

Design and Development of ICT- based HIV/AIDS Preventive Education and Counseling Support Environment in Uganda

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Introduction

- Computer literacy and e-skills acquisition started gaining popularity in Ugandan schools in 1996 when World Links for development introduced telecollaboration projects in selected schools.
- Very little emphasis has been put on using ICT as a tool for fighting the spread of HIV/AIDS among youth in general.
- The young people have never known a world without HIV/AIDS with millions already dead and yet the epidemic among the youth remains invisible.
- Sub-Saharan Africa which has only 10% of the World's population is home of more than 60% of people living with HIV and AIDS.

Introduction (continued)

- Epidemiological trends for HIV/AIDS in Uganda

Year	Event
1982	The first HIV/AIDS case was identified along the shores of L. Victoria
1992	The national prevalence rate was estimated 18.3%.
2002	The prevalence rate dropped to 6%. There were 73, 840 new infections and 75,290 deaths.
2005	Prevalence rate was 6.7%. 132,500 new infections occurred, 76,000 AIDS deaths, 915, 400 children and adults had HIV/AIDS

Impact of HIV/AIDS on Ugandans

- 1.6 million deaths since the outbreak of AIDS epidemic in 1982 with 2.6 million people already infected.
- Labor and human capital is severely affected – time lost by civil servants due to frequent illness to HIV/AIDS.
- Increased number of orphans
- Bed occupancy by AIDS patients in medical wards (75%)
- Increase in drug purchase for the treatment of opportunistic diseases.
- Increase in workload for few health workers

HIV/AIDS education and Counseling in Uganda

- In 2002, the President of Republic of Uganda launched Presidential initiative on AIDS strategy for communication to youth - PIASCY
- Online counseling services for Ugandan schools – jointly initiated by SchoolNet and Straight Talk Foundation in 2003.
- World Links and the AIDSWEB project – students and teachers in different schools in Africa exchanged views on HIV/AIDS prevention strategies – CD ROM was used for information dissemination

Practices of HIV/AIDS prevention in other countries

- ePresence software (Canada)
- Developed for people living with HIV/AIDS to learn about treatment issues – message forums or web-based documentation abilities were seen as effective ways of reaching the people living with HIV/AIDS.
- Video showed promise as technology to aid customer education
- epresence software was abandoned by its users due to reasons ranging from poor interface and lack of added value to user involvement in systems development

ICTs for fighting HIV/AIDS in India

- SAATHI was among the first NGOs that used ICT as a tool in HIV/AIDS area in India.
- ICT was used as a tool to bridge information, networking, and other capacity gaps using three approaches;
- Creation of the listserv (saathia@yahoogroups.com) for timely information delivery.
- Publication of directories for HIV/AIDS organizations at <http://www.saathi.org/stapps/searchindex.jsp> for HIV/AIDS resources including drop-in centers, counseling, treatments, and testing centers within their vicinity.
- Creation of web site www.saathi.org for HIV/AIDS educational resources, conferences, workshops and preventive issues.
- Indian mobile games were also developed for fight against HIV/AIDS in selected African countries including Uganda.

Analysis of existing ICT-based HIV/AIDS education solutions

- presence web-based environment for HIV/AIDS information dissemination and treatment mainly applies to adults and places little or no emphasis on children.
- Indian mobile games are good for use in urban areas and favors adult population more than the children who have less access to the use of mobile phones.
- Mobile phones can be used for educational networking purposes but the mobile phone interface is insufficient for information dissemination and active learning.
- AIDSWEB project focused on production of educational content using CD-ROMs and web sites but did not establish online interaction among students, counselors and teachers.

Summary of literature review

- ICT tools have been used for HIV/AIDS education and treatment information in different contexts – CD-ROM information, online information and mobile computing.
- ICT has potential to provide more services to HIV/AIDS patients and healthy people in terms of counseling and preventive education.
- The design of software environment for HIV/AIDS education should be tailor-made to accommodate the needs of different age groups in societies.
- Web 2.0 technology is a good platform for encouraging social networking in HIV/AIDS education support environment.

Research purpose

The purpose of this research is to design, develop and evaluate web based software environment for HIV/AIDS preventive education and counseling services to the secondary school students in Uganda.

Research questions

- What are the best practices for HIV/AIDS educational systems?
- What needs to be taken into account when designing educational systems for HIV/AIDS?
- What value can ICT add to support HIV/AIDS education in Uganda?

Research Methodology

- Constructivism – foundation or philosophical underpinning for design and development of content for HIV/AIDS education. A pedagogy that relies on the constructivist philosophy requires a set of pedagogical guidelines and strategies that can be translated into practice:
 - Construction
 - Cognitive Skills
 - Authentic tasks
 - Related cases
 - Collaboration
 - Information Technology

Research Process and Methods

- Development research approach – has a dual focus:
 - Develops practical and innovative ways of solving real problems
 - Proposes general design principles to inform future decisions
 - Development research is problem oriented, searching for new and innovative solutions, while also seeking findings that are transferable, practical, and socially responsible.
- Focus groups

Expected features of software environment

- Social networking – student-student, student-counselor
- Recorded video on real life experiences
- Preventive educational content with online assessment
- Open source software – php and mysql/oracle

END

Thank you for listening