



Concept Attainment Model: Theoretical Reviews

Mikul Patel
P.G.Department of Education, Sardar Patel
University

Dr. Diptiben Trivedi
ex. Asso.Professor, P.M. Patel College
Sardar Patel University

Abstract:

Concept attainment strategy is based on work of Jerome Bruner. Concept attainment is designed to clarify ideas and formulating the concept by identifying attributes given in positive and negative examples. The present article is about theoretical review of concept attainment model. The present article contains brief detail about concept attainment model which include introduction, purpose, syntax, social system, support system, principle of reaction, how to use concept attainment model in classroom, worksheet, applications and advantages of concept attainment model. Concept attainment model helps in strengthening the cognitive structure of students.

Key Words: Concept attainment, Attributes, Exemplars (Yes/No), Category

What is concept attainment?

Concept attainment is an indirect instrumental strategy that used a structured inquiry process. It is based on work of Jerome Bruner. In concept attainment, student figure out the attributes of a group or category that has already been formed by the teacher. To do so, student compare and contrast examples that contains the attributes of the concept with examples that do not contain those attributes. They then separate them into two groups, than is the search for an identification of attributes that can used to distinguish examples of a given group or category from non-example.

What is its purpose?

Concept attainment is designed to clarify ideas and to introduce aspects of content. It engages students into formulating a concept through the use of illustration, word cards or specimens called examples. Students who catch onto the idea before others are able to resolve the concept and then are invited to suggest their own examples, while other students are still trying to form a concept, for this reason, concept attainment is well suited to classroom use because all thinking abilities can be challenged throughout the activity with experience, children become skilled at identifying relationships in the word card or specimens with carefully chosen examples, It is possible to use concept attainment to teach almost any concept in all subject.

The concept attainment Model:-

The concept attainment model was developed from the work of Jerome Bruner, Jacqueline Good now and George Austin

(1987). This model helps students to develop and form new concept with the help of teacher. Student analyzes their strategies of thinking. Bruner and his colleagues set out to study this thinking process called categorizing.

According to Bruner "Categorizing activity actually has two components, the act of concept formation and the act of concept attainment." He maintains that the concept formation is the first step towards concept attainment. The distinction between concept formation and concept attainment, though subtitle is important because,

- 1) The purpose and emphasis of these two forms of categorizing behaviors are different.
- 2) The steps of the two thinking process are not the same.
- 3) The two mental processes require different teaching processes.

In concept attainment, there is only one concept. Using clues supplied by the teacher, student try to determine, to identify and destination of that concept.

Syntax – Concept attainment Model

Concept attainment Model involves three phases of teaching learning process.

Phase – 1 Presentation of data and identification of concept

Phase one involves presenting data to the learner each unit to data is a separate example or non example of concept. The units are presented in pairs. The data may be events, people

object, stories, picture or any other discriminable units, The learners are informed that all the positive example have one idea in common, their task is to develop a hypothesis about the nature of the concept. Learners asked to compare and justify the attributes of different example, finally learners are asked to name their concept and state the role or definition of concept according to their essential attributes. Their hypothesis is not confirmed until the next phase; students may not know the name of some concept, but the names can be provided when the concepts are confirmed.

Phase – 2 Testing attainment of the concept

In phase two, the students test their attainment of the concept, first by correctly identifying additional unlabeled examples of the concepts and then by generating their own examples. After this the teachers confirms or disconfirms their original hypothesis, revising their choice of concept or attributes as necessary.

Phase – 3 Analysis of thinking strategies

In phase three, students begin to analyze the strategies by which they attain concepts. As we know, some learners initially try broad constructs and gradually narrow the field; others begin with more discrete constructs. The learner can describe their patterns – whether they focused on attributes or concepts. Whether they did so one at a time or several at ones and what happened when their hypothesis were not confirmed. Did they change strategies, gradually; they can compare the effectiveness of different strategies.

Social System:-

Prior to teaching with the concept attainment model the teacher chooses the concept, selects and organize the material into positives & negatives example, and sequences the

examples. Most instructional materials, especially text books, are not designed by educational psychologist. In most causes teacher will have to prepare examples, extracts ideas and materials from texts & other sources, and design them in such a way that the attributes are clear and what there are indeed, both positive & negative examples of the concept, when using concept attainment model, the teacher acts as a recorder, keeping track of the hypothesis as they are mentioned and of the attributes. The teacher also supplies additional example as needed. The three major functions of the teacher during concept attainment activity are to record, prompt and present additional data.

Principal Reaction:-

During the flow of the lesson, the teacher needs to be supportive of the students hypotheses – emphasizing, however that they are hypothetical in nature and to create a dialogue in which students test their hypotheses against each other In the later phases of the model, the teacher must turn the students attention towards analysis of their concepts and their thinking strategies again being very supportive. 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.

Support System:-

Concept attainments lessons require that positive and negative exemplars be presented to students. It should be stressed that the students job in concept attainment is not to invent new concept but to attain the ones that have previously been selected by the teacher. Hence, the data sources need to be known before and the attributes visible, when students are presented with an example, they describe its characteristics, which can be recorded.

How to use in classroom:-

- Introduce and explain the strategy.
- Draw two column in board and little them “Yes” and “No”, present each example and write them in appreciate column. Start with two or three examples in each column.
- Instruct students to analyze and compare the examples within the groups and between the groups and tell them to listed out and write the attributes they obtained from the examples.
- Add more examples to each column. Instruct students to refine the attributes list by analyzing the additional examples.
- Ask students if they are able to identify the concept but not to say out cloud. Students who have identified

the concept can encourage adding more “Yes” examples in the column. Encourage other students to examine the student – generated examples to identify the concept.

- Teacher can assist by modeling the thought process to help other students identify the concept. Once identified, help students define it using the list of identified attributes.
- To test for understanding, have students suggest more “yes” and “No” examples of the concept with explanation or instruct them to categorize them as “Yes” or “No”.

Concept attainment worksheet:-

Write down the positive (Yes) and Negative (No) examples below (To be filled out by teacher)

“Yes” example

- 1
- 2
- 3
- 4

“No” example

- 1
- 2
- 3
- 4

Attributes:-

- 1.
- 2.
- 3.
- 4.
- 5.

- Identify the concept using attributes.....
- Define the concept...

Advantages of Concept attainment model:-

- Students expand their thinking to be able to view and consider multiple attributes at the same time.
- Students learn how to examine a concept from number of perspectives and how to sort out relevant information.
- Students extend their knowledge of concept by classifying more than one example of that concept.
- Students go beyond merely associating a key term with a

definition and learn more thoroughly and retention is improved.

- Concept attainment model helps in strengthening the cognitive structure of the students.
- The model can also be helpful in opening up a new conceptual area by initiating sequences of individual or group inquiries.

Applications:-

The concept attainment model may be used with children of all ages and grade levels. For young children the concept and example must be relatively simple, and the lesson itself must be short and heavily teacher-directed. The typical curriculum for

young children is filled with concrete concepts that readily lend themselves to concept attainment methodology. The analysis of thinking phase of the strategy is not possible with very young children though most upper elementary students will be responsive to this kind of reflective activity.

When the model is used in early childhood education, the materials for examples are often available and require little transformation for their use as example. Classrooms object, Cuisenaire rods, pictures and shapes can be found in almost any early childhood classroom. Although helping children work inductively can be an important goal in itself, the teacher should also have more specific goals in mind using this model.

The concept attainment model is excellent evaluation tool when teacher want to determine whether important idea introduced earlier have been mastered. It quickly reveals the depth of students understanding and reinforces their previous knowledge.

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