# THE CASE METHOD: A CRITIQUE AND A CONCEPTUAL MENU FOR EXCELLENCE

**Dr. Yassin Sankar, Professor of Management, Dalhousie University, Canada**

## ABSTRACT

*The Case Method as a major vehicle in management for teaching creative problem solving and decision making skills has been perceived as limited in its effectiveness. This is primarily because of its emphasis on reactive - vertical thinking and its visualization of the art of problem solving as a sequential mechanical process hence the crisis of creativity in management and the absence of critical thinking skills in our students. This paper examines the case method as the enactment of a learning design. It focuses on (1) the essentials of learning, (2) problem solving as a <u>complex type of learning</u>, (3) instructional objectives for the case method and (4) pedagogical strategies for facilitating the transfer of learning through the case method.*

## INTRODUCTION

This Case Method as a major pedagogical vehicle has come under review in Business Week (1986) with a rather incisive conclusion. Cases are perceived as "too narrow and superficial to impart complex management concepts…it is difficult for a professor who may write eight or nine cases in a year to rise above the obvious to do original research." Bobele and Buchanan (1996) argue that the weakness of the case method lies not in the method itself, but in the heavy emphasis on convergent thinking in the three steps: (1) analysis or problem identification, (2) generation of alternatives, and (3) decision regarding course of action. "We believe that the already powerful case method can be enriched by including some divergent thinking processes, especially in the generation of alternatives step."

As a vehicle for learning, problem solving, and decision making skills the case method is limited in two areas, firstly in the actual design of cases and secondly in the use of the case method as a pedagogical strategy. In the programming of the case content, as Business Week notes, the case writer may focus on the obvious, a management incident, an organizational problem, a scenario of trivial cause-effect analysis and may, therefore, not contain the major parameters for effective instruction. The content may not contain analytical concepts such as propositions, principles, rules, generalizations, decision criteria, organizing conventions - substantive and syntactical criteria that will enhance discovery learning and critical thinking as opposed to rote learning, On the second point, the use of the case method as a pedagogical strategy, the problem is more complex. As a pedagogical strategy the case method must articulate certain basic principles of learning. The case method is not simply a sequential process involving problem definition, analysis, generation of alternatives and problem solution but also a cognitive process that involves learning and thinking. The case method as an instructional plan that teaches problem solving, a complex cognitive skill, must visualize problem solving as a <u>type of learning</u> not merely a sequence of activities. The case method must focus not only linear thinking and reactive

thinking but also on lateral thinking if it is to achieve pedagogical excellence. We develop these major themes in subsequent sections of the paper.

## The Case Method: Instructional Design and Learning

### Principles of Learning:
**Every instructor who uses the case method is involved in the enactment of an instructional plan based on a variety of decisions regarding the essentials of learning.**

The Case Method as an instructional plan is simply a strategy for managing the conditions of learning. That is, when the instructional plan is viewed as a plan for learning and not merely as a plan for listing bits of information re the sequence of content or describing the problems, incidents or scenarios of an organization, additional considerations emerge regarding the essentials of learning or the "psychological order" of learning. Neither the ideas nor the sample of content in a case represent a teachable content: a sequence and a logical organization is only partially established. The content needs to be arranged so that the dimensions of inquiry are in a sequential order according to a feasible learning sequence. More important, the Case Method as an instructional plan or learning program is a method of teaching thinking: a pathway for developing generalizations inductively and for applying them: a way for establishing relationships between ideas and facts; a model for processing and converting information though inductive-deductive inquiry; a medium for the perception of complex interaction effects in a phenomenon (Taba, 1996); and a framework for evaluating a learner's capacity to interpret, translate, apply, analyse, synthesize and evaluate the bits of information in the case. The design of a learning program as illustrated in the case method then must be based on a set of strategies that facilitate the effective management of the conditions of learning (Gagne, 1990).

Generally, a strategy is a way of organizing thinking about conditions that are important to the design of a learning program (Sankar, 1984). These decisions are explicit in the following questions. What are the major types of learning around which the Case Method is based? What are the pre-requisite types of learning-conditions, skills and attitudes for facilitating each major type of learning? Does the Case Method facilitate the development of projective thinking? Is the Case Method more oriented towards reactive thinking? Does theCase Method facilitate problem solving as a type of learning? Can learning through the mediium of the case method transfer to creative problem solving on the job? Why is the dominant learning style of business students so much oriented towards applications rather than critical thinking and discovery learning? A design strategy should help identify what these points of crucial decisions are and the pedagogical bases on which these decisions are made (Sankar, 1999).

## Thinking, Information, and the Case Method

Often in using the Case Method it is assumed that information is more important than thinking. Thinking is regarded as only a tool for assimilating information, classifying it and storing it and retrieving it. Information is much easier to teach than thinking. One ton of information may contain zero insight (SaiBaba, 2000). Insight is a penetrating mental vision. Vision is an idea vividly perceived in the imagination. Imagination, therefore, is more powerful than knowledge.

(Einstein, 1973) where is the wisdom we have lost in knowledge, where is the knowledge we have lost in information? (T.S. Eliot) Information within a closed system like the Case Method may indeed seem to replace thinking. Thinking may even seen to be mere guessing. The relationship between thinking and information can be considered in this situation. Data become information only when they are looked at through the spectacles of an idea. "Einstein looked at the data that had been seen through the Newtonian idea and by looking at them in a different way came to a different conclusion" (DeBono, 1992). The constant play between information and ideas cannot be neglected. Ideas are generated by the application of thinking to data. When we collect information we collect data that have been organized by the old ideas. To improve those ideas we need thinking, not just more information.

The crisis of creativity in management and the absence of critical thinking skills may be partially attributed to the dominant mode of instruction, namely, the case method, used in all fields of management with its minimum emphasis on insightful problem solving, creative visualization, and ingenuity. The adaptive corporation needs a new kind of leadership. It needs "managers of adaption" equipped with a whole set of new, non-linear skills (Toffler,1985). As the business world becomes more complex, more uncertain, more changeable and more conflict ridden, so the requirements of managers proliferate. Our ability to cope with all this should be enhanced by the multiplicity of concepts and techniques - new paradigms of thinking…. Fixed state thinkers believe there is an ideal condition, that, once put into place, will solve problems now and in the future (Bennis et. al., 1995). No longer is it enough for a manager to have analytic or problem solving skill. These are being increasingly met by computers, and by expert and knowledge-based systems.

> **Perspective:**
> **The crisis in creativity in management and the absence of critical thinking skills and discovery learning in our students can be partially attributed to the dominant instructional mode of learning used in management, namely, the case method.**

My arguments that too much emphasis is placed on linear thinking or convergent thinking as opposed to lateral thinking. Our thinking culture has always emphasized reactive thinking. With the Case Method a problem is set out for us to solve and we react to the situation and solve the problem using a sequential framework. In our critical frame of mind we look at something that is being put forward and we react to it. As problem solvers we receive the problem and we set out to solve it within a hierarchical framework. In contrast a projective thinker may only have a starting point and a general direction. The learner then sets out to do something. One does not need a bag of facts or numbers or variables to start thinking. The learner has to find his/her way and generate his/her own information in projective thinking. Such activities as the assessment of priorities, generating ideas not necessarily data or information, selecting alternatives, designing scenarios, guessing and strategy are all part of projective thinking. The projective thinker will build situations in his mind. He/she will enlarge his perceptions and alter his perceptions. Perception is critical to learning. The perceptual field must be analyzed when creating an instructional design for the Case Method. This design must focus on variables in the perceptual field and must also emphasize projective thinking as opposed to linear thinking. While linear thinking is intrinsic to the Case Method because of its sequential framework; projective thinking

can be emphasized in the design through a Menu which facilitates a Random Query as illustrated in my Computer Courseware for the Case Method (Sankar, 2000).

With reference to creative problem solving, lateral thinking may proceed in this manner. Instead of proceeding step by step in the usual vertical mode, you take up a new and quite arbitrary position. You then work backwards and try to construct a logical path between this new position and the starting point. Should a path prove possible, it must eventually be tested with the full rigours of logic. If the path is sound, you are then in a useful position which may never have been reached by ordinary vertical thinking. Even if the arbitrary position do not prove tenable you may still have generated useful new ideas in trying to justify it. The rigid sequential process used in the Case Method promotes a high incidence of vertical thinking which inhibits creative problem solving.

**The Case Method and the Learning Typology:**

> **Principles of Learning:**
> **The Case Method as an instructional plan is based on a learning typology. The typology is organized around problem solving at the apex which subsumes other major types of learning such as rule learning, concept learning and discrimination learning. These pre-requisite types of learning to problem solving must be programmed in the use of the case method as an instructional plan.**
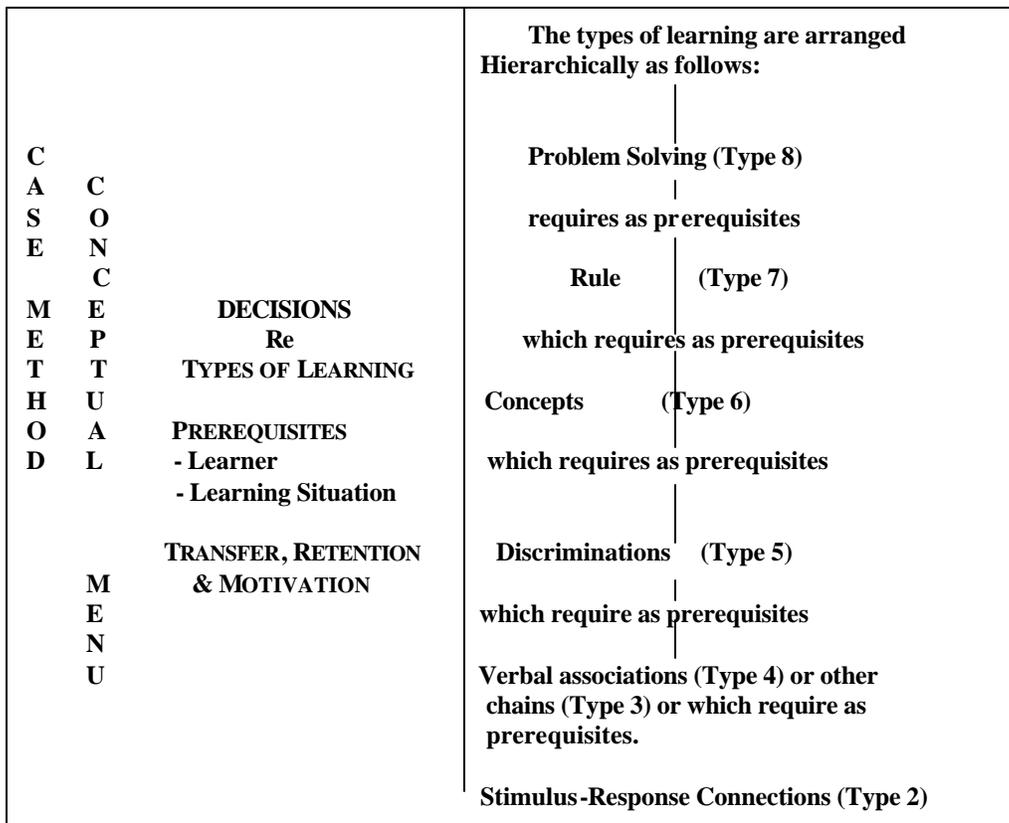
Most Case Method applications in all fields of management involve some measure of problem solving. Problem solving involves conventionally a sequence of activities such as definition of the problem, delimiting major parameters of the problem, cause-effect analysis and generating alternatives or outcomes. But problem solving is also a type of learning that subsumes other types of learning such as rule learning, concept learning, and discrimination learning and so on (Gagne, 1992). Therefore, any evaluation of problem solving which is critical in any Case Method must focus on the prerequisite types of learning, subordinate skills and capabilities, and information and major integrating concepts. Creative problem solving is a most complex instructional outcome to evaluate in the instructor's repertoire of learning objectives. To be effective the Case Method must incorporate the types of learning that are subsumed under problem solving. Too often this is not done in the application of the Case Method. Much that passes for meaningful problem solving is simply a species of rote discovery learning. Insightful problem solving, on the other hand, is a type of meaningful discovery learning in which problem conditions are non arbitrarily and substantively related to existing cognitive structure. It involves going beyond the information given in the case. It involves transforming information in the case or database by analysis, synthesis, hypothesis formulation and testing, rearrangement, recombination, translation and integration. Problem solving then constitutes a form of guided discovery learning.

Gagne has offered a particularly comprehensive model of different types of learning and the conditions necessary for them to occur. He has derived from this model the events of instruction. His argument is that there are many kinds of learning and that it is the learner's starting point that distinguishes one kind of learning from another. "The attempt is made to show that each variety

of learning described here begins with a different state of the organism and ends with a different capability for performance."

That is, the Case Method as an instructional design must focus on the types of learning and the prerequisite conditions for facilitating that learning or combinations of learning. These prerequisite conditions for learning reside in the Learner and the Learning Situation. These types of learning must be reflected in the learning objectives of the Case. The prerequisite conditions must be diagnosed and programmed. Another function of the learning typology is its role in evaluation of learning. The instructor must make a set of decisions not only on the prerequisite conditions for the various types of learning but also decisions regarding the evaluation of these types of learning. For example, with reference to the types of learning, are we testing for simple response learning, chaining of responses, concept learning, propositional (rule) learning? A student may (a) rehash a definition, (b) repeat a generalization, (c) retrieving bits of information, (d) recite the components of a data base and so on; this is testing at the lowest levels. The point is that there must be a consistency between the learning objectives postulated for an instructional plan and the criteria for the evaluation of these learning objectives. The relevant set of decisions for instruction deriving from the definition of objectives are those that determine the type of learning to be employed in attaining these objectives. Such decisions are critical for effective instructional design.

**Figure 1: The Case Method and Problem Solving**



**The types of learning are arranged Hierarchically as follows:**

**Problem Solving (Type 8)**

requires as prerequisites

**Rule  (Type 7)**

which requires as prerequisites

**Concepts  (Type 6)**

which requires as prerequisites

**Discriminations (Type 5)**

which require as prerequisites

**Verbal associations (Type 4) or other chains (Type 3) or which require as prerequisites.**

**Stimulus-Response Connections (Type 2)**

CASE METHOD

CONCEPTUAL MENU

DECISIONS
Re
TYPES OF LEARNING

PREREQUISITES
- Learner
- Learning Situation

TRANSFER, RETENTION & MOTIVATION

With reference to typology of learning, Gagne makes the following observations. In describing the conditions of learning, the distinction between <u>external</u> and <u>internal</u> conditions has been given frequent emphasis. It will be evident that learning hierarchies pertain only to the <u>internal</u> conditions, in other words to the capabilities that are to be learned and to the capabilities that are prerequisite to these. A hierarchy may identify component capabilities which are rules, other sub-ordinate to these which are concepts, or discriminations or, chains or even single S - R connections. These capabilities, however, insofar as learning is concerned, represent only the internal conditions - those subordinate capabilities that need to be recalled when a new higher-level skill is about to be learned (Gagne, 1992).

**Figure 2: The Case Method and Types of Learning**

| **Type of Learning: Simple** | **Learning Conditions** |
|---|---|
| **1. Discrimination** | Recall of S-R connections ("response") Repetition of situations presenting "same and "different" stimuli, with feedback. Emphasis on distinctive features. |
| **2. Concrete Concept** | Recall of discrimination of relevant object qualities. Presentation of several concept instances, varying in irrelevant object qualities. Identification of concept instances by student. |
| **3. Defined Concept** | Recall of component concepts Demonstration of the components of the concept, or verbal statement of the definition Demonstration of concept by the student. |
| **4. Rule** | Recall of component concepts of subordinate rules Demonstration or verbal statement of the rule Demonstration of the rule-application by student |
| **5. High-Order Rule** **Complex** | Recall of relevant subordinate rules Presentation of a novel problem Demonstration of new rule in achieving problem solution |

**The Case Method**

**Conceptual Menu**

Instructional objectives often turn out to specify the learning of fairly complex skills, which requires the prior learning of simpler skills in order to instruction to be effective. This is particularly true according to Gagne if one begins instructional planning with an objective

representing an intellectual skill such as a defined concept, or a problem solving task. The skills to be learned in such tasks typically suggest a preceding sequence of objectives for simpler skills and related information. Each type of learning has its own prerequisites. Instructional objectives for these prerequisite must also be set for the Case Method as an instruction plan.

## CONCLUSION

The complexity of today's business environment creates increasing pressure on the organization and on the role and functions of the manager. More creative problem solving skills could enhance the effectiveness of the organization and the manager to cope with complexity, change, and uncertainty in a global playing field. The learning principles we have designed in the evaluation of the case method is a step forward in the visualization of the case method as a mechanism for developing insightful problem solving, creative decision making skills, divergent thinking and creative visualization. These principles also serve to enhance the effectiveness of the case method as an instructional vehicle. A computer software designed for the case method, with these principles of learning will enhance its effectiveness significantly as an interactive instructional tool.

## REFERENCES

1.  Ausubel, D. (1992).  Educational Psychology: A Cognitive View. New York: Holt Rinehart and Winston.
2.  Bennis, W.. Parikh, J. and Lessem. (1995).  Beyond Leadership. London: Blackwell.
3.  Bloom, B.. Hastings, J. and Madaus, G. (1992).  Handbook on Formative and Summative Evaluation of Student Learning. London: McGraw-Hill.
4.  Bobele, K. and Buchanan, P. (1996).  Training Managers to be Problem Solvers. Journal of Creative Behavior.
5.  DeBono, E. (1992).  New Think. New York: Avon Books.
6.  Gagne, R. (1992).  Development in Learning Psychology: Implications for Instructional Design and Development. Educational Technology.
7.  Gagne, R. (1992).  The Conditions of Learning. New York: Holt, Rinehart and Winston.
8.  Sankar, Y. (1986).  A Conceptual Model for Evaluating Training Program. Management International Interview.
9.  Sankar, Y. (2001).  The Design of a Computer Courseware for the Case Methods. Working Paper No. 3, Dalhousie University.
10. Sri Sathya Sai Baba (2001).  Information to Transformation. Sanathana Sarathi: Puttarparthi.
11. Toffler, A. (1985).  The Adaptive Corporation. New York: Bantam.