UNIT 4

UNIT 4 MODELS OF TEACHING

Introduction:

Education has been considered as a tool of social change. This objective cannot be viewed without improving the classroom practices. Teaching is an activity, which is designed and performed for the attainment of a large number of objectives in terms of changes in students' behaviour and thoughts. A number of educationists and psychologists have proposed their models to approach teaching.

Teaching models are helpful in developing the power of imaginations, observations, value judgments, critical thinking and analyzing the things systematically. The Jurisprudential Inquiry Model is based on conception of the society, in which people differ in their views, priorities and social values, legally conflict with one another's resolving complex, controversial issues within the context of a productive social order, and requires people who can talk to one another and successfully discuss their differences.

A model of teaching is a description of a learning environment. The descriptions have many uses, ranging from planning curriculums, courses, units, and lessons to designing instructional materials, books and workbooks, multimedia programs, and computer-assisted learning programs.

Because the models provide learning tools to the students, they are uniquely suited to the development of programs for students whose "learning histories" are cause for concern.

4.1Major Concepts in the Jurisprudential Inquiry Model

Keeping in view the theoretical framework and the underlying assumptions and the functioning of the model, the major concepts developed in the model are described below.

I) Goals and Assumptions

The jurisprudential inquiry model Basic Goals and Assumptions are:

A. **Conception of society** in which people differ in their views and priorities and in which social morals legally variance with one another.

B**. Resolving complex**, controversial issues within the background of a productive social order requires people who can talk to one another and successfully talk their differences. Such people can cleverly analyze and take a stance on community issues. The stance should reflect the concepts of justice and human dignity these two morals are fundamental to a democratic society.

C. Oliver and Shaver's image of a skilful citizen is very much that of a competent judge. Imagine for a moment that you are a Supreme Court justice hearing an important case.

Your occupation is to listen to the evidence presented, analyze the legal positions taken by both sides, weigh these positions and the proof assess the meaning and provisions of the law, and finally, make the best probable decision. This is the role students are asked to take as they consider public issues.

D. Values framework—the basis for judging public issues and for making legal decisions. If policy stances are to be truly derived from ethical considerations, one must be aware of and understand the key values that form the core of our society's ethical system.

The process of clarifying and resolving issues involve clarifying definitions,

establishing facts, and identifying the values important to each issue. The third area of competence is knowledge of contemporary political and public issues, which requires that students be exposed to the spectrum of political value, social value, and economic problems are facing in Indian society.

Although a broad understanding of the history, nature, and range of these problems is important, in the jurisprudential inquiry model, students explore issues in terms of a specific legal case rather than in terms of a general study of values.

Objectives of the Jurisprudential Inquiry Model

The Jurisprudential Inquiry Model has the following objectives.

1. To develop skills of dialogue, where the primary aims are the clarification and problem solving.

2. To develop such skills in students where they look at discussion as a process for mutual inquiry and clarification rather than conflict.

3. To develop such an attitude amongst the students that they begin to recognize that, each person is entitled to have his/her own opinion.

4. To help students understand those values are complex and they can analyze the situation and rational thinking.

4.2) The concept attainment model.

A. Introduction:

JS Bruner and his colleagues developed the concept attainment model. Teachers provide accurate information about the nature of content to students by using this model. This model is effectively used in the the clarification and interpretation of new concept. “A concept is a symbol that stands for a class of group of objects or events that possess common properties. Concepts greatly simplify our thinking processes. They make free us from having to level and categorize each new object or event we encounter.”

The objective of this model is to enhance the student’s ability of inductive reasoning and to improve the students’ concept. Dr Anand (1966) writes by expressing his ideas about the origin of concepts in human, “Bruner and his colleagues has the perception that the human lives in an atmosphere, that has so many variations and complexions that human can not understand it without classification.

Therefore every human tries to understand the objects founded in the his environment and classifies objects. As a result of the classification of objects,concepts are developed in them. These concepts evolve naturally, yet training is necessary for the development of the right concept.

B. Characteristics of Concept Attainment Model:

(1) This model is more productive when concepts are tried to learn and understand on the basis of examples.

(2) This model can not be used to improve generalization, to provide the knowledge of facts, to answer why, and to specify reason.

(3) This model is more useful for learning languages.

(4) It tries to make understand the fundamental principles of maths and science in a simple and easy way.

5) This model is more productive in all subjects in which there are more chances of concept formation.

C. Main Elements of Concept Attainment Model:

The description of main elements of concept attainment model are being given below—

(1**) Focus** —The main objective of this model is to develop students' inductive reasoning. Its basis is psychology. Under this, students get the knowledge of various concepts on the basis of thinking ability by dividing various events, persons and goods, etc. into different sections.

Bruner and his colleagues have outlined the following four objectives of this model—

(a) To provide students the knowledge about the nature of concepts so they can gain the efficiency to categorize the objects on the basis of their qualities and their characteristics.

(b) To make students able so that right concepts can be developed in them.

(c) To develop specific concepts in students.

(d) To develop strategies related to thinking in students.

(2) Syntax—In syntax, skills are developed in four steps. These are—

(a) Collection of data—Data related to some event or person is presented in front of students. With the help of these data, students restricts various types of qualities to the concepts for developing different concepts.

(b) Strategy Analysis—At this stage, students analyze the information obtained. Mostly these are based on analysis or 'normal to specifi c' formula.

(c) Presentation—In this step, student analyzes different types of concepts on the basis of his age and experience and prepares a report in writing.

(d) Training—This step includes the use and practice of learned concept, their explanation and the origin of concepts on the basis of unorganized information.

3) Social System—Teacher motivates the students and guides them in analysis and origin of concepts. Teacher has an important role in this model because he puts the data in front of students, creates plan and guides students. The main objective of teacher is help students in the origin of concepts.

(4) Evaluation System—In the evaluation of this model essay type and objective exams are used and information is provided by them through evaluation, correction and modifi cation. In this model, students have to obtain the prior concepts, not to discover new concepts.Evaluation system is very useful for understanding of concepts.

D. Bruner's Concept Attainment Model:

Teaching Model:

a). Objectives:

Inductive Reasoning.

To improve language learning skills and understanding.

b). Syntax:

1. Teaching strategies are important in teaching.

2. Four steps are included–

(i) Presentation of data.

(ii) Formation of concept matrix.

(iii) Creation of written report for analysis of concepts.

(iv) Practice for concepts (by students).

c). Social System:

1. More motivation and help by teacher in the beginning.

2. Analysis of concept by students themselves in the end.

d). Evaluation:

1. Objective exam and

2. Evaluation through essay type exam.

EXTRA POINT

About this teacher move

Concept Attainment is a constructivist approach to teaching and learning drawn from the work of Jerome Bruner (1956). In this instructional model students apply their prior understanding to determine the attributes of a concept through the processes of comparing and contrasting. This structured inquiry approach, gives students the opportunity to:

• distinguish between relevant and irrelevant information

• observe, classify, and hypothesize

• connect newly attained concepts with old information

• think inductively

The teacher's principal responsibilities are to provide examples, record student data, and ask probing questions. The principal goals of the concept attainment model are to enhance long-term learning and enable students to develop a habit of analysis through inductive reasoning.

Implementing this teacher move

1. Gather images, sounds, and words to use as exemplars.

2. Duplicate the Student Discovery Guide.

3. Obtain chart paper, markers, tape.

Managing this teacher move with students

A. **Stage One: Categorizing**

1. Post two pieces of chart paper or divide a marker board into two sections.

2. Label the charts or marker board sections as Positive Exemplars (Have the Attributes) and Negative Exemplars (Lack the Attributes).

3. Present several paired Exemplars (pictures, words, sounds, symbols, etc.) according to positive and negative categories. Begin the list with a paired example that has a High Attribute Value i.e., each member of the pair is strongly representative of that attribute. For example, if the concept was "sedentary", a sloth would have a level attribute value and a baby chimpanzee would score at a low value.

4. Working singly or in groups, students complete their Discovery Guides in which they attempt to determine common attributes by:

· Making comparisons within a single category

· Looking for contrasts between categories

· Answering focusing questions: What makes the items fit into that category? What prevents these items from being in the other category?

B. **Stage Two: Building Concepts**

1. Provide students with additional paired exemplars.

2. In the large group, students hypothesize about common attributes. The teacher charts student ideas.

3. Teacher presents a new, additional example to test students' hypothetical explanations.

Ask students "Is this a positive or negative exemplar? Why?"

Tabulate class data and confirm the example.

5. Students attempt to name the Category or teacher gives the category a name or label.

6. Students give additional examples of that concept.

C. **Stage Three: Attaining Concepts**

1. Students work in pairs to identify the Essential Attributes of the concept.

2. Student pairs prepare a final working description of the concept.

3. Students analyze and describe their thinking as they worked though the Concept Attainment processes.

D. **Suggested Formative Assessments**

1. Score the completed Student Discovery Guide.
2. Create a related concept map. See **Add Visual Components** for additional information.
3. Test for the ability to identify additional positive exemplars for the concept.

E. **Concept Attainment Glossary**

Attribute – a major feature or characteristic of something; e.g., robin – red breast.

Attribute value – the degree or strength to which the attribute is represented in the exemplar.

Category – a collection of examples that share attributes missing in the other exemplar list.

Concept – an idea, object, or event that can be given a name or label.

Data set – a large list of exemplars.

Essential attribute – the characteristic that is critical to understanding the concept under consideration.

Exemplars – subset of a collection of data presented as a pair.

Induction – process of reasoning that proceeds from the specific to the general.

4. **3.ASUBEL"S ADAVANCED ORGANISER MODEL AND ITS APPLICATION IN SCOAL SCIENCE**

Introduction:

David Ausubel is the originator of Advance organizer teacher model. This model is based on verbal learning and information processing. David Ausubel has been highly impressed by Bruner's Academic

Discipline Concept. By presenting the details of the model, Bhushan and Varshney (1994) says, "In this model, we develop knowledge in front of students by organizing them in such a way that they can learn new knowledge with the meaningful method by interacting with the knowledge they already kept in their mind.

Meaningful knowledge means that the knowledge learned can be used in other circumstances i.e several problem of his daily life can be solved in a simple and natural manner based on the previous experience. According to this principle, teacher presents a subject matter related to concepts in an organized form in such a way that subject matter is easily understandable to student.

Main Elements of Advance Organizer Teaching Model:

(1) Focus—Main focuses of this model are—

1. To make aware of the concepts and facts.

2. To establish relations in knowledge.

3. To create interesting and meaningful text.

(2) Syntax—In syntax, firstly actions are normally present for meaningful sense of text, then it is presented in a specific form in order to learn the text. Three main process are included in this type of model.

1. Presentation of advance organizer.

2. To present the learning material/learning task.

3. To strengthen cognitive organizer.

(A) Presentation of Advance Organizer—

(a) The objective of the lesson are specified.

(b) The presentation of the organizer is done. For this:

(i) Definitions of the variables are marked.

(ii) Examples are offered.

iii) References are presented and are repeated if needed.

(c) Learner is made aware of related knowledge and experience.

B) Presentation of Learning Material/Learning Task—

(a) Organizer is fully clarified.

(b) Logical order of learning content is interpreted, so that there should not be any doubt.

(c) Taking care by concentration and to maintain concentration.

(d) To present learning material.

(C) To Strengthen Cognitive Organizer—

(a) Use of integrative reconciliation principles.

(b) To make students active to gain information.

(c) To clarify text of complex approach and to make it simple and easy.

(3) Social System—As said above that this model believe that abstract ideas can also be presented in an effective way. Teacher have more important role in it. He is more active and have full control over the class. Class remains disciplined and organized. Teacher presents an appropriate environment for effective teaching and

motivates students when needed. Whenever needed, he helped. There is interactions between teacher and students.

Bruce and Weil summarize social system as follows—

"The model has high structure. Teacher defines roles and controls social and intellectual systems."

(4) Evaluation System—In this model, evaluation is done on the basis of instruction. Both the verbal and written exams are used for evaluation. Advance organizer model is an effective method for teaching abstract learning contents. This model is helpful in obtaining the high level objective of cognitive phase. This model is being used in the sectors of problem solving and transfer of learning.