

# **Open Flexible Learning (OFL) as a Strategy for Enhancing Human Security in Nigeria**

Terhemba Nom Ambe-Uva

National Open University of Nigeria  
14-16 Ahmadu Bello Way, Victoria Island, Lagos  
[mneuter@gmail.com](mailto:mneuter@gmail.com)

## **ABSTRACT**

In this paper, an analysis of open flexible learning [OFL] as a means of enhancing Human Security (HS) in Nigeria, within the context of HIV/AIDS pandemic was carried out. In line with a framework put forward during the MINDEV VIII Meeting held in Dar es Salaam (2nd to 6th December, 2006), the paper attempts to situate OFL system at the centre of strategies for combating the HIV/AIDS pandemic. The framework highlights the potential benefits of open learning and distance education in addressing Africa's challenges of social dislocation, poverty, conflict and marginalisation, and the achievement of the continent's human development goals. The paper argues that discussions on the adoption of OFL in achieving the Millennium Development Goals (MDGs) needs to be expanded to focus on its [OFL] inherent potentials for enhancing HS in Nigeria. To this end, the thrust of open and distance learning in increasing access to affordable, yet quality education that transcends all barriers was advanced and defended. It was also argued that OFL has emerged as an effective and efficient tool that empowers people in developing countries thereby improving their means of livelihood, and enhancing their HS, particularly, as it address threats emanating from the HIV/AIDS pandemic. It was recommended that the government should sustain the policy of "massification" of education through the use of modern technologies and distance education. In addition, suggestions included incorporating open and distance learning strategies in HS framework, and better planning and ensuring effective open and distance learning systems.

## **INTRODUCTION**

In September 2000, 147 heads of state met at the United Nations headquarters- the largest such gathering ever- to resolve action on the most pressing problems of humanity and nature. To underscore their commitment, they set numerical targets and deadlines to measure performance. These are the Millennium Development Goals (MDGs), and they span a large range of topics, including infectious disease, education and gender equity amongst others. In September 2005, the heads of state gathered again for the Millennium +5 Summit to assess the five-year progress of the MDGs. As Attaharan (2005, 1) notes, MDGs have become all important, not just within the UN, but also as the zeitgeist of the global development enterprise. On an interesting note, while the failure to meet the MDGs constitute a fundamental human security (HS) challenge, particularly to developing countries, the absence of HS creates conditions that are not favourable for the attainment of the MDGs. In short, there is a one-way traffic between the MDGs and HS.

The achievement of the MDGs has emerged in the 21<sup>st</sup> century as an ever-pressing concern. In the particular case of the first part of the goal number six, which seeks to halt and begin to reverse the spread of HIV/AIDS, the United Nations General Assembly Special Session of 2001 articulated the need for immediate action and the achievement of specific short-run targets. This particular sense of urgency is justified by the important attributes of the disease: HIV/AIDS is still an expanding global pandemic; if left unmitigated, the ravages of the disease will threaten human development in general, and the achievement of several MDGs in particular over the short and long term; the HIV/AIDS pandemic threatens economic growth; and also threaten HS.

The aim of this paper is to extend the argument that open and distance learning can be used as a veritable tool for meeting the MDGs and by extension, in enhancing individual and community HS. In extending this argument, this paper follows the line of argument of Mc Lean, Gasperini, and Rudgard (2002) that, the appropriateness and effectiveness of distance learning depends on why, how, and how well it is designed and delivered. They have shown that distance-learning initiatives should be undertaken for appropriate reasons, and in a manner that is suitable to the stakeholders of the initiative.

## **CONCEPTUAL ISSUES**

### **Open and Flexible Learning**

Open and flexible learning (OFL) involves instructional education, which does not require teachers and students to be present in the same place. The concept of OFL is one that operates on the premise that by making education delivery flexible to the student and his/her needs, there would be an increase in the catchments of students enrolled in the educational programmes. Delivered in a variety of modalities including but not limited to videocassettes, audiocassettes, CD Roms, on line and traditional face to face tutoring, whatever the mode of delivery, the objective is to increase access to education to those who have difficulty accessing it within the mainstream. With the recent improvement in modern information and communication technologies (ICTs), distance learning has emerged as an inevitable and phenomenal education in the history of educational developments internationally. While the formal system of education continues to be the mainstream of educational transaction, it has inherent limitations with regard to expansion, provision of access and equity and cost effectiveness. As Dickshit, Panda, and Vijayshri (2002) argues, “with the emergence of modern ICTs, it is now possible to adopt flexible, constructivist, learner-friendly and multi-perspective approaches to teaching-learning, so essential for nurturing creativity, leadership, scholarship and integrated development of human personality.

In many regards, OFL is a suitable response to learners ill-served in the mainstream system (e.g. marginalised communities, illiterate with commitments that preclude full-time attendance at institutions, conflict areas, those with basic education, health, sanitation, food security, underqualified teachers in rural areas) etc. (IRFOL 2004). As Calvert (1986) notes, OFL helps extend the market for education to clientele who have not been previously served. In developing countries, particularly in Africa, this clientele has continued to increase in geometric proportion.

### **Human Security**

The United Nations Development Programme defines human security as “safety from chronic threats such as hunger, disease, and oppression and also from sudden and hurtful disruptions in the patterns of everyday life” (UNDP 1996). A similar definition is that put forward by the Global Environmental Change and Human Security Science plan: “Human Security is achieved when and where individuals and communities have the options necessary to end, mitigate or adapt to threats to their human, environmental and social rights; have the capacity and freedom to exercise these options; and actively participate in pursuing these options (GECHS 1999). Fundamental issues confronting Africa such as poverty, famine, desertification, epidemics, conflicts etc represents threats to HS. However, OFL offers an alternative framework in empowering individuals and communities to respond more effectively to such threats.

In the knowledge economy of the 21<sup>st</sup> century, Nigeria has been assessed as lacking behind on most of the indices that point towards an enhanced individual and community HS, especially those revolving around the incidence of poverty and attempts towards poverty reduction. Despite its natural resources, Nigeria remains a monolithic economy dependent on petroleum resources as its main source foreign earnings. It has a human development index (HDI) of 159, life expectancy at birth of 44 years, with 34.1% of the population living below poverty line, and 70.8% living below US\$1 per day (UNAIDS 2006). Apart from these grim statistics, Nigeria is riding high on the crest of HIV/AIDS with 5.8%, a threshold that constitute a significant threat to the country's

HS. The romance between poverty and HIV/AIDS has dire consequences for HS in Nigeria as Kelly (2003, 45) reports, “not only does poverty exacerbate HIV/AIDS but also that HIV/AIDS aggravates poverty”.

Poverty specifically has traditionally warranted significant attention by all governments and civil society if only because its most fundamental characteristic is deprivation, which denies the people and communities the options necessary to exercise choices about their lives. Such deprivation is strongly linked to a host of risk factors, identified by the World Bank to include “low level of nutrition, illness, and the inability to access information or to take advantage of educational opportunities at the primary and secondary level” tend to exclude its victims from the enjoyment of any developmental gains seen in the macro economy. To this list can be added other risk factors such as human trafficking, famine, desertification, and conflict.

The World Bank has also pointed to a reasonably strong correlation between poverty and illiteracy in Nigeria, and has confirmed the dearth of human capital among the poor in the country. However, it remains to be added that the foundation of poverty eradication is ensuring that the vast majority of the people are equipped to participate in the knowledge economy of the 21<sup>st</sup> century, especially through programmes that would encourage their enrolment in large numbers, in a wide swathe of courses for educational and skills development. Training in this case includes social skills, introduction to entrepreneurship, and workplace etiquette. Distance education qualifies to be a feasible vehicle for making such training programmes available and accessible to the country’s poor.

#### **HIV/AIDS AND HUMAN (IN) SECURITY**

HIV/AIDS represents a significant challenge to HS in Nigeria. As evidence of the Round 2 of the Afrobarometer indicates, large proportions of Nigerians have either lost family or friends to AIDS or suffer under the burdens of AIDS by caring for sick family members or orphans (Afrobarometer, 2004, 1). In another survey in Nigeria, it was discovered that illness (of self, relatives, or friends) combined with funerals accounted for the majority of reported absence of teachers from work (Ssengozi et al., 2004, 30). Death and illness are thus not only affecting the education sector but also all other spheres of the social and economic life.

As a HS threat, disease kills far surpassing war as a threat to human life. AIDS alone is expected to have killed over 80 million people by the year 2011, while tuberculosis (TB) one of the various main opportunistic diseases, accounts for three million deaths every year, including 100,000 children (Garett, 2001, 1). The number of deaths from AIDS as of 2003 stood at 310,000, for Nigeria, 2.2 million for Sub-Saharan Africa, and 5.0 million for the world (UNAIDS, 2004). As noted by the UNAIDS, in general, a staggering 1500 people die each hour from infectious ailments, the vast bulk of which are caused by just six groups of diseases: HIV/AIDS, malaria, measles, pneumonia, TB, dysentery and other gastrointestinal disorders.

At the time of writing, Nigeria with a population about 140 million is currently estimated to have the highest number of people living with HIV/AIDS in Sub-Saharan Africa, with the exception of South Africa. As at the end of 2007, about 5.5 percent of Nigerians ages 15-49 were estimated to be HIV-positive, a steady increase from the estimated 1.8 percent of the adult population 15 years ago (UNAIDS, 2004). Nigeria’s epidemic is also characterised by one of the most rapidly increasing rates of new HIV/AIDS cases in West Africa. This means AIDS will soon be the leading cause of adult morbidity and mortality among those age 15-49, arguably the most productive people needed to support any society. This reality will have a devastating impact on all facets of Nigeria’s socio-economic fiber, and will hinder Nigeria’s progress in education – the very tool that Nigeria needs to teach its people and thus stem the spread of HIV/AIDS (Ambe-Uva 2007, 3).

## TACKLING THE HIV/AIDS PANDEMIC: ANY ROLE FOR OFL?

### 1. Access, Empowerment, and Poverty Alleviation

In the absence of an effective cure to the HIV/AIDS pandemic, the onus rests on the educational sector to prevent the spread of the epidemic, and to mitigate its impact on the society. Yet, conventional educational system is ill-positioned to this challenge. There is general problem of accessing education, especially tertiary education. Access here is defined as places and facilities available for potential applicants. In the case of Nigeria, the expansion of tertiary institutions has not been able to meet the increasing demand for tertiary education. Although, there has been significant expansion of enrolment in tertiary education, this has not met the yearning of Nigerian's for higher education. This is as shown in Table 1.

**Table 1. Applications and Admission Statistics for Nigerian Universities**

Year	# of Universities	Total # of Applicants	Total # Admitted	Percentage Admitted	Total # Unplaced
2002/2003	53	994,381	51,845	5.2%	942,535
2003/2004	54	1,046,950	105,157	10.0%	941,793
2004/2005	56	841,878	122,492	14.5%	719,386
2005/2006	75	916,371	N/A	-	-
2006/2007	76	806,089	123,626	15.3%	679,846

**Source:** Compiled from Statistics from the Joint Admissions and Matriculation Board, (JAMB) and the National Universities Commission (NUC), 2007

Table 1 interestingly reveals that between 2002-2006, the highest point of admission of universities has been only 15% of the total number of applicants. This only confirms that the conventional higher education system is hard pressed to meet the demands of burgeoning population of the country for highly accessible, affordable and qualitative higher education.

Distance education with its flexible mode of instructional delivery and geographical penetration thus provides a framework for African countries to launch the fight against HIV/AIDS. OFL is transforming the educational landscape through increased accessibility, flexibility of learning activities, and cost effectiveness. In addition, OFL remains the only potent means suitable for empowering the marginalised and under represented groups, especially fulltime house wives, women in purdah, working women, and the nomadic women, thereby enhancing their literacy and enabling them to play a constructive role in nation building (Olakulehin and Ojo 2006, 15). Fundamentally, OFL is able to achieve this by reducing the cost of education while enhancing access and quality of education, thereby turning the educational triangle on its head, a triangle that has long depicted how education is constrained (Olakulehin,, 2008; Daniels, 1999).

Nigeria is the leading provider of distance education programmes in Africa. With an institutionalised single-mode distance learning delivery- National Teachers Institute (NTI), Kaduna, and National Open University of Nigeria (NOUN), Lagos, and other dual-mode deliveries of distance learning, the government has identified the need to adopt this medium to democratise education, to add to human capital formation in the country, and lay the foundation for behaviour change among graduates. A classical example of this phenomenal growth is that of NOUN. The University's geographic penetration of 18 Study Centers in 2003, to 32 Study Centers in 2007, located in all the regions shows that NOUN now services some of the remotest regions in Nigeria. As of 2007, NOUN had an enrolled population of 35,000 students and this is projected to grow to more than 100,000 by the year's end (Jegade 2007). The University is therefore an essential means of meeting the needs of Nigerians who, for reasons of distance, work or family commitment, cannot otherwise engage in educational opportunities. In other words, the University reaches people in communities in which they would otherwise be deprived of opportunities to learn. In addition, NOUN's expansion of its service area is expected to make a significant contribution in stemming the epidemic by increasing people's access to education.

Moreover, its educational programmes are designed in such a way as to enable people to start applying what they have learned immediately (Jegade, 2003).

Also germane and related to access as a theme of OFL in combating the spread of HIV/AIDS is the emerging role of OFL in empowerment and poverty alleviation. Indeed, it has been argued that DE remains the primary mechanism for the information-driven age, a tool that bridges the gap between developed and developing communities (Aderinoye and Ojokheta, 2004, 5). In a related argument, ICTs have been shown to play major roles in diffusing information to the poor living in the rural communities (Obayelu and Ogunlada 2006, 55). Although little empirical evidences of the benefits of ICTs in Nigeria are found in literatures, there are great potentials of ICTs as tools of enhancing daily lives, whether by increasing access to information relevant to their economic livelihood, better access to other information sources, healthcare, distance learning or in the strengthening of kinship. In short, OFL plays an important role in access, poverty alleviation and empowerment. Through this system, even the low-income people who have no access to education in formal universities can improve their qualification, which in turn contributes towards increasing the literacy rate, which in the long run can be useful towards eradicating poverty.

## **2. ICTs and HIV/AIDS**

ICT offers a wonderful opportunity to help close some gaps. It can reach people in remote or rural areas, for example, and can be used to deliver the curriculum in flexible ways to suit varied needs and lifestyles of citizens everywhere. The challenge has been for governments to make development strategies to make the best use of ICT in their country so that it is used to close the gaps not widen the digital divide.

In view of the enormity of the HIV/AIDS epidemic and the urgent need to make best use of all resources and available tools, the role of ICTs as a major, potential tool among others in the global mobilization and response to the epidemic remains paramount. The promise of ICT as a tool of OFL is based on the feasibility, at relatively low cost, of providing access to information and knowledge for those working on the problem, to those who are suffering from the disease or its effects and to those who need to take preventive means (Driscoll, 2001, 5).

Reducing the impact of HIV/AIDS can be assisted by generating knowledge and its wide dissemination. A study by Peters and Olugbemi (2005) shows that the introduction of an HIV/AIDS program at NOUN would contribute to raising the level of awareness in the different segments of the Nigerian society, stimulate research, and create research networks on HIV/AIDS in Nigeria. The study also notes that the programme would facilitate human resource capacity building and support positive behavioral changes. An earlier study by Aderinoye and Ojokheta (2004) investigate the links between distance education and HIV/AIDS. This study shows that DE in Nigeria and throughout the continent of Africa is helping to democratise and spread knowledge, even to those living in remote, marginalised, and isolated communities. The Aderinoye and Ojokheta study also acknowledges that DE has helped individuals to acquire basic literacy and arithmetic skills, and in some instances, earn certificates in higher degrees, as well as obtain a multitude of broad-brush education skills that target whole populations (e.g., governance skills, life skills, AIDS education aimed at preventing and reducing its spread, improved farming techniques, etc.).

It is in recognition of the above that the University of Ibadan (a dual mode university) was the first university in Nigeria to establish a Diploma program in HIV/AIDS Education at the Distance Learning Centre to assist in developing the capacity of workers on HIV prevention. This challenge was soon taken over by NOUN (a single mode university) to introduce a postgraduate diploma in HIV/AIDS Education and Management. The success of this program has informed the decision of the University to introduce the programme at the diploma level. In another study, Pridmore and Yates (2006) examines the strengths of open, distance, and flexible education in HIV/AIDS prevention and mitigation. These scholars argue that to confront AIDS and meet

MDGs in countries where HIV/AIDS is prevalent, governments must go beyond current efforts and accelerate conventional responses. This can be achieved by increasing access and quality of education and schooling, raising public consciousness, and encouraging people to practice healthy behavior, through emerging accessible, flexible, and cost effective distance education. Furthermore, growing evidence indicates that in Sub-Saharan Africa (SSA), a geography where teachers are in short supply and institutional capacity to support teachers training is inadequate; so are new teacher graduates to replace those teachers who have fallen victim to the AIDS pandemic, OFL remains an effective strategy for teacher training (Aderinoye & Ojokheta, 2004).

OFL is an effective strategy in enhancing HS through its ability to provide educational access to those living in rural and marginalised communities, especially in conflict and post-conflict communities where traditional education cannot effectively serve the people. Its role in poverty alleviation, and empowerment is also important in enhancing individual and community HS. As earlier noted, most Nigerian's are leaving below acceptable level of human existence. This entrenched level of poverty strongly correlates with HIV transmission, and by extension, HS threat. Therefore, by alleviating poverty, OFL has the potential to guarantee HS. In addition, by providing the necessary access to information, and discussion groups, OFL helps those suffering from the epidemic to share their experiences, provides training to medical, social, religious and other stakeholders involved in preventing and mitigating the impact of HIV/AIDS.

### **IMPLICATIONS FOR ACTION**

The previous sections show that failure to halt and begin to reverse the first part of goal number six of the MDGs represents a serious HS threat to both individuals and communities in Nigeria. The direct consequences of illness and death, such as the loss of labour and income, in combination with high costs of medical treatment can trigger a downward spiral to poverty, which in turn would make individuals more prone to HIV infection, and stifle efforts to mitigate the epidemic. This is how the vicious cycle of the epidemic endangers HS.

However, as earlier mentioned, education provides access to information, enhances human capital formation and has the capacity of honing skills required by the individual to make the choices necessary for shaping one's life. A major challenge in the context of Nigeria is been able to provide access to qualitative education, which is a sine qua non to poverty reduction. As Aderinoye and Ojokheta (2004) argues, "education serves as a tool people can use to achieve the level of freedom, that they feel is intrinsically valuable, as well as achieving rudimentary levels of knowledge acquisition, which serves as a functional key to greater educational development. Indeed, the conventional approach alone is inadequately positioned for this challenge, especially in the context where the HIV/AIDS epidemic has began to threaten human capital. This is where OFL has been identified with the potential to expand the catchment of educational delivery. At the university level, most face to face universities remain over subscribed, to cope with the increasing demand for enrolment from qualified teeming populations. In addition, the increasing demand for life-long learning in 21<sup>st</sup> century knowledge economies calls for greater commitment to a flexible system that is able to meet and serve the individual at his/her place of need.

To gain insights into how OFL can be institutionalised in Nigeria to enhance access to learning, empower the people, alleviate poverty, thereby securing their lives, this paper notes that this mode of delivery must be based on the following:

- i. OFL should be set up for the right reasons and purposes and not for political and commercial reasons;
- ii. OFL models and practices need to be adapted to the social, cultural, economic and political circumstances of the learners, and their environment;
- iii. The involvement of individuals and communities who are supposed to benefit in the design and delivery of the programme;
- iv. Gain insights from OFL experiences accumulated in developing countries in crafting pedagogical and administrative models that avoid some fundamental mistakes in the past.

A caveat needs to be introduced at this stage. In adopting OFL as a strategy for enhancing HS, it is essential that appropriate delivery platform be adopted, otherwise, OFL may become more of a liability than an asset. When it comes to choosing technologies for distance education, Phillip (2000, 25) argues that "... it is essential to take a careful look at the infrastructure that the target population have access to, and the extent to which the same target populations can afford to make use of the infrastructure for educational purposes; this help to avoid the trap of 'educational overkill'- using expensive and complex delivery strategies when inexpensive and simple alternatives could be pedagogically effective". It is also important to consider which levels distance education can be made cost effective".

## **CONCLUSION**

The Nigerian philosophy of education is based on the desire to provide equal access to educational opportunities for all the citizens of the country at all levels inside and outside the formal system. However, since the conventional approach to learning cannot handle this challenge, the alternative OFL mode of delivery deserves special policy attention. Other than the grim statistics cited above, the urgency of the need for the government to go "outside the box" in providing accessible education is confirmed by the National Population Commission, which projects that there will be 22 million Nigerians of university-going age by 2010. This emerging youth lives would not be secured unless the government intervenes in enhancing access to qualitative education through distance education. The government should therefore rigorously pursue distance learning and the use of ICTs in supplying and accessing university education.

The incorporation of OFL in national frameworks such as poverty alleviation, conflict resolution, gender processes and HIV/AIDS education should be step up. Distance education should also be used to train those working in the field of health, to educate and empower those infected with HIV, and those affected by the epidemic. As noted by the COL agenda and the Swedish Policy for Global Development, innovative ICT solutions are crucial for creating an environment for people living with HIV/AIDS (PLWHA), enabling them to improve their quality of life and to give them an active role in controlling their own situation, in fighting HIV/AIDS and respecting their wish for anonymity (Sida, nd).

## **REFERENCES**

Aderinoye, R. and Ojokheta, K. 2004. Open-distance education as a mechanism for sustainable development. Reflections on the Nigerian experience. *International Review of Research in Open and Distance Learning*, 5(1):

Afrobarometer. 2002. Key findings about public opinion in Africa. Afrobarometer Briefing Paper No. 1, April.

Ambe-Uva, T.N. 2007. Combating HIV/AIDS epidemic in Nigeria: Responses from National Open University of Nigeria (NOUN). *International Review of Research in Open and Distance Learning*, 3(3): 1-21

Attaran A (2005) An immeasurable crisis? A criticism of the Millennium Development Goals and why they cannot be measured . *PLoS Med* 2(10):

Calvert, B. 1986. Facilitating the transfer of distance courses. Paper presented at the Eight World Conference on the Development of Human Opportunity. Delhi, India: Open University Press.

Daniel, J.S. 1999. Open learning and/or distance education: which one and for what purpose? *In Higher Education through Open and Distance Learning*, ed. K. Harry. London, Routledge.

- Dickshit, H.P., Garg, S., Panda Santosh and Vijayshri. 2002. Access and equity: challenges for open and distance learning. New Delhi, Kogan Page, India.
- Driscoll, Libbie. 2001. HIV/AIDS and information and communication technologies. A final report to the International Development Research Centre. Policy Research.
- Fillip, B. 2000. Distance education in Africa: new technologies and new opportunities. Washington: Japan International Cooperation Agency.
- Garette, L. 2001. Gates urges more funds for HIV prevention. Washington Post, April 8: pA4.
- GECHS. 1999. Global environmental change and human security service plan. IHDP Report, No. 11, Bonn IHDP.
- IRFOL. 2004. Using open and distance learning to overcome barriers. A report of a Workshop organised by the International Research Foundation for Open Learning held on Monday December 13, 2004 at the Small Conference Room, Marborough House, Pall Mall.
- Jegede, O.J. 2003. Taking the distance out of higher education in 21st century Nigeria. An invited convocation lecture presented at the Federal Polytechnic Oko, Anambra State on the 28th of November 2003.
- Jegede, O. J. 2007. Free from ignorance, empowered by knowledge. A convocation address of the Vice Chancellor at the Special Convocation Ceremony held for the formal grand opening and commissioning of the NOUN building headquarters on the 13th March, 2007.
- Kelly, M.J. 2003. The significance of HIV/AIDS for Universities in Africa. JHEA/RESA, 1 (1):1-23.
- Mc Lean, Scott., Gasperini, Lavinia., and Rudgard, Stephen. 2002. Distance learning for food security and rural development: A perspective from the United Nations Food and Agriculture Organisation. International Review of Research in Open and Distance Learning, 3(1):
- Obayelu, A.E. and Ogunlade, I. 2006. Analysis of the uses of ICT for gender empowerment and poverty alleviation in Nigeria. IJEDICT, 2(3), 45-69.
- Olakulehin, F.K. & Ojo, O.D. 2006. Distance education as a women empowerment strategy in Nigeria, Indian Journal of Open Learning, 15 (3)
- Olakulehin, F.K. 2008. Policy formulation and capacity building for improved access to higher education in Nigeria. [http://www.cies.org/Programs/AHEC/download/Felix\\_Olakulehin.ppt](http://www.cies.org/Programs/AHEC/download/Felix_Olakulehin.ppt). (accessed 27 May 2004).
- Peters, F., and Olugbemi, J. 2005. The development of an academic programme on HIV/AIDS education management by the National Open University of Nigeria'. Paper presented at the 1st Regional Conference of Vice-Chancellors, Provosts and Deans of Science, Engineering and Technology (COVIDSET), held at La Palm Beach Hotel, Accra, Ghana, 15-17 November, 2005.
- Pridmore, P., and Yates, C. 2006. The role of open, distance and flexible learning (ODFL) in HIV/AIDS prevention and mitigation for affected youth in South Africa and Mozambique. Department for International Development: Educational Papers.
- Sida. nd. ICT for mitigating HIV/AIDS in Southern Africa. Final Report. <http://www.spidercenter.org/upl/filer/611.pdf>. (accessed 21 May 2008)

Ssengonzi, R., Schlegel, A., Anyamele, C., and Olson, K. 2004. Assessing educators views on the impact of HIV/AIDS on primary education in Nigeria. Study Report. RTI International. Research Triangle Park, NC.

UNAIDS. 2004. Joint United Nations Programme on HIV/AIDS. Geneva. UNAIDS.

UNAIDS. 2006. AIDS epidemic update. Geneva. UNAIDS

UNDP. 1996. United Nations Development Programmes, Human Development Report, Nigeria.

UNDP. 2004. Human Development Report on Nigeria: A challenge to sustainable human development. Abuja: UNDP.