

Ways to Foster Critical Thinking in Students

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Abstract: Critical thinking can be the main objectives of education in a world that is an integral part of any educational system. In schools today, the emphasis is only on the skills of reading, writing and counting while these skills are not inherently valuable and no scholarism in education. Thoughtful people exercise training schools. People tend to interpret the impact on recall information. It is necessary, adopt methods that enhance student motivation and challenge thought processes, change the passive and cautious in the exchange of ideas and thinking. The aim of this review study is to investigate the importance of developing critical thinking in students. Showed results of a study books and review previous research, can be reached in the light of faith and reason and thought and higher level of humanity. Critical thinking is one of the fundamental objectives of education at global level. Critical thinking can be judged on authenticity and value of the information and arguments presented. So for the future, we empower people with the freedom of thought and creativity to nurture them from an early age. So, schools have to replace the transfer of knowledge and disciplinary dry environments that require only reproduce knowledge to provide conditions to build their student's knowledge.

Key words: Thinking, critical thinking, critical thinking skills, higher level of humanity, fundamental

INTRODUCTION

Thinking is one of the three important aspects of cognition (perception, learning, thinking). Thinking is what comes to mind when people are faced with a problem and wants to solve it. At that begins in the mind, an attempt to resolve the issue that called this mental effort, thinking. One of the critical thinking skills that students should acquire in schools is to evaluate, heard, read, ideas and beliefs that many encounter in life and make rational decisions about them. This valuable ability called critical thinking (critical thinking). These days is considered critical thinking increasingly because we are always faced with a lot of misleading information, advertising and other forms of advertising which should be separate light and heavy saddle from Saif (1971). Education leading experts emphasize the importance of thinking, you know it's one of the main goals of education training. Accordingly, the educational system should, rather than the mere transfer of information to students, provide opportunities for education about children. Because the school is a place for formal education in it, hence should be an environment that fosters student's thinking and ideas to flourish. Unfortunately due to the expansion of schools and poor oversight, bad habits is the ruling on schools. Even many educators have insisted on the need to maintain these habits. Keep quiet and he had to repeat it provides not

only in the field of education where students will be encouraged to think but even this will strengthen the belief in the minds of teachers who they will think of your current order. If you want the educational system, to create a fundamental change in its methods, should bear in mind that renew the ideas and beliefs of the teacher is one of the most important issues. Due to the failure of the majority of teachers in the educational innovation in particular methods of thinking is false beliefs and the work that they have already established repeatedly, over many years. Instead, most teachers teach and learners to learn ways of thinking, put them in the knowledge and scientific facts. Teachers should encourage students and teach them the love of thinking in the way of thinking (Shabani, 1962, 1972). Eisner believes schools should develop logical thinking and creative thinking abilities, especially students in what they see, hear and read, so that they can distinguish opinions from facts, fallacies of logic and merit of incompetence. Teaching critical thinking should therefore be considered as a high-level thinking because that will appear in many of the decisions and judgments will be that students in the future. Eisner, in an article entitled "Kind of the Schools That We Need" mentioned school problems, said schools today only focus is on reading, writing and counting while these skills are not inherently value and virtue their value in education devoid of virtue. The schools virtue is the education of

educated people. Bartlett demonstrated in his research that people tend to interpret the impact of the recall information (Myers, 1954), it says to researchers and implementers of education thinking training will strengthen the reminder (Shabani, 1962, 1972). Therefore, it is necessary, adopt methods that enhance student motivation and challenge thought processes, change the passive and cautious in the exchange of ideas and thinking. Critical thinking can be the main objectives of education in a world that is an integral part of any educational system. Because in the process of training the teacher's morale criticism, creates a spirit of criticism and investigation of the students.

Research questions:

- What is critical thinking?
- What are the characteristics of critical thinking?
- What are the basic skills needed to strengthen critical thinking?
- What are the obstacles to the development of critical thinking?

Define the concept: Critical thinking, critical thinking has been defined in many forms. Wiggs (2011) have given the following definition: the ability and propensity of a person to measure results and make decisions about them based on the evidence. Teddlie and Yu (2007) defines critical thinking as logical and systematic evaluation of the results of the verification issues, evidence and solutions. Slavin (2006) defines critical thinking as "the ability to take rational decisions about what to do and what we must believe." Pear (2002) has a more complete definition of critical thinking: critical thinking, the judging accuracy, reliability and value of information and arguments presented (Saif, 1391). Analysis of the nature of thought. Term thinking that is common in the general population and almost all are in some way to make it work, even though they may not have a correct understanding of it. By examining the various definitions, we can conclude that thinking in the broad sense of the word search means consciousness, consciousness that is focused on acquiring the knowledge available and evaluate it and focus on the production of new knowledge. Critical thinking is thinking that the person has always doubt and question the thoughts and judgments themselves and others and through observation of the test and evaluation of the affairs and evaluation of the control of unbiased achieve. Concepts and definitions have been proposed is very broad in terms of titles or in terms of complexity but most of it is focused on outcomes related to cognitive processes, for example is defined as follows Glassman, Koof and Spiers thinking critical: the

ability to identify and regulate matters as well as the ability to set goals and evaluation methods to solve problems.

Critical thinking features: Many cognitive psychologists have studied and specialized in the last two decades in particular, the concept of so-called critical thinking. Accordingly, critical thinking is a reliable means to evaluate or make judgments about right and wrong and what is not, contrary to popular assumptions never meant to negativity or criticism. This is so regardless of the value of positive and negative in nature and often results in a positive judgment, acknowledge and praise even violent. Critical thinking is necessarily an assessment of the nature, the analysis does not claim any source or belief clearly and consistently in order to properly judge the validity or value. Critical thinking is a set of specific actions, either alone or in combination used (Beyer, 1985). Or apply some critical thinking skills include:

- Distinguish between facts and claims approved value
- Distinguish between relevant and irrelevant information, claims or causes
- Identify the sources of credit
- Determine the accuracy of factual statements
- Determination of the ambiguity of claims or arguments
- Not certain assumptions
- Discover the desire and passion
- Determine the logical fallacy
- Detect inconsistencies in argument
- Determine the strength of a dispute claim

Dorothy McClure and Edith West Fraser provided that those skilled in critical thinking has the following features:

- Specific expertise in the evaluation of information, comments and references
- They are to review and evaluate ideas
- Have a strong tendency to consider all comments and views

Appropriate skills to foster critical thinking: Psychologists in recent years in spite of offering a different perspective on critical thinking skills that agreed on the concept and some almost (Woolfolk, 1995). Perkins on the ability to recognize the problem and avoid the tendency to prejudice emphasizes reasoning and application of knowledge in specific purposes. Nydlr (1984). In describing and analyzing thinking, refers to the following specific skills and believes this is essential to strengthen critical thinking skills.

Transparent definition of the problem, including:

- Diagnosis or the main views: the ability to identify the main idea of the article, controversy or political film or the ability to identify the reasons and results of discussion
- Compare similarities and differences: the ability to compare the similarities and differences between some thought, object, person or situation at any particular time or at different times
- Detect information about the problem: the ability to distinguish relevant and irrelevant information or consideration and non-consideration of the issue
- Set the appropriate questions: the ability to set questions that lead to deeper and clearer understanding of the views or position

The judge about the problem, including:

- The distinction between fact, opinion and judgment, reasoning: the ability to use scientific criteria to determine the quality of observation, inference and judgment
- Diagnosis of emotional factors, the content of the advertising: the ability to recognize text and image-making materials and credit resources
- Detecting different value systems and world views: the ability to recognize similarities and differences between different value systems and worldviews

Problem solving or the drawing of conclusions: Including the ability to make decisions about the adequacy of the information about the quality and quantity, to obtain the results, hypotheses set, decisions and generalization.

Predict possible outcomes: The ability to predict an event or multiple events.

MATERIALS AND METHODS

Methods of teaching critical thinking skills: Critical thinking in different fields should be developed in different ways. You can not solid guidelines issued for education, critical thinking across all disciplines. But most experts agree on is that critical thinking skills are best nurtured, during a debate of ideas and problem solving (Myers, 1954). By studying theories of Michel Foucault, Habermss, Kant, Poulou Freire and d’Alembert can be concluded that the requirements of critical thinking, free-thinking, independent thinking, the Enlightenment and the availability of free public space for debate. According to Foucault, the lack of freedom in any way, it is limited to the individual and group creativity. According to Foucault, there is creativity through verbal

and interactive process. If we consciously or unconsciously blocking the dialog have hampered the creative. When formed open dialogue between people on different issues, to some extent, causes, enlighten each other and creativity (Mohammadyari, 1961)

On teaching critical thinking and approach are evident:

- Critical thinking can be taught as an independent program (process approach)
- During continuous and permanent training of thinking is possible (content approach)

According to the above approach Rostami in his article titled “Teaching Critical Thinking” is considered, teaching these skills to students in four dimensions:

- Mental skills training
- Teaching critical thinking in the classroom activities
- Teaching philosophy to children
- Teaching logic

Mental skills training: Increasing the ability of pupils or students when teachers strengthen their ability to teach critical thinking. According to mental skills is one way to strengthen the critical skills. These skills include

Independent thinking: Educators and parents can raise their children to independent thinking. Such as allowing them to engage directly with them instead of trying to solve problems and respond quickly without thinking.

Organize: Coaches and parents can provide a model to help students organize the skills, materials and resources and results.

Inference: Guiding students to understand the meaning of anything instead of their appearance. To achieve the desired results, it can be a good source to analyze the meaning and use of practical skills predicting outcomes: Students should learn to always think beyond their expectations and it is through how to start and end the questions related to various topics can help predict the results of the learners.

Fame and shame reasons and arguments: Students need to understand the difference between the two. They need to learn how to identify the factors and reasons to prove and thus make a valid will. It also requires knowledge of a valid argument that due to lack of evidence and the statements of support. Learners to demonstrate their strengths and weaknesses and the difference, can be a valid issue.

Problem-solving techniques: Educators can guide students on the path to solving the problem, students would experience in the problems of education in various fields of science. So in this context should be given extra time to process them.

Insight: Students need to learn how the results obtained and the analysis to run it.

RESULTS AND DISCUSSION

Teaching critical thinking in the classroom activities: These activities include lectures ask questions, examination assignments, practice a little, test, critical reading, writing and teaching methods.

Lecture: Critical thinking through speech also increases. speech can be interrupted at regular intervals by and by asking the right time now to respond to help learners and asked them to respond to questions What is necessary and this information is Where. Then guide students to take advantage of this information.

Asking: For teaching critical thinking can be used at different levels of cognitive questioning techniques that include

Examination: Many science courses are laboratories for practical activities. Laboratory activities are all suitable for teaching critical thinking.

Assignments include reading assignments and books a little practice problem solving is a critical and rigorous thinking. The curriculum such as math, physics, chemistry, the need to solve the problem of automatically thinking it would just teach Scientometrics follow traditional education programs.

Test: The test must include at least the writing and thinking. Ended questions with answers short or long, for thinking are obvious solution.

Critical reading: By reading, students are thinking and analysis on the titles to it. Critically reading is description worth reading, drawing conclusions and the result is that the basis for this argument.

Writing: In different eras emphasis is on teaching thinking by writing the argument for maintaining content and concepts.

Teaching methods: For the well trained people should be creative, critical and intellectual freedom. In school

curricula, should be included ways through which students learn how to learn capabilities through mental discipline and apply in their daily lives.

Teaching philosophy to children: critical thinking minds of children to build a closer and deepened and it will expand its philosophy. The aim of Philosophy for Children is to improve the learning of all subjects in the curriculum.

Ttraining of argument: In this type of training is to facilitate the development of critical thinking skills through training logical reasoning to help discuss, display and offer examples. The goal is to help students to understand how to use reasoning to collect and analyze and integrate information in order to make informed decisions in everyday life.

Obstacles to the development of critical thinking: Culture is the first and most fundamental obstacle to the creation of critical thinking. Each country's culture reflects the way of thinking and a person's response to the various issues. Culture in which the element of rationality, wisdom-oriented, scientific and rational, truth-seeking spirit of liquidity and have overcome the superstitions and superficial and hasty reading are prone to critical thinking and logical prosperity. Because the life of a society depends on its intellectual life, it seems that will not happen any reasonable and predictable changes in society but in light of the evolution of the ideas and attitudes of men without the benefit of an education system implies. Nagfth efficient and principles can not be expected to seek intellectual development. Cultural study advanced wisdom suggests that culture is centered on communities conceivable that the educational system to build, strengthen and apply critical thinking in all aspects of life is by itself Fragyrandgan conducted a study called collaborative learning test. Teamwork and critical thinking to evaluate nursing students as an experimental project with the control group (174) and testing (309) with a critical thinking test and control groups were trained in traditional and experimental group were trained in methods of cooperative learning. Critical thinking test results showed that the experimental group compared to the control group had higher scores in critical thinking. Richardson and Ice (2010), based on the fact that educational strategies can affect the different sectors and critical thinking of students is important to note for designers and educators. The study "evaluation of student's thinking through educational strategy discussions." The results showed that influence online discussions on critical thinking and critical thinking which tends to increase due to the fact that the objectives and

issues to be thought of pre-determined in the curriculum of the children. Extensive studies by Paul and Elder (2000) 38 state universities and 28 private universities did (NGOs) on the scientific credentials of the faculty, show, despite all the professors know critical thinking as a primary target for their education and believe that because they teach but few of them are able to:

- Provide a clear definition of critical thinking
- Rational standards based on their critical thinking, explain
- The ability to recognize its forming

Anna Leonardo examined the critical thinking skills in schools Brazil between two general education schools with new programs and initiatives that were familiar and ordinary schools that teach the old ways. As a result, the performance of students in public schools has been improved local skills of students in ordinary schools. Zanjanizadeh (1963) conducted a study on critical thinking skills and emotional intelligence did its association with clinical course in medical students at the University of Medical Sciences. They concluded that given the fundamental purpose of education is to produce thoughtful, rational arguments and a spirit from checker. According to the mentioned factors is necessary to achieve these goals. One of these factors is critical skills that are highly important for everyone, especially the students in their future jobs will require multiple decisions and judgments and their reasoning (Jahaani, 1960) to review the philosophical foundations of education, critical thinking and most important finding is that teaching critical thinking Lipman exclusively through the research process is possible. So, teachers need to foster their research spirit.

Hashemian (1960) has provided research and theoretical framework for critical thinking-based curriculum with an emphasis on elementary school social studies curriculum. In this study, eight skills ask questions, analyze, evaluate, correlate, reasoning, scientific organization, the use of critical words, metacognition is intended for critical thinking.

CONCLUSION

Man has intellect, superior to other creatures. In the light of faith and reason and thought can be reached and higher level of humanity. Critical thinking is one of the fundamental objectives of education at global level. Critical thinking can be judged on authenticity and value of the information and arguments presented. So for the future, we empower people with the freedom of thought

and creativity to nurture them from an early age. Schools instead of knowledge transfer and disciplinary dry environments that require only reproduce knowledge to provide conditions to build their student's knowledge. Teachers have the necessary critical thinking and in his teaching methods provide opportunities to develop critical thinking. Including pay special attention to this topic in paperwork. Coaches must develop independent thinking. Organize their skills and guide them on the path to solve problems and learn the results of their analysis. Why is that critical thinking can be provided with regard to the development of human society.

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