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STRENGTHENING LIFE SKILLS THROUGH EDUCATION: A PERSPECTIVE

Omprakash H.M.¹, Ph. D. & Geetha R.M.², Ph. D.

¹ Principal S.M.R.S. B.Ed and M.Ed College, Kusnoor Road, Gulbarga- 585 106, Karnataka 106

² Asst. Professor S.M.R.S B.Ed and M.Ed College, Kusnoor Road, Gulbarga- 585

"Imagination is more important than knowledge, for imagination embraces the world." - Henry Ford

Abstract

Much of the thinking done in formal education emphasizes the skills of analysis-teaching students how to understand, follow or create a logical argument, figure out the answer, eliminate the incorrect paths and focus on the correct one. However, there is another kind of thinking, one that focuses on exploring ideas, generating possibilities, looking for many right answers rather than just one. Both of these kinds of thinking are vital to a successful working life, which is none other than Critical Thinking. The definition of critical thinking has changed somewhat over the past decade. Originally the dominion of cognitive psychologists and philosophers, behaviorally-oriented psychologists and content specialists has recently joined the discussion. The following are some examples of attempts to define critical thinking:

- ...the ability to analyse facts, generate and organize ideas, defend opinions, make comparisons, draw inferences, evaluate arguments and solve problems (Chance, 1986, p. 6);
- ...a way of reasoning that demands adequate support for one's beliefs and an unwillingness to be persuaded unless support is forthcoming (Tama, 1989, p. 64);
- ...involving analytical thinking for the purpose of evaluating what is read (Hickey, 1990, p. 175);
- Critical thinking is the disciplined mental activity of evaluating arguments or propositions and making judgments that can guide the development of beliefs and taking action.

Than come to Problem Solving, because these two are mainly considering in teaching and learning process, the Good problem solving skills empower managers in their professional and personal lives. Good problem solving skills seldom come naturally; they are consciously learnt and nurtured. The repertoire of good problem solving skills includes:

Key Words: Critical Thinking, Problem Solving, Teaching, Learning, and Perspective.



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Introduction:

Thinking skills are one of the most important yet inadequately implemented areas, of the curriculum. Thinking skills are relatively specific cognitive operations that can be considered the building blocks of thinking. Certainly, a part of helping students to develop and improve their thinking skills is connected in some significant way with the challenge and discovery. However, it is often the case that works in a given situation may not work at all in another situation. The variables related to thinking skills are themselves quite formidable. Assisting students to improve thinking skills is increasingly recognized as a primary goal of education. Skills can be conceptualized on a continuum based on the level of complexity required or the difficulty of the problem to be addressed. The broad term" cognitive processes" refers to complex operations that usually require substantial time and effort and the integration of general and specific knowledge.

Helping students learn how to control and direct their own thinking and developing the disposition that support and motivate thinking are essential aspects of the teaching of thinking. Without engaging in Meta cognition and dispositions that drive skillful thinking, individuals are not inclined to the full potential the thinking skills learned. Without such conscious control of their own thinking, they cannot transfer the thinking skills learned from one setting to another. Valuing the use of credible sources other points of view and search for alternatives motivate thinking and enhance its effectiveness.

Problem solving is a key skill, and it's one that can make a huge difference to your career. At work, problems are at the center of what many people do every day. You're solving a problem for a student (internal or external), supporting those who are solving problems, or discovering new problems to solve. The problems you face can be large or small, simple or complex, and easy or difficult to solve. Regardless of the nature of the problems, a fundamental part of every manager's role is finding ways to solve them. So, being a confident problem solver is really important to your success.

A problem is sensed or difficulty felt when a person, any organization for that matter confronts an unfamiliar situation that demands a response. When the individual wants to solve the problem or has to find out answer to the difficult situation the thought process start. "The origin of thinking is some perplexity, confusion or doubt", says Dewey. The first step in the process of problem solving is the awareness of the problem. In individual who is required to find a solution to the problem should be aware of it. Unless the individual is aware of the problem there is no problem at all. He must feel the need of the solution.

Now we will see one by one how these two, Critical Thinking and Problem Solving are

playing an important role in teaching and learning process.

Langrehr (2001) defines that "critical thinking involves judgment about the relevance, reliability, bias, consistency and accuracy of information pertaining to any issue or production". Norris (1985) defines "critical thinking as deciding rationally what to or what not to believe". According to Smith (1990), critical thinking understands the meaning of statements, judging ambiguity, judging whether an inductive conclusion is warranted and judging whether the statements made by authorities are acceptable".

Components of critical thinking:

- 1. Distinguishing between verifiable and value claims.
- 2. Distinguishing relevant from irrelevant information, claims or reasons.
- 3. Determine the factual accuracy of a statement.
- 4. Determine the strengths of an argument or claims.
- 5. Determine the credibility of a source.
- 6. Seeking the truth.
- 7. Weighing the facts.
- 8. Judging the facts.
- 9. Subsequently making decision.

Need for the development of critical thinking:

Teaching of History is the conclusion of critical insight among seekers of knowledge and wisdom. The four pillars of teaching History are time, place, development and continuity. They have to be an appropriate means of service achieving the desired ends.

- 1. Historical events have not taken place in vacuum, but spread over a huge span of time like a river never stopped for a long period. Therefore, history has to be understood in the strength of time which is fundamental for scientific nature.
- 2. Events have taken place at different occasions because history is the drama of evolution from primitive days to modern day scattered all over the globe. Thus, place sense is equally important like the time sense. Time and space function as the two lamps of history for intelligent thinking.
- 3. Man's evolution is accompanied with social, cultural and other developments. Great personalities have shaped the destiny of mankind with their might morality, Politics, Religion and other tools. Teacher has to highlight these developments from a comparative point of view to enrich intellectual ability of his students.
- 4. Various Civilizations and cultures pass a continuity which is an evident in great historical works.

- 5. Critical thinking enables the students to cope with a rapidly changing world.
- 6. This will help pupils to have an open mind and a non-dogmatic rational behavior; in addition, critical thinking ability will enable them to be more inquisitive, insightful and humane.
- 7. It is also necessary to have the free rational and autonomous mind, without the ability to reason dialectically, students are intellectually, emotionally and morally incomplete.
- 8. The present day education system has come under severe criticism for its undue emphasis on memorization of textbooks knowledge by students.
- 9. Ccritical thinking will enable them to deal efficiently with barrage of information, to make decisions, to solve problems, to make maximum utilization of their resources.

What are the dispositions that enhance critical thinking?

So far we discussed what critical thinking is and why its development is important. Now, let us look at some of the dispositions in the mind of the thinker that can add to the strength of critical thinking. As Fitzgibbons (1981) states the three kinds of disposition namely;1. Disposition of thought, 2. Disposition of behavior and 3. Disposition of emotional attachment.

A disposition of thought is a tendency to think in a certain way. A person, for example may have a disposition to be analytical, look for causes and offer reasons for belief. Another person may have a disposition to accept belief uncritically.

Disposition of behavior is a tendency to behave in a certain way. It may exhibit some form of overt behavior under certain condition. Similarly, a person may have the tendency to attach certain emotions to certain things. He may have, for example, the tendency of deriving enjoyment from watching cricket.

Langrehr (2001) makes use of the acronym 'cool' to help us recall the various dispositions that a critical thinker needs to be effective. COOL represents the four dispositions namely;

a. Clear b. Open minded c. Objective d. Loose

Clear: Anyone who wishes to think critically about any issue should have clarity about the issue. To get a clear view, he may ask a few questions to himself. What am I debating here? What do I already know about the issue? What are the different dimensions of this issue? What is the core point? Could it be explained further? Questions such as these would help clarify the issue at hand.

Open minded: A strong critical thinker thinks dialogically rather than mono-logically. He tries to consider an issue from the other person's point of view. On the other hand, a weak

critical thinker is an egocentric. He would keep saying, I'm right and you're wrong. A person who is open minded keeps asking such questions as, "What is your point of view? Why have you taken this point of view? What do you like about my points of view?

Objective: A critical thinker who is strong makes his decisions only after having gathered and studied all necessary data. Conversely, a weak critical thinker makes decisions from the heart. He simply relies on feelings and emotions instead of relying on objective evidence.

Loose: A genuine critical thinker, when he comes to know that he has been functioning from a false assumption, would immediately accept his error. He immediately changes his views on the basis of the evidence. He is so flexible that he would not keep harping on the strings when he realizes he is wrong. If an individual tries to cultivate these dispositions, as time passes, he would turn out to be a strong critical thinker.

Methods, Techniques and Tools of Critical Thinking:

1. Assignment method:

It is one of the important methods to develop critical thinking ability. For e.g.an assignment on – "Akbar the great", depicting his capability – to integrate the country under very odd circumstances.

2. Project method:

It helps to promote critical thinking ability in the students. For e.g. Project work on "Indus – valley civilization" or "National Movement in India". The project can be done in groups, dividing the work to discover the material from books, pictures, scrap books, journals, encyclopedias, charts, atlases, etc.

3. Story telling method:

Some historical stories definitely help to promote critical thinking ability. They develop historical imagination, creative training, manual faculties, learning the art of speech and action. For e.g. Good stories like Mahabharata, Ramayana, Bagavad Geetha, and Puranas have produced great personalities like Gandhi, Shivaji, Napoleon and others.

4. Source Method:

With the help of source method, we will develop critical thinking ability in the students. It develops constructive imagination, sense of reality, improves reasoning and critical judgment for e.g.the best topic in this method can be titled as "Shahjhan as a magnificient builder of great buildings". When we want to teach this topic, we can make use of many literary and archeological sources.

Techniques:

Through the teaching of History, the teacher will judiciously make use of visits to Historical places museums, exhibitions, picture halls and art galleries.

Tools of Critical Thinking:

De Bono (1994) has devised a number of tools for helping students' pickup skill of critical thinking. A few of them are being introduced here to show how they can be used for the purpose of developing critical thinking skills.

- 1. P.M.I. (Plus, minus and interesting)
- 2. C.A.F (Considering all Factors)
- 3. E.B.S (Examine both sides)
- 4. O.P.V. (Other people's view)
- 5. A.P.C (Alternatives possibilities and choices)
- 6. C and S (Consequences and Sequel)
- 7. A.G.O (Aims, goals and objectives)
- 8. F.P. (First Priority)
- **P.M.I.** (**Plus, Minus and Interesting**):It is an attention directing tool in which first attention pertaining an issue is directed towards the plus pointsthen minus points and finally interesting points. This tool is used in connection with an issue. For example, students can be asked to do a PMI on the issue, "Each student gets Rs. 50/ a week for attending school." Think plus, Minus and Interesting points. As students are engaged in the process, they look at the problem analytically. This forces them to see the issue from different perspectives.
- **C.A.F** (Considering All Factors): CAF means considering all Factors that have to be considered in a situation. When we are proposing to buy a second hand car, for instance, is an example where we can apply the CAF. In this case, we need to know all factors like price, previous owners, present owner, mileage, resale value, condition of car, petrol consumption, and condition of the tires.
- **E.B.S** (Examine Both Sides): This tool is exploratory in purpose and involves a genuine examination of both the sides. EBS is a tool that can be used to throw light on and examine when it comes to the study of such issues as "should smoking be banned in all public places" or "should housewives to be paid for their work," etc.
- **O.P.V.** (Other People's View): Is yet another tool form de Bono's Tool Box. This tool involves putting yourselves in the other person's shoes and visualizing the world from the frame of mind of the other person. When we think, generally we are tempted to think only from our point of view. We hardly care to see any issue from the other person's point of view.

OPV is intended to give a broader and clearer view of any situation. As a result, the mental map of the situation becomes clearer and more complete and so it can help to find one's way around. E.g.: Mr. X has the habit of hurling insults at others. Under situations such as the above, if we do an OPV, it will help us arrive at an objective view of the issues concerned.

The obstacles that stand in the way of developing critical thinking:

Olson and Ames (1972) have noted give obstacles namely;

- 1. Use of single textbook
- 2. Halo effect
- 3. Desire for avoidance of controversy
- 4. Emphasis on conformity
- 5. Emotional involvement and response

1. Use of Single Text book:

In teaching various subjects, our classrooms generally depend on single textbooks. This total dependence on single textbooks is one of the greatest deterrents of the development of critical thinking skills. When pupils are exposed to one selection of facts and their interpretation, they inevitably stand the risk of accepting them as true.

2. Halo Effect:

Many individuals among us have the notion that anything that is printed is true. They give undue importance to the printed page. This illusion makes them insist on their forgone conclusion and desist from making judgment on accuracy.

3. Desire for avoidance of controversy:

Issues that are open to controversy are fine means to develop critical ability. Every society has several issues pertaining to ethnicity, race, religion, right, social class, etc. that are highly controversial in nature. As taking up such issues as topic for discussion in the classroom can create a lot of heat and vociferous scenes, administrators and teachers generally avoid them.

4. Emphasis on conformity:

People generally feel comfortable when they are working in areas that are familiar to them. Similarly, they have an affinity for things that are traditional. There is the fear of the unfamiliar and the unknown, a lack of readiness to think and act differently.

5. Emotional involvement and response:

There is hardly any student who is not under the influence of some prejudice, bias or emotion. When he is under the influence of strong feelings, he cannot indulge himself into thinking.

Critical thinking as we have noted, in not merely finding fault with the information we encountered in our day-to-day life. It is the type of thinking that evaluates reason. It is not destructive but constructive process. Developing critical thinking skill is highly important in a democratic country like ours so that our students may not end up in dogmatic indoctrination, will develop a mind that is open, flexible and viable, will be more inquisitive, insightful and humane.

Conclusion:

The following are some of the most important factors to be considered in the discussion of critical thinking:

- Critical thinking is important attribute for success in the 21st century.
- We need to carefully define the concept of "critical" thinking and delineate it from similar concepts such as "creative" thinking or "good" thinking.
- We need to identify expected behaviours and subtasks associated with critical thinking and develop operational definitions.
- We need to complete task analyses, define intermediate goals, and develop evaluation methods.
- We need to identify "best" methods of instruction for each aspect of the critical thinking process.

Critical thinking is a complex activity and we should not expect that one method of instruction will prove sufficient for developing each of its component parts. We have learned that while it is possible to teach critical thinking and its components as separate skills, they are developed and used best when learned in connection with a specific domain of knowledge. We should not expect that a "critical thinking course" will develop our students' competencies in this area. If students are not expected to use these skills in traditional courses, the skills will simply atrophy and disappear. Teachers and instructors at all levels must require students to use these skills in every class and evaluate their skills accordingly. As Hummel and Huitt (1995) have stated "What You Measure Is What You Get." That is, students are not likely to develop these complex skills without specific, explicit expectations and their measurement in the form of important assessments.

However, even this is not enough for a complete "thinking program." The simple model described above must be combined with a model of creative thinking and these two models must then be combined into a model of problem solving and decision making if we are to more thoroughly understand the components of critical thinking and their value to the processes of evaluating arguments and propositions as a guide to developing beliefs and

taking action. Therefore, it is necessary to include development of creative thinking (e.g., <u>lateral thinking</u>) and practice in using both sets of competencies to solve problems and make decisions in a wide variety of situations. In today's rapidly changing context, it is solving real problems and making correct decisions that is valued, not simply demonstrating a narrow set of skills in a highly structured academic setting.

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