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Using management procedure gaps to enhance e-learning implementation in Africa



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ABSTRACT

Management of Universities in Ghana have established good rationale for embracing e-learning as a new paradigm of educational delivery, and have demonstrated commitment by investing and building technology infrastructure necessary for e-learning. However, the approach to evaluate the institutional context as guide to successful e-learning implementation remains a problem. In the absence of standards for evaluation to guide the implementation process, this research investigated management approaches to facilitating e-learning implementation at a leading university in Ghana. To gain depth in understanding activities that support e-learning, a pilot survey was conducted. This was used to refine the research instruments. The survey questionnaire, interviews conducted, and institutional documents on e-learning activities provided depth of management practices that supports e-learning. The management procedures were then compared with some e-learning implementation best practice, and gaps were established.

This paper has demonstrated that by using dimensional tools to establish procedure gaps in e-learning implementation, the short and long-term strategic plans will be put in perspective. The tool show how the university is moving from its current practices of educational delivery to e-learning or some blend. Universities with problems as discussed in this paper may achieve success by assembling an implementation team and a leader, determining the appropriate learning technology, clearly outlining the process of implementation and having an ongoing evaluation process to institutionalise the innovative elearning approach. The policy and strategy document, showing the institutional position must include the pedagogical goals, infrastructure requirements, evaluation, collaboration with stakeholders, quality control, technical support, budget and funding and resource planning.

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1. Introduction

There are vibrant opinions of the efforts made by universities in Africa in the use of Information and Communication Technologies (ICT) to bridge the digital gap in educational delivery. These published opinions of the positive influence of ICT integration in teaching and learning are largely informed by varied technology initiatives and projects, revision of ICT policies in education, designing of new ICT financing models and the establishment of ICT innovative projects. There are suggestions from some institutions that use of these technologies has improved learning outcomes (Isaac & Hallow, 2013).

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Some Ghanaian universities have shown commitment and made progress over the years. As a leading public university with over 30,000 students, a leading university in Ghana (UG) played pioneering role in ICT maturity initiatives in higher education in West Africa. It has also experienced significant penetration and continues increase in the use of computers and internet resources, tablets and mobile technologies by both students and lecturers. By early 2000, an e-learning initiative had started as a means of improving higher education delivery. It was therefore expected that e-learning would have been well established as an integral part of the University curriculum; however, by 2012, e-learning was not a widespread integral part of the University curriculum. The traditional approach to educational delivery was dominant, although much ICT infrastructure had been acquired and built. Some early studies (Awidi, 2008) of e-learning in public universities of Ghana revealed some limitations that did not make e-learning attractive and sustainable for stakeholders, hence context-specific strategies were proposed. Considering the management role as critical in ensuring successful e-learning implementation, this paper investigates University management perspectives and approaches to e-learning implementation. Understanding how innovative initiatives of management, change in policies and academic restructuring in the university facilitated e-learning university wide will help design an evaluation tool that will enhance successful e-learning implementation. The University was used as a case study because it is a leading public university, has state-of-the-art ICT infrastructure and will be a model for other universities. The research question is what management practices facilitate successful e-learning implementation?

This paper highlights some management perspectives of five stakeholders sourced from a project that investigated institutional, people and technological domains for e-learning implementation. The primary purpose of the entire research was to investigate and understand the strategic processes that inform e-learning implementation in the context of the university, and how e-learning was used to enhance lecturers' work and students' learning. This study report is drawn from portions of that research project (Awidi, 2013) and focus on how management decision processes can enhance e-learning implementation. It aims at providing a guide to assessment and establishing the current institutional state of e-learning, challenge the rationale, and proposes procedures to achieve successful authentic e-learning implementation.

2. Background and literature review

In complementing universities' efforts, there are consistent and increasing efforts/initiatives by partner institutions such as the Association of African Universities to develop capacity and introduce innovative technologies that will enhance teaching and learning. Some efforts resulted in establishing inter-university collaborations in Regional and National Research Educational Networks (R/NREN). Coordinated efforts with some educational partners to organise annual or periodic conferences (e-learning Africa) and workshops aim at enhancing inter-university collaboration for technology integration in research, teaching and learning, and scholarship has further boosted the need for e-learning. Promoting active participation in these partnerships, coupled with building technology infrastructure, confirms university management efforts to integrate ICT in educational delivery. Some early researches (Awidi, Cooper, & Pagram, 2011; Owusu-Oware & Awidi, 2008) show that in taking advantage of the partnerships, the University's success experience were embraced in five thematic areas. These were funding and capacity building, management information systems services, ICT infrastructure and basic services, ICT in teaching and learning and with ICT governance and management at the centre of it all. Findings of earlier work by Owusu-Oware & Awidi (2008) are summarised in Table 1 below. Table 1 provides perspective and background to progress made by the university up to 2012.

With the Knowledge Environment for Web-Based Learning, the Next-Generation (KEWL Next-Gen) as the accepted elearning platform, the University was an example of how ICT resources were being used to transform educational delivery. Table 1 showed significant progress in recruiting professional ICT personnel, and the appointment of a Pro-Vice Chancellor as chair for the ICT advisory committee. The Network Operation Centre (NOC) had the capacity to serve as a hub for all universities in Ghana. However, close investigations of e-learning efforts show significant difference between actual and best practice as experience by other universities (Tarus, Gichoya, & Muumbo, 2015). There are also issues of over-emphasis on technological infrastructure and funding. The critical questioning of why e-learning, what and how procedures should be followed to achieve successful e-learning implementation continue to be relevant. With few lecturers in the sciences showing interest in e-learning, and other reluctant to use the KEWL resources after participating in e-learning workshops, thorough evaluation of the processes was necessary. It was clear that the enthusiasm for innovation (Isaac & Hallow, 2013) did not result in the anticipated e-learning transformation. To understand the institution-specific issues related to adoption and integration, it was therefore necessary to investigate the strategies adopted for e-learning implementation, considering that basic infrastructure was built and available. Thus, the study was organised to verify the situational processes adopted and to design a tool that provides a guide to the institutional position and what must be done.

A preliminary investigation for the research project revealed the problem related to how the available resources could be effectively harmonised to achieve successful e-learning. The research question was: 'What strategic dimensions will facilitate successful e-learning?' The strategic dimensional factors are the re-categorised domain elements of institutional management, people, pedagogy and technology. In the context of this research, they provide direction and focus on the issues.

2.1. Best practice arguments

The popularity of e-learning implementation strategy (synchronous, asynchronous and blended) using theoretical and conceptual models (Collis & Moonen, 2001; Rogers, 2003) has gained significant attention due to the complexities involved

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