

Usability of eLearning Resources in Teacher Education of India

Dr. K.Nachimuthu

Asst Prof, Dept of Education
Periyar University, Salem -11, Tamilnadu, India
dr_knmuthu @yahoo.com

Abstract- Professional development refers to skills and knowledge attained for both personal development and career advancement. The 21st century has seen a significant growth in online professional development. eLearning has enormous potential in education, and there is an urgent need to take stock of the possibilities that it offers. Despite this urgency, research on eLearning is still in a nascent stage and there is a degree of conceptual confusion in the field that is difficult to tolerate. Hence a Tool was developed by the investigator for identifying the usability of eLearning resources in teacher education of India, included 20 statements and found out the validity, reliability and data were collected from it. This tool which was asked to fill as “accepted & already used”, “considers being use” & “not interested” to the 17 College of Education (B.Ed) lecturers (n=115) in Salem District of Tamilnadu, India under recognized by Tamilnadu teacher education university, India during the month of September 2010 as a convenience sampling method, using a questionnaire to identify the usability and intentions to act regarding eLearning resources in their teaching community.

The findings of the study are; all the institutions are having at least five computer peripherals with 70 per cent Air conditioned facilities in their ICT laboratories. Majority of B.Ed college lecturers and their colloquies are already taking actions regarding some the accepted ways of use of computers in their regular classrooms (32.0), however, they

are not prepared to sacrifice their personal comfort for using e-books (in total 45%), they have strong reasons for that. the College of Education lectures were using the physical books handling (86.2) rather than the e-books are also evidenced that, they were either not having enough time to use e-books or entry in the computer labs. This paper offers a critical examination of eLearning in the College of education institutions setting. In order to create more teachers professional development and to enhance the research experience we need in e-journals and e-books. I conclude with several recommendations for those who would like to engage critically with eLearning in the education institutions setting.

Keywords- eLearning, eLearning Resource, Teacher Education

I. INTRODUCTION

eLearning is a whole new world for most of us. It is important therefore to think of it as an innovative way of learning with new, and sometimes different, learning skills. If we approach eLearning with a systematic mindset we can be successful. The key is to begin by identifying the necessary skills, and then to assess our current skill set. Second, know our weaknesses and work on updating those skills. Lastly, to achieve ultimate success, study and adopt the tips from experienced e-Learners and those who have been down the eLearning journey several times. Success in eLearning can add value to our teaching professional development and,

best of all; it can offer us a flexible and enjoyable learning experience. Recently, in India, number of teachers involved in eLearning projects at various levels was increased.

The world that teachers are preparing young people to enter is changing so rapidly, and because the teaching skills required are evolving likewise, no initial course of teacher education can be sufficient to prepare a teacher for a career of 30 or 40 years. Continuous Professional Development is the process by which teachers, like other professionals reflect upon their competences, maintain them up to date, and develop them further.

A successful eLearning strategy relies on the interconnectedness of five main elements – Tools, Training, Processes, Supports, and People – to provide the knowledge, skills, tools, and support required to create an increased number of eLearning initiatives that meet the high-standards expected by your organization [6]. These elements are the eLearning strategy mantra we should live by. To ensure the success of any eLearning initiative, all of the teachers impacted must be informed and aware, and involved and engaged.

II. PROFESSIONAL DEVELOPMENT

Professional development refers to skills and knowledge attained for both personal development and career advancement. Professional development encompasses all types of facilitated learning opportunities, ranging from college degrees to formal coursework, and informal learning opportunities situated in practice.

At the heart of professional development is the individual's interest in lifelong learning and increasing their own skills and knowledge. The 21st century has seen a significant growth in online professional development.

III. AREA OF RESEARCH

Research can be defined to be search for knowledge or any systematic investigation to establish facts. Educational research is research conducted to investigate behavioural patterns in students, teachers and other educational institutions through standardized test results. Teacher education refers to the policies and procedures designed to equip prospective teachers with the knowledge, attitudes, behaviours and skills they require to perform their tasks effectively in the classroom, school and wider community. They were classified in to initial teacher education (a pre-service course before entering the classroom as a fully responsible teacher); induction (the process of providing training and support during the first few years of teaching); and teacher development or continuing professional development (an in-service process for practicing teachers). This study related to collect the third category of College of education teachers.

The eLearning materials as “we are coming to realize that we cannot simply reproduce previous forms of learning, the classroom or the university, embodied in software [4]. Instead, we have to look at the new opportunities for learning afforded by emerging technologies”. Education, including work-based learning, is in need of transformations, requiring renewal and innovative ways of relating appropriately to the way we live, work and learn today [3]. The online collaborative learning environment encouraged higher phases of knowledge construction also found [8].

IV. TOOL FOR THE STUDY

The following statements were included in the tool which was asked to fill as “accepted & already used”, “consider being use” and “not interested”. The data collection was completed within November month of 2010. These statements were again clubbed into seven types of concepts for calculations. The tool was developed by the investigator

and found out the validity and reliability and data were collected.

1. Enhanced user access
2. Enhanced book functionality
3. Access to more content & Cataloguing
4. Integration of books/journals on single platform
5. Greater security, reduced book loss/damage
6. Space and infrastructure savings (e.g. shelf/ storage space)
7. Better value-for-money for acquisition budget
8. Cost and time savings (e.g. physical handling/ processing)
9. Availability of usage statistics from publisher
10. Easier cataloguing
11. Enhanced collection development/planning
12. Physical handling/processing
13. Storage/archiving
14. Circulation Difficulty
15. Receipt and check-in
16. Collections development
17. Order processing
18. Usage of ebrary (not library)
19. Enhance career progression,
20. Keep abreast of new technology and practice,

V. SAMPLE FOR THE STUDY

A study was conducted among 17 B.Ed College lecturers (n=115) in Salem District of Tamilnadu under recognized by Tamilnadu teacher education university [10], Chennai, India during the month of September 2010 as a random sampling method, using a

questionnaire and identified that their awareness and intentions to act regarding eLearning resources is inadequate as the member of Educational society.

VI. ANALYSIS FOR THE STUDY

Each type of technology offers its own unique advantages and disadvantages. Here, the detailed results are given in the following tables 1 & 2.

TABLE 1
PERCENTAGE OF B.ED LECTURERS BASED ON THEIR LEVELS OF UNDERSTANDING REGARDING ELEARNING

No	Actions	Percentage of B.Ed Lecturers
1	Excellent Level	0.0
2	Very Good Level	01.4
3	Good Level	03.5
4	Misconception	42.5
5	Inaccurate	52.6

The study has identified that the awareness and intentions to act regarding eLearning resources is inadequate for the educationalists. All the institutions are having at least five computer peripherals with 70 per cent Air-conditioned facilities in their Information and communication technology (ICT) laboratories. Their actions are described in the following table-2.

Majority of B.Ed college lecturers and their colloquies are already taking actions regarding some the accepted ways of use of computers in their regular classrooms (32.0), however, they are not prepared to sacrifice their personal comfort for using e-books (in total 45%), they have strong reasons for that. The College of Education lectures were using the physical books handling (86.2) rather than the e-books are also evidenced that, they were not having enough time to use e-books nor entry in the computer labs.

TABLE 2
B.ED LECTURERS' AWARENESS &
INTENTIONS OF SOME COMMON ELEARNING
TECHNOLOGY

Concepts	Accep- -ted & used	Consi- -der being use	Not intere- -sted
1. Access to more e-content & Cataloguing	51.3	21.9	<u>26.8</u>
2. Greater security, reduced book loss /damage	54.8	17.8	<u>27.4</u>
3. Integration of e-journals on single platform	53.2	23.9	<u>22.9</u>
4. Space & infrastructure savings flexibility	52.5	25.7	<u>21.8</u>
5. Better value-for-money for acquisition budget	55.9	18.7	<u>25.4</u>
6. Cost and time savings for e-books reading	53.7	18.1	<u>28.2</u>
7. Enhanced e-resources Collection	54.1	22.4	<u>23.5</u>
8. Use of Computers in regular Class-rooms	32.0	27.1	<u>40.9</u>
9. Conserve existing books & use new e-books	48.8	26.8	<u>24.4</u>
10. Physical handling / Study habits	<u>86.2</u>	09.4	04.4
11. e-resources enhances the research progress	76.7	17.5	05.8
12. e-resources develops the Profession	78.2	16.3	05.5

(Underlines indicate their eLearning resources non-awareness concepts)

They very strongly suggested that the institutions and the Government should enact some laws to introduce the e-books and e-journals utility awareness in the Teacher education level and to conduct some in-services programmes for utilizing them.

Because they were accepted to the professional development and research progress was through e-resources (77.5). The major reason for non-awareness of eLearning resources was the failure of electricity, which was a common problem in their area. Other reasons were lack of time to utilize the ICT lab in time.

The directed use of learning styles in the online classroom was analyzed [11]. They suggest allowing the learners to determine their learning styles separately using many readily available eLearning resource tools. Assessments of teacher performance may be undertaken with a view to identifying teachers' needs for additional training or development. So, how far the teachers were aware about the e-books and e-journals for their research and professional development, this study was made. An e-Book is easy accessible from the catalogue, so there is no need to search physically for it. Once the title is located in the catalogue, a simple click on the link takes the user to the full-text book. Another benefit important to users was the multimedia additions, hyper linking.

This study has highlighted the eLearning barriers in India as: (i) time management issues which impact on the length and depth of the materials; (ii) confusion around the purpose of learning due to their multiple users in other areas of interests; (iii) a lack of confidence to participate in attention for some learners who are returning to education after a long break and are unfamiliar with the online environment and (iv) not accepting the new innovations in their classrooms.

VII. RECOMMENDATIONS

My recommendation for this paper needs more formative evaluation, especially for eLearning, in the testing area for; content accuracy; content sequencing; interaction and feedback adequacy; look and feel; site navigation and broken links and interactions. And we will know about the following questions from the eLearning materials viz; (i) how do learners feel about the

instruction?; (ii) did learners achieve the learning objectives?; (iii) can learners apply the accepted knowledge and relevant skills in the eLearning materials?; (iv) what is the impact of improved knowledge and skills on the materials? and (v) what learners will be able to do as a result of talking this eLearning instruction.

We are in need of neatly organized self-teaching attempts; the typical interaction and emotional relationships, all can be obtained from the eLearning materials. [5] also supported these views. Each and every one needs to notice, three paradigms viz., (a) the perceptual user interface (PUI) that allows to infer the user's intentions from the observation of his or her explicit and implicit behaviour; (b) the attentive user interface (AUI), conceived for deducting and managing, the user's attention; and (c) the affective user interface (AFUI), which analyzes the user's emotional state for better adaptation.

VIII. CONCLUSION AND IMPLICATIONS

Across all educational institutions, organizations that are successful with eLearning have in common an understanding that having the right content, the right design, and the right technology is just not enough. Certainly it's necessary for success, but it is not sufficient to ensure success. To ensure their success these educational institutions pay as much- or even more-attention to engaging students, motivating lecturers, and energizing their institutions.

eLearning resources are an importance of technological issue and require collective responsible actions at local institutions and national levels. Lecturers need to be technologically literate about e-resources in order to develop actions in their own institutions for a sustainable, technological environment [12].

Teachers can be trained to learn how to use web tools. Web can be used as a core or

a complementary means to the teacher training process [2]. The quality of the eLearning resources work undertaken by a teacher has significant effects upon his or her pupils or students. We can use the reference works from our home, from our office, and we don't have to come to the library any more. Now-a-days, all disciplines are ready to make the conversion from printed material to e-Books.

As seen in the paper of [1], and from the survey result, eLearning actually built up cross-cultural cooperative groups since it contributes to the development of a person's social skills and relationships with others. Professors of Education must themselves be technically literate about eLearning resources if they are to help their lecturers and teacher educators understand this important technological issue.

E-Journal users have become comfortable with electronic delivery in a very short period of time. Search functionality reduces time spent on each title and increases the number of titles reviewed for a given project. In the longer term, the increase in e-Book usage may be accompanied by a decline in the use of the printed versions, although in some cases online usage may stimulate usage of the print title, too, through a kind of 'promotional' effect. The researchers and students from all disciplines are ready to use e-Books. Adoption of the e-format may be fastest in rapidly-changing science disciplines.

To encourage students to learn via effective eLearning can give more benefits such as reduce the expenses, increase the learning efficiency and save the time [7]. The most significant area for cost savings of e-Books and e-journals over print was in physical handling and processing –binding, labeling, transport, and repair. Storage and archiving always represents an issue as well as a cost factor for libraries. Online training allows learners to work at their own pace to complete required technical and work related training or complete full degree or certification programs [9].

So, the eLearning resources have significant cost advantages are circulation and shelf maintenance. In order to create more teachers' professional development and to enhance the research experience we need in e-journals and e-books in India.

REFERENCES

- [1] **ChanLin, L. J., Huang, R. F., & Chan, K. C.** (2003), Web-based instruction in learning nutrition, *Journal of Instructional Psychology*, Vol. 30, No.1, pp. 12-21.
- [2] **Collis, B., & Jung, I.S.** (2003), Uses of ICT in teacher education,. In B. Robinson & C.Latchem (Eds.), *Teacher education through open and distance learning*, London: Routledge Falmer, pp.171-192.
- [3] **Downes, S.** (2005). E-Learning 2.0. In *ACM eLearn Magazine*, October 2005, retrieved 23 June, 2010 from <http://www.elearnmag.org/subpage.cfm?article=29-1§ion=articles>
- [4] **Graham, Attwell.** (2007), Personal learning Environments – the future of eLearning?, *eLearning papers*, No.2, Jan 2007, p.5.
- [5] **Luca Bevilacqua et al.,** (2009), Advanced user Interfaces for e-Learning, *Journal of e-Learning and Knowledge Society*, Vo. 5, No.3, Sep 2009, pp.91-99.
- [6] **Nachimuthu, K.** (2007), Mobile learning and Distance Education, *Journal of Distance Education*, University of Jammu, Kashmir, India, 2007, Vol. XII, No:1, pp. 33-39.
- [7] **Rath Jairak et al.,** (2009), An investigation of Trust in e-Learning for Instructors and Students in Private and Public Universities, in *Proc. 6th eLearning for Knowledge-Based Society Conf.*, Thailand, 2009, 17-18, Dec 2009, pp. 21.1–21.6.
- [8] **Schellens, T. & Valcke, M.** (2005) Collaborative learning in asynchronous discussion groups: What about the impact on cognitive processing?, *Computers in Human Behaviour*, 21, pp. 957-975.
- [9] **Taylor, R. W.** (2002), Pros and cons of online learning - A Faculty perspective, *Journal of European Industrial Training*, Vol. 26, No.1, pp.24-37.
- [10] **Tamilnadu Teacher Education University** (2010), List of educational colleges, Tamilnadu, India from [http://www. Tnteu.in / index.asp](http://www.Tnteu.in/index.asp).
- [11] **Vijayakumari, G. et al.,** (2008), Quality issues and standards of E-content, *Journal of Educational Technology*, I-Manager Pub, Tamilnadu, from <http://www.imanagerpublications.com>, Vol. 04, No. 03, Oct-Dec 2007, pp. 8-11.
- [12] **Watkins, R. & Corry, M.** (2007), *e-Learning Companion: A Student's Guide to Online Success*, 2/E. Houghton Mifflin Company.