Chapter 19
ICT Integration Efforts in Higher Education in Developing Economies:
The Case of Addis Ababa University, Ethiopia

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ABSTRACT

A situational modified version of Tearle's model (2004) is utilized in this study to understand the integration of ICTs in the educational process. The study evaluated self efficacy beliefs, institutional support and policy in the context of developing economies where challenges of inadequate resources and insufficient skills persist. We assess the state of affairs, and the challenges faced by teachers and management at Addis Ababa University, Ethiopia. The results show that educators are generally appreciative of ICTs role in the teaching/learning process.

INTRODUCTION AND MOTIVATION

Today's networked economy is information and knowledge intensive. It is characterized by evolving global marketplaces coupled with business processes and sophisticated work environments. Competitive economic capabilities and success factors are now more centered on knowledge than ever. In order to remain effectively integrated in the global economy, a country's priorities should include education and training to increase the skill sets of their workforce.

Higher education (post secondary education) has been attempting to provide training to an ever increasing audience, to ensure that their graduates have the necessary knowledge and skills for the networked economy and generally prepare them for lifelong learning. To meet these challenges, educational institutions have concurrently aimed on expanding access, improving internal efficiency, and promoting the quality of teaching and learning (Haddad & Jurich, 2002). Information and Communication Technology (ICT) is used by many educational institutions to increase the quality of teaching and learning in a cost effective manner (Means and Olson, 1995). In this networked economy higher education graduates are expected to be versatile in a world of communications that includes email, Intranet, Internet, and the world-wide web, and be able to apply higher cognitive skills (analyzing, summarizing and synthesizing information) in order to engage in creative and critical thinking (Vogel and Klassen, 2001). It has also been argued that higher education should incorporate proven pedagogical strategies such as group work, cooperative learning, peer teaching, idea sharing and reflection (Ramsden, 1992 in Lockyer, et al., 2001). ICTs have been found useful in facilitating these strategies (Lockyer, et al., 2001) and their implementation has become an indispensable part of educational reform (Law, 2004 in Sabaliauskas and Pukelis, 2004).

Table 1. Opportunities from ICT integration in education: Research findings

ICT Impact Attributes in Education	Finds full/partial support in
Brings positive changes in the social organization of the classroom; achieves higher student-centric focus and delivery	Capper, 2003; Cradler and Bridgforth, 2005.
Enhances teaching and learning through dynamic, interactive, and engaging content	Davis and Tearle, 1999; Capper, 2003; Yusuf, 2005.
Develops, enriches, accelerates, and deepens student skills	Davis and Tearle, 1999; Capper, 2003.
Relates school experience to work place, provide opportunity for connection between school and world	Davis and Tearle, 1999.
Enhances learning opportunities and resources to the students and teachers	Byron and Gagliardi, 2001; OTA, 1997 in Cradler and Bridgforth, 2002; Department of Education and Skills, 2002 in Tearle 2003; Becta 2003a.
Enhances student motivation in the learning process which then • Accentuates enjoyment and interest in the learning process, • Achieves higher commitment, increases independence, self esteem and confidence in students.	Cox, 1997 in Cox et al. 1999; OTA, 1995 in Cradler and Bridgforth, 2002; Capper 2003.
Stimulates, motivates and sparks students' appetite for learning and helps to create a culture of success	Becta, 2003c.

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