

EVOLUTION OF COMPUTER AIDED EDUCATION DELIVERY- ITS NEED AND IMPORTANCE AND VARIOUS TECHNIQUES USED IN CLASSROOM TEACHING

Dr. Smt. Manisha Shriram Chaudhari,
Asst. Professor, M.Ed. Department,
College of Education, Nasik.

It is usually observed that it is neither capital investment nor increased workforce but technology which holds the key to development and growth- economic and educational. In recent times, educational system has seen massive evolution in terms of teaching-learning processes and it is not wrong to say that education has now become equipped with technology.

Before we consider the meaning and significance of educational technology it will be desirable to mention in brief the concept of technology itself. Naughton J. (1986) argues in his book, “Technology in Schools” that technology can be considered in two ways- technology as things and technology as social process. So it can be said that technology is a ‘tool’ for the development of the science of education.

Computer Assisted Instruction (CAI) refers to an [educational](#) system of instruction performed almost entirely by [computer](#). The term, **Computer Based Learning (CBL)** refers to the use of computers as a key component of the educational environment. While CAI and CBL can refer to the use of computers in a classroom, they more broadly refer to a structured environment in which computers are used for teaching purposes.

Its need and importance is as follows:

1. Computer programs allow students to work at their own pace along with direct and individualized feedback.
2. Misconceptions can be corrected as they appear and the students' records and scores are made available to the instructor.
3. The use of computers in the teaching and learning process is an important advance in making the highest quality of education universally available, and thus allowing each person to most fully develop their potential.
4. It helps in developing a suitable curriculum with interaction of arts, human values and sciences.

5. It assists in identification of man-material; resources and strategies for achieving the desired aims of education.
6. It helps manage the entire educational system covering planning, implementation and evaluation phases.
7. Technology can make education more productive, individual and scientifically based.
8. Technology can make instruction more powerful, accessible and provides equal opportunity to all learners.
9. Educational technology helps in expansion of media, facilitating learning substantially and preparing effective teachers.
10. It engages both the pupil and learner in the teaching learning process thus developing student-teacher interest, rapport and bond.

The need and importance is immense, and above mentioned are just a few.

Various computer based techniques used in classroom teaching:

1) Power point Presentations:

Teachers can make various PPT's so as to deliver lectures thus making classes interesting, engaging and happening. Also this provides to act as an audio-visual aid in classroom teaching, lessening the teacher's black board work as everything is already present on the PPT.

2) Computer based Tutorials:

This helps in enriching background knowledge, ideal for verbal and conceptual learning, as well as for simultaneous attendance to every individual. Here the teacher can use computer software to make tutorials, tests and the pupils can appear for the same online.

3) Computer based practice lessons:

This method is more effective in language classes where the pupil develops his skills with help of computer programs and language laboratories.

4) Instructional games:

Providing motivation elements, such as competition, cooperation, etc., substituting exercises, and inspiring goal-setting, creativity, and respect for rules.

5) Virtual Classroom:

Classrooms can be conducted in absence of teachers. Lectures can be given, assignments can be assigned and students can be evaluated based on a communication process.

6) Videos:

Teachers can take help of educational videos and show them to class to simplify conceptual teaching. Like PPT, this method of teaching triggers creativity, involvement and interest of the pupils.

7) Computer Projects:

Students can be engaged in computer projects thus developing their technological knowledge and giving a hand on experience on constructing the projects with help of internet.

8) E-learning:

E-learning is an all-encompassing term generally used to refer to computer-enhanced learning, although it is often extended to include the use of mobile technologies such as PDAs (personal data assistant) and MP3 (digital audio) players. It may include the use of web-based teaching materials and hypermedia in general, multimedia CD-ROMs or web sites, discussion boards, collaborative software, e-mail, blogs, wikis, computer aided assessment, educational animation, simulations, games, learning management software, electronic voting systems and more, with possibly a combination of different methods being used.

With evolution of computer technology various computer and software organizations are coming up with programs to help teachers in teaching learning process. A few examples of these are Smartclass, Educomp, Elearning Industry and so on and so forth.

We are social beings and learning has primarily evolved as a social enterprise. The vast personal reach enabled by computer technology is individually empowering and socially disruptive. It is causing us to question notions of how to define community, connectivity, and social responsibility. As our sense of human social networks continues to change, so will our understanding of what it means to be part of a learning community, and this will certainly result in a continuing evolution for the role of computers in education.

Reference:

1. J.C. Aggarwal's Second Edition, Essentials of Educational Technology, Vikas Publishing House, New Delhi.
2. V.K. Rao, Instructional Technology, A P H Publishing Co-operation, New Delhi.
3. http://www.newworldencyclopedia.org/entry/Computer_assisted_instruction
4. <http://elearningindustry.com/computer-based-instruction-theory>