RESEARCH FRONT

ISSN
(Print) 2320 – 6446, (Online) 2320 – 8341

E-TEACHER EDUCATION

Smt. Minal Vijay Patil
V.D.A.V, Mahuli

Introduction

'E-Teaching' is a new and evolving concept. It is not possible to give it a strict definition. 'E-Teaching'involves the use of ICTs to enhance the art of teaching. Harnessing the potential of digital technology in presenting a concept, exploring implications, placing the concept in various contexts, creating links with existing knowledge, and leading discussions that probe student understanding and allow students to take their learning in personally relevant directions.

Like traditional teaching, 'e-teaching' is essentially a group activity, where the group is the size of a normal Class. In this way 'e-teaching' differs from the conventional approach of incorporating ICTs into teaching programs, where normally the activities are aimed at the individual or small group. "Presentation devices are key to extending the reach of information from individuals to entire groups, large or small"

Concept and Features of E-teacher Education:

Educational systems worldwide insist on using information and communication technologies (ICT) to teach students who gain the knowledge and skills needed for the future knowledge society. E-teacher education would developing pre-service a positive attitude towards e-learning and using computers in their future classrooms'-teacher education is the instructional system of processes and activities designed according to the ICT development, characteristics and models of e-learning, principles of formal communication, principles of e-education, principles of competence based education system, etc.-teaching adopts the constructivist principles in the designing of learning experiences. The concept of co-operative teaching is the fundamental construct to develop e-teaching scenarios. There are different forms of e-learning courses. They are as follows;

• E-learning activities in online professional learning community:

Graduated students – active teachers participate in a series of learning activities, exchanging ideas with other students and teachers; this form uses web based technologies, asynchronous discussions, participation in school based activities (implementation lessons, assessment procedures, etc.)

• E-learning programs use broadcast formats, lectures reviewing, class demonstrations, reviewing other online materials; this form uses multiple sites, interaction via video conferencing, online text messaging; video conference-based teaching approach is important part of the(presented)curriculum.

• Individualized self-paced instructional procedures: series of online learning activities which are delivered between e-teacher and teacher participants who are the e-learners in the curriculum: it includes some forms of the self –study without interaction, some interactions with instructor though online discussion, email, Skype.

ISSN
(Print) 2320 – 6446, (Online) 2320 – 8341

• Hybrid teaching models: this form uses integrative onsite meetings, classroom visits, and face-to-face workshops, coaching and mentoring programs, small study groups.
• E-learning based on the extend communication in distance situation and without immediate connection.

E-Teacher/Tutors

E-teachers are the new generation of 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.

Teachers play a vital role in realizing the educational goals of a dynamic society. The quality of teachers is of prime importance for the success of educational endeavors. Teachers' competence

Includes the following three fundamental professional competencies:

• Educational competencies- system of knowledge, skills, abilities and motivation dispositions to realize educational professional roles.
• Programmed competencies or course content competencies system of knowledge and skills from the course content and developed activities to teach the students about the knowledge and skills.
• Communication competencies- system of the knowledge, skills, abilities and motivational dispositions to realize the goals of communication and teaching social interaction.

To gain the expected educational outcomes a teacher can use information and communication technology. E-teaching competencies would serve to enhance the professional competencies
of teachers.

Resources for E-Teaching Education-

- mini-blackboards,
- calculators,
- digital camera,
- Class set of net books (there are logistical issues to be resolved here including charging, security, Rota for use etc.),
- digital learning resources;
    - this includes media (such as images, audio, and video, as well as animations), and using these requires searching for appropriate resources, saving them for re-use with students;
    - this also includes files (such as text files, spreadsheets, presentations);
    - This also includes applications themselves (such as Open Office, Geogebra).
- e-book readers (Kindle, Wiki reader), and
- Computers, tablets and mobile devices - Computers and tablets allow students and teacher's access to websites and other programs, such as Microsoft Word, PowerPoint, PDF files, and images. Many mobile devices
- Portals for E-Learning and E-Teaching
- Modules on ICT-pedagogy Integration

ISSN
(Print) 2320 – 6446, (Online) 2320 – 8341

- Multimedia Resources
- ICT in Education Online Community
- Web-tools for Educators
- Free Directory of ICT resources for Teaching and Learning of Science, Mathematics and Language
- Software for Educators
- Pedagogy Training Modules
- Web Conferencing
- Video conferencing

Support for e-teachers

Support for e-teachers is often difficult to get when the supporters have not had any direct and practical e-teaching or e-learning experience themselves.. IT support staff, like the technologies, should be seen as supporting e-teaching and e-learning. It is e-teachers who need to feel they are in the driving seat of a vehicle they have helped to design. E-learning "enhances the mentor and facilitator roles of the teacher more than ever." It is possible that an e-teacher can be mentored in an online team-teaching situation that provides peer support and some valuable role-modelling. Other e-teachers have opted to enrol in online papers themselves to explore the e-learner role first-hand while having the support and experience of an experienced e-teacher.

Teacher education and e-teaching

The institutes that offer teacher education, both pre-service and In service education, will need to consider their changing roles and the way in which they model good e-teaching practice. For staff working in teacher education to talk about what e-teaching might be like without actually doing it, will leave their students wondering why it might be so difficult. What could be even more discouraging for teacher education students is for the institutions to *put courses online* and assume that this is e-teaching. The Web-Based Education Commission (2000) warned "if teacher education programs do not address this issue at once, we will soon have lost the opportunity to enhance the performance of a whole generation of new teachers, and the students they teach".

The fear of e-teaching

The level of internal motivation to utilise ICT and to consider new and different teaching options was found to be an essential factor in teaching. A positive attitude toward the use of ICT was a strong indicator of whether a teacher might consider e-teaching. Conversely, one of the major barriers to e-teaching the fear some staff felt when faced with stepping outside their comfort levels and they were not willing to take the risk. They included 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.

1. Fear of change
2. Fear of time commitment
3. Fear of appearing incompetent
4. Fear of techno lingo

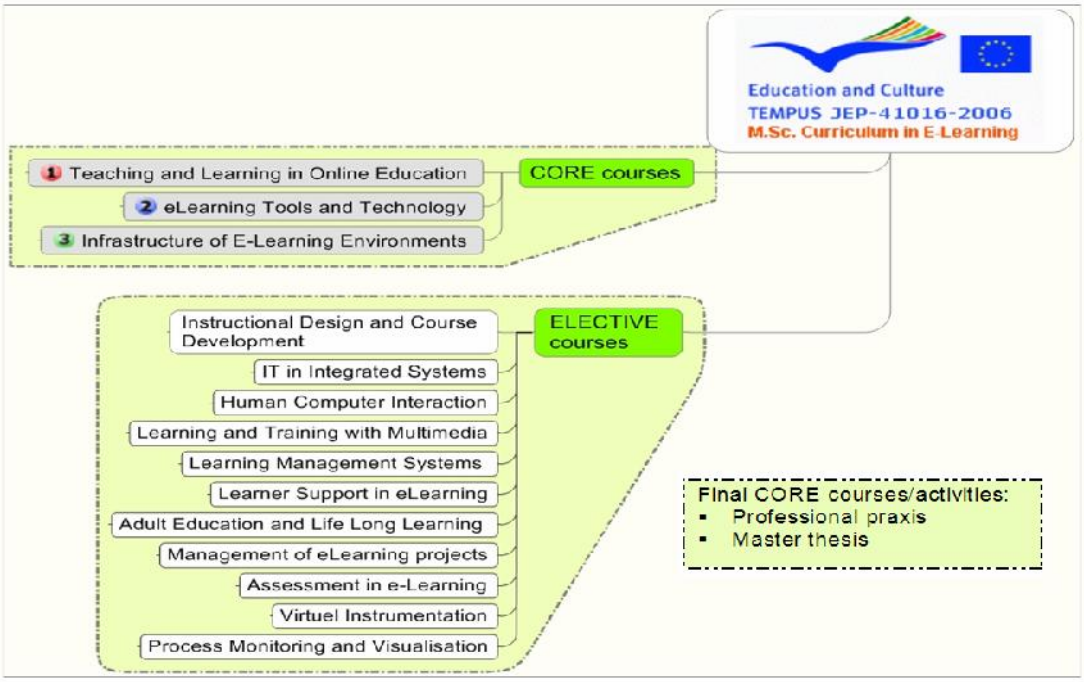
ISSN
(Print) 2320 – 6446, (Online) 2320 – 8341

5. Fear of techno failure
6. Fear of not knowing where to start
7. Fear of being married to bad choices
8. Fear of having to move backward to go forward
9. Fear of rejection or reprisals

The issues of a lack of knowledge about ICT, a perceived lack of support, and an unwillingness to experiment with innovation all impact on the move to e-teaching.

It is important that the concerns are acknowledged and addressed if progress toward e-teaching is to be made for many teachers. Supporting e-teachers as they begin their journey has to acknowledge the fears and anxieties as well as the likely predictors of success.

Courses of E-teaching



Web-based e-learning scenarios;
Classroom-based e-learning scenarios;
Online classroom e-learning scenarios;
Scenarios of net-based course;
Scenarios of e-learning with streaming media technology;
Scenarios of e-learning in the hypermedia classroom;
Scenarios of e-learning based on the combination of the traditional classroom learning and e-learning.

2.1. Teachers' ICT competencies

Pre-requisites of the teacher professional activities are defined by the professional standards. The standards are determined by the description of the competencies. E-education and e-teaching are based on some technological standards of teachers' professional dealing standards. Some standards (Technology standards for All Illinois Teacher; UNESCO, 2008) are described as the general teachers' competence in the application of ICT, and some standards are described as specific e-competencies for special e-education system modelling (e-learning, e-teaching etc.).

ISSN
(Print) 2320 – 6446, (Online) 2320 – 8341

There are three dimensions of the teachers' ICT-competencies

1. The teacher knows what learning activities ICT can be used in teaching (ICT awareness),
2. The teacher has the necessary skills for using hardware and software (ICT readiness), and
3. The teacher knows the pedagogical-didactical elements of ICT (ICT drill and practice).

Table 1. Teacher general ICT competencies

Computer/Technology Operations and Concepts	. Basic use computer systems to run software, to access, generate, and manipulate data: and to publish results evaluate performance of hardware and software components of computer systems and apply basic trouble-shooting strategies as needed.
Personal and Professional Use of Technology	apply tools for enhancing personal professional growth and productivity; use technology in communicating, collaborating, conducting research, and solving problems
Application of Technology in Instruction	apply learning technologies that support instruction in his or her grade level and subject must plan and deliver instructional units that integrate a variety of software, applications, and learning tools, lessons developed must reflect effective grouping and assessment strategies for diverse population
Productivity Tool	integrate advanced features of technology-based productivity tools to support. Instruction extend communication outside the classroom, enhance classroom management, perform administrative routines more effectively, and become more productive in daily tasks
Telecommunications and Information Access	use telecommunications and information-access resources to support .
Research, Problem Solving, and Product Development	use computers and other technologies in research, problem solving, and product development; appropriately use a variety of media, presentation, and authoring packages; plan and participate in team and collaborative projects that require critical analysis and evaluation; present products developed
Information Literacy Skills	develop information literacy skills to be able to access, evaluate, and use information to Improve teaching and learning.

Role of E-Teacher

- support new pedagogical methods
- accessing remote resources
- enable collaboration
- extend educational programs

ISSN
(Print) 2320 – 6446, (Online) 2320 – 8341

- developing skills for the workplace
- locate learning resources
- developing an online learning library
- give students program based learning
- engaging students
- constructive learning

Modern constructivist educational theory emphasizes critical thinking, problem solving, "authentic" learning experiences, social negotiation of knowledge, and collaboration –pedagogical methods that change the role of the teacher from disseminator of information to learning facilitator, helping students as they actively engage with information and materials to construct their own understandings. That is, students learn how to learn, not just what to learn.

Technology never replaces teachers-

The teacher needs to be fully aware of the fact that students can find information, they need proper instructions, they need scope for creativity and expectations of the teacher bring performance. However, Teachers who know how to use technology effectively to help their students connect and collaborative together online will replace those who do not.

References

1. Peter Kent (March 2004),E-Teaching – The Elusive Promise,15th International Conference of the society for Informational technology and teacher Education (SITE 2004) Atlanta,USA..
2. www.practicalinteractivity.edublogs.org/.../e-teaching-_-the-elusive-promise...
3. Christine Canning-Wilson(Dec.2000),The weekly column-Article 42,E-learning with e-teacher: considerations for On-line course Design., Centre for Excellence in Applied Research and technology CERT college, Higher Colleges of technology, AbuDhabi,UAE.
4. www.eltnewsletter.com/back/Dec.2000
5. D. N. Sansanwal, Use of ICT in Teaching Learning and Evaluation', 'Central Institute of Education Technology , NCERT, New DELHI and State Institute of Education, Chandigarh.
6. dnsansanwal@email.com.
7. http://www.mu.ac.in/my web_test/MAY20 Teacher.
8. http://www.uniscobkk.org/edu/ict-in-edu-proj/traing of teacher / training modals.
9. Syed Noor-Ul-Amin, 'An effective use of ICT for education for Education and learning By doing on worldwide knowledge ,Research and Experience', Dept. of Education, Kashmir.
10. http://www.nyu.edu./classes/keefer/waoe/amins.
11. Robert B. Kozma, (2003), 'Technology, Innovation and Educational change: A Global Perspective : A report of the second Information Technology in Education study, module 2.',International Society for Technology in Education.
12. Wikibooks,'ICT in Education', 'The uses of ICTS in Education'
13. http://en.wikibooks.org/wiki/ICT-in-Education/TheUses_of_ICTS_in_Education.
14. Information and communication technologies in Education ,Sep(2011)
15. http://en.wikipedia.org./wiki/Information and communication technology.