

Q. No. Unit - II (8) :-

In what way, technology is related to the different aspects of curriculum construction. Discuss in details.

Ans to the Q. No. Unit - II (8) :-

Title :- 'In what way, technology is related to the different aspects of curriculum construction.'

Introduction :-

In the Paper - 09 i.e. Foundations of Curriculum Development, I got the assignment topic, 'In what way, technology is related to the different aspects of curriculum constructions'. Before going to discuss about this topic, first of all I want to explain the true meaning of Curriculum constructions.

## Meaning of Curriculum Construction:

Curriculum is the heart of the Education. The term 'Curriculum' has been derived from a Latin word 'Currere' which means 'a race course' or 'a run way' on which one runs to reach a goal.

Curriculum is a tool in the hands of the teachers to give training to children in the art of living together in the community. It is a tool which considerably helps to inculcate those standards of moral action which are essential for successful living in society.

Now, I am going to discuss about, in what way technology is related to the different aspects of curriculum construction.

## Main Discussion :-

In what way, technology is related to the different aspects of Curriculum Construction :-

When technology is used for the purpose of accelerating and facilitating educational processes with certain objectives in view, that technology is called educational technology. In educational technology, humans and machines both have their respective roles and both work as complements to each other in the process of education. It means that man uses his intellectual and experiences along with the machines and devices and by using his arts he organizes the teaching. Learning process in the best possible manner.

Three approaches of educational technology related with curriculum :-

## 1. Hardware Approach (Educational Technology - I) :-

The very use of different types of machines in teaching is known as hardware approach. It is also called mechanization of education through the use of teaching machines. T.V, radio, computer etc. It has also been given the name of audio-visual aids provided that they have been prepared by applying scientific and technological principles. For example, application of radio, television, tasks easy and effective by using the teach millions of students together by using the teaching of an effective teacher on T.V and Internet by repeatedly. Now, I am going to discuss about the role of T.V, radio, Computer, internet outside the class.

## (i) Television :-

T.V. differs from the radio in the sense that it is audio and visual both. We can see the incident occurring round the globe on it immediately after the occurrence of the incident through telecast.

As far as application of T.V in education is concerned, it is still in the stage of infancy in India. These programmes were telecast in the evening and on sundays but there was no mechanism developed at that time to measure the effectiveness of such transmitting programmes.

## (ii) Computer :-

It is the latest electronic device that is audio and visual both. It accepts data, performs operations on that data in sequence and outputs the results.

The specification includes details about the amount and type of the nature of the peripheral equipment that can be connected to the computer.

The basic micro computer system consists of an input device the central processing unit of the computer and storage device and the output device, display unit on a monitor and printing terminals.

Computer always works according to the programme given to it. Whatever instruction or programme the student gives to the computers, it will always act accordingly and output will also come out on the same line.

### (iii) Internet :-

It is the abbreviation of international network. The computers connected to this system are automatically connected to world wide website. If we have missed

any television or radio programme, we cannot have access to that programme again but if that programme is loaded on the website, we can repeatedly hear and see the program. The major advantage of this system is that it has made 24 hour communication possible especially between those countries which have great differences in their local timings.

Latest teaching strategies and latest researches in different field can be obtained through internet immediately and we need not to have to wait for their publication in magazines and journals.

#### (iv) Radio :-

It is an important and easily accessible audio and serving three important general purpose, 'news', 'views' and 'recreation'. It is the cheapest equipment of all the radio broadcast is now reachable to 100% population of the country. This increases their general awareness of the world. Students listen the ideas of learned people, politicians and educationists from across the world on the radio. Apart from these there are hundred of programmes of music, songs and play broadcast on the audio which attention them round the clock.

Before broadcast of any educational programmes, its information regarding its timing, nature and the class for which it is designed etc.



is given to listeners in the midst of other radio programme. Following steps are followed in using a radio lesson in the class:—

### (i) Selection :—

Lessons related to the curriculum are selected. It should be recorded by the teacher also so that he may carry out necessary preparation before presenting the radio lesson in the class.

### (ii) Introduction :—

Before presenting a radio lesson in the class, it should be properly introduced by the teacher so as to clarify its aims and objectives and its relevance to the course.

### (iii) Elaboration :—

Whatever graphs, charts, notes etc. the teacher has prepared in the context of the programme, should be used

properly in the class during the radio lesson to elaborate the necessary points and to give his comments.

#### (iv) Discussion :-

Once the radio lesson is over, it should be discussed by the teacher with his students through comprehensive and evaluating question. It will help the teacher to elaborate the missing points of the lesson.

#### (v) Directions :-

Once the radio lesson is on the teacher should instruct his students to note down the important points. If a radio lesson is trapped, he can stop the tape in the middle as many times as required.

## 2. Software Technology (Educational Technology II) :-

It is the application of laws of behavioural sciences or principles of psychology, philosophy and sociology coupled with the general laws and principles of natural sciences in education and training. This technology is related to the mental aspect of the task and it deals with writing educational objectives in behavioral terms, selecting suitable strategies for the presentation of the subject matter, proper use of reinforcement devices and evaluation of educational outcomes has termed this technology as constructive educational technology.

It consists of the following steps :-

- (i) Analysis of instructional problems.
- (ii) Writing objectives in behavioral terms.

(iii) Selecting suitable teaching strategies.

-es.

(iv) Reinforcing the students on right response.

(v) Selecting or constructing measuring instruments for evaluating instructional outcomes.

(vi) Decision making and improvement.

It is clear from the above discussion that hardware and software both the technologies are supplementary to each other. A good instructional material needs both of them simultaneously.

### 3. System Analysis (Educational

Technology III) :-

This technology is exclusively related to the problem of educational administration and management. Problems

of school administration and management are analyzed and studied scientifically and quantitatively under this technology. This study is based on mathematics. Then solution of these problem is also arrived at by taking the help of quantitative interpretations. Thus, this technology can make educational effective. Procedure of system analysis is given below:

(i) The number of inputs involved in a school system is calculated first. Then, it is interpreted in terms of educational outcomes.

(ii) Some modification in the inputs are made. For example, if in any school teacher students ratio was 1:40 and result of the school was 80%. Now this ratio can be decreased to 1:30 to achieve 100% result in the school.

(iii) The effects of change in output are studied and they are matched with objectives of system analysis.

(iv) The input-output ratio of one school system is compared with that of other school system.

(v) The best alternatives are chosen on the basis of the conclusion drawn.

In recent years science and technology has gained remarkable popularity because of their multi channel avenues of employment. They have also opened new horizon for social and economic status and security.

## Conclusion :-

In this assignment, I had discussed about in what way, technology is related to the curriculum construction.

Thus, we can conclude as another important development in respect of science and technology education is that more emphasis is given on theoretical aspects rather than practical aspects. This is an undesirable trend. A proper balance between experimental and theoretical aspects should be maintained. Subjects like experimental physics and chemistry should be developed..

## Reference :-

(i) Mahanta, Dr. N.N. and Borah, H.N (2019). Foundations of Curriculum Development. Panbazar, Guwahati: Mani Manik Prakash.

(ii) Saikia, Dr. Mukul (2016). An introduction to curriculum Development. Panbazar. Guwahati: Mani Manik Prakash.