



# **Challenges of Integrating E-Learning Component in Teaching and Learning Process at Islamic University in Uganda**

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## **ABSTRACT**

This study examined challenges of integration e-learning component in the teaching and learning process at Islamic University in Uganda. The study used samples of 100 and 351 for lecturers and students respectively. The study used a quantitative approach to collect data using a questionnaire. The data collected were analyzed using descriptive statistics. The study found challenges facing integration of e-learning practices at IUIU, for example, 33 (62%) and 171 (85%) of staff and students respectively reported that Blackboard virtual learning environment (VLE) is not integrated into teaching and learning process at IUIU. The same applied to other VLEs such as WebCT and Moodle. The study also found challenges of how existing Technological Infrastructure hinders the integration of e-learning, for example; it was found that 129 (64%) of the students and 41 (78%) of the academic staff reported respectively that there is no stable internet connectivity and Multimedia Laboratories. In the perspective of stakeholders, the study found that 128 (64%) and 22 (46%) of the students and lecturers reported that e-learning was not fit with their teaching and learning style. Also, 146 (72%) and 52 (47%) of the students and lecturers reported they have difficulty in using e-learning resources. The researcher recommends that the University should develop a policy that each faculty should ensure e-learning is part and parcel of teaching and learning process at the university. The university should also endeavor to provide technological infrastructure especially those that are not available at all like virtual learning environments and to train lecturers and students on how to use them, how best they can migrate from traditional method to cloud computing.

**Keywords:** Cloud computing, e-learning, knowledge management

## **INTRODUCTION**

E-learning is becoming an integrated and critical component of corporate knowledge management and performance enhancement. E-learning provides a powerful and unstoppable force for the growth of the educational sector. The energy in the e-learning debate surrounding standards were replaced by broader concerns relating to the quality of learning experience. Learning for life requires knowledge to be personally, socioeconomically and culturally integrated (Naidu, 2003). E-learning has become one of the most popular and widely used learning models in open, distance and conventional institutions. E-Learning is now regarded as an effective method to support the management of education and institutional activities. Naidu (2003) explained that E-learning environments have comparative advantages over C-learning environments such as systematic access to resources, flexible delivery of learning material and

more learning opportunities. E-learning emphasizes the use of learning theories, for example behaviorism which focuses on repeating a phenomenon until it is well practiced, cognitivist which encourages students to process and store information for later retrieval and constructivism which explains that knowledge is constructed through an active process of personal experience guided by the learner himself/herself (Kybartaitė *et al.*, 2007).

Despite the larger use of e-learning in university teaching and learning process, research on e-learning integration showed that it had not reached its full integrated (Zemsky *et al.*, 2004). This showed that more effort should be used in order to improve university teaching and to learn via the e-learning. E-learning integration is hindered when there is the absence of improved e-learning component in any university system. Oye *et al.*, (2011) found out that some challenges are affecting e-learning integration such as awareness and training staff on the use of ICT, motivation, electricity bandwidth and internet connectivity in the university level of Nigeria. However, effective integration requires a transformation process where all stakeholders are involved in re-examining their existing structures and practices. Sife *et al.*, (2007) believes that if universities and colleges are to successfully adopt technologies for teaching and learning, many more than minor adjustments in current practice will be required. Indeed, the effective use of technology requires a revolution in thinking about teaching and learning. Part of that revolution necessitates restructuring of universities and colleges that is, changing the way higher education institutions are planned, managed and organized in order to adapt to the contemporary teaching practices. The growing contemporary trends in e-learning are associated with networked computer information and communications technologies. This enables access to learning materials compared to spatial and conventional setting such as classroom teaching (Dede, 2000). In the case of IUIU with its four campuses, e-learning would enable the lecturer to deliver instruction and distribute learning materials to students to all campuses at the same time, pace and at their convenience. At the moment e-learning is not fully integrated into the teaching and learning process at Islamic University Uganda (Kasse, 2013). There was, therefore, need to establish the challenges of e-learning integration in Islamic University in Uganda.

### Objectives

The objective of the paper is to examine the challenges of integrating e-learning component in the teaching and learning process at IUIU. Similarly, the study investigates the current factors hindering the full integration of e-learning component into teaching and learning process at IUIU, main campus.

### Conceptual Framework

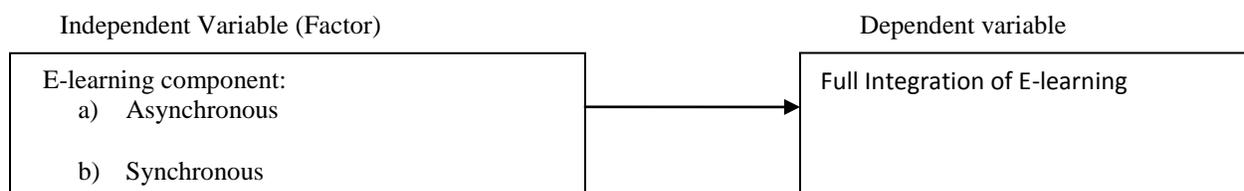


Figure 1.2 Conceptual framework

The above shows that the Independent variables (factors) are conceptualized as synchronous and asynchronous e-learning component, while the dependent variable is conceptualized as a full integration of e-learning into teaching and learning activities.

## METHODOLOGY

### Research design

The study was carried out using cross-sectional survey design which involved gathering information from the population under study at a single point in time. This was because the study used samples of different respondents to research in the same period (Amin, 2005). The population for the study was students and

academic staff in the IUIU, Mbale Main Campus. The campus had the total population of 4,714 students from six faculties (Office of the Academic registrar, 2015).

**Population of the Study**

The sample for this study was drawn from the entire population of six faculties. A total of 100 samples of the academic staff were randomly selected out of total population of two hundred and seventy-nine (279) based on De Vos (1998). Also, also three hundred and fifty-one (351) of the student's sample was randomly selected from the total population of four thousand seven hundred and fourteen (4714) students based on Krejcie and Morgan description table (1970).

**Sampling and Sampling Techniques**

The student's respondents were sampled using proportionately stratified sampling technique. Sixty-seven (67) students from the Faculty of Art and Social Sciences (FASS). Seventy-two (72) from the Faculty of Education (FOE). Seventy (70) from the Faculty of Management Studies (FMS). Ninety-eight (98) Students from the Faculty of Sciences (FOS). Thirty-two (32) students from the Faculty of Law (FOL). Twelve (12) Students from the Faculty of Islamic Studies and Arabic Language (FISCAL). The formula used for sampling strategies was:  $\frac{\text{Faculty Population}}{\text{Total no.of Population}} * \text{Total sample}$  . (Krejcie and Morgan,

1970).

**Sample and Sampling Techniques**

Simple random Sampling was used to select 100 members of the academic staff out of a total of 297 members using De Vos table (1998). Simple Random Sampling was used because at the time of the study, the majority of academic staff were involved in recess semester activities including School practices and internship training.

**Instrumentation**

The instrument that was used in conducting this research study was a self-designed questionnaire. The questionnaire was divided into two parts: the first part covered four items of the bio-data of the respondents. The second part included thirty items on the current level of integrating e-learning component, Technological infrastructure, and stakeholder's perspectives. The study used a five (5) Likert scale of strongly agree, agree, disagree; strongly disagree and undecided.

**Validity of Instrument**

The Content validity was used in validating the instrument. The Questionnaire items were validated by the supervisor and two other experts in the Faculty of Education. The language, content, and structure of the items were critically examined for possible corrections and suggestions. After corrections and suggestions, the validity yielded  $(C V I) = \frac{34}{37} = 0.92$  where n=34, N=37

**Reliability of Instrument**

The reliability determines the internal consistency of the items in the variable (Kaplan and Saccuzo, 2017). The concept, therefore, deals with the accuracy of the instrument and the consistency of the data collected by it. An Instrument is reliable if it measures consistently what it is supposed to measure. Here the reliability of the instrument was established by calculating Cronbach's alpha ( $\alpha$ ) coefficient in the SPSS Version 20 for internal consistency. This was done during a pilot study conducted at the Main Campus. The results of the Cronbach's alpha gave 0.772 which showed that the instrument used was reliable.

**Data Analysis**

After data was collected, the researcher checked the completeness of the questionnaires. The responses were analyzed using basic descriptive statistics including frequencies and percentages using Statistical Package for Social Sciences (SPSS, Version 20).

## DISCUSSION OF FINDINGS

**Table 1. Challenges Affecting E-learning Integration at IUIU**

<b>E-learning Component</b>	<b>Academic staff Frequency with Percent (%)</b>	<b>Students Frequency with Percent (%)</b>
BVL Learning Environment	33 (62.2%)	171 (84.6%)
WebCT Learning Environment	27 (50.9%)	162 (80.2%)
VLV Learning Environment	31 (58.5%)	159 (78.7%)
Audio-Conferencing	32 (60.3%)	98 (48.5%)
Video-Conferencing	32 (60.4%)	98 (48.5%)
Blogs	32 (60.3%)	133 (65.8%)
Youtube	30 (56.6%)	81 (40.1%)
Access to e-learning Resources	25 (47.2%)	112 (55.5%)
No Stable Internet Connectivity(low bandwidth)	129 (63.9%)	41 (77.4%)
Bad perspective about using E-learning Component	25 (4.74)	112 (55.5)
Lack of training on how to access e-learning resources.	22 (41.5%)	128 (63.3%)

Based on the finding of this study, it has been revealed that, from the table above, 33 (62.2%) of the academic staff and 171 (84%) of the students said that Virtual Black Board is not one of the e-learning component integrated into teaching and learning process at IUIU. For WebCT Virtual Black Board, the findings here revealed that 27 (50.9%) and 162 (80.2%) of the academic staff and students reported that WebCT is not currently used in Teaching and Learning process at IUIU. According to 31 (58.8%) of the academic staff and 159 (78.7%) of students claim that Moodle Virtual Learning Environment is not used in teaching and learning processes at the university.

The table above further showed that 32 (60.4%) and 93 (46%) of the academic staff and students respondents mentioned that Video Conferencing is not part of the e-learning component supporting learning process at University. Moreover, the statistics showed that Audio- Conferencing is not integrated. Also, 33 (60.2%), 30 (56.6%) of the academic staff and 133 (65.8%), 81 (40.1%) students said that Blogs are also not part of the e-learning component integrated at University. According to 25 (4.2%) and 112 (55.5%) of the academic staff and students said access to e-learning resources is not sufficient in the University, and 141(55.5%) asserted that there no stable internet connectivity (low bandwidth), 25 (4.7%) and 128 (63.3%) said there is bad perception of the e-learning component and 22 (41.5%) and 125 (63.3%) mentioned that there is lack of training on how to use e-learning component. These findings are in line with Farinpen (2012), who stated that problem affecting e-learning integration in Africa include lack of Video- Conferencing, the stability of internet connectivity (bandwidth) and source of security.

## CONCLUSIONS

The findings on the challenges affecting full integrating of e-learning components into teaching and learning processes at IUIU stated with their frequencies and percentages such as internet connectivity (low bandwidth). Lack of Multimedia Laboratories. This result indicated that almost the e-learning components that have not yet been integrated into teaching and learning processes at IUIU are Synchronous e-learning component such as Virtual Blackboard software for teaching and learning activities, WebCT Virtual learning environment software, and Moodle Virtual learning environment

software. This is a big challenge facing the university. However, Perspectives of stakeholders (students and academic staff) on the integration of e-learning component into teaching and learning process at Islamic University in Uganda. The empirical data revealed that they perceived that e-learning does not fit with their lecturing and learning style currently at IUIU. In addition to the process of teaching and learning, they also perceived that e-learning resources were not easy for them to use.

## RECOMMENDATIONS

Based on the research objectives and their implications, the researcher recommends that;

- i. The University should develop a policy for e-learning technologies. Each Faculty should ensure that integrated e-learning should be part and parcel of teaching and learning process.
- ii. The University should improve the existing e-learning infrastructure by deploying and converting its computer laboratories into Virtual learning environment software, e.g. Moodle or WebCT or blackboard with adequate network computers, stable and speedy internet connectivity.
- iii. Also, the University needs to employ an adequate number of skilled technical staff to ensure the smooth running of e-learning practices
- iv. The IUIU should make benchmarking partner with institutions that have already integrated e-learning component into their teaching and learning processes.
- v. The University should endeavor to sensitize academic and students on how best they can migrate from traditional method to Cloud Computing.

## REFERENCES

- Amin, M. E. (2005). *Social science research on conception, methodology, and analysis*. Kampala: Makerere University printery.
- Basak, S. K., Wotto, M., & Bélanger, P. (2017). Factors affecting to E-learning in continuing Education in Africa: A review of the Literature. *International Journal of Engineering Sciences & Management Research*, 4(1), 86-97.
- Dede, C. (2000). *Emerging Technologies and distributed learning in higher education*. In Hanna De Vos. (1998). *Research at grass roots. A Prime for the Caring Professions AS* (ed). Pretoria: Van Schaik.
- Echezona, R. I., & Ugwuanyi, C. F. (2010). African university libraries and internet connectivity: Challenges and the way forward: *Library Philosophy and Practice 2010*. ISSN 1522-0222
- Kaplan, R. M., & Saccuzzo, D. P. (2017). *Psychological testing: Principles, applications, and issues*. Nelson Education.
- Kasse, J. P., & Balunywa, W. (2013). An assessment of e-learning utilization by a section of Ugandan universities: challenges, success factors and way forward. In *International conference on ICT for Africa* (pp. 20-23).
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, 30(3), 607-610.
- Naidu, S. (2003). *E-learning: A guidebook of principles, procedures and practices*. Commonwealth Educational Media Centre for Asia (CEMCA).
- Office of the Academic Registrar, (2015). *Record of Academic and Non Academic Staff*. Islamic University in Uganda.
- Oye, N. D., Salleh, M., & Iahad, N. A. (2011). Challenges of e-learning in Nigerian university education based on the experience of developed countries. *International Journal of Managing Information Technology*, 3(2), 39-48.
- Sife, A., Lwoga, E., & Sanga, C. (2007). New technologies for teaching and learning: Challenges for higher learning institutions in developing countries. *International journal of education and development using ICT*, 3(2), 57-67
- Som Naidu. (2003). *A Guidebook of Principles, Procedures and Practices to E-learning*. Aishi Creative Workshop, H-4/6/1, Flat No. 302, Bengali Colony, Mahavir Enclave, New Delhi-110 045.

- Kybartaitė, A., Nousiainen, J., Marozas, V., & Jegelavicius, D. (2007). Review of e-teaching/e-learning Practices and Technologies. *Biomedical Engineering Institute, Kaunas University of Technology (KUT), Ragnar Granit Institute (RGI)*, 1-25.
- Zemsky, Robert & Massy, W.F.. (2004). Why the e-learning boom went bust. *The Chronicle of Higher Education*. 50. B6.