Educational Technology: A Systematic Approach

D V R KAMESWARI
(Department of English)
S V I T, Patney Center, Secunderabad.

ABSTRACT:
This paper mainly focuses on relation between education and technology, development of technology and what it includes with its detailed meaning. It also gives insight into need and significance of technology in education and also discusses its importance in our education system. It gives main emphasis on role of education technology as a systematic approach to realize our educational objectives at macro and micro levels and different approaches, where we can use it as a best tool or means to change the class room into a creative hub. Finally, it shows various fabulous changes observed in our education system by using this technology and gives hope for the future generation, how to use this technology in an apt and appropriate way to meet the challenges of present global scenario.

KEYWORDS: System approach, Hardware approach, software approach, programmed learning.

INTRODUCTION:

The main aim of education is to bring all round development of the personality of the child. The impact of technology on education is increasing rapidly day by day.E.T is a fast developing discipline in the field of education which is directly or indirectly influence it. Need of technology has become inevitable.

DEVELOPMENT:

In the 14th century, the instruction was restricted to mouth than to manuscript. After the development of print technology, introduction of text books and inventions of 20th century i.e. Radio, TV, Photography, Films and transparencies, it has taken a new mode in education system. The application of behavioral sciences, A/V aids, Programmed instruction, different approaches and methodologies has given new scope and shape for education technology.

MEANING AND DEFINITION:

Education is a word derived from Latin words, means art of teaching/training. Technology is a word derived from Greek word, means a study of techniques, art and skills. Education Technology concerned with application of modern skills and techniques to the requirements of education and training (1)*

WHAT IT CONSISTS OF:

E.T includes media, methods, material and sources. It consists of input process and output(1)* dogpile.com.It is a systematic integration of materials, communicative system and psychology of learning. It is a dynamic discipline which is

Ever changing according to the needs and necessities of teacher, student and society.

NEED AND IMPORTANCE OF E.T.:

1)To fulfill individual and social needs of education.
2) To design, plan, implement and reform curriculums.
3) Improving and analyzing teaching learning processes and materials.
4) To select best methods, material, views and strategies for instruction.
5) To give best possible instruction to all at the same time. For e.g. open universities, distance education and vocational education.
6) To evaluate teacher and student's performance.
7) To improve quality, values and standards of education.
8) To use as a check device for falling of standards and as a best feedback mechanism.
9) Helps in proper usage of environmental and human resources.
10) To enable the teacher to use the variety of media (multimedia and mass media) and modes to make his or her teaching effective.

APPROACHES:

A.A. Lum bsdein (2)* has classified education technology into 3 distant types or approaches.
HARDWARE APPROACH: This is purely use of mechanical material or equipment in the education. This approach had its origin in physical sciences and engineering and is based on the concept of service. Means using technology in the process of education Lum bsdein AA * -Educational technology, programmed learning and instruction. In this, the main feature is the use of audio visual aids like charts

or models, films, film strips, slides and sophisticated equipments like film projectors, led TVs and Computers. The is approach has brought a mechanical and technical evolution in the field of education.

SOFTWARE APPROACH: In contrast this approach owes its origin to the behavioral sciences, its applied aspects concerned with psychology of learning. The aspects comes under this or CAL, CAI, Micro Teaching, Programmed learning, research analysis and team teaching etc., which soften and smoothen the tasks of teaching and learning.(3)*

SYSTEM APPROACH:
This type of E.T owes its origin to management and systems engineering more specifically computer science. In this style education is considered to be a system, characterized by 4 parameters: Input, output, Process and environment.
3* Aggarval JC (2002). Essentials of ET, teaching, learning, innovation in education.

CHANGES OCCURRED IN EDUCATION SYSTEM DUE TO IMPLEMENTATION OF E.T.:
Students can do research or read online. Video/Teleconferencing without leaving the class room made us world connect, some sites, such as Glovico (4) helps the students to learn foreign languages through online. Children are exposed to education games with basis spelling and math's etc.Thanks to E.T, continuing education students can take courses over the internet at their convenience. Students can use internet, virtually to attend web seminars put on by other institutions. NASA for instance, offers a program that allows students to talk to astronauts in space. A great change in attitude towards education is observed from teacher and student. Both are interested to engage themselves in innovative and creative teaching and learning instead of conventional methods. Change in role of teacher as a mentor, controller, guide and coulnsellor.Learning changed to conceptual learning (Learning by doing)*
(4)*Small business.chron.com:
Special Education programs, new inventions in methods of teaching and learning were designed and tested with the help of satellite linkage. An amazing change in the learning or classroom atmosphere in which the student learns choice of lessons at his own pace. Schools strengthened by developing their infrastructural facilities and proper usage of resources for the wellbeing of students.E.T is bridging the gap between, developments between I.T and Education, emergence of libraries, internet www. Etc. have revolutionized as information services. It has developed the special communication devices for

physically challenged also. Teachers can use technology for quick and easy storage, retrieval and display of students' progress. E.T Is used as tool for evaluation and feedback.

Usage of Mass media and multimedia has started in education. E.g. multi media computers which helped to give continuous pre service, in-service and lifetime training for teachers. Learner centric teaching was started and trained and skilled teachers were emerged. Finally, the class room has become a research hub. Student's independent thinking, logic, reasoning and analytical skills also behavioral changes were observed through the evaluation process designed by technology. Teachers and students were started doing work together to fulfill the needs and aspirations of society.

DEMERITS:
Technological advancement has made the world a great and convenient to live-in and especially in the field of science and education. But like most things, technology has its own drawbacks. The recent inventions are now being categorized as lazy aids and considered major contributors of obesity and a generally unhealthy population.
1) Online learning didn't establish a direct link with the teacher and teaching and learning cannot be assed properly.
2) Teachers, to stray abreast with technology, they may need to be refrained.
3) Only training and skilled teachers can handle the e classes.
4) Constant use of digital technology is affecting students' attention span.
5) Computers proved to be an invaluable education tool and also be a source of problem which results high level of stress on students rather than experience, may lead to disinterest.

CONCLUSION:
The Indian perspective on E.T essentially requires looking at the scenario related to evolution of E.T in the country and periodic changes carried out by policies and curricular concerns which involves : efforts from teachers, management, research organizations(NCERT, SVRT, NEP and SIET), central and state governments, users, beneficiaries and policy planners should provide several pointers towards how E.T could be used fruitfully now, and in future, to attain the desired education goals and to improve the standards of education in 21st century.
E.T concerns a host of issues including pedagogical theory, choice of approach, methods of use and evaluation of effectiveness. Any technology is problematic, expensive but still E.T outweighs the

disadvantages drastically. ET, if properly used, can enhance the academic excellence, learning and interests of students. Let us hope the future generation could support digital India, make in India with the best use of educational technology, to place our country in the list of top countries of the world.

References:

1) Dogpile.com
2) Lumbsdein.A.A-Educational technology, Programed learning and instruction.
3) J.C.Aggarwal (2002-Essentials of Educational technology, Teaching, Learning, inventions in education.
4) Small business.chron.com.