Chapter 4.28
Improving Electronic Information Literacy in West African Higher Education

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INTRODUCTION

Electronic information literacy has gained increased importance with the advent of the new information and communication technologies which, driven by the convergence of computers and telecommunications media, are crucial for facilitating, supporting, and enhancing learning and for the knowledge-based economy of the future. In "Africa's Information Society Initiative (AISI): An Action Framework to Build Africa's Information and Communication Infrastructure," African ICT experts appointed by the Economic Commission for Africa (ECA), have described the potential of the Internet to improve learning in higher education and established the foundation for this to become a reality in Sub-Saharan Africa. The AISI document that the group of experts produced was adopted by the ECA Conference of Ministers as the African Information Society Initiative (AISI) in 1996. The document calls for the implementation of communication infrastructure plans that would be integrated into higher education in the following ways:

a. Providing equitable access to technological resources for distance education
b. Strengthening local educational capacity
c. Connecting schools, universities, and research centers to national and international distance education facilities, national and international databases, libraries, research laboratories, and computing facilities
d. Reducing communications and administrative costs by building communications networks linking all educational establishments
e. Promoting and supporting collaboration among teachers and researchers

f. Extending the reach of educational facilities in informal learning, especially to community level (ECA, 1999, p. 4)

Information literacy has been defined as a set of abilities to "recognize when information is needed and have the ability to locate, evaluate, and use needed information effectively" (Rader, 2002, p. 2). There are extremely few electronic information-literate scholars including administrators, faculty members, and students on campuses in Sub-Saharan West Africa because this part of the world has only marginally benefited from the explosion of the information and communication technologies. For instance, in its 1999 Human Development Report, the United Nations Development Programme (UNDP) found that developing countries suffer from the most serious infectious diseases. Yet they often have the least access to information to combat them. The information and communication technologies would deliver critical knowledge to information-poor hospitals (UNDP, 1999, p. 59). Concurrently, these technologies can bring critical knowledge and information to schools, colleges, and universities.

STATE OF DIFFUSION OF INFORMATION TECHNOLOGY AND INFORMATION LITERACY

The information revolution has enabled academic institutions to provide a more flexible and open learning environment for scholars. For higher education institutions in Sub-Saharan Africa, the information and communication technologies represent an important opportunity for revitalizing higher education. They can provide a way for academics to overcome their isolation (Useem, 1999). As a result, there is a concerted effort to solve the problem of information technology access and its utilization in higher education institutions. In the 1994 Statement of Ouagadougou, Burkina Faso, administrators, academics, and researchers have identified implementation strategies to develop and improve Internet access and use. Suggested strategies include the promotion the use of electronic communication technologies, the setup of required equipment for faculty in every discipline, the improvement of links between organizations, and the coordination of action (Renaud, 1994).

Although there is now growing recognition of the far-reaching impact of the new information and communication technologies on learning, a number of issues continue to restrict its diffusion through public higher education institutions in Sub-Saharan African countries. Many of the scholars and administrators who want and need to use information technology have low ICT literacy levels. The shortage of financial and human resources, the lack of knowledge on the availability of potential tools, the insufficient telecommunications infrastructure, and rapid changes in technology are all contributing to this issue (Ali-Dinar, 1996). The greatest obstacle to use of information technology is not its acceptance as a tool in education, but how this tool will be acquired. Additional challenges for users in higher education institutions include lack of training to use technology features and services, follow-up, and continuity in utilization. Furthermore, educational and training facilities to help administrators, faculty members, and students become literate and acquire the proper skills are insufficient at most institutions (Odera, et al., 1996). A survey by the Association of African Universities (AAU) in 1998 found that only 52 of the 232 academic and research institutions had full Internet connectivity, while the remaining 180 institutions had access that was deemed inadequate (Useem, 1999). Consequently, the higher education community in Sub-Saharan West Africa lacks skills in areas including systems analysis, programming, maintenance and consulting, and at all operational levels that negatively affect their productivity.

Higher education, largely state and public-supported, is not only allocated decreasing appropriations but is also affected by the roaming