ICT Enabled Teaching Learning Process

Smt.Dharmavathi S.Nayak
Asst.Professor
Navodaya B.Ed., College
Raichur, Karanataka

Abstract

Educational technology is a relative new field which aims at solving problem of teaching and learning. Hardware and software are two structural components of this technology and multimedia is an important aspect related to them. Education as a system has some objective planned for the process, for the realization of which a verity of strategies, techniques and aids have been designed and devised by educational technologists. Multimedia approach is one such innovation that is aimed at improving the teaching-learning process. Teacher plays very prominent role in molding up tomorrow’s citizen. The teacher’s shoulder possesses training in using the most modern technologies in the field of education. Information and communication technology is an umbrella term that includes all technologies for the manipulation and communication of information. It deals mainly with the usage of tools and techniques to enhance the effectiveness of the teaching-learning processes. ET (Educational Technology) deals mainly with broad theoretical and classroom. ICT in education largely deals with the practical aspects of ET. Hence, the computer assisted or aided instruction may be defined as the use of a computer as an integral part of an instructional system the learner generally engaging in two-way interaction with the computer via terminal. ICT materials have proved to help in clarifying concepts, stimulating group and individual activities developing a collective critical awareness, changing attitude, imposing a new structure or organization on a certain subject and encouraging originality and creativeness. New technological terms replaced old terms such as banking into e-banking, money into e-money, commerce into e-commerce, governance into e-governance, learning into e-learning, education into e-education etc. To improve the quality of Teacher education of the knowledge and use of ICT and its applications by Teacher Educators are inevitable.

Introduction:

Education creates inbuilt capacity in man to face advance situation in life successfully. It also helps individuals in skill development, than improving the work efficiency. Education is thus based towards scientific knowledge of the universe and enquiry about its movement. Educational Technology relies on a broad definition of the word "technology". Technology can refer to material objects of use to humanity, such as machines or hardware, but it can also encompass broader themes, including systems, methods of organization, and techniques. Some modern tools include but are not limited to overhead projectors, laptop computers, and calculator's. Technical knowledge of technical education which is nothing but commercial use of knowledge for one's economic domination and thus becomes the tool of empowerment and 'Aggrandizement'. Education has in it’s within growth manifestation via technological upgradation.

ICTs Skills:

ICT is universally acknowledged as an important catalyst for social transformation and national progress. ICT stand for information and communication technologies and are defined, for the purpose of primer, as a 'diverse' set of technological tools and resources used to communicate an\ to create, disseminate, store and manage information. It is also potentially powerful tool for extending education opportunities, both formal and non-formal.
National Education policies in context of Teacher Education:

Kothari Commission (1964-65) recommended the introduction of integrated courses of general and professional education in universities with greater scale for self-study and discussion. NEP(198611992),stated that T.E.is a continuous process and its pre service and in service comportment are inseparable.

Initiative towards ICTs in Teacher Education:

NCTE has signed Moll with Intel Technology India pvt. Ltd. in Dec.2006 with a view to achieving of imparting sustained professional development to all teacher education from all the recognized institution and making ICT on integral past of Teacher education curriculum.

National mission for Teacher Education Through ICT:

The HRD ministry under which all the institution of higher learning would be networked through 'Broadband' connectivity has prepared a national mission for education through ICT. ICT has a great potential to contribute positively towards knowledge, dissemination, effective learning and the development of more efficient educational service.

Integration of ICT Educational Courses:

The available resources suggested that separate ICT units with a focus on the development of computing skills do not necessarily lead to their transform to the classroom. ICT integration is classified into four approaches.

- ICT skill development approach
- ICT pedagogy approach
- subject specific approach
- Practice driven approach

The following skills are expected from the Teacher

- Basic operational skill
- IT skills
- Software evaluation skill
- effective use of the internet
- pedagogical skill for classroom management

The main focus on ICT modules are ICT for learning ‘on line’ learning and ‘web authoring ’ and developing and designing digital port folios.

Benefits of the ICT Program:

- Student teachers/ used on line support is help them, solve the problem they faced in completing their learning and assessment tasks.
- Students/ teacher developed their reflective skills through their use of journals and portfolio activities.
- Students/ teacher developed their computing skills particularly in the use of program such as 'word’ 'excel' and 'power point’.
- Students / teacher developed teaching resources that would help them during their practice teaching.
The effective integration of ICTs into the education system is a complex, multifaceted process that involves just not technology, indeed, given enough initial capital, getting the technology is the easier part but also curriculum and pedagogy, institutional readiness, teacher competencies and long term financing among other.

The four broad issues in the use of ICT in education
- Effectiveness
- Cost.
- Equity
- Sustainability

Skills needed in the workplace of the future:
- Digital age literacy - related to ICT
- Functional literacy - use of images, graphic, video, chart, graperier of visual literacy.
- Scientific literacy - Understanding both the theoretical and applied
- Technological literacy - Competence in the use of ICT.
- Cultural literacy - Appreciation of the diversity of culture.
- Global awareness - to knowledge about the world.

Innovative Thinking:-
- adoptability
- Curiosity
- Creativity
- Risk taking

Effective Communication:-
- Tearing
- Collaboration and interpersonal skills
- Personal and social responsibility
- Interactive communication and
- High Productivity

Pedagogy in ICT (Activities):-
- Active Learning - Activities determined by learner, in small groups.
- Collaborative Learning - Working in teams, Heterogeneous groups, supporting each other.
- Creative Learning- Productive learning, finding new solution to problem.
- Integrative learning - Integration theory and practice, relation between subject, thematic, teams of teacher.
- Evaluative - Student directed, diagnostic.

Challenges in ICTs in Education:
Significance challenges those policymakers and planners, educators, education administrator and other stakeholders.

- A rigorous analysis of the present state of the educational system ICT- based arrangements. Especially drivers and barriers to ICT, use need to be identified, including these related to
curriculum and pedagogy. Infrastructure, capacity-building, language and content and financing.

- The policymaker understood the potentials of different ICTs when applied in different content for different purpose.
- The identification of stakeholder and harmonizing of efforts across different interest group.

Potential sources of many and resources for ICTs program in Teacher education

- Public subsidies
- Private donation, fund rising events
- In-kind support (eg. Equipment, and volunteers)
- Community support (eg. Rent building)
- Membering fee

Revenue earned from core business connectivity (Phone, Fax, Internet, web page, Direct Computer access to user, of the service-photo coping, scanning, Audio-Visuals aids)

Revenue earned from ancillary activities - education service (distance education, training Course). Community service (meeting room, social events, local information, remittance from migrant workers, telephonic consulting, specialized activities, sales (satisfactory, stamps and refreshment etc.)

Conclusion:

The most visible symbol of globalization has been the spectacular development of ICTs. ICTs are integrates in to all aspect of life, Today and therefore, it is important for pre service teacher to fill confident and be competent in their use. They will use them as a resource for preparation and as a tool to gather knowledge and communication. Teacher is the architect of our future generation. The role of teacher society is both significant and valuable. Learning with computer and internet, in which technology facilities learning across the curriculum, integrating skills development with curriculum application.

References:

3. K.L.Kumar, Educationotechnology,2006
4. 4.T.Pradeep Kumar, A.Jahitha Begum, Computer education_2009,