

Module – 2

Unit – 3

MODELS OF TEACHING

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Module – 2

Unit – 3
MODELS OF TEACHING

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7/8.2.3.1 : INTRODUCTION

Teaching involves a system as well as family of activities or acts. Teaching is goal-oriented as well influence-oriental family of activities. The most-explicit goal of teaching is causing as well as facilitating student learning. Up till now no systematic theory of teaching independent of cogent learning theories, have been evolved and applied in classroom practices or in distance learning system. Therefore, keeping in mind quality and quantity of student learning, same experts have thought to develop model of teaching (theory in evolving stage or loose theory) from different theories of learning. As because there are numerous theories of learning, models of teaching are also many, not one.

Our experience tell that if teachers understand clearly models of teaching and use them in their professional activities of teaching, then professionalism will be improved. And ultimately a teacher will be enable to evolve his / her own model of teaching. In this way out community will get creative teachers.

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In this Unit we shall learn some essential features of some popular models of teaching that can be applied in our learning-teaching situations.

7/8.2.3.2 : OBJECTIVES

You will be able to :

1. Understand main characteristics and fundamental elements of some models of teaching.
2. Elaborate your conceptions about some of modern teaching models.
3. Critically discuss Basic Teaching model, Advance Organizer model, or Concept Attainment Model.

7/8.2.3.3 : DEFINITION AND CHARACTERISTICS OF MODELS OF TEACHING

DEFINITION

There are many definitions of 'Model of Teaching'. We shall concentrate our view on model of teaching with the definition given by Bruce Joyce and Martha Weil.

“A model of teaching is a plan or program that can be used to shape curriculum (long-term courses of students), to design instructional materials and to guide instruction in the classroom and other settings”. It tells us how to systematically create learning environment”.

A model of teaching consists of guidelines for designing learning environment.

Characteristics

All good and systematic models of teaching have some common identifiable characteristics which are described as follows :

- 1) **Scientific Procedure** : A model of teaching is not a haphazard combination of facts but on the hand it is a systematic procedure to modify the behavior of learners. They are based on certain assumptions as well as grounded on specific theories of learning.
- 2) **Specification of learning outcome** : All models of teaching specify the learning outcomes in details in observable student's performance. What the student will perform, after completing an instructional sequence, is specified in detail.
- 3) **Specification of environment** : This means that every model of teaching specifies in definite terms the learning environmental conditions under which a students will learn and modify their behaviours as focused in the model.
- 4) **Criterion of performance** : A model specifies the criteria of acceptable performance which is expected from the students. The model of teaching delineates the behavioral outcomes which the learner would demonstrate after completing specific instructional sequences.

- 5) Specification of operations :** All models of teaching specify mechanism that provide for students reaction and interaction with the environment of learning that is assumed to create with the interplay of the tasks indicated in the model.
- 6) Assumptions :** Each model of teaching has certain basic assumptions which are kept in mind while a model of teaching to be developed. The assumptions pertain to at least three elements or aspects – (a) creation of appropriate learning environment, (b) occurrence of the nature and quality of interaction between the learners and teacher, and (c) using appropriate teaching strategies.
- 7) Answer to some Fundamental Question :** A model of teaching provides answer to all the fundamental questions :
- (a) How does a teacher behaves ? (b) Why he / she does like this ? (c) What would be effects of his / her such behaviour on the learners ?
- 8) Based on Individual Differences :** A model of teaching follow or age old maxims of teaching of teaching what have been accumulated by our long experiences in teaching.
- 9) Presenting Appropriate Experiences :** A model of teaching provides some kind of experiences to both the learners and the teacher. These experiences are not based on rule of thumb, rather on the basic of some valuable data, theory or even philosophy.
- 10) Maxims of Teaching Driven :** All models of teaching follow our age old maxims of teaching what have been accumulated by our experience in teaching.
- 11) Development of Human Ability :** All models are humanist in nature as well as in orientation. They are developed and used for the development of human ability and capability. All consider that teaching is a system of human acts for the purpose of development of human capacity of others, called learners, in the best economic and efficient manner.
- 12) Influenced by Philosophy :** Each model of teaching is influenced by some kind of philosophy of real life. That is reflected in the edifice of curriculum.

7/8.2.3.4 : FUNCTIONS OF A MODEL OF TEACHING

The basic question which may be asked by a reader here, why should we develop a model of teaching and what are its specific function or how does a model help the practicing teacher in class room teaching-learning process ?

The pertinent answers may be many. Some of these are :

- 1. Guidance :** A model of teaching serves a useful purpose of providing in definite terms what the teacher has to do. He has a comprehensive design of instruction through which he / she can achieve the objectives of the course. Teaching is a scientific, controlled and goal-directed activity. Thus a model of teaching provides guidance to the teacher as well as to the students to attain the goal of instruction.
- 2. Developing Curriculum :** A model of teaching helps in the developing of curriculum for different for different courses at different level of education which is functionally transacted by the teacher.
- 3. Specification instrumental material :** A model of teaching specifies in detail the different types of instructional materials which are to be used by the teacher to bring desirable changes in the personality of the learners.
- 4. Improvement in teaching :** A model helps improving the teaching-learning process in systematic and scientific manners and ultimately helps developing. Other functions are more specific in nature. Model of teaching (i) gives practical shape to the systems of teaching acts, (ii) determines criterion behaviour so that performance of the learners could be observed, assessed and evaluates for taking further decisions, (iii) helps modify teaching strategies for teachers more scientifically and (iv) helps modify teacher behaviours through teacher development programmes.

7/8.2.3.5 : ELEMENTS OF A MODEL OF TEACHING

A model of Teaching generally consists of the following elements :

1. A Focus

2. A Syntax
3. A Social system.
4. A Support system.

However a model of teaching has two other elements : principles of reactions, and instructional and nurturance effects.

Let us now understand meanings of these elements of models of teaching.

1. Focus –

A focus of a system refers to the frame of reference around which the model is developed. It is the main thesis which determines combinations and relationship of various processes, conditions and factors built into the model. Objectives of and aspects of the environment, generally, constitute the focus of most of the models of teaching. Focus is the central aspect of a teaching model. Focus of a model of teaching gives explicit goal of a model.

2. Syntax –

The syntax or phasing of the model, refers to the description of the model in action, i.e., the kind of activities which are organized at well-defined stages of the whole programme typifying the educational environment belonging to each model. It is the sequence of steps of activities involved in the organization of the complete programme of teaching.

3. Social System –

The social system refers to two elements – roles of students and teacher, particularly, the hierarchical relationship or authority relationship, and norms or the student behavior which is rewarded. Social system is an important element of every model. Specific learnings are very much controlled by the kinds of relationship that are structured during the process of teaching. Models of teaching prescribe system for teaching of attitudes, skills and understandings, etc. It describes the structure of the learning environment, or to what extent the instruction will be teacher-centric or learner-centric.

4. Support System –

Another important aspect of a model is the support system which describes the facilities will be ensured to teacher and the students, and implement the strategy of teaching. For example, if we want to implement individualization, we have to provide a number of audio visual aids, teaching machines, programmed text etc., to cater to the needs of individual learner. Support system refers to the additional requirements of the model beyond the usual human skills and capacities and technical facilities necessary for creating appropriate learning environment as suggested in the focus and syntax of the particular model of teaching.

5. Principles of Reaction –

Principles of reactions conveys to the teacher how to regard the learner and how to respond to what the learner does. In some model of teaching the teacher overtly attempts to shape behaviour by rewarding certain student activities and maintaining a neutral stance towards others. On the contrary, in other models such as those designed to develop creativity the teacher tries to maintain a nonevaluative, equal stance so that the learner becomes self-directing.

6. Instructional and Nurturant Effects –

The effects may be either explicit or implicit. The effects of an environment developed by the model of teaching in action can be direct-designed to come from the content and skills on which the activities are based. Or effects can be implicit in the learning environment. For example, a model that emphasizes academic discipline can also (but need not) emphasize obedience to authority. In this example, the first kind of effects are called instructional effects and the second nurturant effects. The instructional effects are those directly achieved by leading the learner in certain directions. While the nurturant effects come from experiencing the environment created by the model of teaching. We must choose those models of teaching that have high probability to get instructional effects with substantial room for getting nurturant effects too.

7/8.2.3.6 : ASSUMPTIONS OF MODEL OF TEACHING

Models of teaching have been evolved on the following assumptions :

1. The first assumptions underlying all models of teaching is that teaching is the creation of appropriate environment. There are various component parts of the teaching environment which are interdependent.
2. The second assumption is that content, skill, instructional roles, social relationship, types of activities, physical facilities and their use, all form an environmental system whose parts interact with each other to constitute the behavior of all participants, teachers as well as students.
3. The third assumption is that different combinations of these elements create different types of environment and elicit different outcomes.
4. The fourth and the last assumption is that models of teaching create environment. They provide rough specification for environment in the class room teaching learning process.

7/8.2.3.7 : FAMILIES OF MODELS OF TEACHING

Expert, particularly Joyce and Weil, conducted search for useful models of teaching. They observed that models of teaching are based on practice, empirical work, theories, hunches and on speculations of several teachers, researchers and practitioners, they eventually developed some families of models of teaching.

Model of teaching have been grouped into four families on the basis of their sources. These represent distinct orientations towards people and how they learn. The families are described as follows :

1. The information processing models :

The information processing capability of the learner is the main orientation to this family of models of teaching. Information processing means the way in which people handle stimuli, organize data, sense problems and solve them. Some models of teaching of this family are concerned with the ability of the learner to solve problems, and thus emphasize productive thinking, other are concerned with

general intellectual skills. Again some models of this category develop creativity, and general intellectual ability of the learner. They emphasize the use of specific strategies within or outside academic disciplines.

2. Personal models :

This family of models of teaching share orientation towards the individual person. These models emphasize the processes by which the individual constructs and organizes his unique reality. Personal and emotional life of the individual and their internal organization as it affects relationship with his environment, are the main orientation of this family of models of teaching. The focus is on helping individuals to develop a productive relationship with their environments and to view themselves as capable persons is expected to result in richer interpersonal relations and a more effective information processing capability.

3. The social interaction models :

The models of this family emphasize the importance of social relationship of the person and his instructional urge to relate himself with others in the society. This type of model increases democratic processes in the society. All models of family category are based on the assumption that social relation is the vehicle of education.

4. Behavior modification as a source :

The models in this family share a common theoretical base, a body of knowledge, we popularly refer to as behaviour theory. This family of models of teaching addresses to more than one concepts like learning theory, social learning theory, behaviour modification, and behaviour therapy. The commonality in these concepts is an emphasis on changing the visible behaviour of the learner rather than the underlying structure and the unobservable behaviour. These modes are widely applicable in addressing a variety of goals in education, training, interpersonal behaviour and therapy. They also include models for teaching facts, concepts, and skills as well as models for reduction of anxiety and for relaxation.

Let us Check Our Progress

1. What is the pedagogical importance of models of teaching ?
2. Do the models of teaching imply theories of teaching ? Explain.

7/8.2.3.8 : MODELS OF TEACHING IN EACH FAMILY

We are now describing in brief the models of teaching under each of the four families of model.

1. Information Processing Models :

MODEL	MAJOR THEORIST	MISSIONS OR GOALS WHICH INTENDED
Inductive Thinking Inquiry Training	Hilda Taba Richard Suchman	Designed primarily for development of inductive mental processes and academic reasoning of theory building, but these capacities are useful for personal and social goal as well.
Scientific Inquiry	Joseph J. Schwab (also much of the Curriculum Reforms Movement of the 1960s)	Designed to teach the research system of a discipline, but also expected to have effects in other domains (sociological methods may be taught in order to solving social problem solving)
Concept Attainment	Jerome Bruner	Designed primarily to develop inductive reasoning but also for concept development and analysis.
Cognitive Growth	Jean Piaget, Irving Sigel, Edmund Sullivan Lawrence Kohlberg	Designed to increase general (intellectual development especially logical reasoning, but can be applied to social and moral development as well) (see Kohlberg 1966).

MODEL	MAJOR THEORIST	MISSIONS OR GOALS WHICH INTENDED
Advance Organiser Model	David Ausubel	Designed to increase efficiency of information processing capacities to meaningfully, absorb and relate bodies of knowledge.
Memory	Jerry Lucas Harry Lorayne	Designed to increase capacity To memorize

2. Personal Models :

MODEL	MAJOR THEORIST	MISSIONS OR GOALS WHICH INTENDED
Non-directive Teaching	Carl Rogers	Emphasis on building the capacity for personal development in terms of self-awareness understanding autonomy and self-concept.
Awareness Training	Fritz Perls William Schultz	Increasing one's capacity for self-exploration and self-awareness. Much emphasis on development of inter-personal awareness and understanding, as well as body and sensory awareness.
Synetics	William Gordon	Personal development of creativity and creative problem solving
Conceptual Systems	David Hunt	Designed to increase personal complexity and flexibility.
Classroom Meeting (Social Problem Solving)	William Glasser	Development of self-understanding and responsibility to oneself and one's social group.

3. Social Instruction Models :

MODEL	MAJOR THEORIST	MISSIONS OR GOALS WHICH INTENDED
Group Investigation	Herbert Thelen John Dewey	Development of skills for participation in democratic social process through combined emphasis on interpersonal (group) skills and academic inquiry skills. Aspects of personal development are important outgrowths of this model.
Social Inquiry	Byren Massialas Benjamin Cox	Social problem-solving, primarily through academic inquiry and logical reasoning
Laboratory Method	National Training Laboratory (NIL) Bethel Maine	Development of inter personal and group skills and through this personal awareness and flexibility.
Jurisprudential	Donald Olive James P. Shaver	Designed primarily to teach the jurisprudential frame of reference as away of thinking about and resolving social issues.
Role Playing	Famine Shafted George Shafted	Design to induce students to inquire into personal and social values, with their own behavior and values becoming the source of their inquiry.
Social Simulation	Sarene Boocock Harold Guetzkow	Designed to help students experience various social processes and realities and to examine their own reactions to them, also to acquire concepts and decision making skills.

4. Behaviour Modification :

MODEL	MAJOR THEORIST	MISSIONS OR GOALS WHICH INTENDED
Programmed Instruction (Contingency Management)	B. F. Skinner	Facts, concepts, skills
Managing Behavior (Self-control)	B. F. Skinner	Social behavior / skills
Anxiety / Stress Reduction	Rimm, Wolpe	Substitution of relaxation for anxiety in social situations.
Relaxation	Rimm and Masters Wolpe	Personal goals (for example, reduction of stress anxiety) in social situation
Assertive Training	Wolpe Lazarus Salter	Spontaneous expression of feeling in social situation
Simulation	Link, Guestzkow Glass	Concept and decision making skills in social situation
Direct Training	Smith and Smith Lumsdaine Gagné	Pattern of behavior, skills

7/8.2.3.9 : CONCEPT ATTAINMENT MODEL OF TEACHING

This belongs to Information Processing Family of Teaching Models.

The Concept Attainment Model was developed from the work of Jerome Bruner, Goodnow, and Austin. Their work, 'A Study of Thinking' culminated many years of research into the process by which people acquired concepts.

This model helps students to attain new concepts. Three concept Attainment models have been evolved :

1. Concept attainment under reception condition.

2. Concept attainment game under selection condition.
3. Analysis of concepts in unorganized data.

The first is more direct in teaching students the elements of a concept and their use in concept attainment. The second permits students to apply this awareness of conceptual activity more actively by using their own initiation and control. The Third variation of this model transfers concept theory and attainment activity to real life setting using unorganised data.

The educational objectives of the Concept Attainment Model are :

- 1) To acquire a new concept.
- 2) To enrich and clarify known concepts.
- 3) To develop an awareness of thinking strategies.
- 4) To understand the nature of conceptual activity, the specific behavioral objectives of the model are :
 - a) The pupil correctly recognizes examples.
 - b) The pupil generates new examples.
 - c) The pupil locates examples in books.
 - d) The pupil states the attributes of concepts.

These are the strategies followed in concept attainment. These strategies are : Reception and Selection. The phases of specific syntax of these are given in the following paragraphs.

Syntax of the Selection Model :

Phase 1 : Presentation of Data Identification of Attributes of Concept

- Teacher presents unlabeled examples.
- Students inquire which examples are positive ones.
- Students generate and test hypotheses.

Phase 2 : Testing Attainment of the Concept

- Students identify additional unlabelled examples.
- Students generate examples.
- Teacher confirms hypothesis, names concept and relates definition according to essential attribute.

Phase 3 : Analysis of Testing Strategy

- Students describe thoughts.
- Students discuss type and number of hypotheses.
- Students discuss type and number of hypotheses.

Syntax of Reception Model :**Phase 1 : Presentation of Data and Identification of Concept.**

- Teacher presents labeled examples (both positive and negative).
- Students compare the attributes, in positive, and negative attributes.
- Students generate and test hypotheses.
- Students name the concept.
- Students state a definition.

Phase 2 : Testing Attainment of the Concept.

- Student of identify additional unlabeled examples as yes or no.
- Teacher confirms hypothesis, names concept and relate definition according to essential attributes.
- The pupils generate examples.

Phase 3 : Analysis of Thinking Strategies

- Students discuss thoughts.
- Students discuss the role of the hypotheses and attribute.
- Students discuss the type and the number of hypotheses.
- Students evaluate strategies.

Principles of Reactions :

During the initial stage of the lesson the teacher should support the students hypotheses-emphasizing, however, that they are hypothetical in nature and to create dialogue in which students test their hypothesis. Later, he / she needs to turn the students attention towards analysis of their concepts and their thinking strategies. The teacher should encourage analysis of the merits of various strategies rather than attempting to seek the one best strategy for all people in all situations.

Social System :

While using the reception model of concept attainment the teacher selects the concepts, selects and organizes, and labels the material into positive and negative examples and sequences the examples. The pupils are required to study the attributes of positive and negative examples and frame hypotheses. The teacher supplies additional examples and frame hypotheses. The teacher supplies additional examples, when needed. The Three major functions of the teacher during reception oriented concept attainment activity are to record, prompt (cue), and present additional data, both examples and non-examples.

When using the selection model of the concept attainment model the teacher presents unlabelled examples and he / she has no control over the sequence of the examples chosen by the pupils. Further, the pupils have to frame a hypotheses regarding the concept and then select an example and ask the teacher whether it is a 'Yes' or 'No'.

The Support System : Concept attainment lesson require material that has been designed so that concepts are embedded in the material with positive and negative examples. The material must be organized so that positive and negative examples are pointed out to the student. It is instructive to note that the students' job in a concept attainment strategy is not to invent new concepts, but to attain the ones that have previously been selected by the teacher. Hence the data sources need to be known beforehand.

Critical Features : The Critical features of concept attainment model of teaching may be summed up as :

- The model emphasises an analytic role of the teacher in all the four components of the model.
- The concept attainment lessons use concept embedded material.
- The job of the student in concept attainment strategy is not to invent new concepts but to learn the ones have been previously bee attained.
- In the beginning stage the teacher using this strategy has to b supportive of the student's hypothesis about the concepts.
- The concept attainment model can be adopted to the entire curriculum in various discipline and it can be the basis for extensive man-machine systems.

Limitations :

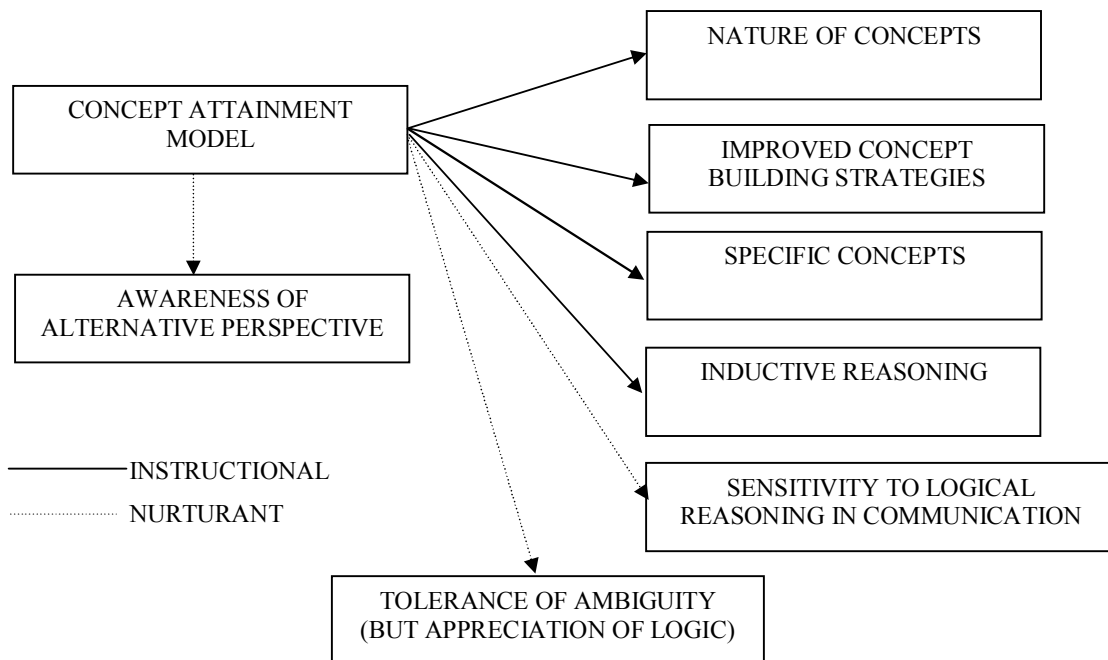
The concept attainment model ignores the 'social interaction' matrix of the classroom situation. It decries expository teaching.

Implications for Teachers :

The concept attainment model has a great relevance for teachers who intend to improve the instructional systems. This model has special implications for teachers of languages, mathematics, sciences and some of the social sciences. This model guides teachers to go to the depth of the content to be imparted for exploring various exemplars and non examples.

Instructional and Nurturant Effects :

The concept attainment models are designed for instruction on specific concepts and on the nature of the concepts. They also provide practice in inductive reasoning and opportunities for altering and improving students concept building strategies. Especially with abstract concepts, the strategies sensitivity to logical reasoning in communication, and to tolerance of nurture an awareness of alternative perspectives, a ambiguity. These have been shown in the Figure.



Instructional and Nurturant Effects of Concept Attainment Model

Application of the Model : The concepts attainment model of teaching can be used extensively in language teaching. Teaching of grammar is done through this model.

Bruner's strategies of concepts teaching can be applied profitably in the teaching of science. The use of discovery and inquiry techniques in teaching science provides the pupils with experience quite similar to tasks used by Bruner. For example, if we want the students to invent their own system of clarification of plants and animals, they can do it by identifying the attributes and putting the plants or animals with common attributes in one groups.

The concept attainment model can be made the basis of extensive man-machine systems in modern teaching-learning process.

Merits :

1. It is a natural way of teaching and learning.
2. It is helpful in developing the power of imagination of the students.
3. It helps in the development of reasoning power of the students.
4. It helps students to analyze things systematically.
5. It helps students actively engaged in the classroom activity.
6. It helps in making the students good observers.
7. It encourages the habit of self study in the students.
8. It helps the learners to apply their knowledge in different situations.
9. It helps the students busy in the classroom work.

Let Us Check Our Progress :

1. State the phases of the concept attainment models.
2. What are the merits of concept attainment model of teaching in teacher education ?

7/8.2.3.10 : ADVANCE ORGANIZER MODEL

The model of Advance Organizer was developed by David Ausubel. It responds to an almost purely information processing theory for meaningful verbal learning. This model is based upon Ausubel's ideas about subject matter, cognitive structure, active reception learning and advance organizer.

According to Ausubel, each discipline has a structure of concepts which form the basis of information processing system of the discipline. He believes that each discipline consists of sets of concepts which are hierarchically organized. The concepts are organized from the simple perceptual to very abstract at the top. All these concepts are linked with each other. Each discipline has its own unique set of concepts.

Ausubel like Bruner believes that the structural concepts of each discipline can be identified and taught to the student and they then become an information processing system for him. An intellectual map which can be used to analyze particular domain and to solve problems within those domains of activities.

According to him, the main task of the school is to identify the stable and organized bodies of knowledge within the discipline. The most important kind of learning which the school can foster is the acquisition of these bodies. The teacher should transmit these stable bodies of knowledge in such a way that the learner will incorporate them meaningfully into his own system and they become his own and function for him.

The heart of this system is meaningful verbal learning. The main idea of meaningfulness refers to connecting the new learning materials with existing ideas in the learner's cognitive structure. That is we must relate and reconcile what we know with what we are learning. In that case learning is not rote learning. And the learner is not passive, rather active.

Syntax : The Advance Organizer Model has three phases of activity. Phase one is the presentation of the advance organizer, phase two is the presentation of the learning task or learning material, and phase three is the strengthening of cognitive organization. Phase three tests the relationship of the learning material to existing ideas to bring about an active learning processes.

The activities are designed to increase the clarity and stability of new learning material so that fewer ideas are lost, confused with one another, or left vague. The students should operate on the material as they receive it by relating the new learning material to personal experience and to their existing cognitive structure, and by taking

a critical stance toward knowledge.

Phase one consists of three activities : Clarifying the aims of the lesson, presenting the advance organizer, and prompting awareness of relevant knowledge.

Some important clarifications are needed to understand activities in phase one. The organizer is not just a brief, simple presentation, it is an idea in itself. The actual organizer is built around the major concepts and / or propositions of a discipline or area of study. The organizer has to be constructed so that the learner can perceive it for what it is an idea distinct from and more inclusive than the material in the learning task itself. The organizer must be at a highest level of abstraction and generality than the learning material itself.

In **phase two** lectures, discussion films, experiments or reading may provide the learning material which is preceded in the first phase by the advance organizer. Two procedures are there – seeking and maintaining students attention, and making the organization of learning material explicit / clear to the students so that they have an overall sense of direction.

The purpose of **phase three** is to anchor (connect) the new learning material in the students existing cognitive structure. This is performed through the execution of four activities –

(1) promoting integrative reconciliation, (2) promoting active reception learning, (3) eliciting a principle approach to subject matter, and (4) clarification.

Reconciliation is important in this model : There are several ways to facilitate reconciliation of the new material with the existing cognitive structure. The teacher can : (1) remind students of the ideas (larger picture); (2) ask for a summary of the major attributes of the new learning material; (3) repeat precise definitions; (4) ask for differences between aspects of the material, and (5) ask students to describe how the learning material supports the concept or proposition that is being used as a subsumer.

Moreover, active learning can be promoted by : (1) asking questions to describe how the new material relates to a single aspect of their existing knowledge ; (2) asking students for additional examples of the concepts or propositions in the learning material; (3) asking students to verbalize the essence of the material, using their own terminology and frame of reference; (4) asking students to examine the

material from alternative points of view; and (5) relating material to contradictory material, experience or knowledge.

Finally, the teacher must translate the new material into a frame of reference that has personal meaning for the student.

Social System : The social system of this model is highly structured. The teacher is in fact the initiator and controller of norms. But beyond the presentation of the organizer, the learning situation can become a less structured. The teacher and the students can be very interactive. The teacher retains the control of the intellectual structure. It is necessary because he relates the learning material from previous material. This system provides help students differentiate new material from previously learnt material.

Principles of Reaction : The teacher or the instructional material is the controller in the situations. The teacher may point out the relationship between the organizer and the instructional material that is presented.

The control is selected for the learner and the teacher should encourage discussion around the material.

The teacher's solicited or unsolicited responses to the learner's reactions will be guided by the purpose of clarifying the meaning of the new learning material, differentiating it from it and reconciling it with existing knowledge, making it personally relevant to the student.

Support System : Well organized material is critical support. The advance organizer depends on an integral relationship between the conceptual organizer and rest of the content. It may be that it works best as a paradigm around which to build instructional materials so that the time can be taken to ensure complete relevance of content and organizer. However, the model was designed for use in face to face teaching and can be if the time is given to prepare lectures or other types of material carefully, useful in daily teaching.

Applicability of the Model :

1. The model, originally, was designed for use with verbal material but it can be applied to any material which can be organized intellectually.

2. It can be used to analyze materials in text books and other instructional materials.

Syntax of the Advance Organizer Model :

Phase One :

Presentation of Advance Organizer

- Clarify aims of the lesson.
- Present organizer.
- Identify defining attributes
- Give examples
- Provide context
- Prompt awareness of learner's relevant knowledge and experience.

Phase Two :

Presentation of Learning Task or Material

- Present material.
- Maintain attention.
- Make organization explicit.
- Make logical order of learning material explicit

Phase Three :

Strengthening Cognitive Organization

- Use principles of integrative reconciliation.
- Promote active reception learning.
- Elicit critical approach to subject matter clarity.
- Clarity.

Instructional and Nurturant Effects : Ausubel has not given any nurturant effects of this model. However, an interest in inquiry and precise habits of thinking are likely effects as shown in Fig.

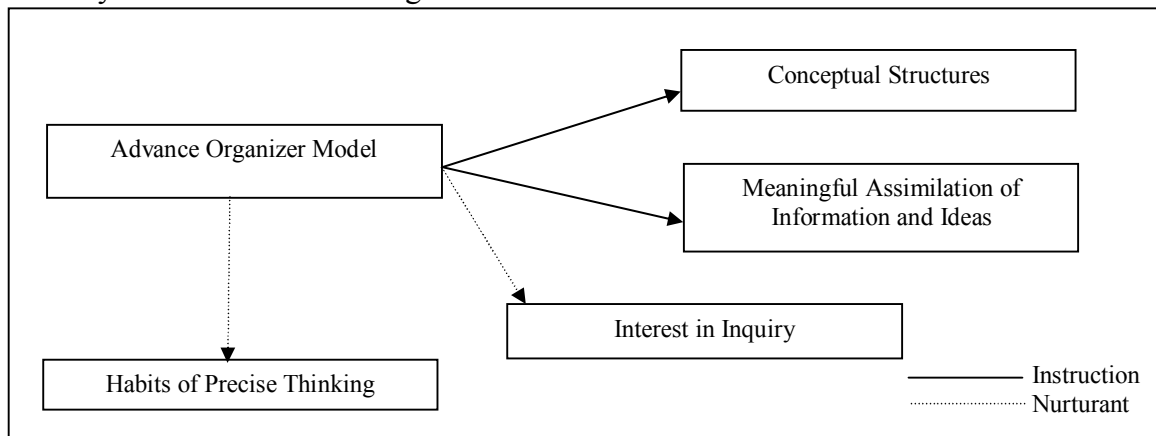


Fig. : Instructional and nurturant effects : advance organizer model

Let Us Check Our Progress :

1. What is the special feature of advance organizer ?
2. Is advance organizer model of teaching suitable to our classroom teaching ?
Justify.

7/8.2.3.11 : BASIC TEACHING MODEL OF GLASER

Basic Teaching Model was developed by Robert Glaser in 1962. It is termed as basic because it tries to explain the whole teaching process by dividing it into the four basic components or parts, namely, 1) Instructional Objectives, 2) Entering Behavior, 3) Instructional procedures, 4) Performance assessment. All these four basic components of the teaching process interact and influence each other as explained in the diagram.

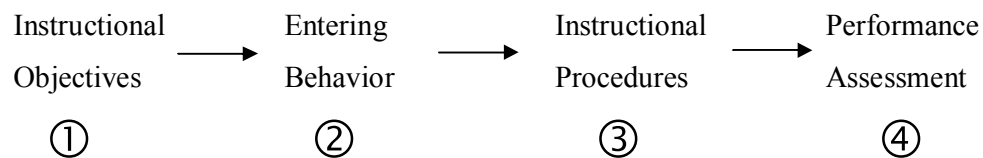
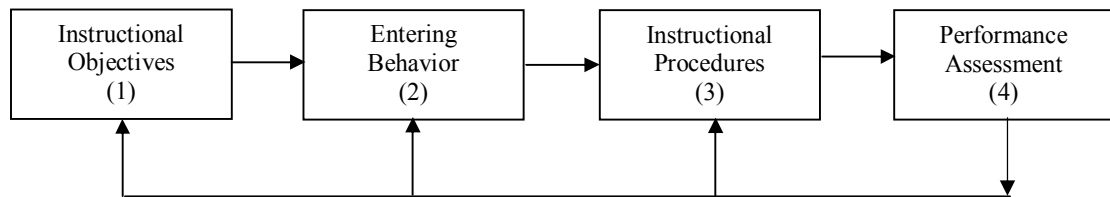


Fig. : Components of Teaching Process in Glaser's Basic Teaching Model

- 1. Instructional Objectives :** Instructional Objectives indicate the stipulated goals that a student is expected to attain after the completion of a part of instruction. These are usually based on Bloom's Taxonomy of Objectives.
- 2. Entering Behavior :** Entering Behavior implies the initial behavior of the student before the beginning of instruction. The assessment of the entering behavior is an important aspect of the instructional process.
- 3. Instructional Procedures :** Instructional Procedures represent the teaching methods, strategies and student-teacher interaction patterns involved in teaching. Instructional procedures are guided by the nature of the instructional objectives and the entering behavior.
- 4. Performance Assessment :** Performance Assessment involves the extent to which the stipulated objectives have been fulfilled. It involves the use of suitable

evaluation technique like tests, observation etc. It serves as a feedback device for each of the steps and elements of the teaching process. As a matter of fact, all these four basic components of the teaching process interact and influence each other. One sets the base for the other by providing as a base or feedback for the successful operation of the teaching act.

By adding feedback loops we can get this Basic Teaching Model as :



Three feedback loops, for example, connect performance assessment with each of the earlier component of the model.

Description of Glaser's Basic Teaching Model :

Glaser's model may be described in terms of the fundamental elements as under :

i) Focus : It attempts to pinpoint the process and major activities comprising the entire teaching-learning process. It also brings into light the sequence to be followed in the instructional process.

ii) Syntax : The flow of activities in this model is sequential. First of all the objectives to be followed are fixed in accordance with Bloom's Taxonomy. Then the potentiality of the learners in terms of their entry behavior is assessed. Thereafter in the light of the entry behavior, instructional work is carried out for the achievement of stipulated objectives. Performance assessment is the last phase.

iii) Principles of Reactions – Main Principles of Reactions are summarized below :

a) Principle of Interdependence – The student's response are to be understood and deal within the light of the inter action and interdependence process and assessment.

- b) Principle of Active Involvement** – It proper execution requires a lot of activity on the part of the teacher. At every stage the teacher is expected to develop proper understanding of the potential and difficulties of his students for achieving the objectives.
- c) Principles of Follow Up** – In case the results are not in accordance with the set objectives, gaps and deficiencies have to be found out and corrective measures taken.
- iv) Social System** – The success of this model depends upon the ability and competency of the teacher in terms of various skills like formulation of objectives, use of proper strategies, techniques of evaluation etc.
- v) Support System** – The model for its success needs additional support in terms of (a) Availability of adequate pre-service and in-service facilities to teachers to acquire needed competencies and skills for the use of the model, (b) Availability of desirable teaching learning environment and situation for the use of suitable teaching strategies and (c) Availability of appropriate evaluation device for the assessment of entry and terminal behavior of the learners.

Applicability of the Model :

Being quite systematic and structured, this model is applicable to almost all learning-teaching situations.

Glaser's model indicates that teaching includes a wide range of decision and practices and much of which requires little or no personal contact between the teacher and students. It implies a personal contact between the teacher and students. It implies a greater emphasis on the competency of the teacher than on his personality.

Let Us Check Our Progress :

1. Write down the main components of Glaser's Model of Teaching.
2. Mention application of Glaser's Model of Teaching in Classroom Teaching.

7/8.2.3.12. : LET US SUM UP

Teaching will become successful if it follows some systematic activities. Models of teaching provide us directions on what ways we can move ourselves for imparting effective teaching. In this Unit the fundamentals of models of teaching have been discussed first. Then, we have understood three different models of teaching. These understanding will help us becoming more effective teachers.

7/7.2.3.13 : SUGGESTED READINGS

1. Joyce, B. and M. Weil (1997) : Models of Teaching, New Delhi, Prentice-Hall of India.
2. Passi, Singh, and Sansanwal (1991), Models of Teaching, New Delhi, NCERT.
3. Robert, L. Ebel and David, A. Frisble (1991). Essentials of Educational Measurement, New Delhi, Prentice-Hall.

7/8.2.3.14 : ASSIGNMENTS

1. Discuss functions and elements of models of teaching.
 2. Discuss any one models of teaching with its structures and applications.
 3. Elaborate the classifications of models teaching.
 4. Discuss critically Advance Organizer Model of Teaching.
 5. Critically discuss Concept Attainment Model of Teaching. Can you apply it in a general classroom situation ?
 6. Describe different activities of a teacher in (a) Concept Attainment Model of Teaching, and (b) Advance Organizer Model of Teaching.
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