

A review of the Impact of e-learning in higher institution

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ABSTRACT- *This paper highlights the review of the impact of e-learning in higher institution. It is seemed that e-learning had greatly contributed to the emergence of Information, Communication and Technology (ICT) and effective teaching-learning approach. Studies had shown that impact of e-learning has brought about an increase in organizational level, interactive & engaging materials, unintended consequences, virtual learning environments, tutor skills & changing roles. Efforts have been made in this article to provide evidence that the use of computers to deliver learning is effective and efficient.*

KEYWORDS: *e-learning, higher institution, quality education, computer, ICT.*

I. INTRODUCTION

The demand of accessible and quality education has given rise to improve on the quality of education in our higher institutions. With the invent of e-learning which has transformed the education sector from the traditional chalkboard era to the computer base era, Information, Communication and Technology (ICT), has been effectively integrated in our education and training systems. Technological advancements have always been a part of delivering education, dating back as far as the development of the written textbook, the chalkboard, and the overhead projector. The utilization of computers and electronic means of communication is the latest, and possibly the fastest growing educational tool to shape various attributes of how educational content is delivered to the learner. E-learning can be seen as a Web-based learning, online learning, distributed learning, computer-assisted instruction, or Internet-based learning [1]. E-learning is a collection of useful web and social media applications in education that involves the use of video, projector, computer and the internet which

Supersede the traditional chalkboard approach. Historically, the chalkboard has been the medium of choice for the delivery of classroom instruction. With the advent of the PC and audio visual equipment, many teachers began using PowerPoint to deliver lectures [2]. This includes the use of computers by students both within the class and for private study; the use of electronic devices for teaching purposes within the class, such as data projectors, interactive Whiteboards (IWB) and tablet PCs; and the use of the internet, intranet or virtual learning environment (VLE) for communication between students, tutors and students, and for storage and access to teaching and learning materials.

Institutions have adopted e-learning and Sikkim Manipal University, Accra is not an exception in this development because it has rapidly increased the trend in the teaching-learning system, improve pedagogical benefits, deliver effective and efficient teaching –learning approach and to some extent, broaden students' ideas about teaching- learning aids. E-learning is widely used in universities and other organizations all over the world, either to support classroom learning or on its own [3].

It is universally agreed that e-learning is becoming more important in our higher institution and there is a need to elaborate on the impact of these processes.

II. LITERATURE REVIEW

E-learning is generally regarded as using information and communications technologies for teaching and learning. These technologies may include, but are not limited to, the following: presentation technologies (e.g., PowerPoint), the Internet, video conferencing, e-mail, specialist disciplinary software, learning management systems such as WebCT, simulations, and educational games. E-learning may involve such

hardware as computers, personal digital assistants, and cell phones. E-learning involves the utilization of information and communication technologies to support learning and includes tools such as internet, databases, video conference [4]. E-learning is a promising tool for *expanding and widening access* to tertiary education. Because it relaxes space and time constraints, ICTs can allow new people to participate in tertiary education by increasing the flexibility of participation compared to the traditional face-to-face model: working students and adults, people living in remote areas (e.g. Rural), non-mobile students and even foreign students could now more easily participate in education [5].

Students do not see e-learning as replacing traditional instructor-led training but as a complement to it, forming part of a blended-learning strategy [6]. Innovations in e-learning technologies point toward a revolution in education, allowing learning to be individualized (adaptive learning), enhancing learners' interactions with others (collaborative learning), and transforming the role of the teacher.

E-learning (Electronic Learning) as the unifying term to describe the fields of online learning, Web-based training, and technology-delivered instruction [7]. E-learning could expand and widen access to tertiary education and training; improve the quality of education; and reduce its cost [5].

E-learning can be divided into several different types namely [8];

- Web-supplemented courses focus on classroom-based teaching but include elements such as putting a course outline and lecture notes online, use of e-mail and links to online resources.
- Web-dependent courses require students to use the Internet for key elements of the program such as online discussions, assessment, or online project/collaborative work, but without a significant reduction in classroom time.
- In mixed mode courses, the e-learning element begins to replace classroom time. Online discussions, assessment, or project/collaborative work replace some face-to-face teaching and learning. But significant campus attendance remains part of the mix. The potential for

collaborative learning to break the isolation of learners is realized in e-learning technologies [9].

III. IMPACT OF E-LEARNING

The impacts of e-learning in higher institutions are inevitable. Institutions using e-learning have become more attractive to students than their counterparts using the traditional chalkboard approach. In adaptation rules in e-learning course development, (1) instructors tend to start with less complex activities, (2) instructors then begin to focus on pedagogical aspects, even if it is just to consider how best to use Content Management System (CMS) functions, (3) instructors rethink their course concepts accordingly and (4) instructors then begin to reference other teaching models [10].

In an expansion of the effectiveness and efficiency of computer in delivering e-learning, Computer-mediated communication (CMC) promotes a type of interaction that is often lacking in the traditional teacher-based classroom [11]. It allows learners the freedom to explore alternative pathways to find and develop their own style of learning. What if content could be delivered in the form of graphics, text, and/or full-motion video, whenever and wherever in the world it is requested? How do we, as teachers and educators, responsibly participate in and make use of the inevitable technological changes at hand?

Computers are not a threat to the teacher (although the role of the teacher must change when using them), but computers may threaten the chalkboard.

IV. BENEFIT OF E-LEARNING IN HIGHER INSTITUTION

E-learning has contributed to accessible, quality and less expensive forms of education at higher institutions. Some benefits of using e-learning in higher institutions are outlined below;

- E-learning decreased material costs for faculty in training students.
- E-learning increased productivity in teaching/learning processes.
- E-learning allows faculty to create a standardized process and consistency in the delivery of content/lectures. It also compresses delivery time. E-learning delivered consistent content/lectures.

- E-learning encourages real-time access
- E-learning improves combination of multimedia and instructional design that produces a very rich learning experience that is repeatable.
- It encourages self-assessment during and at the end of the lesson.
- It encourages training at own pace, independently of other learners
- The learner actively involved in his/her e-learning
- Training performed on interactive and attractive tools for both trainer and learners
- Prerequisites for assessing learner levels
- E-learning improved collaboration and interactivity among students.

V. CONCLUSION AND SUGGESTIONS

In this paper, the impact of e-learning and its contribution to faculty and students in higher institution rather than the traditional chalkboard approach was discussed. It can seem that e-learning promote active learning whereby improving collaboration between faculty and students and creating a friendly environment for teaching/learning in higher institution. If well manage, e-learning will transform tertiary education for the better in the long run. E-learning is currently revolutionizing teaching/learning process in higher institution. Some brief recommendations have been suggested to the government on how to improve and encourage e-learning in higher institution.

- Encouraging the dissemination of good practices to stimulate innovation, avoid wasteful duplication of efforts, and scale up successful experiments.
- Encouraging appropriate staff development, in order to ensure progress at institutional level.
- Supporting research and development of learning objects and other promising innovations such as open educational resources or the use of virtual simulation tools, and ensuring their relevance for students and faculty.
- Exploring the issues surrounding intellectual property in e-learning.
- Promoting a dialogue between IT providers and institutions, and supporting public-private

partnerships, in order to keep costs at a reasonable level.

REFERENCES

- [1] Abdallah Arman, Taha El-Arif, Abdul-latif Elgazzar (2009). The Effect of e-learning Approach on Students' Achievement in Biomedical Instrumentation Course at Palestine Polytechnic University, Communications of the IBIMA, Volume 9, 2009 ISSN: 1943-7765
- [2] Grady HM (2004). From chalkboard to PowerPoint to the Web: a continuum of technology, Professional Communication Conference, 2004. IPCC 2004. Proceedings International
- [3] Abdallah Arman, Taha El-Arif, Abdul-latif Elgazzar (2009). The Effect of e-learning Approach on Students' Achievement in Biomedical Instrumentation Course at Palestine Polytechnic University, Communications of the IBIMA, Volume 9, 2009 ISSN: 1943-7765
- [4] University Of Alberta (2005). E-Learning Report 2005: A Foundation for Transformation. Retrieved May 2, 2009, from OFFICE OF THE VICE-PROVOST (INFORMATION TECHNOLOGY):
- [5] Kurt Larsen and Stéphan Vincent-Lancrin (2005). The impact of ICT in tertiary education: advances and promises, OECD/NSF/U. Michigan Conference "Advancing Knowledge and the Knowledge Economy"
- [6] Trukhacheva N, Tchernysheva S, Krjaklina T (2011). The Impact of E-learning on Medical Education in Russia, E-Learning and Digital Media, 8(1), 31-35. <http://dx.doi.org/10.2304/elea.2011.8.1.31>
- [7] Farah Habib Chanchary, Samiul Islam (2012). IS SAUDI ARABIA READY FOR E-LEARNING? – A CASE STUDY. The International Arab Conference on Information Technology.
- [8] Organization for Economic Co-Operation and Development (OECD) (2005). E-learning in Tertiary Education, Policy Brief, Available online: <http://www.oecd.org/internet/35961132.pdf>
- [9] Jorge G. Ruiz, Michael J. Mintzer, Rosanne M. Leipzig (2006). The Impact of E-Learning in Medical

- [10] EDUCASE (2003). Impact and challenges of E-learning, EDUCASE Center for applied research, volume 3. Available online; <http://net.educause.edu/ir/library/pdf/ers0303/rs/ers03036.pdf>
- [11] Zane Berge and Mauri Collins (1995). Computer-Mediated Communication and the Online Classroom in Distance Learning, Computer-Mediated Communication Magazine / Volume 2, Number 4 / April 1, 1995 / Page 6, Hampton Press (Cresskill, NJ)