

Critical Thinking is Necessary in Education

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Abstract: This article aims to study the instillation of critical thinking skills in young students and the formation of problem solving skills in higher education. Since this skill is not well formed in many students, it creates difficult situations in acquiring knowledge and finding solutions to problems. We will consider such issues and give recommendations on how to be effective.

Keywords: Developing, critical, Thinking, Skills, Students, Higher Education.

Nowadays, the world is full of many problems, the study of which is not complete. The problems that arise in the daily interactions of a person with both the physical and social environment are becoming more complex day by day. In any society, a person's life shows a series of contradictions - with himself, with other people, with social institutions and the environment. A person who can successfully solve these problems and approach them with confidence will have the right knowledge, skills and abilities to solve these problems. Education, of course, has the function of equipping students with the mechanisms for solving problems and uncertainties that arise so that they can lead happy and fulfilling lives in society. Therefore, the most difficult role of education today is to provide students with the ability to successfully cope with the fast dynamic world and the unknown future. Undoubtedly, when today's students face the world as adults tomorrow, current situations and problems may become obsolete. One of the tools that education (especially higher education) can perfectly provide for these young people is critical thinking, which gives them the skills they need to solve environmental problems, regardless of their nature. Today, higher education needs more than ever to solve the social problems that arise through relevant education. Individuals who seek to solve problems without the proper skills, abilities, and understanding of the problems often find themselves not only irresponsible and chaotic, but also prone to ways that are detrimental to their future and the human condition in society.

Education remains the most powerful tool for development around the world. It is for this reason that education has been viewed as a "perfect" tool for influencing national development. Experts in the field of education have given different definitions to the term "education". When properly analyzed, it is found that the following are fully compatible with the driving force of educational philosophy:

1. development of a person into a healthy and productive citizen;
2. full integration of the person into the society;
3. to ensure equal access to educational opportunities for all citizens of the country at the primary, secondary and higher education levels, both inside and outside the formal school system.

It can be seen that the needs and aspirations of the nation have been set in the right direction for these purposes. This means that any form of education provided in any country must take into account the needs of its people for that education to be functional. Education is a lifelong process

aimed at imparting the skills and knowledge necessary for leading a purposeful life and equipping students to adapt to their immediate and far-off environments.

Therefore, if education is to fulfill its expected role in society, it must provide the learner with the appropriate knowledge, skills, attitudes and values to become active and productive members of their society. . One such skill or ability expected to be instilled in the learner is critical thinking, which is the focus of this article. A student with critical thinking skills is believed to be able to solve his/her personal problem(s), family problem(s) and solve social problems regardless of the area of life. Thus, the student becomes a problem solver rather than a problem creator. Society wants to educate such individuals, which is in line with the educational goals mentioned above.

Critical thinking skills are reflected in all the skills students are expected to acquire through the type of education provided. A person who cannot think may not be able to solve even the smallest problem. We are now living in a world of problems - social problem, economic problem, political problem, ethnic problem, religious problem, educational problem, science and technology problem. All it takes is a sound mind, a mind filled with reflective thinking, to analyze deeply, figure out the causes of a problem, and come up with possible solutions or options to make a decision, resulting in a solution to the problem or it will be possible to get out of it.

Critical thinking in education is the ability to think logically and analytically. In other words, critical thinking is a purposeful and reflective judgment about what to believe or do in response to observation, experience, oral, written statements, or evidence. Thus, critical thinking involves determining the meaning and significance of what is observed or expressed, or whether there is sufficient reason to accept a given conclusion or conclusion as true. Therefore, critical thinking pays due attention to the evidence, the context of the judgment, the appropriate criteria for making the judgment correct, the methods or techniques used to form the judgment, and the theoretical framework used to understand the problem and question. Critical thinking uses not only logic, but broad intellectual criteria such as clarity, reliability, precision, relevance, depth, breath, fairness, and relevance. In modern usage, the word "critical" can express displeasure, which is not always true for critical thinking. For example, a critical evaluation of an argument may lead to the conclusion that it is valid.

Similarly, for critical thinking, he defined it as: "the intellectual discipline of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered or generated through observation, experience, reflection, reflection In its exemplary form, the Foundation claimed to be based on universal intellectual values such as accuracy, precision, accuracy, consistency, relevance, sound evidence, sound reason, depth, breadth, and fairness.

In its simplest form, critical thinking can be understood as a way of thinking about any topic, content or problem, in which the thinker improves the quality of his thinking by skillfully controlling the specific structures of thinking and establishing intellectual standards.

From the above, it can be seen that critical thinking includes the structures or elements of thinking that are implicit in all reasoning, such as a goal, a problem or question, assumptions, concepts, empirical bases, conclusions, conclusions, implications and implications, objections . Responding to different topics, issues, and goals, critical thinking is included in a family of interconnected ways of thinking: scientific thinking, mathematical thinking, historical thinking, anthropological thinking, economic thinking, ethical thinking, and philosophical thinking.

Critical thinking can be seen as having two components:

- a) skills of creating and processing information and beliefs,
- b) the habit of using these skills to guide behavior based on intellectual commitment.

These components should be opposite:

- only receiving and storing information, as it includes a certain method of searching and processing information;
- the mere possession of a set of skills, as it involves their constant use;
- Simply using these skills ("as practice") without accepting their results.

Based on the above, it can be concluded that critical thinking is a self-directed, self-disciplined, self-directed, self- is a controlling and self-correcting mindset that strives to think fairly at the highest quality level. Thus, people who constantly think critically try to live rationally and empathetically. They are well aware of their own flawed nature

The importance of critical thinking to individuals and the nation as a whole is evident in the several definitions of critical thinking presented above. Obviously, everyone thinks, and it's our nature to do so. However, thinking is often haphazard and informal. Most of our thinking, if left to itself, is a flawed, distorted, partial, uninformed bias. But the quality of our lives and the things we produce, create or build depends on the quality of our thoughts. Critical thinking allows a person to analyze, evaluate, explain, and reconstruct their own thinking, thereby reducing the risk of accepting, acting, or thinking wrongly. However, even with knowledge of logical inquiry and reasoning, errors can occur due to the thinker's inability to apply methods or character traits such as egocentrism. Critical thinking involves identifying prejudice, bias, propaganda, self-deception, distortion, misinformation, and more. We live in a world of challenges and it is very important that an individual, particularly students in a country, acquire the skills and abilities to solve their own and society's problems, thereby making the nation a decent place to live.

At this point, the relevant question is: "how to develop students' critical thinking skills." It is interesting to note that critical thinking skills can be instilled in students from elementary school to higher education in the educational hierarchy. Each level has a different level of participation. Thus, although it is important to start critical thinking in a student from elementary school, it has a better effect on students in higher education. This is because students at this level are more mentally prepared to take on the challenge.

However, the question of how to develop the ability in students still remains. This is a methodological issue. What method do we use to effectively develop critical thinking in students? It appears that critical thinking is about being willing and able to evaluate one's own thinking and can be done through the teaching and learning of any subject in the school curriculum.

Developing critical thinking skills in students involves learning the art of suspending judgment. Critical thinking is based on concepts and principles rather than hard and fast rules. Examples of these concepts are: problem identification, rational inquiry, conceptual analysis, logical reasoning, character of argument, identification of premises, and conclusion.

Principles related to critical thinking include: acquiring knowledge through thinking, reasoning, and fact-based questioning; learning what to think by how to think; evaluating the effectiveness of an argument through reflective thinking; critical thinking as a search for meaning and critical thinking as a learnable skill among others.

It uses broad intellectual criteria of not only logic (formal/informal), but also clarity, reliability, accuracy, precision, relevance, depth, breadth, and relevance. Critical thinking is essential to learning. There are two stages of content learning. The first occurs when students first construct in their minds the basic ideas, principles, and theories specific to the content. This is a process of internalization. The second stage occurs when students make those ideas, principles, and theories relevant to their lives and apply them effectively, which is called the application process. Good teachers develop critical thinking, that is, intellectually active thinking, at every stage of education. The point here is that a teacher who develops critical thinking develops students' thinking by asking questions that stimulate the thinking necessary to construct knowledge.

Each subject adapts the use of critical thinking concepts and principles. Basic concepts are included in the content of each subject. Intellectual engagement is essential for students to learn content. All students need to construct their own thinking and knowledge. Good teachers know this and that's why they focus on teaching.

From the above points, it can be concluded that since critical thinking is a precursor of personal success, national peace, and development, all interested parties should strive for the common good. For this purpose, the following is recommended:

- Introducing critical thinking as a separate subject or course in our higher educational institutions.
- Teachers should be encouraged to do more in the classroom than at lower levels of knowledge.
- Teachers should use appropriate teaching methods such as modern method, inquiry method, problem solving method, etc., which are suitable for developing students' critical thinking skills.
- Both teachers and students should inculcate an attitude of intellectual empathy and intellectual humility.
- It is not enough to acquire knowledge and skills related to critical thinking, students must be encouraged to apply such skills in their daily lives.
- In summary, according to Glasser, critical thinking skills include three things:
- An attitude of being inclined to think carefully about problems and topics within one's experience (that is, a state of mind about something);
- Knowing the methods of logical research and thinking;
- Some skills in applying these techniques.

Critical thinking requires a constant effort to examine any belief or any form of knowledge against the evidence that supports it and the subsequent conclusions to which it tends.

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