Research Paper Education

Web Based E-Learning among Teachers and Students in India

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ABSTRACT

E-learning is a use of technology to enable people to learn anytime and anywhere. It can include text, video, audio, and virtual environments. E-learning falls into four categories: knowledge database, online support, asynchronous training and synchronous training. E-learning is among the most important explosion propelled by the internet transformation. This paper will focus on various benefits of web based e-learning on professional development of teachers and fear of e-learning among them. Further, paper will explore various challenges of e-learning in India like poverty, absent teachers, access to technology, class system, government strategies etc. It is suggested that now is time to focus on the needs of e-learning, e-teaching, e-teachers and the architects to bring change in our school and school system. E-teachers will have to support and promote change as they are an essential part of the process of web based e-learning.

KEYWORDS : Web, E-learning, Teachers and Students

INTRODUCTION

It is no longer a question of whether or not we will implement e-learning in our schools, but whether we will do it well.

The "e" word has become increasingly evident on the lives of Indians and people all over the world in ways many could not have been imagined less than ten years ago. With relative ease, the "e" is attached to activities like real estate, retailing, banking, entertainment and now to education. The "e" stands for electronic and it relates to the use of the Internet to undertake the wide range of activities.

What is e-learning?

E-learning is learning which takes place as a result of experiences and interaction in an Internet environment. It is not restricted to a regular school day and can take place in a variety of locations including home, school and community locations e.g. libraries, cafes etc.

What is e-education?

E-education involves e-teaching and e-learning along with the various administrative and strategic measures needed to support teaching and learning in an Internet environment. It is the definition for all types of electronically enhanced education, with emphasis on education, which is a stark contrast to e-learning.

Who Are E-Teachers, and What Do They Do?

E-teachers are the new generation teachers who will work in an Internet environment in both regular and virtual classroom situations. They will build new concepts of working in time and space. E-teachers collaborate, build and discover new learning communities and explore resources as they interact with information, materials and ideas with their students and colleagues.

Categories of E-Learning: A lot of categories can be identified focussing on the complex field of e-learning. In general e-learning can be classified into four categories:

- **Knowledge Database:** This is the most basic kind of electronic training. These databases include detailed sets of instructions for tasks or indexed explanations to the questions.
- **Online Support**: It is similar to a knowledge database, but usually comes in the form of e-mail, forums, chat-rooms, online bulletin boards or lives instant messaging.
- **Asynchronous Training:** This is self-paced training usually based on CD-ROMs or the internet. It can be totally self-contained or feature access to online instructors.
- **Synchronous Training:** This happens in real time with an instructor online. Learners log in at the same set time and communicate directly with each other and the instructor. It works much like an online conference, and is the closest to traditional classroom instruction.

Techniques and Tools of E-Learning: There are various tools and techniques of e-learning but in this paper main focus are on seven tools of e-learning:

- **Module:** It enables students and lectures to interact within a collaborative virtual learning environment where course materials can be easily managed and assessed.
- **Lecture cast:** It allows teachers to record, edit, and broadcast their lectures online. This is particularly advantageous for students whose first language is not English and for those with learning disabilities.
- **Electronic Voting System (EVS):** It can help lecturers gauge how much students know about a topic, using EVS also enlivens the students learning experience.
- **Turn it in:** It is a tool designed to deter and detect plagiarism, whereby submitted work is scanned against a large database of websites, books, journals and previously submitted papers.
- **My Portfolio:** It is an online space where students can store all their notes and work, allowing access to as few or as many people as they like.
- **Web Conferencing:** It deals for long-distance learning, allowing students to watch and participate in teaching sessions as they happen.
- **Open Educational Resources:** It allows academics to share their work online for free- something that UCL is committed to doing within all its research.
- **Summits and Horizons:** It is a joint venture between CALT and E-LE, presenting a series of lunchtime events looking at new e-learning in UCL in which two or three speakers discuss how they have used new technologies in their teaching.

E-learning and its Impact on the Development of Teachers and Students:

The networked environment of this new Internet-connected world has expanded the opportunities for teaching and learning in ways that we are only beginning to understand. What makes the implementation of e-teaching so challenging is that we are asking teachers of the dot.com age to teach in a way in which they have never been taught when they were at school. They will do work in an environment in which they have never been learnt and may have had few first-hand experiences. No doubt e-learning helps in the professional development of teachers as its less time consuming, self-paced, its moves faster than traditional courses, provide up-to-date information and helps in increasing retention power due to active participation

in learning. Kegen (1994) believed there was a resultant lack of status because of perceived commercial and mechanistic association; if there is a perceived lower status associated with e-education, innovative teachers will not be attracted to this area of teaching, if they are intent on advancing their promotion and career prospects (Holt, 1996; Moskal, Martin and Foshee, 1997).

Fear of E-Teaching among Teachers:
A positive attitude toward the use of ICT is a strong indicator of whether a teacher might consider good e-teacher. Conversely, one of the major barriers to e-teaching identified by Hirschbuhl was the fear that some staff felt when faced with stepping outside their comfort levels and they were not willing to take the risk. Teachers have fear of looking foolish, fear of asking for help, fear of not 'catching on' quickly enough, and fear of not being able to be effective with the technology in instructional settings. It was important for us to note that these fears were self-imposed and self-generated, but very real nevertheless. Researchers suggested that teachers need time, support and latitude to experiment and to be creative (Camphell, 1997; Camble and Hawkens, 2001). Rutherford and Grana (1995) also focused their research on academic staff fear in the face of technology. They identified nine areas that could prevent staff from making changes that would enable them to integrate technology into their teaching: Fear of change; Fear of time commitment; Fear of appearing incompetent; Fear of techno-lingo; Fear of techno-failure; Fear of not knowing where to start; Fear of having to move backward to go forward; Fear of rejection or reprisals. Researches show that support for e-teachers is often difficult to get when the supports have not had any direct and practical e-teaching or e-learning experience themselves (Camphell, 1997).

E-learning is not going to replace libraries, friends, colleagues and many of the existing social networks that contribute to satisfying learning and teaching experience. In fact many of these will be enhanced by the ability of the teacher to access them in different ways. E-learning can give students much greater control over their own learning experience while giving e-teachers an opportunity to further meet the needs of individual students in a digital age (Layton, 2000; Wallhaus, 2000).

Challenges of E-Learning
Lack of Research: There is a lack of available research about the process of implementing a technology as dynamic and evolving as the Internet into e-classrooms and examining the impact of e-teaching in schools.

Poverty: Large portions of rural Indian can't afford to send their children to school because they are kept home to support the family (Sharma, 2005). To make the education more accessible, some Indian institutions have created online learning sites were students can learn and obtain certain skills and credits, but online courses in India also ignore the content around basic literacy and primary education needs of the marginalized rural population (Sharma, 2005).

Current Education Status: Current Education in India is not keeping up with the demand and for some individuals it is not providing results. Few people are choosing teaching as a profession, and this has resulted in a shortage of good teachers.

Absent Teachers: A report released by the World Bank outlines that 25% of teachers in India do not report to work (World Bank, 2006). In developing countries government often spend 80 to 90% of their educational budget on staff. With such large portion going to staffing it seems that the government is not getting their return on investment (World Bank, 2006). With such a large portion of budget spent on staffing, perhaps it is time for the government of India to assess its investment in e-learning. In India 2% of the central government expenditures can be attributed to education (UNICEF, 2007).

Access to Technology: Statistics released in 2004 outlined that 3 out of 100 people in India have access to computer (UNICIEF, 2007). All throughout India, major infrastructure is lacking. Due to constraints on the power grid, India's rural communities are the first ones to have their power turned off, so that the cities manufacturing districts can keep on producing (Sharma, 2005). Without affordable hardware and sustainable power there might be little hope of e-learning.

Class System: Educational access in India is complicated by the intermingling of class and caste limitations. There is a clear correlation between caste and wealth (Heitzman and Worden, 1995). Educational initiatives in India have focused on two main areas: basic literacy, and higher education which allows professional growth and a national ability to compete in a global market (Franklin, 1999). The national policy on education, 1986, introduced a focus on basic education and literacy.

Government Strategies: One of the challenges of e-education is the need for new organisational and programmatic systems**.** As e-education evolves in Indian schools there will be a need, at classroom, school and/or national level, to answer such diverse questions as:

- How will schools accommodate the needs of staff who choose not to adopt the role of e-teachers?
- How will schools determine student numbers when students are attending multiple institutions?
- How will schools apportion costs of shared facilities, staff and students?
- How will schools accommodate large numbers of part-time e-staff who will not be seen on or near the school base?
- How will schools measure irregular "attendance" patterns or will they need to?
- How will student class participation patterns be measured?
- How will schools accommodate the needs of staff those live in different locations?
- How will schools accommodate the professional development of teachers based on their school so they can move toward being e-teachers?
- How different will the e-curriculum need to be?
- How will e-teacher's workloads be measured when the preparation of e-learning materials will need to be started many months before the start of the e-class?
- How will teacher's workload and compensation be worked out when they work in multiple locations and institutions?
- How will teachers teach and assess the work of students who are all working at different paces?
- What are the support needs of e-teachers and how can they access this support?
- How will the Ministry of Education accommodate different types of schools with many different structures and characteristics?
- How will families accommodate the e-learning of students who may no longer attend school at the traditional times of the day?
- How will families make choices from a wide range of educational choices for their children?
- How will the needs of students change as they take the opportunity to determine some of their own learning goals?

- The students who experience e-learning in secondary education will expect these same opportunities in tertiary education and the chance to pursue life-long learning opportunities. Will e-teachers be ready for the demand?
- How will teacher education meet the challenge of offering e-education for future e-teachers?
- Who will create the content and maintain the online learning environments?
- How will the quality of online courses offered by for-profit organizations be monitored?
- How will the issue of the copyright of e-learning information and materials used for e-teaching be addressed?

Conclusion: Considering the questions above begins to widen the perspective for how e-education might evolve in Indian schools. It is clear that it is not a case of *if* it will happen but *when* and *how* it will happen. With this in mind it is time to find some answers so that e-teaching and e-learning are given support and recognition in the new global schoolhouse. It seems a little ironical to have ended this paper with far more questions than I set out to answer. As I wrote and thought about the challenge to implement e-education in Indian schools the questions are need to be answered. The Ministry of Education's (1998) ICT Strategy for schools briefly stated that "ICT has the potential to break down barriers created by distance, enabling teachers and students in urban and rural areas to access a range of learning opportunities from around the world". It is time now to focus on the needs of e-teaching and e-teachers, the architects of change in

our schools. Solutions developed by instructional designers and multimedia specialists will not change the e-education world unless the teachers are the learning designers of the future. E-teachers will support and promote change when they feel they are an essential part of the process. This support was indicated by Fancy (2000) when he raised the important question "which comes first, the learning or the technology" and answered "In my mind there is little doubt, properly identified learning needs and appropriate pedagogy to meet them."

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