Review of the related literature

2.4.1 Books

1. Jagtap H. N. (2006) Shikshanatil Navpravaah ani Navpravartane (first Edition) Pune: Nityanutan Publication, P. 109 – 110. While giving information of Computer assisted instruction Jagtap H. N. says that computer is like reference encyclopedia for teachers and also it helps in actual instructions presentation. This functioning of computer systems is called as computer assisted instruction. Salient features of these technologies as he has told are as follows.

Instruction technology depends on the interactions between computer and student. Human Learning is its objective. In this kind of instruction, computer gives accrual instructions to the student. The relevant information is stored in the computer to raise the desired level of the students. The computer has facilities that help student learn at his or her pace. However, computer is an instrument of self study and this would not be an exaggeration. Jagtap has told some types of computer assisted instructions, like communication, revision and practice, inquiry problem solving tutorials are included in it.

2.4.2 Magazines

Dakshindas, Vinay (November 2005) Shikshan Sankraman Pune: Maharashtra State Middle and Higher Middle Education Board, P. 15 Asana Joshi in article, “Project is an effective teaching method” has said that project means a mindful study for fulfilling the particular objectives and project is a teaching methodology based on self learning principles. E.g. Research project means a method to find a solution to the
problem by collecting the information about the problem and doing action and to draw the conclusion that the project is tracking system. E.g. Adverse effects of cold drinks.

Use of New Multimedia Technique in Teacher Education


Multimedia combines five basic types of media into the learning environment: text, video, sound, graphics and animation thus providing a powerful new tool for education.

The multimedia technologies that had the greatest impact in education are those that argument the existing curriculum. It allowing both immediate enhancement and encouraging further curriculum development. For example: the www serves as a store house of information, so that learners can search for subject matter content that specifically fits their learning addenda’s.

Research Based online Teaching online teaching only can enhance quality in high education. (New frontiers in Education) ISSN : 0972-1231 Vol.45, No.3, July-Sept.2012.

G. Arockisamy Assistant Professor (SG) Department of Electronic of Media Technology, Coimbatore

The fundamentals of education is arriving at scientific truth through search and research involving both the teaching community and the learning population. It has the earlier nation that stuffing the students with notes and learning material is sufficient for obtaining the degree.
New methods in both teaching and learning is a must. Research based learning and teaching new ways should be introduced in online education.


The process of education is not a natural phenomenon of the kind that has sometimes rewarded scientific investigation. ‘No people can rise above the level of its TEACHER’.

This statement made the roll of and status of teachers in the National Policy of Education, 1986 is, besides beaning commendable an eye opener in the field of teacher education. To provide quality teacher education the teacher educators must maintain a high academic and professional competence.

The author to encourage student teachers in trying out practice based on a few popular principles of joyful teaching and learning four strategies were designed and new nomenclature was given to them.


Vishal D. Kamble Mangala R Khodaskar Associate Professor, Sou N. Thopate College of Education Bhor, Dist. Pune

Objectives of e-Learning in teacher education. E-Learning is helping in achieving a number of objectives, including –

i) To encourage teachers to use new technology for improving classroom teaching and professional development.

ii) To develop competencies among teacher about the use of new technology.

iii) To create general awareness among teachers about learning.
iv) Assisting teachers in preparing educational materials and courses and filling gaps of experiences.

v) Easily backing electronic study suitcase for both teacher and students and the availability of updating it remotely by curricula development administration.

vi) Filling gaps in academic and training professionals in some educational sectors through virtual academic classrooms.

vii) Spreading technology within community and further introducing continuing education method.

Mobile Learning (M-Learning) An Interventions for easy learning (Edutracks ISSN: 0927-9844 Vol.12 No.6, Feb. 2013)

Goli Srilatha, Dr. L.Venkat Ram Reddy

For a century and a half, mobile learning evolved with technology to blaze new paths in education and is expanding the reach of the classroom. Today, the virtual classroom means there are no walls or limits on who can learn or where they can learn it. We have the tools at our disposal. It is time to grasp them with energy and ingenuity.

M-Learning mobile learning with hand held devices.

Both in and out of the classroom or a combination of both (blended learning) one can use pocket cell phones, note books and mobile devices for learning projects. The desktop and laptop computers are robust established tools for learning.

Challenges Before Teacher Education


Dr.Intekhab Ansari College of Education, Kharad (Gujarat)
The quality of any society directly depends on it’s teachers. Teachers have to play very important role for the development of the society. Rajput (1999) observed that, ‘Teachers have always played a crucial role in preparing communities and societies towards exploring new horizons and achieving higher levels of progress and development. They are the prime agents of change. But the success of teacher depends on the teacher education programme. The quality of teacher education programme determines the quality of teachers and ultimately quality of the society. Kumar and Kumar (2006) has observed that ‘Preparation of quality teachers depends on quality of teacher education’ Khosla (1998) has also rightly noted that’ Teacher education is an integral component of the educational system. It is intimately connected with society and is conditioned by the ethos, culture and character of a nation.


Jyoti Bhalla. Nov. 2011 Library Faculty of Education, Jamia Millia Islamia

Due to recent advancement in information technology, computer uses has made inroads in myriad walks of life. Various initiatives, mandates, and recommendations such as those forth in National Curriculum Framework for school Education (NCERT 2000), Curriculum Guide syllabus for Information Technology in Schools (NCERT 2001); 11th five year plan National Mission in Education through ICT, and National Policy on ICT; in school Education (2009) have definitely served as catalysts to motivate teachers in this direction sampling.
20 Kendriya Vidyalayas within NCT of Delhi run by Kendriya Vidyalaya Sangathan were randomly selected and from each selected schools, 15 teacher’s were randomly selected (excluding computer teachers),

**Tools**: Questionnaire

**Data Analysis**:

- Product moment correlation coefficient.

The regression analysis:

The significant findings:

According to the finding of the study.

It was found that in general, there is a need for improvement with regard to various key factors that we studied, while teachers were found to have a favorable attitude towards use of computers in teaching learning process distinct improvement needs exist with regard to other factors such as, access, support training and competence.

The study indicates that various steps towards improving teacher access to computers with regard to availability, location and provision, and school support with regard to maintenance, technical assistance, sufficient time for planning, and so on, will also go a long way in enhanced integration of computer use in teaching learning process.

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Arjun D Pithe Assistant Professor G.E.S. College of Education, Sangamner-422 605

Innovative practices for teacher education through distance mode.
1) Multimedia: Use of multimedia for teacher education. It is the combination of sound, graphics, animation and video. In the world of computers, multimedia is a subject of hypermedia, which combines the multimedia with hypertext, which links information.

2) Packages of published materials can be sold separately. For example packages of published study materials for IGNOU B.Ed student teachers learning through distance mode can sold separately by the publisher.

3) Radio and Television programmes.

4) Video recording and CD Rom

5) Open Learning.

6) Educational interchanges, continuous feedback after specific periods and improvement.

7) Educational work shop.

8) Conferences for course providers.

Computers and Multimedia in Physics and Astronomy Education.

Shikshnatil Marmdrushti ISSN : 0976-0385

Now a days computers are extensively used in almost all walks of life. Computers when wedded with multimedia make an effective teaching-learning tool. The present paper deals with use of computers and multimedia in physics and Astronomy education. These areas are selected because they are core branches of science and are intimately related to each other. The authors have found that computers and multimedia are very much useful to learners and teachers for a better way to understand various topics.
Use of computers reduces the labour of manual data collection and analysis. They provide a learning environment in which students are engaged in the active learning. Also they interactive computer simulation help in a big way when teachers explain any physical phenomenon.

Analysis of subject Achievement in Graph Theory via communication channel of Multimedia Package for self Instruction. ISSN : 0976-0385

Pankit S. Gandhi Assistant Professor of Mathematics K.C.College, Churchgate, Mumbai.

The process of learning mathematics is a complex cognitive task that can be very imposing on learners. Consequently learners need a lot of motivation to cope with the subject. It is therefore the need of the hour to develop instructional strategies in the subject of mathematics that are interesting, stimulating and leading to high achievement of the subject. Educators are now introducing more and various forms of software and multimedia presentation driven media into their classroom activities.

These creative presentation systems are producing a great deal of excitement amongst educators. Some studies have shown that computer assisted instruction (CAI) was more effective than other methods in increasing students interest in science and mathematics lessons and during teaching process computer assisted applications aid the consolidation of attitudes and restructuring of the knowledge by student themselves.

Information of communication Technologies (ICT) in Education for Development.

Prepared by : Brian Gutterman, Shareen Rahman
Information and communication Technologies ICT can be an extremely powerful enable in efforts to bring positive and sustainable development to countries around the globe. Today, almost a full decade into the 21st century, we live amidst an unprecedented revolution in the advancement of ICT.

1. **Role and Importance of ICT in Education**

   ICT can play a vital role in increasing access to education as well as providing better quality education.

2. **Mobile Technology and its Role in ICTE in the future**

   Successful application of radio, television and computer technology to education in recent years have been discussed thus far in this paper they provide the most concrete examples of sustainable and successful ICTE coming from developing world.

   In terms of their usage in ICTC, mobile phones provide education policy makers with an unprecedented tool for distance learning. The applications of M-education are endless and will continue to evolve as more and more people acquire and learn to use mobile phone, in the future.

3. **Recommendation for Implementation of ICT in Education for Development.**

   Joshi T.S.

   Educational Technology in India

   Role of Computers in Education

   One of the greatest contributions of the present day technological development is the invention and use of computers in almost every action. The use of these types of innovative techniques in educational technology is a landmark in the history of education.
The main objective of which is to provide individualized instruction to meet the specific needs of individual learners.

**Anweshika (India, Journal A Teacher Education)**


“Information and communication Technologies in Teacher Education”.

The Unesco (2002) document “Information and communication technologies in teacher education. A planning guide” states the importance of ICT in teacher education as follows.

“With the emerging new technologies, the teaching profession is evolving from an emphasis on teacher centred, lecture based instruction to student centred, interactive learning environments. Designing and implementing successful ICT enable teacher education programmes is the key to fundamental, wide ranging educational reforms in teacher education or be left behind in the swirl of rapid technological change. For education to reap the full benefits of ICT in learning, it is essential that pre-service and in-service teachers have basic ICT skills and competencies. Teacher education institutions and programmes must provide the leadership for pre-service and in-service teachers and must be model in the new pedagogies and tools for learning. They must also provide leadership in determining not the new technologies can best be used in the contest of culture, needs and economic conditions within their country” (pg. 13)

**2.4.3 Review from Internet:**

www.Ictineducation.org

Features of good ICT activity

1) ICT activity should have a real purpose
Ex. Use computer programmes in real life applications.

2) Students should be encouraged through risk – taking.
   Ex. Students should be able to apply the knowledge and take risk to try out something new in the ICT activity

3) Unexpected output should be allowed in the ICT activity.
   “Ex. out of Box” thinking should be encouraged by the ICT activity

4) Good ICT Activity
   Ex. ICT activity should not be only for examination purposes. The activity should be interesting and useful.

A Teaching with Technology White Paper- Podcasting

Website: [http://www.cmu.edu/teaching](http://www.cmu.edu/teaching)

Abstract:

This paper attempts to answer these questions through the exploration of educational podcasting in three realms: the creation and distribution of lecture archives for review, the delivery of supplemental educational materials and content, and assignments requiring students to produce and submit their own podcasts.