

UNIT-4

Models of Teaching

- . Introduction**
- . Meaning of Teaching**
- . A Definition**
- . Functions of teaching Explain and inform**
- . Models of Teaching Philosophical**
- . The Insight Model of Teaching**
- . The Insight Model of Teaching**
- . Impression Model (Jhon Locke)**
- . Glaser's Basic Teaching model**
- . Interaction Model (Flander) And Computer Based Model(Daniel Davis)**
- . Information Processing Models**
- . Personal Models**
- . Social Interaction Models**
- . Behaviour Modification Model**

Introduction

A model of teaching is a plan or pattern that can be used to shape curriculum, to design instructional materials And to guide instruction in the class room and other setting.

The most important aim of any teaching model is to improve the instructional effectiveness in an Interactive atmosphere and to improve or shape the curriculum.

Meaning of Teaching

Now let us discuss the concept of teaching and teaching definitions as stated by some prominent Philosophers and educationists.

A Definition

Teaching is the process of attending to people's needs, experiences and feelings and intervening so that they learn particular things, and go beyond the given. Interventions commonly take the form of questioning, listening, giving information, explaining some phenomenon, demonstrating a skill or process, testing understanding and capacity.

Functions of teaching Explain and inform

The main function of teaching is to explain and inform the students about a topic's pros and cons. A good teacher is expected to be well informed especially in the area he teaches.

Initiation, direction and administration

It is the function of teaching to initiate, direct, organize and take decisions about any problem which arises in our school or with our teaching – learning process.

Giving Security

Teaching performs the function of giving security to the children in terms of praise, reinforcement, Friendly atmosphere etc.

Evaluating, Recording and Reporting

Evaluation is must for student's progress. It is the function of teaching to record, report and then evaluate the progress of students in order to dispatch it to their parents as well as to principal of that institute so that modifications may occur among them.

Diagnosing Learning problems

Teaching also performs the function of diagnosis. The teacher must diagnose learning problems of students and should suggest the possible course of action.

Enriching Common Activity

Arranging and Organizing Classroom

Making Curriculum Materials

Adjusting to His Environment

Emotional Stability

Prescriptive Function

Utility of Teaching Models in Teaching

1. Teaching models are useful in developing social efficiency, personal abilities, cognitive abilities and behavioral aspects of the students.

- 2. Teaching models help to establish teaching and learning relationship empirically. It helps in making the teaching more effective.**
- 3. Teaching models helps in providing a theoretical rational to the teaching, which will provide changes and rectifications in teaching.**
- 4. Teaching models stimulates the development of new educational innovations in teaching strategies and tactics, which may replace the existing ones in schools of today.**
- 5. Teaching models assist makers of materials to create more interesting and effective instructional materials and learning sources.**
- 6. Teaching models assist teachers to develop their capacities to create conductive environment for teaching, as its nature is practical.**
- 7. Teaching models help curriculum planners to plan learning activities and content material which provide a variety of educational experiences to learners.**
- 8. Teaching models evaluates the behavior of the students.**

Characteristics of a Teaching model

- 1. Models of teaching are some sort of pattern or plans prepared in advance for the success of the teaching learning process.**
- 2. They differ from general teaching techniques and strategies in the sense that they are designed to meet specific objectives or goals.**
- 3. Provide specific guidelines or blue print in advance for the realisation of the specific objectives by specifying the teaching activities and controlling the teaching- learning environment.**
- 4. Give specific instructional design for particular type of instruction in specified teaching-learning situation.**
- 5. Help in creating a proper teaching- learning environment help in specifying the criteria of acceptable performance expected from the learners in a specific teaching- learning situation.**
- 6. Provide systematic procedure and organized efforts for the desirable modification of the behavior of the learners.**

7. They first specify the teaching or learning outcomes in behavioral terms and then lay down a step by step procedure for the attainment of these outcomes.
8. Help the teacher in the task in the same way as an engineer is helped in the construction of a building or bridge by an appropriate model or blueprint prepared in advance.
9. Save the energy, time and efforts of the teacher and the learners besides providing economy to the best utilization of the other teaching learning resources.
10. Models of teaching are known to serve three major function in a given teaching learning situation.

. Models of Teaching Philosophical

The term model is used to mean a teaching episode done by an experienced teacher in which a highly Focused teaching behavior is demonstrated, in it an individual demonstrating particular patterns which the trainee learns through imitation.

. The Insight Model of Teaching

A "model of teaching" is not a concrete affair, nor is it a set of rules for teachers. It is a philosophical model and so exists only in an abstract sense.

Philosophical models simplify, but such simplification is a legitimate way of highlighting the important features of a subject. A model of teaching helps to answer those critical questions which a definition of teaching will always fail to supply: what kind of learning are we aiming at? what does learning consist of? how shall we achieve learning?

A definition merely describes the process of teaching; a model orientates it by providing answers to those questions mentioned just previously. Such questions are of vital significance to teachers; indeed they give pith to the whole educational enterprise.

The best way in which the Insight Model can be described is to compare it with another influential model, the Instruction Model, which is, strictly speaking, a verbal variant of the Impression Model of teaching, associated with the empiricist school of John Locke. It can be maintained that all teaching converges around these two models, the Instruction and the Insight Models, or variants of them.

. The Instruction Model of Teaching

The Instruction Model is closely akin to behaviourism. Facts and accepted theory (the independent variables) are fed into the mind, and knowledge is an accumulation of such statements. The efficiency of the process can be tested by feedback (the dependent variables) to see how much has been learnt. The implications of this view of teaching are firstly that the teacher should be concerned with the exercising of mental powers engaged in receiving and processing data, and secondly and crucially that he should strive for the most appropriate input. For on this view, the mind of the pupil can largely be shaped by the stimuli provided by the teacher.

Finally and most crucially, the Instruction Model makes inadequate provision for originality by the learner. If the response of the learner depends only on what he has acquired through sensory experience, how is it ever possible for him to be original? Yet innovation by the pupil is a fact with which all teachers are familiar. Indeed such originality is eagerly anticipated.

. The Insight Model of Teaching

The approach of the model is radically different. The relationship between teacher pupil and the subject is conceived of in a new way. The task of the teacher is to prompt and stimulate his pupils to realise for themselves the knowledge that is in their own minds. For according to this model, all knowledge apart from the acquisition of unstructured factual information or skill – training is a matter of insight or internal Vision.

. It is the occurrence of vision in the mind of the learner that makes the crucial difference between being able to store and reproduce knowledge and the ability to understand its application in practice.

The Insight Model stresses that the mere receipt of true information cannot be real knowledge. For knowledge requires the student to have earned the right, through his own effort, to an assurance of its truth.

Socrates is the first historical source of the Insight Model, and was the first man known to us to use a refined question and answer technique as a teaching method. This brings us to the first major application of the Insight Model - the use of oral questioning

Oral Questioning.

A list of the purposes of oral questioning is laid out on Page 2 of the RAF School of Education's "Oral Questions Programmes". These are the four headings: -

- a. To promote mental activity
- b. To arouse and maintain student activity
- c. To guide thought
- d. To evaluate learning.

Of the four headings, the third one concerned with the guiding of thought is fundamental to our purpose. The other three, which deal respectively with retention and recapitulation, motivation and evaluation, are valid in their way, though it must be strongly doubted whether they have the blanket all-embracing application which some claim for them. Our primary concern here is to consider the possible merit of learning by oral questioning from the point of view of the knowledge gained from it. Is it superior to knowledge gained by formal instruction? This is a question of the quality or status of knowledge.

Discovery Methods of Teaching.

Some extraordinary claims as to the merits of discovery methods have been made, though experimental evidence to back them is often very thin. Confusion about discovery methods abounds, and begins with the proleptic use of the word "discovery". If discovery occurs, this may well be a thrilling and motivating experience, but what if it does not occur? We should not delude ourselves into letting the "word" discovery allow us to prejudge the effectiveness of the method.

This method of discovery by planned experience has been more applicable to the teaching of young children than others: the use of Dienes' blocks and Cuisenaire rods in Montessori nursery schools is well known. The flaw in this method is the erroneous assumption that the child will somehow manage to conceive of the structured material in the same way as the teacher, when this is patently unlikely. Recently in fact, the whole basis of Dienes' abstractionist theory has been shown to be invalid, but that is not to say that the conceptual apparatus which he used is valueless - only that the claims he made for it were unrealistic.

Conclusion.

The applications of the Insight Model are enormous and should be used wherever practicable. Where and when such practicable situations arise depend on so many factors that it is well-nigh impossible to legislate for them. The individual teacher or supervisor is the person best qualified to judge, but that is not to say that he should do so on the basis of his intuition alone. Learning situations can be analyzed on the basis of the four purposes of oral questioning highlighted earlier, and in the light of those critical questions to which models of teaching provide answers. It must also be remembered that the teacher is rarely faced by questions of absolute value. When he or she considers the use of discovery methods or other types of insight teaching, the value of these methods must be related to other important considerations, such as problems of cost-effectiveness and problems of resources in general, including the time available. In fact, only a relative scale of appropriateness will be of much use to the teacher in making judgments as to teaching methods. Thus, in some situations discovery methods will be considered more essential than in others, e.g. science practical's. At present, old fashioned syllabi and examinations make a large scale application of insight methods difficult, and we must hope for some educational reforms in such areas.

Impression Model(Jhon Locke)

1. Introduction

John Locke (1632-1704) is one of the most important thinkers of the world, some have even considered him as the most notable English philosopher: in any case, his book “An Essay Concerning Human Understanding” (1690) is still arousing the interest of those concerned with the field of the philosophical reflection and especially the history of western philosophy. Perhaps older or younger experts have been attracted mainly by his “realism” the passion with which he supported the cause of sensory knowledge. John Locke proposes that sensation and reflection are the two sources of experiences. Through sensation, understanding grows about the external world and through reflection it becomes aware of all the operations that it performs itself. The experiences provided through teaching creates an impression on a child's brain.

2. Locke's Educational Theory

This conception on the origins of knowledge is older, being also present in a specific form in the Greek Philosophy, viz in Aristotle's – De anima", who could have taken it from his magister plato: " Or in the way that to be acted upon according to something common has been distinguished before, that the mind is in Potentiality somehow the intelligible objects but in actuality nothing until it thinks.

To the issue under discussion it is less relevant where John Locke found his basic principles, as it is more important that the theory under debate has a certain type of educational echoes, in the most direct manner possible. If at birth the child's mind is devoid of any ideas, then the educator has a major role in shaping the personality of his pupil, whom he has to transform into a model of behaviour, training him step by step to face the demands of real life to the best of his abilities. To investigate the opinions of the English philosopher our focus lies first on his work "Some Thoughts Concerning Education" (1692), a "treatise" on the education of a gentleman which one may place among the most important books on the philosophy of education in the Modern Age.

The stress laid on discipline and submission is an important element in the whole discourse of the Reformation spirituality, from Luther and Calvin to Immanuel Kant: the German philosopher, if one were to discuss only him, considers that man is the only being who needs education and may be educated, discipline being an indispensable 76 Mihai Androne / Procedia - Social and Behavioral Sciences 137 (2014) 74 – 79 and defining element in the development of our personality: discipline makes man what he is, humanizes him by determining him to dominate his animal impulses (Zöller & Loudon, 2007, pp. 437; Sullivan, 1989, pp. 293). Unlike the animal, who needs food, warmth and protection to grow and mature, man also requires care, and this supplementary need sets him apart from all the other living beings. Or, it is also John Locke's vision that parents and teachers are called to take note of the peculiar nature of man: any treatise of pedagogy or philosophy of education is also intrinsically a treatise of anthropology. A good tutor with all these qualities is hard to find, admits Locke. He constantly resumes this idea referring to the qualities of a tutor: professionalism and sobriety, moderation and politeness. Moderation is the defining element of any virtue, as without moderation everything turns into vice.

. Glaser's Basic Teaching Model

Glaser's Basic teaching model was developed by Robert Glaser in 1962. It explains the relationship between teaching and learning. It provides a simple and adequate conceptualization of the teaching process. This model belongs to the category of psychological models of teaching.

Why this teaching model is a basic teaching model

It is called the Basic teaching model because it presents a very basic analysis of the process of teaching in terms of the elements of teaching.

This model applies to all levels of education i.e., elementary, secondary, higher, etc. It is also applied to subject matter related to any subject as a teacher can use this model for teaching them.

Teaching for any length of time (40 minutes, 1 hour, weeks, etc.) is possible using this model. It explains the whole teaching-learning process by dividing it into four basic components

Instructional objectives

Entering behavior

Instructional procedures

Performance assessment

Assumptions of the Basic Teaching Model

It is developed on the assumption that “every lesson assumes some knowledge on the part of the learner” Through the instructional procedure, the teacher guides the learner from entry behavior to terminal behavior.

Components of the basic training model

Step 1: Instructional objectives

The instructional objective is those objectives that the student should attain upon completion of a unit of instruction. These objectives may be stated in general, specific, or in behavioral terms. For instruction to be effective and systematic, the instructional objectives are stated in behavioral terms.

Step 2: Entering behavior

Every learner has initial behavior before he enters the teaching-learning process. It is essential to detect the entering behavior of the learner before giving instructions. It is just like previous knowledge of a subject or the performance of the learner in terms of educational abilities.

This step is important because only after this step the teacher can take the students from entry behavior to terminal behavior.

Step: 3 Instructional procedures

It is the most active part of the teaching process.

It indicates the method, procedure, and **strategies of teaching** which depend on the objectives and entry behavior of the learner.

This component depends on two previous components.

Step: 4 Performance assessments.

Here ultimate behavior of the learner is tested so that feedback may be given.

If the need arises objectives may be modified, the instructional procedure may be improved and an assessment of performance is made again.

Evolution techniques used for the purpose of assessment tests are observation, interview, rating scale, etc.

All four basic components are interrelated with one another. They interact and influence each other.

If the performance assessment indicates that the learners have not been able to achieve the objectives set for them, necessary changes are brought about in any one or all proceeding components of this model so that the goals of instruction are attained.

Description of Glaser's Basic Training Model

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

Focus: – This model attempts to pinpoint the process and major activities comprising the entire teaching, and learning process. It also brings into the light sequence to be followed in the instructional process.

Syntax: – In this model flow of activities is sequential as listed below:-

- (a) First, the objectives to be followed are fixed in accordance with Bloom's Taxonomy.
- (b) Then the entering behavior showing the understanding and background of the student is determined.
- (c) Thereafter the instruction work is carried out to achieve the objectives keeping in view the entering behavior of the learner.
- (d) The ultimate behavior of the learner is determined by using different types of tests.

The social system. The model describes a teacher-dominated classroom climate. Here students are receptive and appreciative of the teaching activities. The success of this model depends upon the competency and ability of the teacher in terms of various skills like the formulation of objectives, use of proper strategies, techniques of evolution, etc.

Principles of reaction:- main principles of reaction are as follows.

(a) Principles of interdependence: -The student's responses are to be understood and dealt with in the light of the interaction and interdependence, process, and assessments.

(b) The principle of active involvement: -Proper execution of this model requires a lot of activity on the part of the teacher. The model requires the active involvement of the teacher from the beginning to the end. Understanding the potential and deficiencies of the students is required at every stage of the teacher in order to achieve the objectives.

(c) Principles of follow-up: – An assessment is made after teaching. In case the results are not in accordance with set objectives, gaps and deficiencies are found by the teacher. Then he tries to rectify the drawbacks by taking corrective measures.

Support system: – The teacher needs the following support systems for its success.

(a) Proper environment: – proper teaching-learning environment and situations are required for the use of suitable teaching strategies.

(b) Pre-service and In-service facilities:- availability of adequate pre-service and in-service activities to the teachers to acquire needed skills for using this model.

(c) Availability of appropriate evaluation device for the assessment of entering and terminal behavior of the students.

Application: – Since the model is quite systematic and structured, it is applicable to almost all learning and teaching situations. It implies a personal contact between the teacher and the student. It implies a greater emphasis on the competency of the teacher rather than on his personality.

. Interaction Model (Flander) And Computer Based Model(Daniel Davis)

An Interaction model of teaching (N.A. Flander).-

Flander considered teaching process as an interaction process. He divided classroom behaviour in ten categories known as Flander's ten category system. In this model the behaviour of student and teacher is analysed. An interaction between a teacher and the student is more emphasised in this model.

These are based on the following specifications:

- a) Specification of Environment
- b) Specification of operation
- c) Specification of criterion of performance
- d) Specification of learning outcome

Effects of teaching by modelling: Models of Teaching are really models of learning. As we helps students acquire information ideas skills, values, ways of thinking, and means of expressing themselves, we are also teaching them how to learn . In fact the most important long term outcome of instruction may be the students 'increased capabilities to learn more easily and effectively in the future ,both because of the knowledge and skills they have acquired and because they have mastered learning processes.

Bandura and Walters have formulated three kind of effect in teaching by modelling:

- 1- **Modelling effect-** The learner acquires new kind of response pattern.
- 2- **Inhibitory and disinhibitory effect-** The learner increases or decreases the frequent, latency or intensity or previously required responses.
- 3- **Eliciting effect-** The learner receives from a model merely a cue for realizing a response.

Fundamental Elements of a Teaching Model:

Normally majority of teaching models are based on the following six elements:

Focus

Focus is the central aspects of a teaching model. Objectives of teaching and aspects of environment generally constitute the focus of the model. Every teaching model is based on one or the other objective as its focal point. Any teaching model is developed by keeping this focal point in mind.

Syntax

Syntax of the model describes the model in action. Syntax includes the sequences of steps involved in the organization of the complete programmed of teaching. It is the systematic sequence of the activities in the model. Each model has a distinct flow of phases. It means the detailed description of the model in action.

Principles of Reaction

Principles of Reaction tell the teacher how to regard the learner and to respond to what the learner does. This element is concerned with the way a teacher should regard and aspects respond to the activities of the students. These responses should be appropriate and selective. They provide the teacher with rules of thumb by which to select model, appropriate responses to what the student does.

The Social System

This element is concerned with the activities of pupil and the teacher and their mutual relationships. Every teaching model has separate objectives and will have therefore separate social systems. It is related with the interactive roles and relationship between the teacher and the student, and the kinds of norms that are observed and student behaviour which is rewarded.

Support system

Support System describes the supporting conditions required to implement the model. 'Support' refers to additional requirements beyond the usual human skills, capacities and technical facilities. The support system relates to the additional requirements other than the usual human skills or capacities of the teacher and the facilities usually available in the ordinary classroom.

Application

It is an important element of a teaching model. It means the utility or usage of the learnt material in other situations. Several types of teaching modes are available. Each model attempts to desirable the feasibility of its use in varying contexts related with goal achievements in terms of cognitive, and affective behaviour modification.

Computer based teaching model (Daniel Davis)-

It is the most complicated model having , entering behaviour, determination of objectives and teaching aspect as fundamental elements. In this element computer teaching plan is selected according to the entering behaviour and instructional objectives. The performances of the student are evaluated. Accordingly alternative teaching plan is presented. In this model, the diagnosis and teaching go side by side. Remedial teaching is provided on the basis of diagnosis .Individual differences are also given importance.

Modern teaching models (Joyce and Weil)

Eggen, Kauchar and Harder (1979) have discussed six Information Processing Models –

1. General Inductive Model,
2. Concept Attainment Model,
3. Taba Model,
4. General Deductive Model,
5. Ausubel's Model and
6. Such man's Inquiry Model.

Modern teaching models

The most comprehensive review of teaching models is that of Joyce and Weil (1980). Bruce R. Joyce has divided all the teaching models under the title “Modern teaching models”. They identified 23 models which are classified into four basic families based on the nature, distinctive characteristics and effects of the models. These four families are :

1. information Processing Models
2. Personal Models
3. Social Interaction Models and
4. Behaviour Modification Models.

Within the families, there are specific models which are designed to serve particular purposes.

Information Processing Models

The models of this type are concerned with the intellectual development of the individual and help to develop the method of processing information from the environment. These models focus on intellectual capacity. They are concerned with the ability of the learner to observe, organise data, understand information, form concepts, employ verbal and nonverbal symbols and solve problems. The primary purposes are :

1. The mastery of methods of inquiry
2. The mastery of academic concepts and facts
3. The development of general intellectual skills such as the ability to reason and think more logically

The models which belong to this family are :

- a. The Concept Attainment Model
- b. Inquiry Training Model
- c. The Advance Organiser Model
- d. Cognitive Growth Development Model
- e. Biological Science Inquiry Model

Brief Review of the Information Processing Source Models

| SOURCE | TEACHING MODEL | | INNOVATOR | AIMS AND APPLICATION |
|-----------------------------------|---|--------------------------------------|--|---|
| The Information Processing Source | 1-Concept Attainment Model 2-Inductive Model | | Bruner, Hilda Taba | To develop inductive reasoning, mental inductive process, and understanding of concepts and principles. |
| | Inquiry Training Model | | Richard Suchman | To develop individual competencies to achieve the social objective. |
| | Biological Science Inquiry Model | Joseph J. Schwab | To develop understanding of research methodology, to think logically on social problems. | |
| | | Advance Organizational Model | David Asubel | To understand concepts and facts and to make the content purposeful and interesting. |
| | | Cognitive Growth Developmental Model | Jean Piaget | To develop general intelligence and logic, social and moral development. |

. Personal Models

Personal development models assist the individual in the development of selfhood, they focus on the emotional life an individual,.

The emphasis of these models is on developing an individual into an integrated, confident and competent personality. They attempt to help students understand themselves and their goals, and to develop the means for educating themselves. Many of the personal models of teaching have been developed by counsellors, therapists and other persons interested in stimulating individual's creativity and self expression.

The primary goals are :

- To increase the student's self worth,**
- To help students understand themselves more fully.**
- To help students recognize their emotions and become more aware of the way emotions effect other aspects of their behaviour,**
- To help them develop goals for learning,**
- To help students develop plans for increasing their competence,**
- To increase the students' creativity and playfulness,**
- To increase the students' openness to new experience.**

The models which belong to this family are :

- a. Non-Directive Teaching Model,
- b. Synectics Teaching Model,
- c. Awareness Training Model,
- d. Classroom Meeting Model.
- e-Conceptual System Model

Social Interaction Models

The models in this family emphasise the relationships of the individual to the society or other persons. The core objective is to help students learn to work together. to identify and solve problems, either academic or social in nature.

The primary goals are :

- To help students work together to identify and solve problems
- To develop skills to human relations, and
- To become aware of personal and social values.

The models which belong to this family are :

- a. Group Investigation Model,
- b. Role Playing Model,
- c. Jurisprudential Inquiry Model,
- d. Laboratory Training Model,
- e. Social Simulation Model,
- f. Social Inquiry Model.

. Behaviour Modification Model

All the models in this family share a common theoretical base, a body of knowledge which referred to as behaviour theory. The common thrust of these models is the emphasis on changing the visible behaviour of the learner. The models which belong to this family is Operant Conditioning Model

Brief Review of The Behaviour Modification Source Model

| SOURCE | TEACHING MODEL | INNOVATORS | AIMS AND APPLICATION |
|--------------------------------------|-----------------------------------|--------------------|--|
| Behaviour Modification Source | Operant Conditioning Model | B.F.Skinner | To achieve the objectives of lower level of cognitive domain on the basis of individual differences |

A number of instructional strategies to realise different instructional goals have been developed recently by different researchers. They have transformed existing knowledge in the learning and teaching processes into 'Models of Teaching' which can be used by teachers in the teaching, learning process for realising different instructional objectives. There is a need to incorporate a few 'Models of Teaching' in the curriculum of teacher education programme at the secondary as well as elementary level so that prospective teachers attain a higher degree of 'ability to teach'.

MODEL QUESTIONS

- 1. What is the meaning of models of teaching?**
- 2. Define models of teaching?**
- 3. What are the functions of models of Teaching?**
- 4. Write a brief notes on**
 - a) Philosophical Teaching Models**
 - b) Insight Model (plato)**
 - c) Impression Model (John Locke)**
 - d) Rule Model (Kant)**
- 5. Write a notes on:**
 - a) Basis of teaching model (Robert Glasser)**
 - b) Interaction Model (Flander)**
 - c) Computer Based Model (Daniel Davis)**

