

USE OF ICT, E-LEARNING AND M-LEARNING IN TEACHER

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ABSTRACT

The present age is rightly called Computer Age. ICT can be defined as the development, application and evaluation of the system, techniques and teaching aids to improve the process of learning. E-learning is the use of electronic media and information and communication technologies (ICT) in education. E-learning includes numerous types of media that deliver text, audio, images, animation, and streaming video, and includes technology applications and processes such as audio or video tape, satellite TV, CD-ROM, and computer-based learning, as well as local intranet/extranet and web-based learning. E-learning includes the use of ICT tools (e.g. Internet, computer) and content created with technology (e.g. Animations, videos) to support teaching and learning activities. The advent of e-learning has opened the doors to the treasure of information. The use of the internet is immense in terms of gathering information, acquisition of knowledge and in terms of sharing supplementing and complementing information between or among students. It provides for learning anywhere at any time at one's own pace at one's own convenience. Now-a-days students at all levels lead to use the internet for learning purposes to a great extent. Multimedia is media and content that uses a combination of different media content forms. Multimedia means, a combination of text, audio, still images, animation, video and interactivity content forms delivered electronically. It focuses utility of multimedia in teaching, multimedia learning theory, types of multimedia contents. Every teacher should be aware of ICT. Since today's trainees are the teachers of tomorrow. It is concluded that the B.Ed. students are to be strengthened to utilize the e-learning components in their classroom. Teacher-educators may be given in-service training on e-learning, so as they can be able to use e-learning features in their teaching methods. Therefore the Teacher-educators can keep their students more attentive and make them to understand the concepts of their subject-matter easily which will enhance their learning process.

KEYWORDS: *E-Learning, M-Learning, Information Communication Technology (ICT), Technology*

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INTRODUCTION

Information and Communication Technology

Education is a continuous, complex, dynamic and life-long process. Now-a-days technology occupies a prominent place in the teaching-learning process. The purpose of ICT is to improve the effectiveness of the teaching-learning process in formal or informal setting and to utilize scientific principles to that end.

ICT can be defined as the development, application and evaluation of system, techniques and teaching aids to improve the process of learning. It will help the teachers to teach well as well as the learners to learn well.

E-LEARNING IN TEACHER EDUCATION

E-learning is the use of electronic media and information and communication technologies (ICT) in education. E-learning is broadly inclusive of all forms of educational technology in learning and teaching. E-learning is inclusive of, and is broadly synonymous with multimedia learning, technology-enhanced learning (TEL), computer-based instruction (CBI), computer-based training (CBT), computer-assisted instruction or computer-aided instruction (CAI), Internet-based training (IBT), web-based training (WBT), online education, virtual education, virtual learning environments (VLE) (which are also called learning platforms), m-learning, and digital educational collaboration. These alternative names emphasize a particular aspect, component or delivery method.

E-learning includes numerous types of media that deliver text, audio, images, animation, and streaming video, and includes technology applications and processes such as audio or video tape, satellite TV, CD-ROM, and computer-based learning, as well as local intranet/extranet and web-based learning. Information and communication systems, whether free-standing or based on either local networks or the Internet in networked learning, underly many e-learning processes.

E-learning can occur in or out of the classroom. It can be self-paced, asynchronous learning or may be instructor-led, synchronous learning. E-learning is suited to distance learning and flexible learning, but it can also be used in conjunction with face-to-face teaching, in which case the term blended learning is commonly used.

E-learning is defined as learning facilitated and supported through the utilization of information and communication technologies (Jenkins & Hanson 2003). Thus, e-learning includes the use of ICT tools (e.g. Internet, computer) and content created with technology (e.g. Animations, videos) to support teaching and learning activities.

MULTIMEDIA LEARNING IN TEACHER EDUCATION

Multimedia is media and content that uses a combination of different media content forms. Multimedia means, a combination of text, audio, still images, animation, video and interactivity content forms delivered electronically.

Multimedia may be broadly divided into linear and non-linear categories. Linear active content progresses without any navigational control for the viewer such as a Cinema Presentation. Non-linear content offers user interactivity to control progress as used with a video game used in self-paced computer based training.

The term “multimedia” was coined by Bob Goldstein in July 1966 at Southampton, Long Island. In August, 10, 1966 Richard Albarino explained the utility of Multimedia in seminars. In India, this concept was started in 1993. Commonly recognized examples of new literacy’s include such practices as instant messaging, blogging, maintaining a website, participating in online social networking spaces, creating and sharing music videos, podcasting and videocasting, photoshopping images and photo sharing, emailing, shopping online, digital storytelling, participating in online discussion lists, emailing and using online chat, conducting and collating online searches, reading, writing and commenting on fan fiction, processing and evaluating online information, creating and sharing digital mash-ups, etc..

A multimedia tool was proposed by Fallon et al., (2011), which can simulate video delivery over Stream Control Transmission Protocol (SCTP) and it can communicate multiple heterogeneous networks.

UTILITY OF MULTIMEDIA IN TEACHING

When we watch a movie or Television program, superficial and even deep feelings and emotions are elicited, such as excitement, anger, laughter, relaxation, love, whimsy, or even boredom (Prensky, M. 2006). These emotions are often triggered or heightened by the mood created by specific visual scenes, the actors, and the background music. A multimedia content can have a strong effect on our mind and senses. It is so powerful that we may download it off the Internet or order the DVD from any interested subject along with the CD soundtrack so we can relive the entire experience over and over again. This attraction to multimedia videos extends to movies, TV programs, commercials, and music videos.

MULTIMEDIA LEARNING THEORY

Over the past decade, a corpus of studies has accumulated that investigates the effects of multimedia strategies on learning. Multimedia typically refers to the presentation of material in two forms: auditory/verbal and visual/pictorial (Higgins, J. A., & Dermer, S. 2001). The strategies have included PowerPoint (Mayer & Johnson, 2008), Educational games (Nachimuthu, K2010), and computer-assisted video learning (Vijayakumari, G 2010) in a variety of content areas, in addition to auditory and video media. The empirical findings of research on the effectiveness of videos embedded in multimedia classes or modules are very encouraging. Numerous studies in specific areas such as teacher education have produced significant results favouring videos (Borko & Pitman, M.E 2008) If we observe the students, they can be utilized the following electronic gadgets; (a) Listening to music; (b)Playing PC & video games; (c) Talking on iPhone; (iv)Sending text & picture messages; (v) Watching videos and or Television; (vi) Using Face book, Orgut & Twitters ; (vii) Utilizing videos from Youtube, Skype, other Yahoo and Google messengers (Champoux, J. E.2005).

According to Sagarmay Deb (2012) Multimedia technology and internet networks have changed the whole philosophy of learning and provided us with the opportunity for close interaction between teachers and learners with an improved standard of learning materials compared to what was exists only with the printed media. It has gone to such an extent to create a virtual classroom where teachers and students are scattered all over the world.

TYPES OF MULTIMEDIA CONTENTS

Multimedia learning refers to learning from words and pictures. The two approaches of multimedia design are (i) a technology-centered approach and (ii) a learner-centered approach.

There is a wide range of multimedia categories that can be used in the classroom. The actual choice will depend on the instructional purpose or outcome and the characteristics of the students and their interests.

The multimedia sources having different way of contents expressions viz., (a) drama, (b) action, (c) romantic, (d) comedy, (e) romantic comedy, (f) documentary, (g) Television programs, (h) commercials, (i) college music videos, and (j) faculty or student-made videos. All of these types of multimedia contents can evoke or induce anger, excitement, terror, activity, motivation, love, laughter, whimsy, tears, dreams, calmness, relaxation, sleep, and a coma.

Multimedia can have powerful emotional effects. Instructors need to decide the effect they want to produce in a given learning situation. Applied inappropriately, the multimedia clips can distract and decrease learning even incites students to riot.

Unless rioting is a specific learning outcome, instructors should be very discerning in their choices. Multimedia learning refers to learning from words and pictures.

CONCLUSIONS

In this context, every teacher should be aware of ICT. Since today's trainees are the teachers of tomorrow. It is concluded that the B.Ed. students are to be strengthened to utilize the e-learning components in their classroom. Teacher-educators may be has given in-service training on e-learning, so as they can able to use e-learning features in their teaching methods. Therefore the Teacher-educators can keep their students more attentive and make them to understand the concepts of their subject-matter easily which will enhance their learning process.

Multimedia encyclopedias have become the latest addition to students' reference tools, and the World Wide Web is full of messages that combine words and pictures. (Mayer, R.E. 2012). A multimedia need the video journalism concept and it is a new field that has grown out of traditional print photojournalism, slideshows that combine sound and pictures, public radio, documentary filmmaking and the best of television news features. It can use a clean sound with clear recorded clips used in multimedia.

REFERENCE

1. **Bascelli, D. (2005).** "Making Work Real: Building Virtual Learning Communities". In P. Kommers & G. Richards (Eds.), *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications (EDMEDIA) Montreal, Canada June 27.*
2. **Biggs John (2003).** *Teaching for Quality Learning at University, second edition. Berkshire, UK: The Society for Research into Higher Education & Open University Press.*
3. **ALIPANAHI, FATEMEH.** "INTEGRATION OF TECHNOLOGY IN TEACHING AND TEACHER EDUCATION."
4. **Bruner, J (1960).** *The Process of Education: Cambridge, Mass: Harvard University Press.*
5. **Hong, K. S., Lai, K. W., & Holton, D. (2001).** *Web-based learning environment: Observations from a Web-based course in a Malaysian context. Australian Journal of Educational Technology, 17 (3), 223-243.*
6. **Liu, X., Macmillan, R., & Timmons, V. (1998).** *Integrating computers into the curriculum: How teachers may hinder students' use of computers. McGill Journal of Education, 33 (1), 51-69.*
7. **Mitra, A., &Steffensmeier, T. (2000).** *Changes in student attitudes and student computer use in a computer-enriched environment. Journal of Research on Technology in Education, 32 (3), 417-433.*
8. **Scagnoli, N. I. (2001).** *Students orientation for online programs. Journal of Research on Technology in Education, 34 (1), 19-28.*
9. **Chowdhury, Piku.** "Overcoming Barriers to Inclusivity: Preparing Preservice Teachers for Diversity." (2017).
10. **University Malaysia Sarawak Annual Report (1995).** Kota Samarahan, Sarawak: UNIMAS.
11. **University Malaysia Sarawak Annual Report (1996).** Kota Samarahan, Sarawak: UNIMAS.
12. **University Malaysia Sarawak Annual Report (1998).** Kota Samarahan, Sarawak: UNIMAS.

13. *University Malaysia Sarawak Annual Report (1999)*. Kota Samarahan, Sarawak: UNIMAS.

