E-LEARNING NEEDS ASSESSMENT AT THE UNIVERSITY OF EASTERN AFRICA, BARATON

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Abstract

In the modern days of globalization and digitization, many institutions of higher learning have embraced a blended learning, an integration of e-learning and traditional (face-to face) instruction as a means of meeting the escalating demands by learners to utilize technology in classroom instruction. Although the University of Eastern Africa, Baraton is one of the early private universities to be recognize by the government of Kenya, and make use of the modern technology, there seems to be a general tendency of reluctance, and to some extent resistance in the part of lecturers to embrace the concept of e-learning or blended learning. Many of the lecturers are not excited to use the modern technology in the classroom instruction. However, the 21st century learners in their class are digital natives, who are restless unless classroom instructions are supported by technology. In addition the current trend demands that if not proficient, at least lecturers should be willing to learn and use technology in their classroom instruction. Therefore, this paper is to address this gap by gathering basic information on the technology use and assess the university's readiness to use a blended learning. Data was gathered using a self-administered survey questionnaire from regular and contract faculty, chairpersons of departments and school deans of the University of Eastern Africa, Baraton to investigate their e-learning readiness and carry out a diagnostic e-learning readiness assessment of faculty in order to determine the levels of e-learning readiness. Sixty five (65) questionnaires consisting of 10 categories of questions were distributed, out of which 44 were returned (68% response rate). The analysis of data and interpretation of the findings are based on the 44 questionnaires returned

Results revealed that majority of the respondents have not integrated e-learning nor currently using e-learning but expect to use e-learning for teaching and learning in the future.

Thus, e-learning readiness of UEAB faculty is yet at the lowest level of Tomei's Taxonomy for the technology. Most faculty possess minimum degree of skills and competency with respect to ICT

Keywords: Blended learning, digital, e-learning, face-to-face learning, ICT, traditional learning

Introduction

Although technology has been part of teaching and learning for centuries, types of technologies have changed over the years (Cinnamo, Ross, & Ertmer, 2014). The globalized 21st century digital world requires the educational leaders and teachers to be conversant with technology to deal with significant changes associated with technological advancements in terms of instructional, cultural, and social life of the learners (Wang, 2012).

In order to assess the e-learning needs of the lecturers, it is important first to assess their readiness to integrate ICT. E-learning readiness assessment is a means of getting the basic information necessary in regard to the factors that need to be considered in order to make an informed decision for better preparations to integrate technology.

Literature Review

It is undeniable fact that we are living in the age of information explosion. Technology is E-learning readiness is defined as "the mental or physical preparedness of an organization for some eLearning experience or action" (Borotis & Poulymenakou, 2004). According to EIU and IBM (2003), eLearning readiness is defined as "a nation's ability to generate, disseminate and use digital information among its citizens to the betterment of the country's economic activity.

Before designing and putting instructional ICT support systems in place it is appropriate for institutions of higher learning to conduct e- learning readiness assessment. The assessment should include learners' ability to adapt to technological changes, collaborative training and synchronous as well as asynchronous

self-paced training.

Experts in the field have developed a number of models to access e-learning readiness, one of the e-learning readiness model is Chapnick's model (Chapnick, 2000, p. 2), in which he looks at eight important areas to be considered in e-learning readiness assessment as follows.

1. Psychological readiness. This factor considers the individual's state of mind as it impacts the outcome of the e-learning initiative.
2. Sociological readiness. This factor considers the interpersonal aspects of the environment in which the program will be implemented.
3. Environmental readiness. This factor considers the large-scale forces operating on the stake holders both inside and outside the organiza tion.
4. Human resource readiness. This factor considers the availability and design of the human-support system.
5. Financial readiness. This factor considers the budget size and allocation process.
6. Technological skill (aptitude} readiness. This factor considers observable and measurable technical competencies.
7. Equipment readiness. This factor considers the question of the proper equipment possession.
8. Content readiness. This factor considers the subject matter and goals of the instruction.

The model enables educators to assess areas of success in their institutions in e-learning and the areas which need improvement. Apart from Chapnick's model, other similar models are available to access e-learning readiness of institutions (Chapuick, 2000). The current pressure to integrate ICT in classroom instruction requires a well-planned approach of assessing the needs for technology integration. E-learning readiness assessment is an approach to identify their current levels of teachers' skills, and competencies to integrate ICT. In order to do this, a questionnaire was designed and administered to 44 randomly selected lecturers. The questionnaire was organized around 10 themes
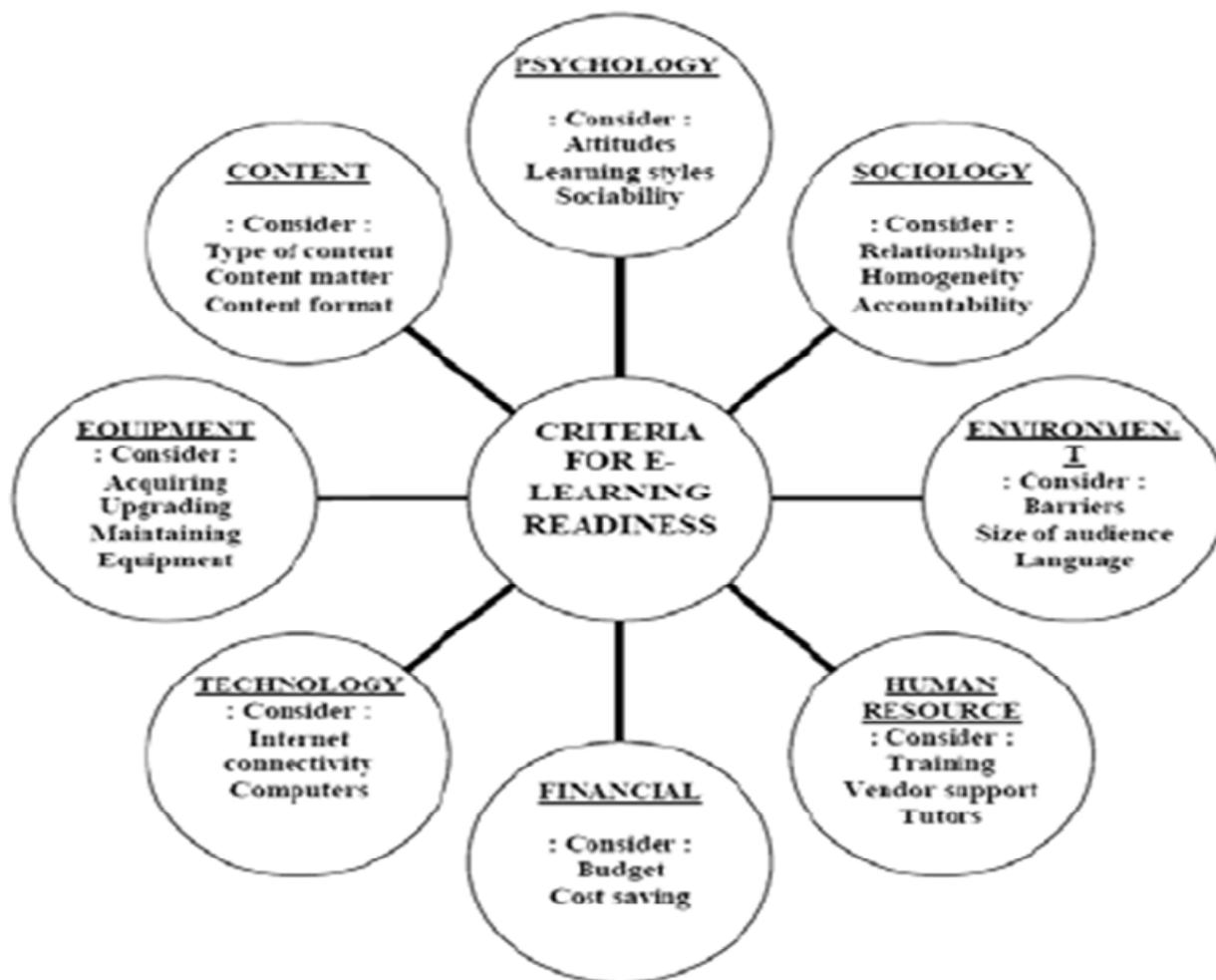

Figure 1. Simple e-learning model (Adapted from Chapnick, 2000)

Taxonomy for the Technology Domain

Similar to the taxonomies of educational domains (Krathwohl, 1956), cognitive (Bloom), affective (Krathwohl), and psychomotor (Kibler), Tomei developed taxonomy for a technology domain in 1998 (Tomei, as cited in Wang, 2012). Taxonomy for the technology domain is the newest approach to learning technology. This taxonomy consists of six levels organized in a progressive order from simple to complex. The six levels include: literacy: understanding of technology, collaborative sharing ideas, decision-making: Solving problems, learning with technology, teaching with technology, and tech-ology (Tomei, as cited in Wang, 2012).
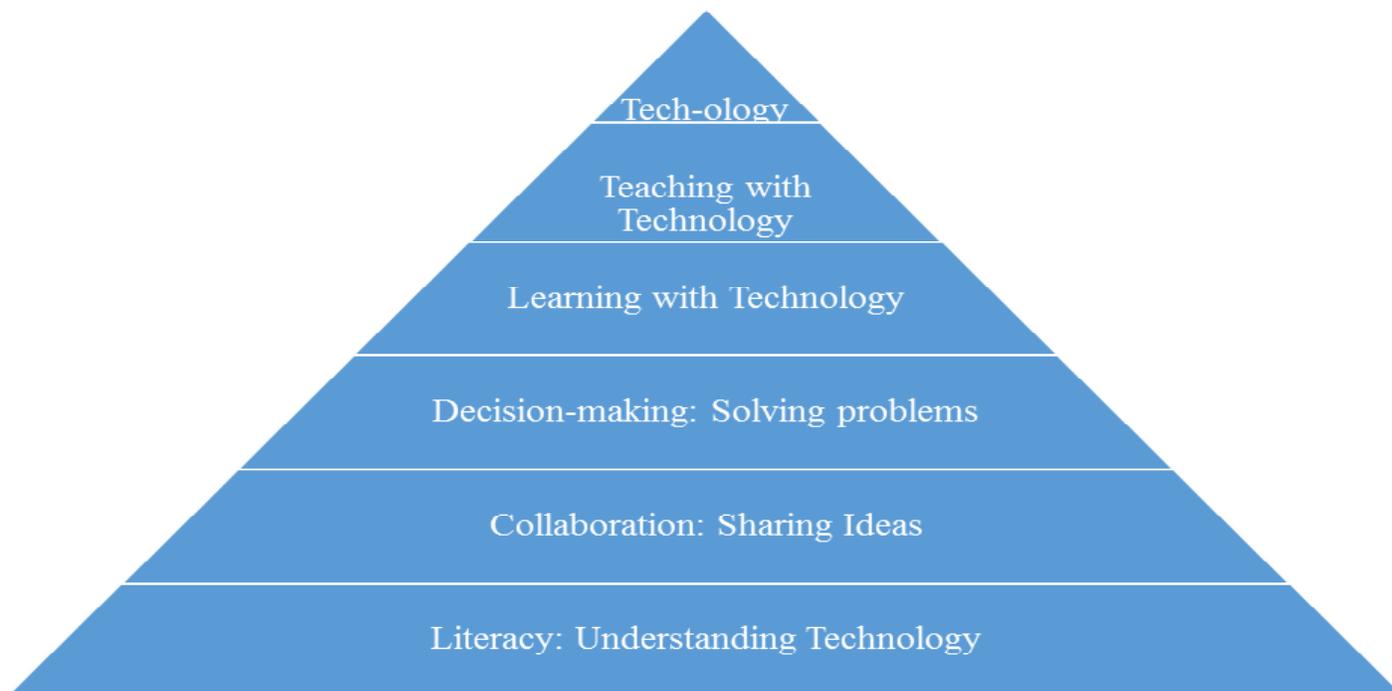

Fig. 2. Taxonomy for the technology domain (adapted from Tomei, 2005 as cited in Wang, 2012).

The Case of UEAB

Although the University of Eastern Africa, Baraton is one of the early private universities to be recognize by the government of Kenya, and make use of the modern technology, there seems to be a general tendency of reluctance, and to some extent resistance in the part of lecturers to embrace the concept of e-learning or blended learning. Many of the lecturers are not excited to use the modern technology in the classroom instruction. However, the 21st century learners in their class are *digital natives*, who are restless unless classroom instructions are supported by technology. In addition the current trend demands that if not proficient, at least lecturers should be willing to learn and use technology in their classroom instruction.

Therefore, this paper addressed this gap by gathering basic information on the technology use and assess the university's readiness to use a blended learning. Data was gathered using a self-administered survey questionnaire from regular and contract lecturers, chairpersons of departments and school deans of the University of Eastern Africa, Baraton to investigate their e-learning readiness and carry out a diagnostic e-learning readiness assessment of lecturers in order to determine the factors that influence e-learning readiness. Findings, interpretations and recommendations were based on the analysis of the data gathered.

Analysis of Data

Data was gathered using a self-administered survey questionnaire from regular and contract faculty, chairpersons of departments and school deans of the University of Eastern Africa, Baraton to investigate their e-learning readiness and carry out a diagnostic e-learning readiness assessment of faculty in order to determine the levels of e-learning readiness. 65 questionnaires consisting of 10 categories of questions were distributed, out of which 44 were returned (68% response rate). The analysis of data and interpretation of the findings are based on the 44 questionnaires returned. Statistical Analysis (frequency and percentages) were generated using SPSS software.

Findings

Findings revealed that majority of the respondents have not integrated e-learning nor currently using e-learning but expect to use e-learning for teaching and learning in the future. Less than 50% of respondents have lower understanding of the following technological terms: Digital repositories (34.1%), virtual learning environments (36.4), plagiarism detection software (36.4%), e-course packs (the lowest   15.9%), social software (blogs, wikis) (38.6%), e-portfolio (the lowest, 11.4%), portals (29.5%), and web conferencing (40.9%).

More than 50% of the respondents indicated that they are currently not designing online activities and discussions (65.9%), facilitating/tutoring online discussions with students (65%), using computer based simulations and games (60%), not writing open/distance learning materials (55%). That means, they are not able to integrate ICT in their teaching. More than 80% of the respondents have indicated that they intend to further develop their skills and abilities in integrating ICT in their teaching. Respondents also indicated relatively better skills in using e-journals, but quite a limited skills in using virtual learning, conferencing systems, and blogs. They have indicated least skills in using wikis, plagiarism detection software, and use of e-portfolios. The only technology that majority of the respondents are currently using is e-journal (60)%). Above average of the respondent have indicated that currently they are not using virtual learning environment (54.1%), conferencing systems (67.6%), e-portfolios (76.3%), blogs (67.6%), wikis (70.3%) and plagiarism detection software (62.2%). Respondents indicated that getting administrative support (89.6%), having more time (81.8%) and more resources (79.5%) would encourage them to make greater use of e-learning.

Interpretations, Conclusion, and Recommendations

This study did not include the adjunct faculty and faculty at the extension center. Thus, results may not represent the overall opinion of e-learning readiness of the entire faculty of UEAB. However, this research can provide some insights into the level of e-learning readiness among lectures of UEAB. E-learning readiness of UEAB faculty is yet at the lowest level of Tomei's Taxonomy for the technology. Most faculty possess minimum degree of skills and competency with respect to ICT. There is lack of widespread knowledge and skill that would enable faculty to make an optimal use of technology. The e-learning support systems in the university is perceived as low. Almost majority of the respondents are interested in any form of ICT training that would.

Thus, UEAB should invest more on e-learning by improving the IT infrastructure, organize more training on e-learning content development, and develop an IT integration policy in all teachings. The faculty should create more time and show interest to take part in IT trainings and make more efforts to update their ITC skills.

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