CONCEPT OF EDUCATIONAL TECHNOLOGY

Educational Technology

Meaning of Technology

The word *'Technology'* is derived from the two Greek words namely *Technic and Logia.'Technic'* -means *'art or skill.''Logia'*– means *'Science or Study'*.So simplest meaning of *'Technology'*is *"Science of study of an art or skill."*

Definitions of Technology

"Technology is Knowledge organized for Production" – Sachs, I.

"Technology is the application of scientific knowledge to a practical purpose" – Page, T.

"Technology is the set of instruments and skills which are used to satisfy the needs of the community" Hierra, A.

Meaning of Education

The word *'Education'* is derived from the Latin word *'Educatum'*, which means *'To bring out'*. In the sense, the meaning of *Education* is *to bring out the better qualities of the individual.*

Acc. to Ross, the word '*Education'* is derived from the Latin word *'Educare'* which means *'to bring up' or 'to raise'.*It means that education is that process which brings up or rears the individual in the right way.

Meaning of Educational Technology

There are three views regarding the meaning of educational technology.

Educational Technology 1 (ET 1)

The first view which may call *Educational Technology 1 (ET 1)* refers to the application of physical sciences and engineering technologyto provide mechanical instruments or *"hardware"*which can be used for instructional purposes. This is the view of *James O. Finn and others (1960).*

E.g. Tape-recorders (including language laboratory), television, teaching machines and computer- based teaching.

Educational Technology 2 (ET 2)

The second view which we may call *Educational Technology 2 (ET 2)* refers to the application of scientific principles or *'software approach'* to instruction. This is the view of *Skinner, Gagne and others.*

Educational Technology 3 (ET 3)

The third and the modern view of *Educational Technology 3 (ET 3)*as described by *Davis and Hartley (1972)*, incorporates both ET 1 and ET 2 through the application of a *'system approach'* to education and training.

Definitions of Educational Technology

"Educational technology may be defined as the application of the laws as well as recent discoveries of science and technology to the process of education" – S. S. Kulkarni.

"Educational technology is the application of scientific process to man's learning conditions" – Robert A. Cox.

"Educational technology is an application of scientific knowledge about learning to practical learning situation" – Bloomer.

Characteristics of Educational Technology

1. ET has contributed in developing various methods e.g. Micro teaching method, Interaction analysis, Audio Visual Aids and Programmed learning method.

2. In the field of ET, Psychology, Science and technology, system, art, AV aids and machines are used.

3. It is based on the application of the scientific knowledge.

4. It is helpful in making the teaching process objective, easy, clear, interesting and scientific.

5. It is a continuous dynamic technology.

6. It is an important medium of communication.

7. A desired change is possible in the behaviour of teachers and students.

Revolution and Development of Educational Technology

Erich Ashley (1967) has identified four revolutions in education. They are,

- **First Revolution:** Revolution of shifting the task of educating the young ones from parents to teacher and from home to schools.

- **Second Revolution:** Revolution of adoption of the written word as a tool of education.

- **Third Revolution:** Revolution as a result of invention of printing and availability of books and other teaching-learning material.

- **Fourth Revolution:** Revolution on account of development in electronic, chiefly involving radio, television, cassette recorder and computer, and development of systems concept.

Origin of Educational Technology

- *Sidney Pressey* of a University in Ohio, America who used a *teaching machine* in the field of teaching in 1926.

- 1930-40 Lumsdain and Glaser- Mechanized education *(Models of teaching).*

- 1950- B.F Skinner's *Programmed Learning.*

- 1950- Bryn more in England the term *'Educational Technology'*.

- S Bloom (1956) was introduced the *taxonomy of educational objectives*.

- In 1960 Flanders introduced the concept of *interaction analysis model of teaching*.

- *Micro-teaching technique* first adopted at StanfordUniversity in USA (1961) by W.Allen et.al.

- *Personalized System of Instruction (PSI)* was first introduced by Keller in 1965.

- *Computer Assisted Instruction (CAI)* was developed by O.K Moore in 1966.