

CHAPTER IV

TECHNIQUES, METHODS AND REMODELED LESSON PLANS FOR ENHANCING CRITICAL THINKING.

4.0 Introduction

The present research study is an intervention to enhance Critical Thinking in students, using Psychology subject as content matter. The study is developmental in nature. In the light of this objective, the investigator has developed a teaching-learning strategy. The teaching –learning strategy comprises of methods and techniques for enhancing critical thinking in students using the Psychology subject as content matter. This particular chapter deals with the techniques and methods integrated in teaching –learning specific content as to facilitate thinking in students.

4.1 TECHNIQUES

A technique is a device or an instrument, which aid and direct students to think critically. The major part of techniques embodied in the present study have been adopted and adapted from deBono's CoRT lessons.

Edward deBono is considered to be the leading authority in the world on the direct teaching of thinking as a skill. His thinking lessons and in particular the CoRT thinking lessons have been in use for many years and in many countries like Venezuela, Singapore, Australia, New Zealand, Canada and many more.

The four techniques embodied in the present study are Plus Minus Interesting (PMI), Other People's Point of View (OPV), Considering All Factors (CAF), and Thinking about thinking technique. The investigator will explain each of these techniques and also brief about the assumptions and objectives behind using these techniques in the following paragraph.

- (i) **PMI** - is the first of CoRT lessons an attention-directing technique. 'P' stands for plus or the good points. 'M' stands for minus or negative points and 'I' stands for interesting points. In doing PMI, one deliberately directs one's attention towards the plus points, then towards the minus points and finally towards the interesting points. This is done in a very deliberate and disciplined manner.

The basic assumption behind using PMI is that it sets the mood of objectivity and scanning. Students trained in PMI will be in a position to make analysis more broadly and clearly. In doing PMI, one gets an opportunity to view points in both the directions: positive as well as negative and arrive at a conclusion, make evaluation, pass judgments critically.

The main objectives, of critical thinking likely to be achieved are process of analysis and critical evaluation.

- (ii) **OPV**-is another of the CoRT tools. The letters OPV stands for 'Other people's View' or 'Other Point Of View'. In using OPV, the thinker tries to put himself in the other person's 'shoes ' in order to look at the world from that position. For example, a school policy states that a student should be suspended for cheating in an examination. To understand truly the impact of the policy it should be looked at from different points of view namely from the teachers, school board, parents, society and the concerned student himself or herself.

Assumption behind using OPV is that the person who reasons puts two or more opposing points of view in competition with each other by providing support, raising objections and countering those objectives. There are two parts to this exercise. The first part involves the identification of the others who are part of the situation and the second part involves getting into the shoes of all those other people. It is deliberately and objectively trying to look at the world from their point of view.

The objective of critical thinking likely to be accomplished is dialectical thinking and intellectual empathy.

(iii) **CAF-** doing CAF means 'considering all factors' while looking at an issue, a problem, or a situation, one needs to take into consideration all the factors or aspects of the matter at hand. For example, suppose we are doing a CAF on choosing a pet, which would mean that we need to consider factors like space in the house, food habit of the owner and the animal, purpose etc.

Assumption behind using CAF is that, a critical thinker needs to develop criteria or a bases for analysis, comparing or solving a problem. It is essential to consider all factors that go into it. In doing CAF the emphasis is on what factors ought to be considered.

The objective of critical thinking likely to get inducted is the ability to form or lay down the basis or the criteria for comparing and contrasting.

(iv) **Thinking about Thinking-** thinking about thinking is an essential requirement of critical thinking ability. To think about thinking is to engage in what is called metacognition.

One possible definition of critical thinking is the art about thinking while one is thinking in order to make ones thinking better, more clear, more accurate, more fair when one is critically reading, thinking ,listening or writing

The basic assumption behind teaching 'thinking about thinking' is that after having learnt critical vocabulary, students would be able to read critically. The basic objectives of critical thinking that students who are likely to get trained, are that they learn to make and draw 'assumption', 'implication' about ones claims the persons' claim when reading, listening or writing. Students learn to differentiate between 'facts' and 'opinion', provide 'evidence' and detect biases.

4.2 METHODS

Methods of teaching thinking assist the researcher to draw out and deduce students' thought process. In the present study the researcher aims at infusing Critical Thinking in students of std. XI and the methods used for infusing Critical Thinking are a Case study method, Socratic questioning method and Experiential teaching method.

(i) Case Study Method

In the present study, the researcher would be mainly implementing 'case study method' for developing critical thinking in students. Case study method is a widely used tool in training, besides lecture, game playing, role-playing and other methods.

A case is a description of a situation or a problem requiring analysis, decision and planning a course of action. A case is an instance of some situation or a state of affairs, hypothetical or actual. It has a structure or a series of structures. It has a plot or a drama. In short, a case may be description of real situation or an imaginary situation. It involves a problem situation and participants get involved in it during analysis and discussion.

For the present study, the investigator has developed cases based on psychology content. For the study, each case devised is an imaginary situation, involving a problem situation, based on theories and concepts. The main purpose behind devising each case is that students may get an opportunity to solve the problem based on their understanding of the theories and concepts. Thus, a student is required to do much more than just blindly memorize the content but to think on the content and apply their knowledge.

The researcher had decided on case study method of teaching for developing critical thinking because of its inherent features. It provides opportunity to (i) ***Put knowledge into practice.*** (ii) ***To develop in students an understanding on principal problems of importance.*** (iii) ***To apprise situation prevailing in a case and apply concepts.*** (iv) ***To diagnose problem situation, to draw conclusion, implication, propose action etc. and many more.***

For the present study the researcher has used case study method along with discussion method. On completion of a topic a case was presented to the students to be solved individually and followed by a discussion, so that students have chance to interact with one another and in the processes learn to critically think.

Bryce .B. Hudgins and Sybil . Edelman (1986) conducted a study to teach critical thinking skills to fourth and fifth grade through teacher-lead small group discussion. Eight lessons were written especially for the purpose of group discussion. Each lesson was constructed to pose a problem that demanded critical thinking for its solution. The result of the study indicates that students who had been exposed to the program have reported gains on various measures of critical thinking.

(ii) Socratic Questioning

Socratic questioning stands far apart from the usual mode of classroom that is based on recall and memory. Unlike the usual mode of questioning, Socratic questioning is a mode of questioning that deeply probes the meaning, justification, or logical strength of a claim, position or line of reasoning. *Socratic questioning can be carried out in a variety of ways and adapted to understand many levels of students' understanding.* Socratic questioning enables teachers to find out what students know or think and use it to probe into students thinking on a variety of issues.

(III) Experiential Teaching Method

Experiential teaching means teaching through demonstrations or role-play. Under experiential teaching the students are given first hand experience of the concepts under consideration. Here teaching through demonstration is different from what generally happens in a science laboratory. Usually in a science laboratory the concepts are explained verbally and later a demonstration is given on their functioning/ properties/ components (which have already been explained prior to the demonstration) etc. In this study, essence of the given concept is demonstrated without any prior explanation. Based on their experience, students infer about the concept under consideration. For example, concept rumor- instead of explaining how rumors are generated, it may be simply shown through demonstration/role-play. It gives a student a first hand experience and on basis of his/her experience he/she gets an opportunity to relate, analyze and conceptualize.

The above methods and techniques are an important integrated components of the intervention program to assist thinking in students. Methods are tools employed by the investigator to evoke thinking in students. On the other hand, techniques are presupposed skills, taught to students in order to aid and direct

students to think. With the support of methods and techniques, the investigator will remodel classroom lessons. Remodeled lessons plans are presented in the chapter V.