

E-learning Readiness Assessment Model: A Case Study of Higher Institutions of Learning in Uganda

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Abstract. Uganda faces challenges in her efforts to achieve her goal “education for all”, as a developing country. E-learning has been suggested as an alternative approach that can overcome these challenges involved in reaching underserved students. It is therefore important for an institution to know if it is ready for e-learning. This study examined the readiness for e-learning by Ugandan institutions of higher learning and proposed ways to encourage the use and development of e-learning systems aimed at up-lifting the education standards of the country. Data collected from eight Ugandan universities on analysis revealed that: awareness, culture, technology, pedagogy and content need to be considered in e-learning readiness assessment. These results together with the review of existing models for e-learning readiness assessment led to the development of a modified model for e-learning readiness assessment. Each layer corresponds to the attribute that is to be used for assessing the institutional e-learning readiness.

Keywords: E-learning, e-learning readiness, Higher Institutions of Learning.

1 Introduction

Uganda faces challenges in her efforts to achieve her goal “education for all”, as a developing country. This is because of the increasing demand for higher education with limited resources and large numbers of students. The demand for education in Africa exceeds the ability to deliver thus, it is not offered to significant portions of the population [1]. E-Learning has been suggested as an alternative approach that can overcome many of the challenges involved in reaching underserved students [2]. The underserved students are those who have limited access to educational resources due to their location and their large numbers. E-learning has the potential to enable Africa to achieve education for all [1], which is in line with the goal for developing nations. While technology has enabled online education in many countries, the same cannot be said for African public universities [3]. E-learning is the use of ICT as mediating devices that allow learners to access learning resources that inform them of new ideas, reflected on them and integrate into their existing knowledge [4]. It can also be defined as a type of learning meant to enhance the learning process using electronic means. Most educational institutions in developing countries are unfamiliar with e-Learning, have low levels of computer availability, access, familiarity and Internet penetration which leads to skepticism about the feasibility of this approach [2].

E-learning has been identified as the future of learning worldwide since the powerful platform of the internet has accelerated the speed of communication [5]. E-learning is good for African nations; they can access recent and quality information for learning, hence increasing on their knowledge and their standard of education [7]. Adoption and implementation of e-learning needs to be done carefully because other researchers [9] have warned the stakeholders interested in it to take care in order to avoid cost overruns, unappealing training products and failure in general. The adoption of e-learning by many institutions in developing countries has been carried out in relation to specific models borrowed. The educational requirements and challenges faced by these developing countries vary from country to country. The borrowed models have greatly contributed to the challenges faced by institutions because they do not suit their contextual setting [12]. Meeting these challenges has been especially difficult for those looking forward to validate a measure for institutional readiness for e-learning. There are many examples of failed e-learning events [12]; hence it is necessary to modify such models in order to address the challenges faced by the developing countries in their attempts to embrace e-learning technology. This research work on e-learning readiness assessment is crucial because:

- a) There is high demand for higher education in Uganda, with its limited resources.
- b) The rapid growth and evolution of ICT and teaching-learning technologies makes it crucial that we understand what is needed for higher institutions to investment in e-learning.
- c) Existing models have so far been designed for and tested only against business organizations and higher education institutions such as universities in developed countries [9]. Therefore, a design of a model for e-learning readiness assessment suitable for developing countries is necessary.

The purpose of this research is to investigate factors affecting e-learning readiness for an institution and design an e-learning readiness assessment model for institutions of higher learning in developing countries. This paper specifically includes:

- a) To establish the factors influencing the e-learning readiness of an institution.
- b) To design a model for assessing institutional e-learning readiness.

This study focuses on the Ugandan experience of higher education institutions of learning and will also benefit other developing countries that are exploring the use of e-learning technology. The next sections of this paper examine the existing literature on e-learning, identifying the existing models of e-learning readiness assessment in use and finally suggest a model suitable for use in developing countries.

2 E-learning in Higher Institutions of Learning

Despite the efforts of the developing countries to integrate e-learning into education institutions of higher learning, it has not been effectively done. Several challenges hinder its successful integration in higher education system. Just having all the technological hardware and software available for learning is not enough to start an e-learning course. There is a need for organizations to define clear and comprehensive