UNIT 5: TEACHING STRATEGIES

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5.1 LEARNING OBJECTIVES

After going through this unit, you will be able to:

- explain the meaning and definition of teaching strategies;
- analyse the nature and characteristics of teaching strategies;
- identify different types of teaching strategies;
- examine the models of teaching.

5.2 INTRODUCTION

Teaching is not everybody's cup of tea to take a sip. It is an art and skill to be learnt. It requires the knowledge of subject content, method, techniques and teaching aids to be used for making teaching interesting and effective. The selection to this method and techniques depends on nature of task, learning objectives, learner abilities and students' entering behaviour.

The learning objectives and task analysis provide the basis for effective presentation of effective presentation of teaching. In order to bring desirable change in behaviours of the learner, teacher has to employ the devices, teaching strategies and teaching tactics.

5.3 MEANING OF TEACHING STRATEGIES

The term teaching strategy, in its simple meaning, stands for the type of strategy used by the teacher in carrying out his teaching or instructional work. The word strategy, in its etymological derivation, owes its origin from a Greek word strategia and may be defined as plan and specific ways devised and employed for the realization of a goal. Strategy, as a term is quite in vague in military science and welfare. Here, it stands well for the effective plans, means and ways derived and employed for winning a war. A chess player may also be said to employ for winning his

game. In the same way, a teacher may also need the use of strategies for carrying out his task of teaching as effectively as possible.

Thinking in this way, we may now be in a position to view the term teaching strategy in the following words:

Teaching strategies may stand for the plans, means and specific ways specially devised and employed by the teachers for guiding, directing and showing path to the learners for the realization of the set instructional or teaching-learning objectives.

A similar meaning for the term teaching strategies has also been attributed by the famous writers, E.Stones and S.Morris (1972) in their book Teaching practice: Problems and Perspectives.

They write, "Teaching strategy is a generalized plan for a lesson which includes structure, desired learner behaviour in terms of goals of instruction and an outline of planned tactics necessary to implement the strategy."

5.4 SPECIAL FEATURES AND CHARACTERISTICS OF TEACHING STRATEGIES

Based on the discussion on the meaning of the term teaching strategies, we can draw the following conclusions about the special features, characteristics and nature of teaching strategies:

- Teaching strategy stands for a generalized plan, ways and means for carrying out the task of teaching, i.e. more specifically for teaching a particular lesson.
- Teaching work/lesson is directed towards the realization of the set teaching-learning objectives.
- Teaching strategies is devised and employed to help the learners in the realization of the set teaching-learning objectives.
- Teaching strategy brings out a scheme, some programme or teaching-learning structure, which, if followed, may help in the better realization of the set teaching-learning objectives.
- The strategy requires a number of well-planned tactics for its effective

implementation. In other words, teaching tactics are the essential components of a teaching strategy.



CHECK YOUR PROGRESS

Q 1: Etymologically, the word strategy is derived from the _____ word. (Fill in the blanks)

Q 2: What is teaching strategy?

.....

Q 3: Write three characteristics of teaching strategy.

.....



ACTIVITY 5.1

1. Define teaching strategies in your own words.
2. What type of teaching strategy is followed by your teacher in the classroom teaching learning process? Illustrate few of them.

5.5 DIFFERENT TYPES OF TEACHING STRATEGY

Teaching strategies can be classified under the following two heads:

- Autocratic Style
- Permissive Style

5.5.1 Autocratic Style of Teaching Strategies

The autocratic style of teaching is traditional. These strategies achieve different objectives more than permissive styles of teaching strategies. The autocratic style strategies are content centred and teacher remains more active and students are passive listeners. The autocratic teaching strategies realise cognitive and effective while permissive teaching strategies tend to achieve effective objectives. The main emphasis is on presentation. These strategies

do not consider the student abilities, interests and personality of the learner. There is no freedom for the learner in the teaching process. These are highly subjective and conventional styles of teaching process. These are highly subjective and conventional styles of teaching strategies. A detail description of such strategies have been given here.

5.5.1(i) Lecture Strategy

It is the oldest teaching method given by Idealistic Philosophy. It is still the most important teaching method in our schools. It is one of the autocratic teaching strategies. The lecture is often considered a communication strategy which has the following principles:

- **Principles of teaching:**
  - The content is presented as a whole.
  - The main stress is on presentation.
  - The students learn through listening.
  - The subject-content is correlated with other subjects.
  - The new knowledge is linked with student's previous knowledge.

5.5.1 (ii) Lesson Demonstration

The lesson demonstration strategy is the traditional classroom method which used by teacher-educators during teaching practice. As a technique it is less autocratic than a lecture, but considerably passive than a discussion. It has the following principles:

- **Principles:**
  - The skill may be developed by imitation
  - The perception helps in imitation.
- **Applications:** It is mainly used as teaching strategy for average and below average students or untrained and experienced teacher. The learner's cognitive and psychomotor objective can

be realised. It is more useful for pupil-teachers to develop their own lessons in classroom teaching.

5.5.1 (iii) Tutorials

Tutorial strategy is considered both autocratic and permissive types of teaching. It is generally considered to be one of the most valuable educational experiences. Lecture strategy is followed by tutorials because individual difficulties are not solved in a lecture. Tutorials are highly individualised type of teaching. Following are the principles:

- **Principles:**
  - It considers the individual differences.
  - It establishes class report with the learner.
  - It provides educational guidance.
  - It organizes remedial help to the learner.

5.5.1 (IV) Programmed Instruction

Programmed instruction is a new strategy of teaching. It has revolutionized the process of teaching and learning. It is also known as individualized instruction. Programmed instruction is an autocratic style of teaching strategy. The responses of the learner are controlled by the programmer. The learner does not get freedom to respond, but it provides an opportunity to each learner to pace according to his own capacity and ability. It is based on the following principles:

- **Principles:**
  - Principle of small steps.
  - Principle of active responding.
  - Principle of immediate confirmation
  - Principle of self placing, and
  - Principle of self testing.

5.5.2 Permissive Style of Teaching Strategies

The permissive style of teaching strategies is based on 'modern

theory of organization of task and relationship centre." This style seems less conventional. It is mainly child-centred: content is largely determined by the pupils. The affective objectives are mainly achieved by permissive style strategies. These strategies create situations for students and teacher interaction and both remain active in teaching. Teaching is organised with the consideration of students' interest, abilities and values. These strategies encourage the creativity of the pupils.

5.5.2 (i) Question- Answer Strategy

The Socratic Method is known as question-answer method. It is developed by the famous philosopher Socrates. He assumes that all knowledge is within the learner and teacher has to unfold it. He further assumes that teacher should present the subject-matter in such a way that learner can recognize the truth and he can identify himself with it. It has the following principles:

- **Principles:**
  - Theory of unfoldment: All knowledge is within the learner, teacher cannot teach any new knowledge.
  - The knowledge can be emitted by linking the question with his answer.

5.5.2 (ii) Heuristic

The term 'Heuristics' has been borrowed from the word 'Heurica'. It means I discover or investigate. The purpose of communication is to develop the tendency of investigation. Armstrong is the exponent of this strategy. It is based on the assumption of Herbert Spencer that the learner should be told as little as possible and he should be encouraged to learn himself as much as possible. It has the following principles:

- **Principles:**
  - Developing problem-solving tendency.

- Developing logical and imaginative thinking ability.
- Developing scientific attitude towards the problem.
- Encouraging free thinking for performing the task.

5.5.2 (iii) Project Teaching Strategy

It is a new teaching strategy and it has been evolved as a result of social-tendency of education. The advocates of this opine that education should be related to life situation. It is experience-centred teaching strategy. The exponent of this project method is W.H. Kilpatrick. The main focus of this strategy is to socialize a child. It has the following principles:

- **Principles:**
  - Principle of utility. The problem of study is related with life situation of the learners.
  - Principle of readiness. The learner is active in finding out the solution of the problem.
  - Principle of learning by doing. Learner has to perform certain tasks in project strategy.
  - Principle of freedom to work. The learning situations are realistic.
  - Principle of socialization. It develops the feeling of cooperation and group work.

5.5.2 (IV) Review Strategy

It is more permissive style of teaching strategy. It develops the ability of critical thinking among pupils. The pupils remain more active in this teaching strategy and the teacher provides guidance for reviewing books and references books after introducing the topic to them. Every pupil is assigned to review an independent topic. Sometime one topic is assigned to a group of students. In this strategy the pupil has to perform much library work. In review strategy pupils are very critical about knowledge of a topic gathered from

various sources.

This strategy requires self motivation and involvement in the subject-matter. The pupils should have the patience in searching the topic from available literature and should have the feeling of cooperation to help others in this regard.

5.5.2 (V) Group Discussion

There is no comprehensive definition of group discussion but it is considered a democratic teaching strategy. The pupils are more active in it. Teacher's job is to supervise and to provide guidance for pupils activities. It is child-centred teaching strategy. It may be of two types- (1) By teacher, and (2) By the students.

- By the teacher - This type of discussion is more autocratic in style.
- By the students - In this situation discussion is more permissive or democratic in style. It is based on the following principles:

5.5.2 (VI) Role Playing

It is also termed as simulated social skill training or teaching. It is most useful for training institutions to develop social skills. It is a better strategy than lesson-demonstration, because it provides a situation to the learner to perform the task. It is based on the following principles:

- **Principles:**
  - Learning by doing.
  - Principle of immediate reinforcement.
  - Rehearsal before the actual task.
  - Social skill through group work.

5.5.2 (vii) Assignment

The assignments are also considered as one of the teaching strategy. It is most frequently used by teachers in school for every subject.

This provides the situation for the assimilation of the content. It is based on the psychological learning principles which are:

- **Principles:**
  - Principle of exercise.
  - Principle of interest.
  - Principle of learning by doing.
  - Principle of Individual differences.
  - Principle of assimilation.

5.5.2 (Viii) Discovery

J.S. Bruner has developed this teaching strategy. The discovery and heuristics are used for the same meaning but they are quite different from one another. The discovery strategy is used for teaching social subjects whereas heuristics strategy is meant for science subjects. The heurism is used to provide the objective knowledge of the science concepts whereas discovery is used for the historical facts. There is a scope for direct observation in the heuristics, but discovery provides the factual information about the past events or remains or records. It has the following principles:

- **Principles:**
  - The learner remains active.
  - The student learns with understanding and insight.
  - The organisation of motives and values within the individual is relevant.
  - The principle of assimilation as described as description is followed.
  - There is scope for divergent thinking which leads to inventive solution of the problems.

5.5.2 (ix) Computer Assisted Instruction

In the beginning the computer service have been utilized in administration and industry. But computer has also influenced the

education process. It can be used effectively for imparting more information's and facts to the students according to their abilities.

- **Principles:**
  - The cognitive objectives may be achieved by this teaching strategy.

5.5.2 (X) Brain Storming

It is completely permissive style of teaching strategy. It is based on the assumption that a student can learn better in group rather than in an individual study. It is a problem oriented strategy of teaching which has the following principle:

- **Principles:**
  - The higher order of cognitive objectives and effectives can be achieved.



CHECK YOUR PROGRESS

Q 4: Teaching strategies can be broadly classified under _____ heads. (Fill in the blanks).

Q 5: Write the three types of Autocratic Style of Teaching Strategy

.....

Q 6: Write the three types of Permission Style of Teaching Strategy

.....

5.6 MODELS OF TEACHING

The teaching models or models of teaching are instructional design in a way. These describe the process, of specifying and producing the particular environmental situations which cause pupils to interact in such a way that specific change or modification occurs in their behaviours.

Models of teaching suggest inter-relationships between various conditions of teaching and learning. Usually these models are prototype of

the theories of teaching. These models are the building whereas the theories of teaching are the construction plans.

5.7. MEANING AND DEFINITION OF MODEL OF TEACHING

'A model of teaching is a plan or pattern that can be used to shape curricula or courses of study, to design instructional materials and to guide instruction in the classroom and other setting.'

Classroom teaching is a social, dynamic and complex activity and the problems which a teacher faces in a classroom are also complex, varied and multidimensional in nature. These cannot be resolved by simply studying or knowing the nature of teaching, the variables of teaching and the relationship between teaching and learning. Some psychologists have tried to develop theories of teaching, yet we have not been in a position to evolve any sound theory of teaching so far. Still some thinkers of education have made attempts to develop models of teaching by examining the practical aspects of some of the theories enunciated by instructional psychologists.

These models of teaching consist of guidelines for designing educational activities and environments. These specify ways of teaching and methods of learning are intended to achieve certain kinds of goals. A model includes a rationale, a theory that justifies it and describes what it is good and why. The rationale may be accompanied by empirical evidence that it works in actual classroom situations.

Defining models of Teaching

Regarding models of teaching, some of the definitions are given below:

- Joyce and Weil (1972 p.2), "Teaching models are just instructional designs. They describe the process of specifying and producing particular environmental situation which cause the student to interact in such a way that specific changes occurs in his behaviour."
- Joyce and Weil (1972, p.3), Teaching model is "A pattern or plan, which can be used to shape a curriculum or course, to select

instructional materials and to guide a teacher's actions."

- Weil and Joyce (1978 p.2), "A model of teaching consists of guidelines for designing educational activities and environments. It specifies ways of teaching and learning that are intended to achieve certain kind of goals."
- Paul D.Eggen (1972, p.12) "Models are prescriptive teaching strategies designed to accomplished particular instructional goals."
- N.K.Jangira and Azit Singh (1983, p.10), "A model of teaching is a set of inter-related components arranged in a sequence which provides guidelines to realise specific goal. It helps in designing instructional activities and environmental facilities, carrying out of these activities and realisation of the stipulated objectives."

5.8 SOME SELECTED MODELS OF TEACHING

The teaching models belonging to different families constitute a long list. In a text book of the elementary nature like the present one, it is difficult to incorporate the details of all these models. However, for the sake of illustration we would like to present a summarised description of a few teaching models. We would also make use of the six fundamental components of the model, described earlier for such description.

5.8.1 Concept attainment Model

The Concept Attainment Model of teaching was developed by Jerome S. Bruner, Jacqueline Good row and George Austin in 1956. The model emerged out of the study of thinking process in human beings. It is based on the assertion that environment is full of tremendously diverse things and would have been impossible to adjust in it if human beings had not been endowed with the capacity to discriminate and to categories things in groups. This process of classifying things in groups benefits human being in three ways. First, it reduces the complexity of the environment, second it gives the means by which we identify the objects in the world and third it reduces the necessity

of constant learning.

Bruner and associates devoted their major work to the description of a process by which we discriminate the attributes of things, people and events and place them into categories.

According to Bruner categorizing activity has two components, the act of concept formation and the act of concept attainment. He maintains that concept formation leads to concept attainment. In concept attainment there is only one concept. Using clues supplied by the teacher, students try to determine the identity and definition of that concept. Burner categorises the Concept Model as follows:

- Reception Model of concept attainment.
- Selection Model of concept attainment.
- Unorganised Material Model of concept attainment.

The syntax of these will be:

Syntax of Concept Attainment Model

Phase I- Presentation of Data and Identification of Concept. (Teacher presents labelled examples. Students compare attributes in positive and negative examples. Students generate and test hypothesis. Students state a definition according to the essential attributes.)

Phase II- Testing Attainment of concept (students identify unlabelled examples as yes or no. teachers confirm students hypothesis, names, concept and restates definition according to essential attributes. Students generate examples.)

Phase III- Analysis of Thinking Strategies. (Students describe thoughts. Students discuss role of hypothesis and attributes. Students discuss type and number of hypotheses.)

Syntax

The concept attainment is processed through four phases which are described as follows:

- In the first phase data are presented to the learner. The data may be of any events or people or any other discriminatable

unit. The learner delineats the units of information in various kinds of attributes, the concept or principles or discriminatory concept which is being used on the basis of selection of units.

- In this phase, students test the kinds of concept and their attributes in a variety of materials appropriate to their age and experience. The complexity of developing concepts increases with the age of the learners. Young children may analyse the simple concepts like feeding bottle, cat, dog and family etc. Older children may examine concepts like social status and other more complex. The main purpose of this phase is to increase the knowledge of the nature of concepts and how they are used.
- The phase begins by analysing the thinking strategies to attain the concepts by the student. Some learners start with broad constructs and gradually narrow down the field or become more specific in their statement of the concept.

Social system - In the concept attainment model of teaching, the teacher is the controller of the learning. He presents the data and designates it as belonging or not belonging as an exemplar of concept but the atmosphere in the class is co-operative. The teacher proceeds closely in tune with the learner's intellectual development.

Principles of reaction - During the flow of the lesson, the teacher wants to be supportive of the students' hypothesis about concepts but to emphasise that they are hypothetical in nature and to create a dialog in which the major content is a balancing of one person's hypothesis against another's. in the later phases of the model, students analyse their concepts and strategies.

He should encourage analysis of the merits of various strategies rather than attempt to seek the one best strategy for all people in all situations.

Support system - Concept attainment lesson requires material which has been arranged so that concepts are embedded in the material. The material can be arranged so that positive and negative exemplars are pointed out to the students or so that he may have to

find out the concept relevant material himself as when he analyses a political approach. It should be stressed that the student's job in a concept attainment strategy is not to invent new concepts, but attain the ones that have previously been attained by the teacher or teaching agent. Hence, the data sources need to be known before hand.

Applicability of the model -

- The concept attainment model of teaching is widely used in language teaching. Language learning can be viewed as concept attainment in as much as the society has already devised categories of things and labels for those categories.
- Teaching of grammar or the syntactic structure of every language is done through teaching the concept of that language.
- The fundamentals of mathematics are taught through concept attainment model.
- Concept attainment model of teaching can be used in all disciplines. It can be the basis of extensive man-machine systems in modern teaching-learning process.

5.8.2 Inquiry Training Model

The Inquiry Training Model was developed by J. Richard Suchman for developing scientific inquiry training skills in the pupils. Suchman had a particular system of beliefs, which form the basic philosophy of the present model. His briefs may be summarized as below:

- All knowledge is tentative. A scientist generates a theory or principle. After some time it may be pushed aside by a new one.
- There is no one answer. We can always be more sophisticated in our explanation and most problems are amenable to several equally plausible explanations.
- In a natural process, all of us often inquiry when confronted with a problem or puzzle.
- An individual can be made consciously aware of the process of inquiry and learn to analyse his thinking strategies.

- In addition to what is already known to him, he may be taught the new strategies to enquire and explore things.
- A co-operative efforts helps in the inquiry process. As a result the development of knowledge is always facilitated by help and ideas from colleagues.

Focus. The children are very curious by nature. for satisfying their curiosity, they may be seen to be engaged in enquiry in the inquiry process, exploring and analysing the things or phenomena by themselves. The Inquiry Training Model aims to refine or improve such inquiry skills of the children through a systematic Inquiry training. It provides systematic structure within which the students have to ask questions, organise them to formulate and test hypothesis in the similar way as scholars and scientists do in organising knowledge and generate principles for explaining causation.

Syntax. Inquiry Training model consists of five phases - the initial encounter with problem, the three stages of inquiry (verification, experimentation and explanation) followed by the post mortem process (the analysis of the inquiry). These phases, along with the concerned operations are summarized as below:

Phase One Encounter with the problem

- Explaining inquiry procedures.
- Presentation of the problem or puzzled event.

Phase Two Data Gathering Process (Verification)

- Verifying the nature of objects and conditions.
- Verifying the occurrence of the problem.

Phase Three Data Gathering Process (Experimentation)

- Isolating relevant variables.
- Hypothesizing (and testing) casual relationship.

Phase Fou Formulating and Explanation

- Formulating rules or explanation

Phase Five Analysis of the Inquiry Process

- Analysing inquiry strategy and development more effective ones.

The First Phase: Encounter with the problem

In this phase, the teacher is required to explain inquiry procedure and present the problem situation. The problem situation or the puzzling event should be such that it may provide a discrepancy or appear illogical, quite contrary to the common notion of reality. It may puzzle the students because they do not know the answer. The problem selected may or may not add to knowledge of some or the other subject. However, the emphasis is always on inquiry training as explained by Weil and Joyce in the following words.

"The emphasis in this model is clearly on becoming aware of and mastering the inquiry process, not on the content and explanation of any particular problem situation. Although, the model should also be enormously appealing and effective as a model of acquiring and using information, the teacher cannot be too concerned with subject matter coverage or correctness." (1978, pp. 130-31).

Regarding explanation of inquiry process, the students may be told to observe the following rules.

- They have to phrase such questions as are answerable by a "Yes" or a "No".
- They are not to ask the teacher to explain the phenomenon to them i.e. to give directly the cause or answer of the puzzling event.
- Once a student has been called upon, he will be allowed and persuaded to ask as many questions as he wished to test his hypothesis/hypotheses.
- The students are free to consult work with one another if they wish to do so.
- Any students can test an explanation regarding his hypothesis at any time.
- Students are free to use resource books, experimental kits and other aid material, if they feel the need of doing so.

Phase Two and Three. These phases belong to the data gathering operations of verification and experimentation. In these

operations data are gathered by the students in two ways:

- Be asking questions to be responded by the teacher in "Yes" or "No" form and.
- To conduct a series of experiments on the environment of the problem situation.

The process of verification is carried out in two steps:

- Verifying the nature of objects and events like,
- Identification of the objects.
- State of the objects or systems at a particular time (behaviour of objects under certain conditions) and
- Nature of an action or happening.

This phase requires the teacher to be aware of the type of questions to verify all aspects of the problem and change questions pattern through intervention.

The Experimental phases directed at exploration and direct testing. Here the hypothesis involving plausible explanation are formulated and tested by the students. The teacher has to remain very careful in guiding and directing the student for the rejection of the inappropriate hypothesis and broaden the pupils' inquiry for the appropriate hypothesis.

Phase Four demands from the students

- The extraction of the relevant information from the collected data and
- The formulation of an explanation of the problem or puzzling event as best as possible.

Phase Fifth requires working of the teacher and the students together for analysing one another's strategies. They can evaluate the modes of questioning and responding, the appropriateness of questions, the productivity of the lines of questioning, the information they needed but did not obtain, similarly, the suitability of the formulated hypothesis and its verification etc. may also be properly discussed and evaluated. This analysis attempts to help teachers to modify and improve the inquiry process and equip the students

with appropriate problem-solving skills.

Principles of Reaction.

The particular and unique rules of thumb for responding and reacting to the action of the students in the inquiry training process may be summarized as below (Weil and Joyce: 1978, p.135).

- Insuring that questions are phrased so they can answered by a "Yes" or a "No"
- Asking students to rephrase invalid questions.
- Pointing out invalidated statements - for example, "We have not yet establish that this is liquid."
- Using the language of the inquiry process - for instance, identifying student questions as theories and inviting testing (experimenting).
- Neither approving nor rejecting student theories (hypothesis).
- Pressing students to clearer statements of theories and more support for generalizations.
- Encouraging interaction among students.

Social System

Inquiry Training Model provides high weightage to the controlling of social system. Teacher and students, however participate as equals where exchange of ideas is concerned. At every stage teacher has to respond in such a way that students may be encouraged to initiate and persuade the inquiry as much as possible. Where in the beginning the social system may be arranged as highly structured, it may be relaxed when the students seem to learn the principles of inquiry. The open environment with a possibility of proper teacher-pupil interaction and pupil-pupil interaction surely adds to the success of this model.

Support System

While working with the Inquiry Training Model, a teacher requires additional support in the form of

- A set of confronting materials
- Technical understanding of the intellectual processes and

strategies of inquiry and

- Resource material bearing on the problem.

Application Context

Basically the Inquiry Training Model has been developed to provide training in systematic inquiry. It is not a method of teaching or imparting information. However, it can work well to impart knowledge concerning with subject areas particular in the field of natural sciences. Any event or topic from a curriculum area which can be converted into a problem situation or puzzle can be selected for inquiry training.

5.8.3 Glaser's Basic Teaching Model

John P. De Cecco, in his book "The Psychology of Learning and Instruction", has discussed three psychological models. They are a basic teaching model of Robert Glaser, a computer-based teaching model of Stolurow and Davis and an interaction analysis model of Flanders.

The 'Basic Teaching Model' was evolved by Robert Glaser in 1962 and is called a basic model because it presents a very basic analysis about the process of teaching in terms of the elements which constitute the teaching act.

Components of the Basic Teaching Model:

In this model the entire teaching process is divided into four parts that are given as follows:

- Instructional Objectives
- Entering Behaviour
- Instructional Procedures
- Performance Assessment

In the given diagram, the four main parts or components of the teaching process have depicted through four boxes, named A, B, C and D, with feedback loops for each one of them that indicate an inter-connection between them.

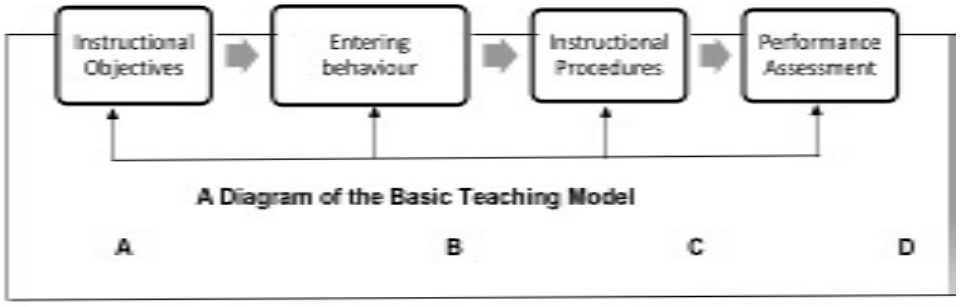


Fig. 5.2: A Diagram of Basic Teaching Model

Brief Explanation of the four Components of the Basic Teaching Model

Implications of the Basic Teaching Model for the Student-Teacher:

The prospective teachers must master the skills of formulating instructional objectives in behavioural terms. They should know how to assess the entering behaviour of their learners so that they may be able to design instruction with reference to the pupils' abilities, interests and academic attainments. They are supposed to be highly dynamic in their approach and the teaching process has to be Instructional Objectives: Instructional objectives are those that a student should attain upon the completion of a segment of instruction. In theory, objectives can vary in scope and character from the mastery of a spelling list to acquisition of complex ideas. These objectives may be stated in general, specific or even behavioural terms. In order to plan instruction systematically objectives are preferably stated in behavioural terms. According to Mager, a statement of instructional objectives stated in behavioural terms has to meet the following criteria:

- Identification of the terminal performance which instruction attempts to produce.
- Description of the important conditions under which the behaviour is expected to occur.
- Description of how good a student's performance must be to be acceptable.

By using Mager's criteria, we can prepare a useful statement

of the instructional objectives pertaining to a particular topic of learning according to the basic teaching model.

Entering Behaviour: Entering behaviour describes the pupil's level before instruction begins. It refers to what he has previously learned, his intellectual ability and development, his motivational state and certain social and cultural determinants of his learning ability. Stated simply, entering behaviour describes the present status of the student's knowledge and skill in reference to the future status that the teacher wants him to attain. Entering behaviour is, therefore, that from which instruction must always begin. Terminal behaviour is that from which instruction must always begin. Terminal behaviour is that from which instruction concludes. We can describe teaching as getting the student from where he is to where we would like him to be as moving before entering terminal behaviour.

Although this model gives priority to the selection of instructional objectives over the assessment of entering behaviour, in practice these two components must interact.

Instructional Procedures: Instructional procedures describe the teaching process in terms of the instructions the teacher makes on these procedures. Proper management of this component results in the changes in student behaviour which we call learning or achievement. Procedures must vary with the teaching of concepts, information, rules, principles, skills and problem-solving abilities which the instructors adopt according to the nature of subject-matter and entering behaviour of the learners for the attainment of behaviourally stated instructional objectives.

Performance Assessment: Performance assessment consists of tests and observation to determine how well the student has achieved the instructional objectives. If performance assessment indicates that the student has fallen short of mastery or some lesser standard of achievement, one or all the preceding components of the basic teaching model may require re-adjustment.

The feedback loops on the given diagram show how the information provided by performance assessment is fed back to each component.

Critical comments:

The basic teaching models explains almost all the important components of a sound instructional design and lay stress on goal-directed teaching as it lays stress on instructional objectives indicating terminal behaviours to be attained by the learners.

The model also, highlights the linking of instruction with already acquired behaviour of the students in terms of entering performance assessment. The model lays stress on carefully planned instructional strategies selected to match the entering behaviour and instructional objectives stated in operational terms. Thus, the emphasis in the model is on perfecting instructional procedures.

The model implies a greater emphasis on teacher competence than on his personal charisma without, of course, objecting to a useful combination of the two. Therefore, the personality of a teacher is not given undue importance in this model. There is inbuilt flexibility in the model. If the pupils are unable to attain the stipulated instructional objectives after having attended the instruction, according to this model, revision of teaching is permissible. We can adjust, and readjust all the processes of the four boxes inorder to ensure hundred percent mastery on the part of the pupils.

Constantly readjusted in the basis of the evidence available in terms of performance assessment. The teaching act in this model is not an 'influence-directed act' rather it is 'goal-directed act' capable of being modified as and when felt necessary.

Teachers are also supposed to be experts in the area of test construction. As performance assessment is an important component of this model, teachers are expected to develop to variety of assessment tools such as quiz tests, objective-type tests, short-

answer type tests and criterion-referred tests.



CHECK YOUR PROGRESS

Q 7: The Concept Attainment Model of teaching was developed by _____. (Fill in the blanks)

Q 8: What is Concept Attainment Model?

.....

Q 9: Write one applicability of Concept Attainment Model

.....

Q 10: The Inquiry Training Model was developed by _____. (Fill in the blanks)

Q 11: Who wrote the book "The Psychology of Learning and Instruction"?

.....

Q 12: The 'Basic Teaching Model' was evolved by _____ (Fill in the blanks)

.....

Q 13: Write the components of basic teaching model

.....



5.8 LET US SUM UP

- Teaching strategy is a generalised plan for a lesson which includes structure, desired learner behaviour in terms of goals of instructions and an outline of planned tactics necessary to implement the strategy. The lesson strategy is a part of a larger development scheme of the curriculum. teaching strategy involves two aspects : (i). a generalised plan for the presentation of lesson, (ii) A desired learning-behaviour in terms of goals instruction.
- Teaching strategies can be classified into two types:
  (i) Autocratic style and (ii) Permissive Style.
- Autocratic style consists of Lecture, Lesson, Demonstration, Tutorials and programmed Learning.

- Permissive style consists of question-answer heuristic, project, review, group discussion, Role-playing, assignment, Discovery, Computer Assisted Instruction, Brain storming Independent study, leaderless group and sensitivity training.
- Models of Training have been developed to help a teacher to improve his capacity to reach more children and create a wider and more diverse environment for them.
- All the models of teaching have some common identifiable characteristics which are: scientific procedure, specification of learning outcome, specification of environment, criterion of performance and specification of operations. The functions of model of teaching are: (i). Guidance, (ii). Developing curriculum, (iii) Specification of instructional material, (IV). Improvement in teaching.
- Elements of a model: (i). Focus, (ii) syntax, (iii) Principle of Reaction, (iv). Social System, (v). Support System.



5.9 FURTHER READING

1) Aggarwal, J.C. 2009. Essentials of Educational Technology. New Delhi: Vikas Publishing House
2) Kochhar, S.K.1985.Methods and Techniques of Teaching. New Delhi: Sterling Publishers
3) Mangal, S.K. 2001. Foundation of Educational Technology. Ludhiana: Tendon Publications.
4) Sampath, K., A. Panneerselvam, S. Santhanam. 2007 Introduction to Educational Technology. New Delhi: Sterling Publishers.
5) Sharma, K.K. 2007. Educational Technology .Delhi: Mahaveer and Sons Publishers and Distributors.
6) Sharma, R.A. 2002. Technology of Teaching. Meerut: International Publishing House.



5.10 ANSWER TO CHECK YOUR PROGRESS

Ans to Q No 1: Greek

Ans to Q No 2: Teaching strategies may stand for the plans, means and specific ways specially devised and employed by the teachers for guiding, directing and showing path to the learners for the realization of the set instructional or teaching-learning objectives.

Ans to Q No 3: Three characteristics of teaching strategies are as follows:

- Teaching strategy stands for a generalized plan, ways and means for carrying out the task of teaching, i.e. more specifically for teaching a particular lesson.
- Teaching work/lesson is directed towards the realization of the set teaching-learning objectives.
- Teaching strategies is devised and employed to help the learners in the realization of the set teaching-learning objectives.

Ans to Q No 4: Two

Ans to Q No 5: Three types of autocratic style of teaching strategy are as follows:

- Lecture Strategy,
- Lesson Demonstration and
- Tutorial

Ans to Q No 6: Three types of permissive style of teaching strategy are as follows:

- Question-Answer Strategy,
- Project Teaching Strategy and
- Review strategy

Ans to Q No 7: Jerome S. Bruner, Jacqueline Goodrow and George Austin in 1956.

Ans to Q No 8: The model emerged out of the study of thinking process in human beings. It is based on the assertion that environment is full of tremendously diverse things and would have been impossible to adjust in it if human beings had not been endowed with the capacity to discriminate and to categories things in groups. This process of classifying things in groups benefits human being in three ways. First, it reduces the complexity of the environment, second it gives the means by which we identify the objects in the world and third it reduces the

necessity of constant learning.

Ans to Q No 9: One applicability of concept attainment model are as follows:

The concept attainment model of teaching is widely used in language teaching. Language learning can be viewed as concept attainment in as much as the society has already devised categories of things and labels for those categories.

Ans to Q No 10: J. Richard Suchman

Ans to Q No 11: John P. De Cecco

Ans to Q No 12: Robert Glaser in 1962

Ans to Q No 13:

- Instructional Objectives
- Entering Behaviour
- Instructional Procedures
- Performance Assessment



5.11 POSSIBLE QUESTIONS

Short Questions (Answer each question in around 150 words).

Q 1: What are the special features of teaching strategies?

Q 2: What do you mean by Autocratic Style of Teaching Strategy?

Q 3: Mention some important principle of Lecture Strategy.

Q 4: Write a note on tutorial method of teaching.

Q 5: What are the advantages and disadvantages of programme instruction?

Q 6: What do you mean by Computer Assisted Instruction (CAI)?

Q 7: What are the main functions of model of teaching?

Long Questions. (Answer each question in around 300-500 words)

Q 1: What is teaching strategy? Explain the different types of teaching strategy.

Q 2: Define teaching model. Write the characteristics of model of teaching.

Q 3: Discuss the various elements of concept attainment model with its classroom implications.

Q 4: Explain the inquiry training model. Discuss its various elements with classroom implications.

Q 5: What is meant by permissive style of teaching? Discuss its different types.

Q 6: Explain the components of a teaching model.

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