

## Health Education Initiatives Using the Internet

This section focuses on health education initiatives delivered using the Internet since 1990. Although every effort has been made to capture all relevant initiatives, it is unlikely that this list is fully complete. Certainly, it will not document any initiatives which have not been reported on the Internet. However, indicators of reasonable completeness is the gradual reduction in new sites identified and the re-occurrence of already-identified sites when carrying out Internet searches in slightly different ways.

Two minor difficulties were encountered in relation to this study. First was the lack of a definition of 'health education initiatives'. None is proposed here, although much of the information was identified using the words 'health education Internet Africa', which means that these words were used to describe the various projects so identified. It will be seen that this results in a fairly broad net being cast and a wide range of activities being included in this section.

The second difficulty is that many of the initiatives used other related modalities, in particular, the distribution of CDROMs. As mentioned earlier, an excessive focus on the Internet could result in other effective, IT-based strategies being overlooked

Data in this section is presented in ten groups. The first group consists of review articles relevant to the field. The second covers a number of projects, most of which are of large size, which cover a number of different areas, e.g. both connectivity and information provision. The third and fourth groups both focus specifically on connectivity issues – in general and related specifically to health institutions respectively. Groups five to nine focus on increasing availability of digital information. Group five looks at general information, whilst group six focuses on information for health professionals and related workers. Group seven is perhaps a subset of group six in that it features a number of health-related email discussion groups. Group eight features material related to digital information within training programmes and group nine focuses on information provision to the community/general public. The final group features a number of country-specific examples.

This classification is an extension of and consistent with the groupings proposed by the health section of the DOT Force, which identified three areas where ICTs could be used in the health field, education of health workers, direct communication with the public and in public health information systems<sup>54</sup>. The first two have been used as groupings in this section. The third is focused more on health care delivery and is consequently considered beyond the scope of this study.

Allocation of a particular initiative to a particular group is largely subjective and does not necessarily mean that it has no relevance to other groups. In addition, we have tried to highlight particularly useful sites by marking them with large stars.

## **General Review and Discussion Material**

We have included a number of articles which discuss the broad issues relevant to Internet health education initiatives in Africa. They serve by way of introduction to the various projects introduced later in this section. They might be considered minimum essential reading for staff and others involved in the planned programme. It is likely that many of them are already known to people involved with the programme.

### **Bridging the Gaps in Internet Development in Africa Jensen, M.<sup>55</sup>**

<http://www.idrc.ca/acacia/studies/ir-gaps.htm>

This IDRC study, published in 1996, sought to build on the activities of those who have helped chart the events in Africa toward universal access to low cost electronic communications and the associated activities that need to take place to build Africa's Information Society. It aimed to identify the most important gaps in this development process, focusing on the countries, regions and sectors in African society that could benefit most from the increased involvement of IDRC. In many ways, this study could be considered a baseline against which developments to date could be measured.

### **Developing Country Experiences of ICTs**

<http://www.healthcomms.org/discussions/ltd02.html>

Report of a lunchtime discussion organized by the Exchange Programme<sup>56</sup> in London in July 2001. In addition to presenters from Sri Lanka and Costa Rica, Dr James Ngwandu (Mvumi Hospital, Tanzania<sup>57</sup>) spoke of a pilot scheme using computers in medical institutions to translate and adapt health information. The centres needed equipping and the staff needed training. The setting in Tanzania saw a predominantly rural population of subsistence farmers, where the Anglican church provided 45 per cent of health services. There was a real need for reliable, up-to-date, locally relevant information in local languages and Swahili. All the major towns had phone lines which were government controlled but this was changing, and Dr Ngwandu outlined a pilot project for Mvumi Hospital to become an 'information waystation'.

### **The Great African Internet Robbery**

<http://news.bbc.co.uk/1/hi/world/africa/1931120.stm>

BBC Article looking at the high costs faced by ISPs in Africa.



### **Health, HIV/AIDS and Information and Communication Technologies: A Needs Assessment**

<http://www.dotforce.org/teams/Health%20HIV-AIDS%20and%20Information%20and%20Communication%20Technologies%20A%20Needs%20Assessment%20Report.doc>

This is an extensive report by DOT Force produced in May 2002. It looks at the needs in developing countries relating to health and ICTs. It emphasises the necessity above all else to focus on the information needs and the communication channels and underlying human processes before considering the technology in support of an initiative. The needs

of the beneficiaries and users must be the drivers for any solutions, not the technology looking for a problem. Information needs must be clearly defined and local context, content and language are essential components to create valuable, trusted and useful information. The report urges a focus on a range of ICTs including TV, radio and CD-ROMs and not a narrow focus on the Internet alone. The survey suggests that the focus of directed education and training would be better channeled to health care workers at this time rather than to the public at large. The study learned lessons in five main areas (section 5):

- Capacity
- Policy and process
- Information
- Technology
- Standards

### **Higher Education through the Internet: Expectations, Reality and Challenges of the African Virtual University**

**Okuni, A.**

<http://www.dse.de/zeitschr/de200-4.htm>

This article in *Development and Cooperation* in March 2000 examines critically the idea that the Internet is a lifeline to higher education in Africa.

### **HIV/AIDS and Information and Communication Technologies**

**Dricoll, L.**

[http://www.idrc.ca/acacia/docHIV\\_AIDSfinaldraft.html](http://www.idrc.ca/acacia/docHIV_AIDSfinaldraft.html)

This IDRC paper was produced in November 2001. It looks specifically at the role of ICTs in addressing the HIV/AIDS pandemic.

### **ICT For Health**

[http://www.dotforce.org/reports/documents/70/ICT\\_e.pdf](http://www.dotforce.org/reports/documents/70/ICT_e.pdf)

This paper produced by the health section of the DOT Force in June 2002 is a brief document which builds on the needs assessment produced in May. It concludes that there are three areas in which ICT could be most beneficial in the health field. These are:

- Education for health care workers
- Preventive information for the general public (particularly on HIV/AIDS)
- Public Health Information Systems

### **Improving health, fighting poverty: the role of information and communication technology (ICT)**

<http://www.healthcomms.org/findings/findings1.html>

This article from the Exchange Networking and Learning Programme reviews the effect of new ICTs on health communications. It brings together a large number of other materials and concludes that the processes of communication are more important than the technology.

### **Information Technologies, Health and 'Globalisation': Anyone Excluded?**

**Parent, F., Coppieters, Y. and Parent, M.**

<http://www.jmir.org/2001/1/e11/>

This paper, published in the *Journal of Medical Internet Research* in 2001, warns that the *Distance-based Learning in Global Health for Africa*

use of the term "globalization" ignores the reality of the "digital divide," that is, the fact that social inequalities may preclude the realization of this promise on a truly global scale.

### **The Internet and Poverty - Real Help or Real Hype?**

<http://www.comminit.com/ctsglobal/sld-358.html>

A PANOS Briefing which takes a critical look at some of the numbers about growing Internet use in developing countries.

### **The Internet and the Public's Health**

<http://www.hsph.harvard.edu/health-internetconference/>

A conference looking at the impact of the Internet on the health of the world was held in Harvard in May 2000. One of the speakers was Frederik Bukachi from HealthNet Kenya<sup>58</sup>.

### **Internet Use Increasing in Africa**

[http://www.nua.ie/surveys/index.cgi?f=VS&art\\_id=905358408&rel=true](http://www.nua.ie/surveys/index.cgi?f=VS&art_id=905358408&rel=true)

A Reuters' story documenting the increase in Internet use in Africa, including the surge in urban Internet cafes.

### **Are poor countries losing the information revolution?**

**Rodriguez, F. and Wilson. E.J.**

<http://www.comminit.com/ctrends2002/sld-5407.html>

This InfoDev Report is a non-technical summary of research that explores whether there is an information and communication technology (ICT) gap between rich and poor countries, and whether that gap is growing or shrinking. It also discusses the link between that gap and gaps in income, both within countries and across them.

### **Regional Information Infrastructure Development in Africa : Opportunities and Challenges for the Health Sector**

**Adam, L.**

<http://www.uneca.org/aisi/health1.htm>

This study by the Economic Commission for Africa looks at the opportunities and challenges for the health sector in Africa relating to new ICTs. It argues that any approach to ICTs cannot be focused on the sector alone but needs to also focus on broader issues, such as IT and telecommunications infrastructure.

### **Rise in dial-up subscribers in Africa**

[http://www.nua.ie/surveys/index.cgi?f=VS&art\\_id=905358268&rel=true](http://www.nua.ie/surveys/index.cgi?f=VS&art_id=905358268&rel=true)

This Africa Online story contains some useful statistics:

- The number of dial-up subscribers has risen by 20% in Africa in the year to August 2002
- There are an estimated 1.7m subscribers in Africa but 1.2m are in S Africa or North Africa
- There are 500 000 subscribers in the 49 sub-Saharan African countries
- There are now about 39 countries in Africa with 1000 or more subscribers, 20 countries with more than 5000 subscribers, and 16 countries with 10,000 or more subscribers.
- An estimated 1.5-2.5m people use the Internet in Sub-Saharan Africa
- There were about 560 ISPs across sub-Saharan Africa in August 2002 (excl. S Africa)

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- The average total cost of using a local dial-up Internet account for 20 hours a month in Africa is about USD 60.

### **Supporting women's use of information technologies for sustainable development**

<http://www.acwict.or.ke/Hawknet/ict.htm>

The central question of this study concerns African women's use of information and communication technologies (ICTs). This includes issues of access, the benefits African women experience and can expect to experience from ICTs, and the role they can and do play in the production and dissemination of information.

### **Ugandan Internet and mobile use soars**

[http://www.nua.ie/surveys/index.cgi?f=VS&art\\_id=905358141&rel=true](http://www.nua.ie/surveys/index.cgi?f=VS&art_id=905358141&rel=true)

A story in the East African in July 2002 reported that:

- The number of mobile phone users in Uganda rose from 3 500 in 1996 to 360 000
- The number of ISPs rose from 2 in 1996 to 9
- The number of Internet cafes rose from 3 in 1998 to 49 by July 2001
- Internet subscribers rose from a few hundred in 1996 to 11 000

### **Universities without walls: evolving paradigms in medical education**

**Neame, R., Murphy, B., Stitt, F. and Rake, M.**

[http://www.studentbmj.com/back\\_issues/1299/new\\_tech/new\\_tech2.html](http://www.studentbmj.com/back_issues/1299/new_tech/new_tech2.html)

Neame et al., writing in the Student BMJ of December 1999 deliver a blistering attack on conventional medical education arguing for greater use of *'the computer, the world wide web, distance learning techniques, and effective educational strategies to create an entirely new educational experience'*. The article compares and contrasts Flexnerian and post-Flexnerian models of medical learning. The latter are characterized by problem-based approaches. The article reviews approaches to education, influences of IT, and their impact on curriculum design and delivery. It then introduces a new paradigm and discusses the implications of this. Applicability in developing countries, in general, and Africa, in particular, is not explicitly discussed but there are implicit implications for medical education in Africa, hinted at by statements such as *'Reducing the cost will benefit all, but especially the less well off. Such encouragement for an increased production of a medical workforce will ameliorate shortages where they exist and promote development of a supply and demand marketplace in healthcare services'*.



### **The Use of Information and Communication Technologies in the Health sector in Sub-Saharan Africa**

<http://www.idrc.ca/acacia/studies/ir-hlth.htm>

This IDRC paper, produced in 1999, reviews the use of ICTs in the health sector in Africa. The scope of this work is broadly similar to the task of this part of this report. What is striking is how few resources/initiatives were documented in 1999 as compared to three years later. For example, in 1999, only 12 African countries were reported to have Internet services. Now, all 54 African countries do, at least in the capital cities<sup>59</sup>.

## **Cross-cutting Projects**

These projects are often large in nature and include diverse elements, including for example activities to increase connectivity and those focused on increasing provision of digital information. Some, e.g. AISI and DOT Force are general in nature whilst others are health- or disease-specific, e.g. SatelLife and MIM respectively.

### **African Information Society Initiative**

<http://www.uneca.org/aisi/programmes.htm>

The AISI initiative was put into place through the collaborative actions of a network of partners, sharing the aim of promoting connectivity and information technology development in Africa. It focuses on a number of areas including:

- Policy Awareness
- Democratising access to the information society
- Infrastructure Development and Internet Connectivity
- National Information and Communication Infrastructure (NICI) plans
- Development Information
- Sector applications, including in health
- Training and capacity building

### **Association for Progressive Communications**

<http://www.apc.org/english/about/index.shtml>

The Association for Progressive Communications (APC) is an international network of civil society organisations dedicated to empowering and supporting groups and individuals working for peace, human rights, development and protection of the environment, through the strategic use of information and communication technologies (ICTs), including the Internet. APC Africa Members and partners in Africa work locally and regionally to interpret APC's programmes in the region. Strengthening indigenous information sharing and independent networking capacity on the continent are key priorities.

### **DOT Force**

<http://www.dotforce.org/about/>

The Digital Opportunities Task Force was formed following the G8 summit in Japan in July 2000. Its mandate was to co-ordinate efforts at promoting the use of ICTs in developing countries. The DOT Force has an implementation team for health. It produced a needs assessment report in May 2002<sup>60</sup> and a report entitled ICT for health in June 2002<sup>61</sup>.

### **The MIM Communications Network**

<http://www.africonnect.com/mimcom/mimcombackgd.htm>

The National Library of Medicine chairs the Communications Working Group of the Multilateral Initiative on Malaria (MIM), which began in 1997. The objective is to support African scientists and malaria researchers in their ability to connect with one another and sources of information through full access to the Internet and the resources of the World



Wide Web, as well as create new collaborations and partnerships.



### **SatelLife**

<http://www.healthnet.org/whatwedo.php>

“Sadly, many health professionals in developing countries do not have access to current information and research that is vital for diagnosis, treatment and care of disease.

Empowering them to deliver better health care in their communities, SATELLIFE:

- Connects health professionals in remote areas to critical information resources.
- Enables health professionals to share information on relevant health issues.
- Trains health workers in the use of information technology tools.
- Distributes current, peer-reviewed medical and public health content to health practitioners in the developing world.”

## **General Initiatives Focused on Increasing Connectivity**

There are a number of projects which promote and/or document connectivity within Africa. They are not specifically focused on health or the health sector but certainly affect the sector indirectly. They vary in size from large global projects, e.g. InfoDev and USAID’s Leland initiative to more localized regional initiatives, e.g. Kabissa.



### **African Internet Connectivity**

<http://www3.sn.apc.org/africa/>

This is an absolutely brilliant website operated from South Africa which documents the status of Internet connectivity in all African countries.

### **Africast Educational Foundation**

[http://www.africast.com/afri\\_edufound.shtml](http://www.africast.com/afri_edufound.shtml)

A site specifically focused on the education centre. The foundation has initiatives aimed at providing secondhand computers to schools and promoting free Internet access in African communities.

### **InfoDev**

<http://www.infodev.org/about/prospectus.htm>

InfoDev began in September 1995 with the objective of addressing the obstacles facing developing countries in an increasingly information-driven world economy. It is a global grant program managed by the World Bank to promote innovative projects on the use of information and communication technologies (ICTs) for economic and social development, with a special emphasis on the needs of the poor in developing countries. One specific health project supported by InfoDev was the establishment of a Regional Information Technology Training Centre (RITTC) in Nairobi, Kenya<sup>62</sup>.

### **Information Society and Development Programme**

<http://www.unitar.org/isd/>

This project is run by the United Nations for Training and Research (UNITAR) in West  
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Africa. “UNITAR takes an active part in the debate about universal access, and focuses specifically on awareness raising and capacity building activities. Our aim is to assist developing countries to formulate coherent national ICT strategies and to encourage them to participate actively in the construction of the global information society.”

### **InterConnection**

<http://www.interconnection.org/background/index.htm>

InterConnection is a non-profit organization whose mission is to provide no-cost and low-cost professional, affordable websites and Internet technology assistance to non-governmental organizations (NGOs) in developing countries.

### **Kabissa**

<http://www.kabissa.org/index.php>

Kabissa provides a space on the Internet for the African non-profit sector by hosting websites, listserves and a bulletin board.

### **United Nations Information and Communications Technologies Task Force**

<http://www.unicttaskforce.org/>

In March 2001, the United Nations Economic and Social Council requested the Secretary-General to establish an Information and Communication Technologies (ICT) Task Force. This initiative is intended to lend a truly global dimension to the multitude of efforts to bridge the global digital divide, foster digital opportunity and thus firmly put ICT at the service of development for all.

### **USAID’s Leland<sup>63</sup> Initiative**

<http://www.usaid.gov/regions/afr/leland/index.html>

The Leland Initiative is a five-year, USD 15 million U.S. government effort to extend full Internet connectivity to 20 or more African countries. The Leland Initiative builds on existing capacity with the ultimate aim of facilitating Internet access throughout each country. The Leland Initiative hopes to achieve the following results:

- Improving connectivity within Africa
- Increasing access by Africans to people and information for sustainable development
- Enhancing African ability to find solutions to African problems
- Making African-produced information available to the world

### **WorldOnline**

[http://www.worldonline.co.za/home/home\\_center.asp?icon=1](http://www.worldonline.co.za/home/home_center.asp?icon=1)

World Online is a commercial Internet Service Provider based in South Africa. It is part of Tiscali International, a major European ISP. Other South African ISPs include [InterneXt](#).



## ***Increasing Connectivity of Health Professionals and Health-Related Institutions***

These initiatives are similar to the former group but differ in that they focus on the health sector and health institutions in particular. The largest and probably most significant is HealthNet. However, there are many less well-known examples of micro-level projects, of which the WiderNet intervention is just one.



### **HealthNet**

<http://www.healthnet.org/whatishn.php>

HealthNet is the name of SatelLife's global communication network, which links healthcare workers around the world via e-mail. In its early years, HealthNet utilized SatelLife's low- earth-orbit satellite to establish e-mail connectivity in various locations throughout Africa. As one of Africa's first e-mail networks, HealthNet was a pioneer in providing viable solutions to information poverty among health professionals in the developing world. Through this new connection, doctors, nurses, researchers, medical students and other health care providers who had been working in isolation were finally able to communicate, share experiences and access information critical to their work.

An IDRC review in 1999 described HealthNet as “probably the most significant health-related ICT initiative in Africa”<sup>64</sup>.

### **UNDP Internet Initiative for Africa**

<http://www.un.gm/undp/ict/raf97021.htm>

This project focused on the Gambia has a 3 year budget of USD 1m. The project believes that access to reliable and up-to-date information is a prerequisite for sound decision making throughout the sustainable human development policy process. It is also based on the Regional Internet Initiative for Africa which aims to establish and enhance Internet services in 10-12 Sub-African countries, as a means of strengthening economic and social development. These countries are: Angola, Burkina Faso, Cape Verde, Chad, The Gambia, Mauritania, Namibia, Nigeria, Sao Tome & Principe, Swaziland, Togo and Zaire. The project will work with all sectors to create a favourable environment for the introduction or enhancement of the Internet in The Gambia.

Specifically, it will:

- install internet nodes with local servers to provide internet services through leased lines or small terminals, or small satellite earth stations
- build on existing capacity of the national PTTs, as well as enhance the capacity of the private sector and ISP's to implement and manage the internet nodes
- assist in designing marketing tools to sustain the implementation of the internet nodes

### **WiderNet**

<http://www.widernet.org/>

WiderNet is a non-profit project at the University of Iowa focused on improving digital communication in developing countries. Currently, the project is focusing on Africa and has developed close links with Nigerian universities, particularly the Universities of Jos and Ibadan. The reason for this is that only 3/27 Nigerian universities have access to

the Internet and none have sufficient bandwidth to adequately serve their users. This is an extensive website with a lot of IT related material.

**WiderNet: ICT and Education in the Gambia  
Liverpool, S. and Missen, C.**

<http://www.widernet.org/projects/gambia/executive%20summaryGambia.htm>

The stated goal of the 'WiderNet' project is to improve digital communication in developing countries<sup>65</sup>. This particular page describes a six week needs assessment visit to the Gambia between May-July 2002 focusing on the Gambia's tertiary learning institutions, particularly Gambia's School of Public Health. Particular features of the visit included establishing a small intranet for the School, to improve project-related communications between the Universities of Iowa and the Gambia and to assess ICT needs of tertiary level education facilities in the Gambia. This study noted that the School of Public Health had 15 stand alone PCs, provided by funding from the World Bank, Bank funding is also providing a new computer lab. The School of Nursing and Midwifery had received 12 computers from the Africa Development Bank but was unable to use them because of a lack of necessary cabling. A full report on the situation of ICT in the Gambia college is available on the Internet<sup>66</sup>. The Gambia has received support to ICT development through UNDP's Internet Initiative for Africa<sup>67</sup>. However, the country is still hindered by limited finances, scarce human resources, inadequate planning and inconsistent power supplies. The country has a relatively good telecommunications infrastructure. Several ISPs utilize a satellite system from the GAMTEL Satellite Station in Abuko, The Gambia to Teleglobe in Canada. During the visit, a five-station intranet was established with access to a digital library<sup>68</sup> installed onto the hard drive of the server.

***General Initiatives to Increase Availability of Digital Information  
in Africa***

In addition to initiatives focused on increasing connectivity, there are those which are focused on increasing the availability of digital information, both through the Internet and other means, e.g. CD-ROMs. Perhaps the largest and most ambitious of these is the Development Gateway, which was initiated by the World Bank but is now administered by a separate Trust.

**Africa Action**

<http://www.africaaction.org/about.htm>

Africa Action is a national US organization that works for political, economic and social justice in Africa. Through the provision of accessible information and analysis combined with the mobilization of public pressure we work to change the policies and policy-making processes of U.S. and multinational institutions toward Africa. The website includes 'Africa's Right to Health Campaign'<sup>69</sup>.

**Africa Online**

<http://www.africaonline.com/site/africa/health.jsp>

[http://www.africanlakes.com/subsidiaries/africa\\_online.html](http://www.africanlakes.com/subsidiaries/africa_online.html)

Africa Online was founded by three Kenyan entrepreneurs, Ayisi Makatiani, Karanja Gakio and Amolo Ng'weno in Cambridge, Massachusetts in early 1994 with the vision of connecting the continent to the rapidly expanding Internet. Operating out of Cambridge, the company began by offering subscribers a distributed African news service via e-mail. The growth period began with the establishment of a small office in Nairobi, Kenya in 1995. Since then, the company has grown to become the largest ISP in Africa outside of South Africa, with operations in eight African countries. As at the end of the third quarter, 2001, Africa Online had 25,100 active dial-up subscribers.

#### **AllAfrica.com**

<http://allafrica.com/whoweare.html>

AllAfrica.com is a multi-media content service provider, systems technology developer and the largest electronic distributor of African news and information worldwide. Registered in Mauritius, with offices in Johannesburg, Dakar, Abuja and Washington, D.C., AllAfrica is one of a family of companies that aggregate, produce and distribute news from across Africa to tens of millions of end users. The site contains a health section which contains up-to-date news articles arranged according to date<sup>70</sup>.

#### **The Communications Initiative**

<http://www.comminit.com/mission.html>

The Communication Initiative is a partnership of development organisations seeking to support advances in the effectiveness and scale of communication interventions for positive international development. The CI strategy includes provision of real-time information on communication and development experiences and thinking, facilitating horizontal linkages between people engaged in communication action, peer commentary on programmes and strategies and taking opportunities to promote strategic thinking on communication and development issues and problems.

#### **Development Gateway**

<http://www.developmentgateway.org/>

The Development Gateway is an interactive portal that facilitates access to knowledge on development and poverty reduction. Working in partnership with civil society and public and private sector organizations, the Development Gateway provides a space where people can share their experiences with development efforts. Among other resources, the portal offers a global online marketplace (the dgMarket), the largest online directory for information on development projects and activities (AiDA), information on major development topics, links to a growing network of Country Gateways (national portals), and data and statistics for more than 200 countries. Through AiDA, the Development Gateway provides an ICT project database window, which includes information over 5500 activities.

This is a huge website which can be searched according to development topic, e.g. ICT for development, HIV/AIDS. However, health is not listed as a topic. AiDA is a huge database of development projects internationally. Currently, it is highlighting Tanzania and has details of 620 health and 561 reproductive health projects in that country<sup>71</sup>.

### **EnviroLink**

<http://www.envirolink.org/>

The EnviroLink Network is a non-profit organization which has been providing access to thousands of online environmental resources since 1991. It contains a sub-section on human health<sup>72</sup>.

### **Fahamu**

<http://www.fahamu.org/>

Fahamu is committed to supporting progressive social change in the South through information and communication technologies. Fahamu specialises in making electronic information available to this community by: producing electronic newsletters disseminating news, information and debate about social justice in Africa; producing distance learning materials for human rights and humanitarian organisations; providing training through face-to-face workshops managing websites for its partners; making web-based resources available for offline use; undertaking social policy research on Africa. Fahamu has developed distance learning programmes to strengthen the capacity of human rights organisations in southern Africa (the Adilisha Project) in association with the University of Oxford's Department for Continuing Education.

### **Pambazuka News**

<http://www.pambazuka.org>

Pambazuka is a weekly electronic newsletter that offers a comprehensive weekly round up of news on human rights, conflict, health, social welfare and development in Africa.

## ***Using Electronic Media To Share Information Resources with Health Professionals***

This is broadly similar to the previous group except that it is health-specific and focuses primarily on health professionals as a target group. The DOT Force group on health has identified this approach as of top priority<sup>73</sup>.

### **The Acacia Initiative**

<http://www.idrc.ca/acacia/stcat.htm>

The Acacia Initiative is a project of the International Development Research Center (IDRC). It focuses on communities and the information society in Africa. It has produced a number of review papers relating to health.

### **AEGIS**

<http://www.aegis.com/>

Formed in 1991, AEGIS produces a daily web briefing on HIV/AIDS. AEGIS is a not-for-profit organization registered in California



### **Africa South of the Sahara**

<http://www-sul.stanford.edu/depts/ssrg/africa/guide.html>

A very useful database of Internet resources for Africa. It is maintained by Stanford

University and contains links to an interactive tutorial, called [Internet Detective](#), which seeks to teach someone how to assess Internet resources.

### **Balancing Act**

<http://www.balancingact-africa.com/about.html>

Balancing Act is facilitating the development of content for the internet and other new media technologies in Africa that will have an impact on people's lives and that they will want to use, in the three fields of economic, social and cultural development. Whilst the primary focus is digital products that can be delivered through things like e-mail, the internet and CD-ROM, they are also interested in development of appropriate linkages between new and old media (e.g. community radio, satellite, the internet and multimedia) that will deliver to Africa's less well-connected rural areas.

### **Columbia's University School of African Studies**

<http://www.columbia.edu/cu/lweb/indiv/africa/cuvi/health.html>

The School of African Studies maintains a list of health-related and health information-related sites on the Internet.

### **E-TALC**

<http://www.talcuk.org/e-talc.htm>

This is an extension of the work of Teaching-aids At Low Cost and seeks to make information available in an electronic format rather than in printed form. It uses CDs rather than the Internet because of the problems of connectivity in many developing countries.

### **Family Health International**

<http://www.fhi.org/en/gen/urlsrch.html>

FHI maintains details of reproductive health and HIV/AIDS resources on the Internet and search engines.

### **The Global Reproductive Health Forum**

<http://www.hsph.harvard.edu/Organizations/healthnet/>

The Global Reproductive Health Forum @ Harvard (GRHF) is an internet networking project that aims to encourage the proliferation of critical discussions about reproductive health and gender on the net. GRHF provides interactive electronic forums, global discussions, distributes reproductive health and rights materials from a variety of perspectives through our clearinghouse as well as maintains an extensive, up-to-date research library. Our goal is to reach out to, involve and meet the needs of under served groups globally, the reproductive health community worldwide, academics and people who are dedicated to women's rights and gender issues.

### **The Health InterNetwork**

<http://www.healthinternetwork.org/>

The Health InterNetwork was created to bridge the "digital divide" in health, ensuring that relevant information - and the technologies to deliver it - are widely available and effectively used by health personnel: professionals, researchers and scientists, and policy makers. Launched by the Secretary General of the United Nations in September 2000 and led by the World Health Organization, the Health InterNetwork has three core

elements *content*, *Internet connectivity* and *capacity building*. Concerning content, the Health InterNetwork provides more than 2,000 scientific public health publications, one of the world's largest collections of biomedical literature. A key focus of HIN is HIV/AIDS and it is planning a demonstration project with DOT Force focused on using ICTs to create learning centres for nurses in Africa<sup>74</sup>.

### **HealthLink**

<http://www.hst.org.za/hlink/>

HealthLink is a project of the Health Systems Trust that encourages the effective use and dissemination of information for decision making by various stakeholders by using electronic, print and other media. It aims to provide a reliable source of information about health and health policy developments in South Africa, and to serve as a channel through which health systems research results and recommendations can be shared. Although its primary focus is South Africa, it is an influential and well-known project regionally.

### **Journals**

A variety of health-related journals with material focused on Africa are available via the Internet. Details of over 50 of these are available from the INASP site Africa Journals Online <http://www.inasp.org.uk/ajol/>. Examples include:

- African Journal of Reproductive Health  
<http://www.inasp.org.uk/ajol/journals/ajrh/index.html>
- African Newsletter on Occupational Health and Safety  
<http://www.occuphealth.fi/e/info/an/>
- East Africa Journal of Humanities and Sciences  
<http://www.fiuc.org/jaup/sap/publications/cuea/cueapub.php>
- Ethiopian Journal of Health Development  
<http://www.cih.uib.no/journals/EJHD/EJHD-main-page.htm>
- Ife Psychologia – from Nigeria  
<http://www.inasp.org.uk/ajol/journals/ifep/index.html>
- Wajibu – a Kenyan journal of social and religious concern  
<http://www.peacelink.it/wajibu/index.html>

### **The Library of Congress**

<http://memory.loc.gov/ammem/ndlpedu/resources/inres/area/africa.html>

The Library of Congress maintains a list of useful resources for Sub-Saharan Africa.

### **MARA**

<http://www.mara.org.za/>

The MARA/ARMA collaboration was initiated to provide an Atlas of malaria for Africa, containing relevant information for rational and targeted implementation of malaria control. The MARA/ARMA initiative is non-institutional and runs in the spirit of an open collaboration. A group of dedicated African scientists, based at institutions across the continent, work co-operatively towards achieving the overall objectives.

### **PubMed: National Library of Medicine**

*Distance-based Learning in Global Health for Africa*



<http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>

Allows free online access to Medline which contains over 12 million citations.

### **SYFED-REFER**

<http://www.refer.org/syfed.htm>

This is a French-language site which describes the Syfed-Refer initiative. Since the creation of the first Syfed Center in 1991 in Dakar, the initiative has grown and centers now exist in 35 countries. These centers serve the local scientific community regarding new communication and information technologies.

### **Twinning in HIV/AIDS through ICT**

<http://www.comminit.com/icad/about-twinning.html>

This is a joint initiative of the Communication Initiative (CI) and the Interagency Coalition on AIDS and Development (ICAD). Twinning is a formal, substantive collaboration between two organizations:

- **“Formal”** means that there is an agreement or contract, verbal or written
- **“Substantive”** means that the interaction is significant and that it lasts for a period of time (i.e., it is not just a one-time interaction, such as a telephone call asking for information)
- **“Collaboration”** means that the two organizations work together on a specific project or to exchange information or skills.

The CI contains a number of examples of twinning projects including one between the Kenya Human Rights Commission and the Network of Independent Monitors in South Africa (although this seems to have been based on a visit rather than on ICTs)<sup>75</sup>.

### **USAID**

Health – <http://www.usaid.gov/regions/afr/abic/guides/phnsites.htm>

HIV/AIDS - <http://www.usaid.gov/regions/afr/abic/guides/hivsites.htm>

USAID maintains an Internet resource guide for health, in general, and HIV/AIDS in particular.

### **WiderNet: Digital Library Project**

<http://www.widernet.org/digitalLibrary/Report.htm>

This is part of the WiderNet project of the University of Iowa. It essentially consists of a collection of almost 1m documents which have been made available to 4 universities in Nigeria, 1 in Ghana and 1 in the Gambia. The library is loaded onto a hard drive within the university allowing them to be accessed through intranet systems. This is faster, cheaper and more reliable than Internet access. The first version of the field library was created in January 2002 on a Microsoft Access database and delivered to African universities in February. A second version was delivered in May 2002. The first version was estimated at 16Gb and the second at 40Gb.

### **WWW Virtual Library: Public Health Africa**

<http://www.ldb.org/vl/geo/africa/>

This site lists a number of Internet resources relating to public health in Africa.

## **Email Discussion Lists**

This group is probably a sub-group of the former one in that much of the activity is focused on sharing information and it is often focused on health professionals and related workers. However, they are a distinctive group because of the way they operate and their interactive nature.

### **AF-AIDS**

<http://www.hivnet.ch:8000/africa/af-aids/>

A regional HIV/AIDS information network for Africa (in English and French)...Over 200 organisations working in or with African Nations in the response to the epidemic have already joined the forum." To join send e-mail to: [af-aids@hivnet.ch](mailto:af-aids@hivnet.ch) with the word 'join' in the subject line. Sponsored by Fondation du Présent, Geneva, Switzerland.

### **Africa Policy Electronic Distribution List**

<http://www.africaaction.org/listinfo.htm>

The Africa Policy Electronic Distribution List is an information service provided by AFRICA ACTION. Each week subscribers to this free e-mail service receive an average of two-to-three policy-relevant documents relevant to African policy issues, with a particular focus on broad continent-wide issues with implications for international and U.S. policy. Documents distributed include documents selected for reposting from other sources, as well as publications produced by Africa Action.



### **AFRO-NETS**

<http://www.afronets.org/>

The electronic conference for the 'African Networks for Health Research & Development' (AFRO-NETS) was established in 1997 to facilitate exchange of information among different networks active in Health Research for Development in Anglophone Africa, and to facilitate collaboration in the fields of capacity building, planning, and research. This is an active and widely used site.

### **Association for Health Information and Libraries in Africa (AHILA) List**

A discussion list for health librarians and documentalists from Africa. AHILA publishes the African Index Medicus. To join, send a request to Irene Bertrand; she will manually add you to the list. E-Mail: [bertrand@who.ch](mailto:bertrand@who.ch)

### **Equinet (Network for Equity in Health in Southern Africa**

<http://www.equinet africa.org>

Equinet, the Network on Equity in Health in Southern Africa, is a network of research, civil society and health sector organisations. Seeking to develop and widen the conceptual understanding of equity in health, Equinet identifies critical areas of work and policy issues and makes visible existing unfair and avoidable inequalities in health. Equinet's main aim is to build alliances leading to positive policies on health both the local and regional levels. This is achieved by disseminating information and stimulating an informed debate on equity in health in southern Africa. Equinet produces a regular electronic newsletter (Equinet News) which is managed by Fahamu (<http://www.fahamu.org/>).

### **Forum on Stigma and HIV/AIDS in Africa**

UNAIDS Intercountry Team for East and Southern Africa and Health & Development Networks (HDN) invite you to join a new e-mail discussion forum focusing on HIV/AIDS and stigma, denial, shame and discrimination in Africa. To join send e-mail to: [join-stigma-aids@hdnet.org](mailto:join-stigma-aids@hdnet.org)

### ***Electronic Media in Training***

This group recognizes the importance of e-media in training and is probably the most directly relevant to the programme being planned by Oxford University.

#### **The African Virtual University**

<http://www.avu.org/section/about/index.htm>

The African Virtual University (AVU) is a World Bank initiative to provide a "university without walls" that uses modern information and communication technologies to give the countries of sub-Saharan Africa direct access to some of the highest quality learning resources throughout the world. AVU is bridging the digital divide by training world-class business managers, engineers, technicians, scientists and other professionals who will promote economic and social development and help propel Africa into the knowledge age. Since the launch of its pilot phase in 1997, AVU has provided students and professional in 17 African countries over 3,000 hours of interactive instruction in English and French. More than 24,000 students have completed semester-long courses in technology, engineering, business and the sciences and over 3,500 professionals have attended executive and professional management seminars on topics such as strategy and innovation, entrepreneurship and e-commerce. AVU provides students access to an on-line digital library with over 1,000 full text journals. Over 45,000 free AVU e-mail accounts have been created and the AVU website currently receives more than 1 million hits per month.

#### **Internet-based Training Course in Refugee Health Care**

<http://www.jhsph.edu/refugee/education.html>

The Center for International Emergency, Disaster and Relief Studies at Johns Hopkins Bloomberg School of Public Health offers this course.

#### **Fahamu**

<http://www.fahamu.org/>

Fahamu has developed distance learning programmes to strengthen the capacity of human rights organisations in southern Africa (the Adilisha Project) in association with the University of Oxford's Department for Continuing Education.

#### **Training of Health professionals in nutrition at the University of Nairobi, Kenya: Opportunities and Challenges in the use of information technology.**

**Thuita, F.**

<http://www.itana2002.org/abstracts/files/Faith%20Thuita.doc>

*Distance-based Learning in Global Health for Africa*

This paper looks at the ways in which IT has been used to teach public health nutrition to various groups of students within the University of Nairobi. Access to the Internet has increased access to up-to-date materials and it is being used to conduct literature searches for nutrition related research, assignments and thesis preparation and write up. Staff and Postgraduate students are also utilizing nutrition-specific software available to prepare research instruments and to analyze data from community nutrition surveys. Materials such as CDs can also be ordered online. Individuals can also sign up to nutrition related listserves. However, the demand for services exceeds availability and hardware is not always adequate to run all software satisfactorily.

### ***Using Electronic Media to Communicate Directly with People***

There are fewer examples of projects which have worked in this way because of the considerable barriers involved. However, there are some innovative examples in particular countries, such as the work of AfriAfya in Kenya. In general, the DOT Force group on health conclude that other media, e.g. TV and radio may be more influential in this area than the Internet<sup>76</sup>.

#### **COMESA's CAR project**

[http://www.dotforce.org/reports/documents/70/ICT\\_e.pdf](http://www.dotforce.org/reports/documents/70/ICT_e.pdf)

COMESA is establishing edu-telecentres in Malawi and will be extending the programme to Kenya, Uganda and Zambia. ICTs are an integral part of this programme which focuses on various issues including HIV/AIDS, women's empowerment etc.

#### **Women Connect**

<http://www.women-connect.org/projectssummary.htm>

***Women Connect!*** is a project of the Pacific Institute for Women's Health that combines communications and health strategies for the improvement of women's lives by working through women's non-governmental organizations, primarily in Africa. The project is in its third year and is funded by grants from the Bill and Melinda Gates Foundation and the Annenberg Center for Communication at the University of Southern California. The purpose of the project is to strengthen the communication and advocacy skills of women's rights organizations, a strategy aimed at the broader goals of women's empowerment and helping to build civil society. Specifically, *Women Connect!* assists women's organizations to use all forms of media to communicate and advocate for the causes they feel are important in their communities. The project also works with groups to connect them to email and the Internet so that they can network with each other and with other groups around the world, sharing problems and solutions. Since May 1999, *Women Connect!* has held training workshops and provided project grants to 26 NGOs in Zimbabwe, Zambia and Uganda. In October 2000, *Women Connect!* carried out a mid-term assessment to identify challenges and opportunities for improvement and growth. A final external evaluation was completed in December 2001.

## **Country-Specific Stories**

This final group contains examples of relevant projects from the countries covered by this study.

### **Ethiopia**

#### **Customers queue to get access to the Internet**

<http://www.comminit.com/ctethiopiait/sld-1309.html>

An article hosted on the Communications Initiative website looking at Internet connectivity in Ethiopia.

### **Kenya**

#### **AfriAfya**

<http://www.afriafya.org/afriafyaoverview.asp?sect=1>

*AfriAfya*, African Network for Health Knowledge Management and Communication, is a consortium formed by several agencies in Kenya to harness the power of information and communication technology for community health. These agencies include Aga Khan Health Service, Kenya, AMREF, CARE International, Kenya, Christian Health Association of Kenya, Plan International, Kenya, SatelLife HealthNet Kenya, World Vision International, Kenya and the Ministry of Health.

### **Namibia**

#### **Internet as a tool for communication, information and participation among tertiary students in Namibia**

<http://www.comminit.com/ctnamibia/sld-5898.html>

This study shows that Namibian students have limited access to electronic media today, but a great interest in the use of e-mail and awareness of the potential of Internet communication. Many local ICT projects, state, private and NGO initiatives, are weaving a growing web of Internet connectivity and paving the way for an increased and affordable access to Internet. The government's continued dedication to public education expenditure is another tremendously important prerequisite for an increased level of students' participation in the local, regional and national democratic process.

### **Somalia**

#### **Internet Returns to Somalia**

<http://news.bbc.co.uk/1/hi/world/africa/1775865.stm>

BBC News story from January 2002 announcing the establishment of an ISP in Somalia, NetXchange two months after the country's only ISP closed down.

### **Tanzania**

#### **Digital Information Technology in Africa (DigIT Africa)**

<http://www.digitafrica.org/>

DigIT Africa was registered in December 2000 as a Tanzanian NGO. It is a not-for-profit organization. The Company resulted from an initiative of DataVision International (T) Ltd, which is a (for-profit) Tanzanian consulting firm providing expertise for projects around the world in statistics, IT systems, and management of information technology. The leaders of DataVision saw a need (in the first instance, for their own commercial success, and, moreover, for the success of Tanzania as a whole) and decided to take action to meet that need. The result was DigIT Africa. DigIT Africa's overarching aim is to provide both rural and urban communities with the knowledge about ICT (Information and the Communications Technologies) that they need in order to participate fully in what is being called the information economy. The Company aggressively addresses the barriers to the dissemination of such knowledge that are prevalent in Africa. These barriers are economic, social, cultural, and logistical. Thus, we aim to bridge the "digital divides" that otherwise would become wider over time, locking in stagnant pools of poverty, especially in rural areas and peri-urban slums.

#### **eThinkTank**

<http://ethinktanz.org/>

The vision of eThinkTank is to offer ICT leadership by catalyzing policy changes and by supporting related developments aimed at enabling Tanzanians to participate effectively in the modern Internet-based global economy, benefiting their Nation and partners. Basically, the over-arching goal of eThinkers was to make a proposal to Government to establish a national ICT organization as a focal point to harness ICT for Tanzania's development. Rapid progress was expected once the eThinkers met on 19th October 2001 to endorse that the draft be finalised for publication.

#### **ICTTanzania**

<http://www.icctanzania.org/>

ICTTanzania, a project of the International Institute for Communication and Development is a portal that is meant to network the numerous ICT initiatives across Tanzania. It is where anything that concerns Information and Communication Technology in Tanzania is discussed, traded, criticized or applauded and passed on to share with others.

#### **Uganda**

##### **The Internet in African LDC: Uganda Case Study**

<http://www.comminit.com/ctrends2002/sld-4758.html>

This study from the International Telecommunication Union appeared in January 2001. One of the most liberal markets in Africa and the first country on the continent where the number of mobile subscribers has overtaken fixed-line users, the Republic of Uganda is poised to become a unique laboratory for the development of wireless Internet. Already, the primary means of corporate access to the Internet is from microwave radio and GSM data services are growing. With two cellular operators already in the market, and with the newly-privatized incumbent, Uganda Telecom Ltd., planning to start a third mobile service, the likelihood is that mobile may become the primary form of Internet access within the next five years. A mission to Uganda was carried out in February 2000 involving Michael Minges and Tim Kelly plus a consultant, Walter Brown. The mission was co-ordinated with the Ministry of Works, Housing and Communications which is currently drafting an Information Technology (IT) policy document for consideration by



Parliament. The Internet case study will help shape the recommendations to be presented.

## **Zambia**

### **Sister Libraries**

<http://www.ala.org/sisterlibraries/floridazambia.html>

The University of Florida Health Science Center Library (UF) and University of Zambia Medical Library (UNZA) sister library program, which started in 1992, is based on concern for health care issues that impact on public health throughout the world. This project has emphasized access to biomedical information for health care workers in a developing country. While originally concentrating on print material, the program has evolved into utilizing the Internet and other new information technology components.

## **Zimbabwe**

### **World Federation of Societies of Anesthesiologists**

<http://www.afronets.org/afronets-hma2/afro-nets.200003/msg00086.php>

WFSA supports a focused distance learning programme for doctors in Zimbabwe based around the distribution of information on CD-ROMs and remote tutor support through email. Samples of the materials available on CD are accessible through the Internet<sup>77</sup>. Key contacts for this project, Gerald Robinson and Michael Dobson are based in Oxford and work closely with e-TALC.