (d).

Advocacy emerges as a critical factor in mobilizing diverse partners and energizing efforts to build and maintain formal- non-formal platforms of PPET.

Appropriate monitoring and evaluation tools, including appropriate EMIS, are needed to take innovative PPET programs to scale.

Finally, the cost of creating and managing expanded systems of PPET will require sustained funding. The role of traditional partners of the education sector, like the World Bank, will be crucial in providing new funds or in redirecting existing programs in favor of PPET. Potential financial partners include the Global Fund against AIDS, Tuberculosis and Malaria, the African Development Bank and regional development associations like ECOWAS. An example is provided, showing how Namibia has obtained funding from the Global Fund for HIV and AIDS initiatives. Advocacy and leadership will be needed to encourage them to support the funding of responses to HIV and AIDS through PPET.

3.6. Conclusions

This study concludes with the observation that the inclusion of responses to HIV and AIDS is crucial to the success of PPET in addressing African development needs. The fact that the target age group is highly vulnerable to HIV infection and that large percentages of young women in the 15 to 24-year old age group are *already* HIV-positive should be a call to action. Most of the measures recommended here are relevant to countries with low HIV prevalence because they tend to expand the variety of educational and training opportunities for youth as a whole. Because of the vulnerability of the age group concerned by PPET, the inclusion of HIV and AIDS issues is important, even in low-prevalence countries. Though many West and Central African countries have low HIV prevalence, their youth face most of the same risk factors that menace youth in high-prevalence countries. While the latter will not need large efforts to assist OVCs, programs like JFFLS and IRI can provide important learning opportunities for hard-to-reach youth in both urban and rural areas, particularly where there is a lack of trained traditional teachers. In addition, the involvement of the community, as seen in the SPW and JFFLS examples, is a positive factor in enhancing educational quality, with or without HIV considerations.

Strong leadership and advocacy are required to sensitize key partners, both domestic and international, to the importance of the HIV and AIDS issues in PPET, given the partial and ad-hoc measures that largely predominate so far. A “platform” is needed to bring together the technical resources of educators and HIV and AIDS specialists with those of the sectoral specialties in TVET. The education sector must scale up it response to the epidemic in general secondary and in tertiary education, giving more prominence to HIV and AIDS as a work place issue. Last, but not least, funding can be found to support HIV and AIDS initiatives within PPET development. However, active leadership will be required.

Overall management and supervision needs to be the responsibility of Ministries of Youth Affairs and Vocational Training or similar competent umbrella bodies set up to coordinate PPET. The creation and deployment of an EMIS is one of the critical responsibilities of this body, which will need to take corrective measures where large numbers of students/learners are failing to graduate and teacher/instructor absenteeism is undermining instructional quality.

APPENDICES

APPENDIX 1: DATA ON POST-PRIMARY EDUCATION AND TRAINING IN SUB-SAHARAN AFRICA

Of the 2,063,000 students enrolled in formal TVET in Sub-Saharan Africa, only 40 percent were females. South African enrolments account for about 12 percent of the total. Ghana is an exceptional case with equal male and female enrolments. Data on TVET enrolments in Tanzania and Zimbabwe are not available.

Enrolments in PPET in selected Sub-Saharan African Countries

Country	Total enrollment TVET (000)	Percent female
Sub-Saharan Africa	2063	40%
Botswana	11	38%
Ghana	31	50%
Kenya	14	46%
Mozambique	25	30%
South Africa	276	40%
United Republic of Tanzania	NA	NA
Zimbabwe	NA	NA

By comparison, general secondary education is far larger than formal TVET with 104.7 million students enrolled across the continent. South Africa is the only country with close to universal secondary enrolment. The only other country presented with close to half of the eligible age group enrolled is Kenya.

Enrolments in general secondary education in selected Sub-Saharan African Countries

Country	Total enrollment in secondary education (000)	Total enrollment of age group	Female enrollment in secondary education (percent of the age group)	Male enrollment in secondary education (percent of the age group)
Sub-Saharan Africa	104741	32%	28%	35%
Botswana	226	33%	23%	41%
Ghana	3099	45%	42%	48%
Kenya	5053	49%	48%	50%
Mozambique	2323	13%	11%	16%
South Africa	4932	93%	97%	90%
United Republic of Tanzania	5403	NA	NA	NA
Zimbabwe	2105	36%	35%	38%

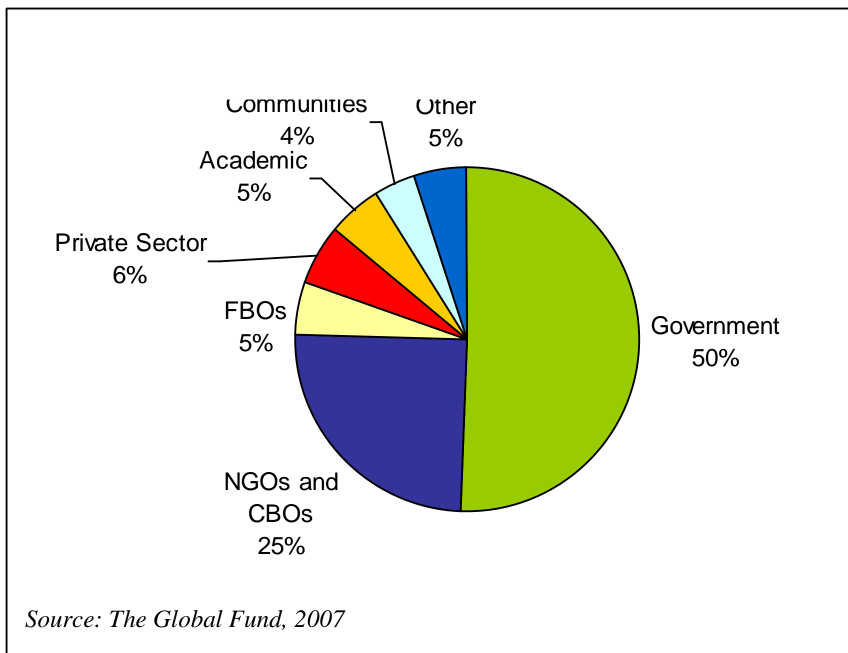
APPENDIX 2: FINANCIAL CONSTRAINTS IN RESPONDING TO HIV AND AIDS IN PPET

There are limited data available at the country level on actual expenditures on HIV and AIDS and how much is available from international as well as national sources. The lack of coordination among donor initiatives in funding HIV and AIDS initiatives in PPET means that there is no centralized "spread sheet" to track donor and national funding.

Many countries are making efforts to address HIV and AIDS within the education sector but in view of the magnitude of the problem and their limited resources there is little they can do to significantly invest in the fight against HIV and AIDS.

Financial support to HIV and AIDS activities in most educational institutions, including PPVET, tend to be constrained by other competing and more pressing needs such as classroom construction and renovation, teacher shortages or insufficient equipment such as desks and chalk.

Figure 2: Breakdown of GFATM Funding by Type of Recipient



Source: The Global Fund, 2007

Data from the Global Fund against AIDS, Tuberculosis and Malaria (GFATM), give an estimate of the breakdown of all implementing entities based on proposal data which show that 50 percent of all the funds the GTFAM provides to governments is implemented by the government sector and 25 percent goes to NGOs. About five percent is implemented by the "academic" institutions mainly in form of operational research by academic institutions such as universities. Anecdotal evidence, however, suggests that most of the grants from the Global Fund are channeled through the National AIDS Councils or Commissions, and ministries of education need to apply competitively for these funds just like other ministries. In effect, there is little evidence of GFATM funding for the education sector, although such resources could be very beneficial in supporting both prevention and mitigation of the epidemic. On the other hand, some of the funding for the private sector is used for HIV and AIDS work place programs, including non-formal education for young apprentices in the upper end of the PPET age group.

APPENDIX 3: OVERVIEW OF THE IMPACT OF THE HIV AND AIDS EPIDEMIC IN SUB-SAHARAN AFRICA

The estimated number of adults and children living with HIV/AIDS, the number of deaths from AIDS, and the number of living orphans in individual countries in sub-Saharan Africa at the end of 2005 are shown below.

Country	People living with HIV/AIDS	Adult (15-49) rate %	Women with HIV/AIDS	Children with HIV/AIDS	AIDS deaths	Orphans due to AIDS
Angola	320,000	3.7	170,000	35,000	30,000	160,000
Benin	87,000	1.8	45,000	9,800	9,600	62,000
Botswana	270,000	24.1	140,000	14,000	18,000	120,000
Burkina Faso	150,000	2.0	80,000	17,000	12,000	120,000
Burundi	150,000	3.3	79,000	20,000	13,000	120,000
Cameroon	510,000	5.4	290,000	43,000	46,000	240,000
Central African Republic	250,000	10.7	130,000	24,000	24,000	140,000
Chad	180,000	3.5	90,000	16,000	11,000	57,000
Comoros	<500	<0.1	<100	<100	<100	-
Congo	120,000	5.3	61,000	15,000	11,000	110,000
Côte d'Ivoire	750,000	7.1	400,000	74,000	65,000	450,000
Dem. Republic of Congo	1,000,000	3.2	520,000	120,000	90,000	680,000
Djibouti	15,000	3.1	8,400	1,200	1,200	5,700
Equatorial Guinea	8,900	3.2	4,700	<1,000	<1,000	4,600
Eritrea	59,000	2.4	31,000	6,600	5,600	36,000
Ethiopia	420,000-1,300,000	0.9-3.5	190,000-730,000	30,000-220,000	38,000-130,000	280,000-870,000
Gabon	60,000	7.9	33,000	3,900	4,700	20,000
Gambia	20,000	2.4	11,000	1,200	1,300	3,800
Ghana	320,000	2.3	180,000	25,000	29,000	170,000
Guinea	85,000	1.5	53,000	7,000	7,100	28,000
Guinea-Bissau	32,000	3.8	17,000	3,200	2,700	11,000
Kenya	1,300,000	6.1	740,000	150,000	140,000	1,100,000
Lesotho	270,000	23.2	150,000	18,000	23,000	97,000
Liberia*	-	2.0-5.0	-	-	-	-
Madagascar	49,000	0.5	13,000	1,600	2,900	13,000
Malawi	940,000	14.1	500,000	91,000	78,000	550,000
Mali	130,000	1.7	66,000	16,000	11,000	94,000
Mauritania	12,000	0.7	6,300	1,100	<1,000	6,900
Mauritius	4,100	0.6	<1,000	-	<100	-
Mozambique	1,800,000	16.1	960,000	140,000	140,000	510,000
Namibia	230,000	19.6	130,000	17,000	17,000	85,000
Niger	79,000	1.1	42,000	8,900	7,600	46,000
Nigeria	2,900,000	3.9	1,600,000	240,000	220,000	930,000
Rwanda	190,000	3.1	91,000	27,000	21,000	210,000
Senegal	61,000	0.9	33,000	5,000	5,200	25,000

Sierra Leone	48,000	1.6	26,000	5,200	4,600	31,000
Somalia	44,000	0.9	23,000	4,500	4,100	23,000
South Africa	5,500,000	18.8	3,100,000	240,000	320,000	1,200,000
Swaziland	220,000	33.4	120,000	15,000	16,000	63,000
Togo	110,000	3.2	61,000	9,700	9,100	88,000
Uganda	1,000,000	6.7	520,000	110,000	91,000	1,000,000
United Rep. Of Tanzania	1,400,000	6.5	710,000	110,000	140,000	1,100,000
Zambia	1,100,000	17.0	570,000	130,000	98,000	710,000
Zimbabwe	1,700,000	20.1	890,000	160,000	180,000	1,100,000
Total sub-Saharan Africa	24,500,000	6.1	13,200,000	2,000,000	2,000,000	12,000,000

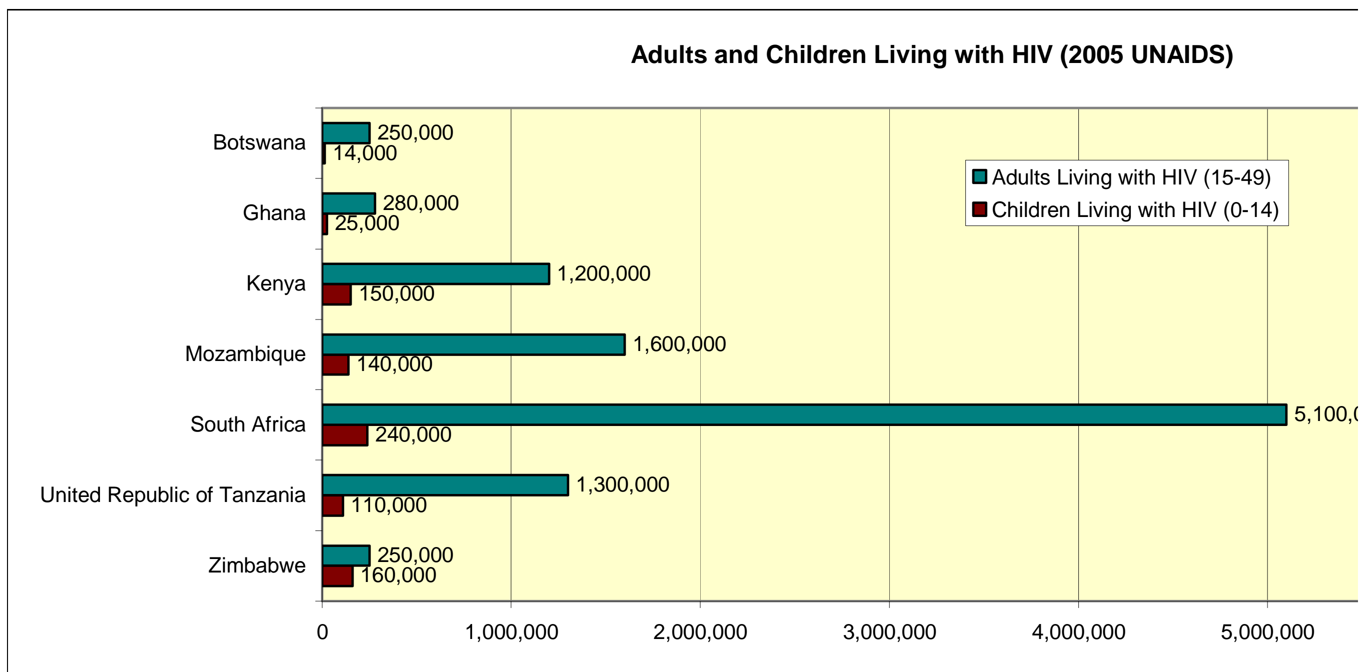
Source: UNAIDS/WHO 2006 Report on the global AIDS epidemic

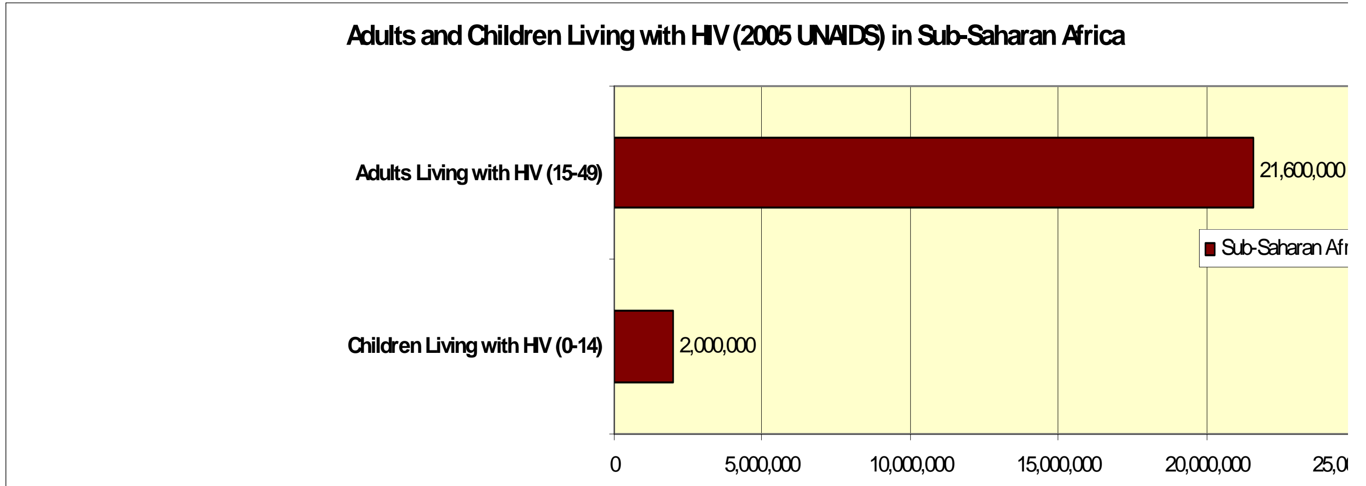
* Insufficient data available for Liberia

Notes

Adults in this page are defined as men and women aged over 15, unless specified otherwise.

Children are defined as people under the age of 15, whilst orphans are people aged under 18 who have lost one or both parents to AIDS.




Adults and Children Living with HIV (2005 UNAIDS) in Sub-Saharan Africa
Adults Living with HIV (15-49)
21,600,000
Children Living with HIV (0-14)
2,000,000
Sub-Saharan Afr
0
5,000,000
10,000,000
15,000,000
20,000,000
25,0

Title	Objectives	Target Group	Outcomes	Lesso
Student Partnership Worldwide	To provide effective instruction on ASRH and life skills in secondary schools; to build community support for program objectives	Secondary school students in small towns in Tanzania	Increased knowledge about reproductive health; greater self-esteem and assertiveness reported among girls.	Young para-profes mediators of learni skills. Reliance on foreig as well as learning by MoE limit susta
Study of the impact of HIV and AIDS on primary and secondary education in Burkina Faso	• To assess the impact of the epidemic on the supply and demand for education • To identify the range and effectiveness of responses to the epidemic in the education sector	1. Administrative staff at central, district and local levels 2. primary and secondary school teachers and pupils 3. NGOs & other partner organizations in the education sector	A comprehensive map of policy, strategies and practices relating to HIV and AIDS in primary & secondary education in Burkina Faso has been established. It is now possible to develop more effective strategies programs through better base-line information presented in the study	Both quantitative a can provide useful and AIDS issues. Without committed advocacy at the ser responses to the ep fragmented and of Silence, stigma and most serious proble Teacher-led instruc issues needs suppo Peer education on I supervision and rer

Title	Objectives	Target Group	Outcomes	Lesso
HIV and AIDS workplace policy for teachers in South Africa and Kenya	To provide a framework of legal protection from discrimination related to HIV & AIDS; ensure access to care.	Primary and general secondary teachers in South Africa and Kenya	Emergent initiatives. Unique profile of HIV & AIDS impact on S. African teachers.	Strong advocacy ar to mainstream poli Ownership require (unions, MoE) Positive living grou must insist on enfo
Interactive radio instruction (IRI) program in Zambia	To improve the quality of instruction; to provide education to out-of-school children and youth	22,773 learners in 2003, including OVCs attending approximately 300 centers all over Zambia	Development of literacy skills via IRI surpassed MoE target score for formal education. IRI is now MoE's method of reaching out-of-school youth.	IRI can provide qu learning outcomes. Community-provid volunteer instructo broadcasts are effe numbers of out-of-

Title	Objectives	Target Group	Outcomes	Lesso
	Vocational Training (VT) system; to monitor and evaluate the performance of the VT system, and to advise the Minister on policy related issues of VT.	institutions and programs in Botswana.	for preparing curricula; a compulsory HIV and AIDS policy and activity requirement for registration and accreditation of training institutions; development of a model HIV & AIDS policy for training institutions to cover both learners and staff.	National ownershi essential for sustai
Title	**Objectives**	**Target Group**	**Outcomes**	**Lesso**
Envirocare-Tanzania	To provide vocational skills to OVCs for sustainable livelihoods.	Two hundred out-of-school OVCs aged 14–20 years	All but three completed the 6-month program; 80 % obtained or created jobs. Others entered secondary school.	Partnerships betwe vocational schools programs are possi
Kenya Voluntary Women's Rehabilitation Centre	Training and support of community volunteers to in turn provide counseling and guidance in low-income areas.	600 juvenile female sex workers.	Trainees learned tailoring, dressmaking, weaving, tie dyeing, hairdressing and training in mechanics. They received counseling in health education and social skills.	The "cascade" mo can deliver effecti Long-term sustain uncertain.
Rural TVET: Junior Farmer Field and Life Schools (non-formal training)	To empower OVCs in the agricultural sector via participatory learning. Programme designed to pass on agricultural knowledge, entrepreneurial and life skills while cultivating self esteem and equality among young men and women.	One thousand 12 – 18-year-old rural OVCs in 34 Junior Farmer Field and Life Schools in Kenya, Mozambique, Namibia and Zambia.	Learning skills for traditional and modern agriculture, including field preparation, sowing and transplanting, weeding, irrigation, pest control; utilization and processing of food crops, harvesting, storage and marketing. Also, learning knowledge about indigenous crops, medicinal plants, and biodiversity.	An emergent progr "graduates" do afte JFFLSs. Promising trend: s JFFLSs, without o Many rural commu donate land, labor young people deve
Title	**Objectives**	**Target Group**	**Outcomes**	**Lesso**
Ghana's HIV and AIDS non-formal	To develop AIDS awareness and	Mainly female hairdressers	Business owners trained to pass on information about	National resources and implement pee

Title	Objectives	Target Group	Outcomes	Lesso
The Youth Development Network-South Africa	To increase impact of youth development programs on in-school, out-of-school youth; share information & best practices amongst members, incl. HIV & AIDS toolkit.	Thousands of mainly secondary school students or out-of-school youth reached. Focus on entrepreneurial and technical skills.	Very diverse programs. However in one member program, over 3/4 participants stated that they had clear goals for future careers and felt that they had gained a competitive advantage over non-participants.	The YDN programs mainly by South Af government grants. international fundin reach rural youth an • HIV and AIDS r • Program monito strengthening.
I Choose Life – Kenya	▪ To improve HIV and AIDS-related knowledge. ▪ Delay sexual debut ▪ Decrease number of sexual partners. ▪ Increase condom use among sexually active students. ▪ Increase VCT uptake. ▪ Decrease stigma. ▪ Providing HIV care and support for students.	The student bodies at the University of Nairobi as well as Kenyatta, Daystar, Egerton, Maseno and Moi universities and the Co-operative College of Kenya.	After four years : ▪ 2,900 peer educators reaching an estimated 40,000 students. ▪ 4,000 VCT test visits; 210 post- test clubs created including 2 for students living with HIV. ▪ 86 percent students using condoms; ▪ 25 percent increase in the number of students tested for HIV.	*I Choose Life* l potential for repl significant extern altogether clear despite considerabl Peer education is variable outcomes. *I Choose Life* is established ben monitoring and e methodology.
Groupo dos Activistas Anti SIDA/DTS, University Eduardo Mondlane, Mozambique	▪ To provide HIV and AIDS prevention and peer education ▪ To support efforts to develop HIV and AIDS work place programs	Students and staff at the university	• Activities maintained for 15 years after founding. • Contribution to national HIV and AIDS work place policy	A university must costs of an HIV an
The National University of Rwanda	To provide access to HIV and AIDS services in : ▪ prevention ▪ counseling ▪ testing and ▪ treatment	Students and staff (on-campus services) The public (treatment at the university teaching hospital).	Creation of: • a positive living group • HIV and AIDS course for all incoming students HIV and AIDS in medical and health-related courses • Condom distribution program • 24-hr access to HIV & AIDS services at clinic	• Sustained lead the Rector ena HIV and AIDS • It is important the basic ope campus HIV ensure sustainal can be obtained
Youth-Friendly Centre- Ahmadu Bello University,	To mainstream HIV education and prevention on a campus using a commercial	Students and staff at Ahmadu Bello University.	Since late 2006, about 100 students and employees have made use of the	The fear of "being AIDS treatment ca services are "packa

Electrical Engineering Curriculum at the University of Pretoria	technical department of a university. To encourage faculty and students to engage with HIV and AIDS issues.	on HIV & AIDS. Electrical engineering students work with a model to explore AIDS impact.	spontaneous initiative to explore HIV and AIDS issues in a way that is meaningful to the students.	important to engag (especially in techn exploring HIV and and tools they are f

APPENDIX 5: ADDITIONAL EXAMPLES OF RESPONSES TO HIV AND AIDS IN PPET

The following six programs cover both formal and non-formal education and training for youth. Most are of recent creation. One no longer exists but is included here because it is a promising example of using formal educational institutions to house and support non-formal educational programs (Environcare - Tanzania). The lack of complete data on various aspects of these interesting initiatives is the reason for placing them in an Appendix to the main text of the study.

Formal and Non-formal Training

1. Envirocare-Tanzania

The Environmental, Human Rights Care and Gender Organization (Envirocare) is a Tanzanian nonprofit organization founded in 1993. It works in mitigating three cross-cutting issues: poverty, environmental degradation and human rights abuses. In September 2005, Envirocare began a project aimed at providing youth orphaned by HIV and AIDS with vocational training and support in four districts of Musoma, Tanzania. Two local vocational schools were used to house the program. The assumptions of the program were that the youth would be equipped with skills necessary to support themselves or find employment. Environcare was chosen for this study because it is a program that illustrates how formal and non-formal education can cooperate to meet the needs of OVCs. Although short-lived, its program for OVCs was extremely successful and merits further study.

Two hundred youth aged 14–20 years were invited to participate. The project was designed with six months of in-class vocational training followed by a process of getting the youth on their feet and with the capacity to support themselves—both through further instruction and some startup resources. Of the 200 enrolled in the project, only three did not complete the program. The program assisted youth who had been orphaned at a young age. Many had been "street children" nearly all their lives. These youth gained experience working in groups and interacting with others, while also learning about HIV and AIDS. The vocational program included training in food preparation and processing, chalk making, bamboo furniture making, auto repair, welding, carpentry, cloth dying and tailoring and the making of other products from local resources, all common and useful professions in the region.

The dedication of the children, as well as their willingness to put in their every effort and their readiness to adapt to change has made the program a success. As the program ended in December 2006, more than 80 percent of the participating youth had secured employment. Others chose to continue with secondary school. The project's outputs were:

- 197 OVCs completed vocational training;
- More than 80 percent of participating orphans secured employment by the end of the project;
- 100 orphans identified as head of household received financial support for the duration of the program
- Two regional vocational schools, SIDO/Mara Region and St. Anthony Vocational School, strengthened with increased enrollment.

While the program was heavily dependent on external funding and supervision to ensure its sustainability, its design is a good one, providing flexible learning opportunities and support services to OVCs. Its success is that some "graduates" went on to study in secondary school while others became economically self-

sufficient. With closer integration with formal secondary schools and formal TVET via the relevant ministries, such programs could become sustainable.

2. The Kenya Voluntary Women's Rehabilitation Centre

The Kenya Voluntary Women's Rehabilitation Centre (K-VOWRC) is a nonprofit organization founded in 1996. K-VOWRC responds to the special problems facing women and girls in an AIDS environment. The risks and consequences of contracting HIV differ for girls and boys, and young women and men. World-wide, 50 percent of all adults living with HIV and AIDS are female. In Sub-Saharan Africa, which has 70 percent of the world's HIV and AIDS infections, 58 percent of HIV positive adults are women. As noted earlier, adolescent girls tend to have higher HIV prevalence rates that their male counterparts. K-VOWRC works within local communities in areas of action planning, community mobilization and strategic planning. It gives special attention to the following needs through training and support of community volunteers:

- Dissemination of relevant research data on HIV and AIDS issues;
- Voluntary counseling and testing;
- Care and management of patients in the local clinical setting or home-based care;
- Care and support of orphans;
- Prevention of mother-to-child-transmission;
- Community mobilization for HIV and AIDS control.

Through this process, K-VOWRC has been able to offer vocational training to female juvenile sex workers aged ten to eighteen years. They learn tailoring, dressmaking, weaving, tie dyeing, hairdressing and training in mechanics. They receive counseling in health education and social skills, which include women's rights and character building. Six hundred girls have completed the program since its inception. The program should be studied further, as it appears to provide sustainable livelihoods for very young women and an alternative to the risks of sex work.

3. The Youth Development Network-South Africa

The Youth Development Network (YDN) is a national network of six youth development organizations operating in South Africa. The organizations are the Establishment for Comprehensive Youth Development, the Joint Enrichment Project, Junior Achievement - South Africa, the Resource Action Group, School Leavers Opportunity Training and the South African Association of Youth Clubs. The YDN was established in 1998 to explore ways of increasing the impact of youth development programs, sharing information and best practices amongst the member organizations, securing resources to support youth development programs and advocating for the interests of young people. A priority for the YDN is to put youth and youth issues on the national agenda. The YDN member organizations run skill training, youth entrepreneurship and community development programs to this effect. Most of the organizations target out-of-school youth, like School Leavers Opportunity Training. However, others, like Junior Achievement-South Africa, operate in the general secondary school environment as an enrichment and orientation program. YDN believes that youth development programs must take into account the different needs of young women and men, so that all young people are given the opportunity to develop to their full potential. YDN is included in this study because there is a sharing of lessons and experiences among the member organizations. While each program is quite different, each is an important means of bridging the gap between formal schooling and sustainable employment. The example cited below highlights how instructors are trained to use a participatory approach and a learning tool to engage learners in HIV and AIDS issues.

The number of trainees or students varies over time because the various programs may last for a school year or for several months only. Some are part of a broader apprenticeship program to facilitate the access of

youth to income-generating activity. Given the lack of information about outcomes, it is not possible to make comprehensive statements about impact. However, the summary results of the 2005 Impact Assessment of the 2003-2004 Mini Enterprise Programme participants in the Junior Achievement- South Africa program were quite positive. Between 75 and 86 percent of the participants gave favorable responses to an evaluation questionnaire, stating, for example, that they were able to identify clear goals for their future careers as a consequence of participation in the program and felt that they had gained a competitive advantage over non-participants.

In order to address HIV and AIDS issues, YDN has developed a toolkit to help youth workers integrate HIV and AIDS education into training programs, particularly those that focus on employment skills training. By making connections among the issues of HIV and AIDS as well as sexual and reproductive health, youth employment and entrepreneurship, youth programs can better meet the needs of young people. The toolkit helps youth workers explore issues surrounding HIV and AIDS so they will be better prepared to engage constructively with the youth in their programs. For example, the toolkit highlights the importance of working with young people in a way that is honest and respectful, and helps them make connections between different aspects of their lives. Youth workers must not only be able and willing to talk to young people about HIV and AIDS, but the information provided must be correct and useful so that youth can make healthful life choices. In particular, when conducting training, youth workers need to:

- be comfortable talking about sexual matters;
- have a good understanding of HIV and AIDS;
- know where to find information;
- respond appropriately if someone discloses that he or she has HIV and AIDS;
- be aware of how people living with AIDS can live healthy and productive lives; and
- know that as youth workers their role is not to moralize or to judge.

The toolkit also includes “The Truth Game”, an experiential activity that allows youth workers to explore whether they are ready to talk honestly and openly about HIV and AIDS with young people in their programs. By asking very candid questions about sex, money, race, politics, habits and gender, it demonstrates how uncomfortable issues related to HIV and AIDS can make people feel. The game also highlights the importance of being truthful with young people about this life-threatening disease.

4. Ghana’s HIV and AIDS peer education for small business owners and apprentices

Ghana recognized the need to reach out to small business entrepreneurs who had not earlier been targeted by HIV and AIDS programs. In 2002, Ghana through the Ghana AIDS Commission, the National AIDS Control Program, the Institute of Statistical, Social and Economic Research, and several community-based organizations targeted small enterprise owners, such as garage owners, hairdressers and their apprentices, who had not received any HIV and AIDS education before, for HIV and AIDS intervention activities. One rural and one urban community were identified for the interventions. The initiative was premised on the following assumptions:

- That the HIV pandemic has severe implications for the informal sector economy due to low levels of education, extreme poverty, financial insecurity and little respect for human rights.
- Workers in the informal economy are not easily reached by mainstream HIV and AIDS interventions because the sector is not a focal point for NGOs, governments and other service providers.
- Informal sector lacks adequate health facilities and social protection arrangement for its workers.
- Informal sector workers take up additional jobs to supplement their meager income, such jobs include contractual sex which increase risk to HIV infection.

HIV and AIDS interventions covered mainly female hairdressers selected from a rural area close to Accra, the capital of Ghana, and garage owners and their apprentices who were male and selected from an urban area.

In Phase 1 of the training activities, IEC material, peer educator kits were developed for the program. These kits included; HIV and AIDS training manual; HIV and AIDS –at-a-glance cue cards; HIV and AIDS planner – cue cards; STD cue cards; polo shirts; T-shirts; baseball caps; penis models; male condoms; female condoms; HIV and AIDS question and answer booklets; eight different HIV and AIDS leaflets.

Peer educators were also recruited from among both the masters and the apprentices. This ensured a wide age distribution among the peer educators and achieved total coverage of the target audience. Two experienced workshop facilitators were recruited per workshop held. The recruited peer educators were taken through a comprehensive Ghana Social Marketing Foundation International training program. The program offered an opportunity for informal business owners to train on HIV and AIDS issues and pass on that information to others in the same businesses. The training curriculum included the following elements:

- anatomy and physiology;
- sexually transmitted diseases;
- HIV and AIDS; condoms; fertility management; communication skills;
- Journey of Hope training methodology and peer educator activities;
- gender roles and HIV and AIDS;
- motivational/inspirational discussions and related subjects.

In Phase II of the interventions a second set of peer educators was recruited and taken through training that entailed learning about the same subjects studied by the first set of peer educators. In addition, the second set of peer educators learned how to manage question-and-answer discussions and rapid assessment findings. In addition, two intermediate training sessions (refresher courses) were organized for 100 peer educators who had undergone the basic training in both communities. The training curriculum was upgraded to include two new topics, VCT and cross-infection prevention. The training session also provided a platform for peer educators to share experiences and have their questions answered.

The program has been successful mainly due to the high motivation, enthusiasm and active involvement of peer educators in outreach activities. About 800 persons were reached on a monthly basis at the two sites of the project.

The initiative was a national one, conducted with Ghanaian resources. Sustaining HIV and AIDS interventions amongst the small enterprise owners depends on the realization of the leadership of the informal sector of the need for interventions. Many are not keen on releasing employees from work to attend workshops and trainings because they do not prioritize HIV and AIDS. It also requires strengthening capacity of NGOs working in the informal sector so that they can provide prevention programs, care and support.

Tertiary Education

Because higher education in Africa has generally been reluctant to respond to HIV and AIDS in the area of policy and curriculum, the two examples below were chosen because the first one shows how “packaging” HIV and AIDS services with other attractive services can induce students to avail themselves of the former. The second example shows how a technical department of a university “took ownership” of HIV and AIDS issues and developed an information tool which became part of the program of studies in the department.

The Youth-Friendly Centre, Ahmadu Bello University, Nigeria

Ahmadu Bello University in Nigeria is one of five pilot sites across Nigeria for a Youth-Friendly Centre, initiated as a partnership with the Nigeria's National AIDS Council and EcoBank, a commercial bank. The Youth-Friendly Centres are a new structure combining on-campus banking facilities with a student-focused facility. Whilst focused on the task of minimizing the spread of HIV infection and providing education on HIV, the centre at Ahmadu Bello University draws most of its 100 users a day by offering access to the internet and banking services. Since its opening in late 2006, about 100 students and employees have made use of the testing and counselling service. As the internet facility grows in popularity and usage, it is hoped that the Centre will generate its own revenue.

The Youth-Friendly Centre is a novel and innovative attempt at mainstreaming HIV education and prevention services using a commercial partnership and non-traditional health promotion strategies. In a context where sexuality and reproductive health issues are still highly contested, it presents an important alternative for youth who need a 'safe environment' which does not compromise them socially. It is assumed that the amenities offered at the centre are likelier to attract students to testing and counselling services than stand-alone VCT services. The centre offers education and media resources, internet and banking facilities, space for gatherings and counseling services to university students.

The apparent success of the program has been the unique combination of banking, internet, resource centre with HIV and AIDS service delivery. A possible lesson learned is that university youth will feel more comfortable using VCT services that blend in with an environment of other, innovative services. Monitoring of VCT uptake is needed, however, to determine the real success of the initiative.

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