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Theoretical Overview-Ideas and Philosophy behind Models of Teaching, Attributes, Functions of Models of Teaching

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ABSTRACT: Education is a planned development endeavour, the outputs of which are considered as development of the learner, leading to that of the nation. It is known that the primary concern of any technology is the maximisation of the output, both quantitatively and qualitatively. This is the reason why education also speaks of the need for mastery learning that is maximised learning output, for which technologically planned inputs and processing strategies are being suggested.

The development thus brought about in the learners through the learning process, is expected to process three qualities, these being 'totality', 'sustainability' and 'transferability'. Thus an individual is expected to attain development on all aspects of human life, by getting educated. This total development has to include progressive changes in the various domains such as cognitive, linguistic, emotional, social, personal, cultural, personality related etc. Such changes occurring in the individual should remain, all over one's life, of course with changes to suit the changes occurring in the society. Moreover the individual should exhibit the ability to transfer the results of learning while facing new situations in life.

Efforts made by educational thinkers and educators have resulted in the idea, 'Models of Teaching'. A Model of teaching is an instructional design which describes the process of specifying and producing particular environmental situation which makes the students to interact in such a way that a specific change occur in their behaviour. According to Joyce and Weil (1972), a teaching model is a pattern or plan which can be used to shape the curriculum or course to design instructional materials and to guide teacher's action. Apart from these it creates the necessary environment which facilitates the teaching-learning process. The core of the process of teaching is the arrangement of environment within which the student can interact. Thus a model of teaching consists of guidelines for designing educational activities and environment. It specifies ways of teaching-learning that are intended to achieve certain kinds of goals. It is a step by step procedure that leads to specific learning outcomes. In short, models of teaching create the conducive teaching-learning environment in which teacher teach more effectively, by making the teaching act more systematic and efficient.

KEYWORDS: Ideas behind Models of Teaching, Philosophy behind Models of Teaching, Attributes Of Models of Teaching, Functions of Models of Teaching, Families of Models of Teaching

I. INTRODUCTION

Teaching means helping students to learn well. Powerful learners have expanded repertoires of strategies for acquiring education. Models of teaching are designed to impart those strategies for acquiring education. Models of teaching are designed to impart those strategies while helping students develop as persons, increase their capacity to think clearly and wisely and build social skills and commitment. Teaching is the process of building communities of learners who use their skills to educate themselves. Powerful learners know how to profit from a wide range of learning opportunities from lectures and readings, from collecting and analyzing information and building concepts and theories and from working together co-operatively

II. RELATED WORK

A model of teaching lays the foundation for the actions and interactions between the students and teachers. For example, a teacher centered model of teaching would imply a set of actions and interactions which will be different from that of student centered model of teaching. In the teacher-centered model of teaching, teacher would make most of the decisions about the curriculum, and learning where as in student centered model, students are more involved in decision-making. Thus models of teaching are designed to help students learn and each model of teaching has its own set of proportions and directions enabling us to implement them in classrooms, or in tutorial situations.

Instructional goals for different classes of students vary greatly and therefore the strategies utilized to achieve these goals may vary accordingly. Eggen (1979) defined Models as “Perspective teaching strategies designed to accomplish particular instructional goals”. Joyce and Weil (1972) define a model as “Pattern or plan, which can be used to shape curriculum or course to design instructional materials and to guide teacher’s action”.

“Models of teaching helps in designing instructional activities and environmental facilities, carrying out of these activities and realization of stipulated objectives” (Singh, 1983).

III. METHODOLOGY

The model of teaching consists of guidelines for designing educational activities and environment. Models of teaching are a plan that can be utilized to shape courses of study, to design instructional materials and to guide instruction. It can be used to design face-to-face teaching in classrooms to shape instructional materials including books, films, tapes, computer mediated programmes, curricula and long term courses of study. In short a model of teaching is merely a tool for thinking about the teaching situation, which ultimately leads to certain direct and indirect metacognitive abilities and attitudes among the learners. **Sinha (2001)** defines teaching as a “System of action intended to induce learning”. Taking into account, different aspects of teaching-learning process form a model.

IV. EXPERIMENTAL RESULTS

Philosophy behind models of teaching has been shaped in tune with a few assumptions. The important ones among these can be enumerated as follows.

1. There is no single method (‘the method’) that could be recommended for effective instruction in general. Method of teaching has to vary with the type of development anticipated. Hence a number of instructional models have to be designed.
2. Even a single model cannot be stereotyped. It has to be modified judiciously to suit the context, the learner, needs of the individual and the needs of the society.
3. Learning meant for development should be the result of a joint venture involving a number of individuals; the main responsibility is to bring about the expected developmental change of the learners, who is getting modified as a result of learning. Hence the knowledge to be acquired as well as the patterns of self-concept, attitudes and interests should be properly constructed by the learner by seeking help and effective interaction from the society. In short, learning should be the processes of ‘learning to learn’.
4. In order to realize the above type of development, teaching learning situation has to be considered as a ‘shared environment’-the sharing of activities and experiences among the learners, teachers and members of the society.
5. Even when the stress is on the process of learning, the teacher has a very vital role to play. The sharing of experiences of the learner becomes more productive when it is with knowledgeable persons, of whom the teacher is the most important. The teacher has to play different roles such as that of a motivator, leader, counsellor, illustrator, demonstrator, source of information etc. These roles have to be taken up in tune with the nature of the development anticipated.
6. In order to ensure validity of the design presented by a model, it would be essential to base it on an approved theory that would suit the goal anticipated by the model of teaching. One cannot think of the theory’ that would be applicable to all types of learning. What is required is the insight to adopt what is relevant in a theory and apply this for the realization of the specific goals anticipated by the designer of a model.

2.3 ATTRIBUTES OF MODELS OF TEACHING

All models of teaching have some common identifiable attributes as follows:

1. Scientific procedure

A model of teaching is a systematic procedure to modify the behaviors of learners. They are based on certain assumptions.

2. Specification of learning outcomes

All models of teaching specify the learning outcomes in details on observable students' performance. i.e., what the student will perform, after completing an instructional sequence.

3. Specification of environment

This means that every model of teaching specifies in definite terms the environmental conditions under which a student's response should be observed.

4. Specification of criteria of performance

A model specifies the criteria of acceptable performance, which is expected from the students. The model of teaching delineates the behavioral outcome, which the learner would demonstrate after competing specific instructional sequence.

5. Specification of operations

A model of teaching specifies the mechanism that provides for the reaction of students and interaction with the environment.

2.4 FUNCTIONS OF MODELS OF TEACHING

The major functions of models of teaching are;

1. Construction of a curriculum or contents of a course
2. Development and selection of Instructional materials
3. Guiding the teacher to select appropriate teaching strategies or method for achieving the pre-determined instructional objectives and improving the teaching process.

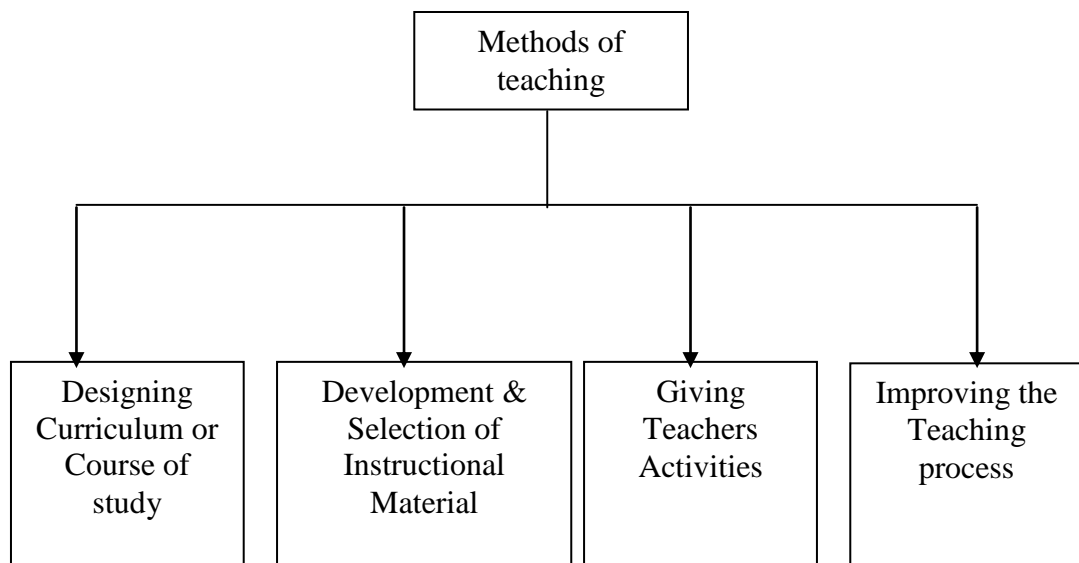


Fig. 2.2: Functions of models of teaching

2.5 FAMILIES OF MODELS OF TEACHING

Joyce and Weil (1997) found out that models of teaching are in abundance. They have been developed by educationalists, psychologists, sociologists, system analysts and many other models of teaching range from simple, direct procedures that get immediate results to complex straggles that the students acquire gradually from patient and skilful instruction. They include major philosophical and psychological orientations towards teaching and learning. They can be used comfortably and efficiently in classrooms and other educational settings. The most comprehensive review of teaching model is that of Joyce and Weil who have identified 23 models, which are classified into 4 basic families based on the nature, distinctive characteristics and effects of the models. These 4 families are,

1. Information Processing Family
2. Social Family
3. Personal Family
4. Behavioral Family

1. Information Processing Family

The Information Processing Models emphasize the enhancement of the human beings innate drive to make sense of the world by acquiring and organizing data, sensing problems and generating solutions to them and developing concepts conveying them. Models of this family focus on intellectual capacity. The primary purposes of this family of models are the following:

1. Mastering of the methods of enquiry
2. Developing the skill for processing information
3. Fostering the ability to think logically

Main models of this family are Concept Attainment Model, Inductive Thinking Model, Inquiry Training Model, Advance Organizer Model etc.

2. Social Family

Models based on Social Interaction Family emphasize the relationships to society and to other persons with respect to social goals. Models from their orientation give priority to the improvement of democratic process, and the improvement of society. While social relations may be emphasized more than other domains, social theories are also concerned with the development of the mind and of the self and the learning of academic subjects.

The primary goals of this family are the following:

1. To train students to work together
2. To develop skills for maintaining human relations
3. To inculcate personal and social values

The main models of this family are Group Investigation Model, Role Play and Social Inquiry Model etc.

3. Personal Family

Ultimately human reality resides in our individual consciousness; we develop unique personalities and see the world from perspectives that are the products of our experiences and positions. Common understandings are a product of the negotiation of individuals who must live and work and create families together. Models belonging to this family deals with the personal development of the individual. The primary goals are the following.

1. To increase the students senses of self worth
2. To help students understand themselves more fully
3. To help students refine their emotions
4. To foster the students creativity

The major models of the family are Synetics Model, Non-directive Teaching Model etc.

4. Behavior Modification Family

This family of teaching model has evolved from attempts to develop efficient system for sequencing learning tasks and shaping behaviors by manipulating stimulus response and reinforcement. An exponent of reinforcement theory, Skinner (1957) have contributed towards the development of these models and “operant conditioning” is their central mechanism. The main thrust of these models is modification of the visible or verbal or overt behaviour of the learner rather than the underlying psychological structure and unobservable behaviour. In this model, each behaviour is so designed that success is ensured, the learner activity respond to the problematic situation and gets reinforcement and feedback. The specific goals of the models in this family are:

1. To develop the competency to adopt behaviour styles appropriate to given situations
2. To master techniques of stress reduction
3. To ensure high rate of success, by maximization of student learning time.
4. To develop leadership qualities.

The important models of this family are Contingency Management Model, Operant Conditioning Model, Assertive Training Model, Direct Interactive Teaching Model etc.

All the models of teaching can enhance the ability of students to achieve various learning objectives. Thus actually increasing aptitude to learn is one of the fundamental purposes of these models. Students will change as their repertoire of learning strategies increases, and they will be able to accomplish more and more types of learning more effectively. These powerful models of teaching are designed to bring about particular kinds of learning and to help students become more effective learners. As educators, we need to be able to identify these models and to select the best one and master them in order to develop and increase their own effectiveness.

2.6 BASIC PROCEDURE FOR IMPLEMENTATION OF A MODEL

Joyce and Weil (1992) designed a procedure suitable for the implementation of any instructional model. This procedure tells us what activities should occur and when appropriate and also in what sequence. They put forward a definite structure to the models and it includes:

1. Syntax
2. Principles of Reaction
3. Social System
4. Support System
5. Instructional and Nurturant effect

1. Syntax

The syntax or phasing of the model describes the model as a flow of action in terms of sequence of events, which are called phases. Each model has a distinct flow of phase.

2. Principles of reaction

Principles of reaction tell the teacher how to respond to what the learner does. In some models the teacher overtly tries to shape the behavior of students by regarding certain student activities and maintaining a neutral stands towards other. In such models such a those designed to develop creativity, the teacher tries to maintain a non-evaluative, carefully equal stance so that the learners become self-directing. Principles of reaction provide the teacher with rules of thumb by which to ‘turn in’ to student and select appropriate one to what the student does.

3. Social system

Social system describes the student and the teacher, their roles and relationships and kinds of norms that are encouraged. The teacher and the learner, the location of authority and the amounts of control over activity that emerged from the process of interaction explain the concept of hierarchical relationship in terms of sharing of initiating activity. The leadership role of the teacher varies greatly from model to model. In certain models, the teacher has a dominant role to play. In some others the activity is centered on the pupil and still in some others the activity is equally distributed.

Thus, based on social system, models can be classified under three categories. They are;

1. Highly structured – Teacher is the centre of the activity
2. Moderately structured – Activity is equally distributed between the teacher and the student
3. Unstructured – norms, roles, relationship and activities become less-prescribed.

4. Support system

The support system refers to the additional requirements beyond the useful skills, capacities and technical facilities necessary to implement a model. This includes special skills, special knowledge of the teachers, audio-visual materials like films, self-instructional materials, visit to places of importance etc.

5. Instructional and Nurturant effects

The description of the effects of models can validly categorized as the direct or instructional effects, which are directly achieved by leading the learner in certain directions. The nurturant effects come from experiencing the environment created by the model (Joyce and Weil, 1992). In choosing a model for teaching, for curriculum construction, or as a basis for materials, the teacher must balance instructional efficiency or directions with the predictable nurturant effects.

The diagrammatic representation of instructional and nurturant effects is given below.

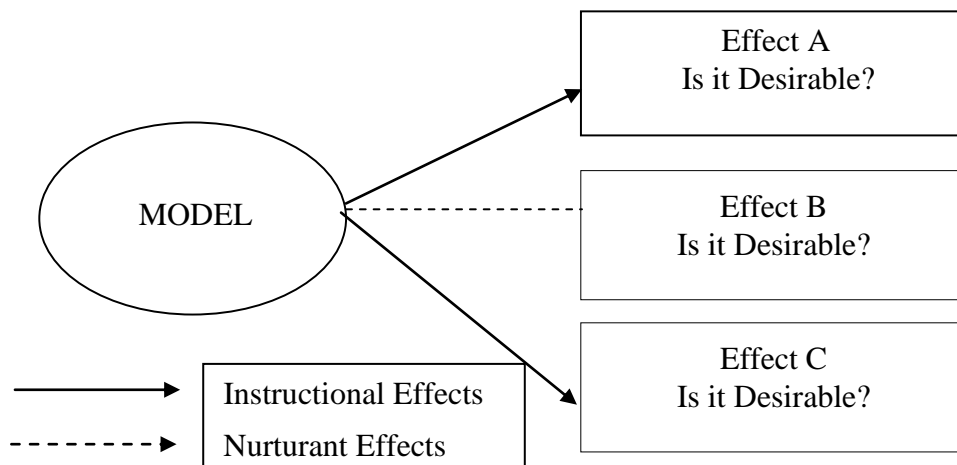


Fig. 2.3: Instructional and Nurturant Effects of a model

V. CONCLUSION

Models of teaching are very effective teaching strategies which are meant for transacting specific topic to students. The nature of the topic, presentation method and classroom environment will direct the teacher that what model of teaching s/he has to select for teaching the concerned topic. However the teachers and student teachers should be well aware on the concept and various models of teaching. Hence they can implement the models of teaching in their professional life and make wonder in their classroom .

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