Chapter 1
Management of Critical Thinking Abilities of Teachers and Learners in a Dynamic Futuristic Environment

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ABSTRACT

Education is the essential tool for turning out a regular annual stream of students who constitute the manpower for the development and growth of a country. This chapter deals with the needs of a country which is considered as the leader of the third world. The education system has to be nurtured to produce the managers who have the essential skillset to take the country in its forward march to become the number one country in the world.

CRITICAL THINKING

Critical, creative thinking has been by definition the analysis of information contained in facts and data to draw a proper conclusion after a judgment of the facts. In any group of people, those who are able to quickly grasp all the details and come up with a solution to the problem on hand will be applauded as a performer and in course of time, out of such performers emerge the Leaders of the team. The hierarchy of the management of an institution has at its helm the one who proves time and again his mettle to contribute significantly to the success of the organization. Critical thinking is important in this respect and

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there started a movement with the development of the influential definition of critical thinking(Ennis, R, 1991). Further, the skills of 'critical thinking' occupy a contentious place in debates on education(Mc Peck, JE, 2016).

Swami Vivekananda, the Hindu monk and chief disciple of the 19th Century mystic Swami Ramakrishna Paramahamsa, electrified the First World's Parliament of Religions gathering at Chicago by beginning his address with the salutation: ``Sisters and Brothers of America'', for which he got a standing ovation from the gathering of seven thousand participants which lasted for two minutes!

Swami Vivekananda believed that education is the manifestation of perfection already in men. This is a demonstration of original and critical thinking of Swamiji's to the enlightened religious heads from various countries of the world. A message of universal relevance to leaders, managers, technocrats, administrators and even politicians, at all times.

Swamiji felt that the existing system of education not only did not enable a person to stand erect on his own feet, but it also did not teach him the essentials of self-confidence, self-respect and self-control.

EDUCATION SYSTEM

There have been four branches of the Education system from time immemorial. They are:

1. Science and Technology (S & T)
2. Commercial and Management
3. Arts and History
4. Humanistic and Spirituality

Normally, Science and technology (S&T), Commerce and Management, Arts and History are taught with seldom importance given to Humanism and Spirituality. Such an education may not make any country progressive. Indian scriptures clearly demarcate and explain the relationship amongst Vignyana (Science), Agnyana (Ignorance) and Suguna (right knowledge or Wisdom).

A combination of Vignyana and Agnyana is dangerous! A combination of Suguna and Agnyana would create havoc. The right combination is, therefore, Vignyana and Suguna which mean science and right knowledge or wisdom. . This combination establishes harmony in a progressive society.

The education system takes us from childhood through adulthood to becoming responsible citizens. It is not possible to radically change the existing education system which evolved over the past few centuries. The rapid strides in the Encyclopaedic growth of knowledge in all directions, in all the existing subjects, with new venues opening up to the creative minds of the gifted, is mainly due to the modern digital computer, which for the first time was used for writing articles on computer architecture (hardware), programming (software), large-scale computing and automata theory(Neumann, JV, 1986)

The American Mathematician Norbert Wiener reputed for the creation of "Cybernetics" --- the science of communications and automatic control system in both machines and living things --– suggested the desirability of the Binary System for internal representation of data in the computer for arithmetic-logical processing. This made the binary digits (bits) ideal to represent the basic numbers 0 and 1, resulting in the design of chips, Integrated Circuits (ICs), leading to the Very Large Scale Integrated Circuit (VLSI) Technology. Presently, the situation is that of Ultra Large Scale Technology (which is the limit of our