Chapter 13
Technology Integration in the Classroom:
Report of an Asynchronous Online Discussion among a Group of Nigerian Graduate Students

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ABSTRACT

Increased access to ICT tools and resources has provided opportunities for learning technologies. This chapter focuses on classroom integration of social media among a group of Nigerian graduate students using asynchronous online discussion. The study involved an intact class of 33 participants who were engaged in a threaded discussion for a period of 14 weeks at the College of Medicine, University of Ibadan. A duly validated instrument with reliability co-efficient of 0.85 was used, and data collected were analysed using frequencies and percentages. Results revealed high competency level among the majority (84.8%) in checking, composing, and sending e-mail. Participants were actively engaged in AOD during the period, even though access to the Internet by the majority (63.6%) was through the commercial cyber cafes. The majority (66.7%) actively participated in the AOD, and their opinion was predominantly positive about the perceived impact of AOD. A major barrier to their participation in AOD is limited access to computer and Internet facilities. Therefore, the authors recommend provision of ICT infrastructure within the learning and on-campus residential environments by university administrators for cheaper and unrestricted technology access and that lecturers should become more proactive in technology-driven teaching.

DOI: 10.4018/978-1-4666-6162-2.ch013
INTRODUCTION

Products and services provided by the telecommunication industry is making a lot of impact in the way and means by which people communicate and socialize using diverse social networking and media platform such as e-mail communications; listserves, mailing list, media such as Facebook, Twitter, among other emerging platforms. Uses of these ranges of platforms are found to be common among university students. These technologies are adaptable and applicable through curriculum integration especially, in form of blended learning delivery systems and or collaborative learning. It implies that online communication and social media platforms could be converted to instructional advantages and serves the purpose of supplementing classroom and teacher-students interactions.

Furthermore, computer-based interactions as become part of global trends in professional development programmes and recruitment for employment. Therefore, it is imperative for graduate students to become familiar with related skills that can prepare them for such technology-driven environment in preparation for work life. Arguably, modern day professional development depends more on computers and other forms of information technologies for appropriate integration in a variety of fields including law (Tebo, 2000), education (Moore, 2002) and even among government workers (Saunders, 2003).

Ruhleder and Michael (2000) state that benefits of online collaboration include reflection and peer feedback. Reflection according to Moon (1999) is ‘a mental process with purpose and / or outcome in which manipulation of meaning is applied to relatively complicated or unstructured ideas in learning or to problems for which there is no obvious solution’. Peer feedback is closely related to peer learning which refers to getting responses from contemporaries of the same status in forms of feedback for cross fertilization of ideas on issues relating to their learning. Online learning impacts the learning process by improving socialization skills among students, as well as enhancing critical thinking; it also increases learners’ motivation and engagement in learning and education and constitute a potent tool for effective delivery of quality higher education (Jegede, 2002; Mavers, 2005; Okebukola, 2005). Mobile technologies such as tablets, personal digital assistants (PDAs), mobile and smart phones, iPods and Androids are particularly motivating, and allow for greater flexibility in teaching, with teachers taking advantage of the mobility of the technology to move outside the classroom thereby, ensuring overall students' satisfaction and perceived learning which have a positive effect on the quantity and frequency of participation. (Starkey, 2006; Mellar, 2007)

Asynchronous online discussion (AOD) according to McInerney and Robert (2004) is a form of collaborative or cooperative learning whereby learners or participants relates together using the electronic platform to communicate, consult and contribute. Asynchronicity connote ‘non-real time’ as against synchronicity meaning ‘real time’. The terms ‘collaborative’ and ‘cooperative’ are often used interchangeably, the term collaborative learning is a learning method that implies “working in a group of two or more to achieve a common goal, while respecting each individual’s contribution to the whole.” It has been argued that incorporating well-planned collaborative activities into online learning benefits students, since higher order thinking skills are more likely to be generated (Schultz, 2003).

Hron and Friedrich (2003) postulates that online learning environments equipped with communicative technologies bring about improvement on collaboration in an asynchronous manner, but with a caution that computer-mediated communications puts other demands on participants or group members. Hron and Friedrich (2003) indicated that these demands require that participants or group members should;