What role does play critical thinking in education?

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Abstract: *This article is a Qualitative research approach. This research is conducted using secondary data sources. All secondary data were collected from a variety of sources, including books, journal articles, conference papers, reports, and news and feature articles from recent publications. The study's main purpose is the present status of critical thinking, basic concepts and the importance of these thinking skills in the education system.*

Key Words: Qualitative, Secondary data, Thinking, Critical thinking.

1. INTRODUCTION:

Education is the process of acquiring information, skills, values, and attitudes by a number of techniques such as teaching, training, or study. Education can also refer to the institution that facilitates this process. It is a journey that encompasses both formal and informal learning experiences and lasts a person's entire lifetime. Education is a very significant contributor not only to the expansion and maturation of people but also to the advancement of society and society as a whole. Education in life skills provides students with the information, abilities, and attitudes that are essential for navigating the many facets of life and achieving success in those endeavours. It goes beyond the acquisition of academic information and places an emphasis on the development of practical skills that are essential for one's personal development, well-being, and success in a variety of settings. Critical thinking encompasses not only the ability to think according to the rules of logic and probability but also the ability to apply these skills to non-content-independent real-world problems. Thinking critically will increase your creativity as well as improve how you use and manage your time (Hader, 2005). The ability to think critically can assist one in developing a more profound awareness of oneself. You will have the chance to be objective, to have less strong emotions, and to be more open to the ideas and opinions of other people. If you plan ahead, you will be able to achieve the self-assurance necessary to provide novel points of view and unique insights on challenging topics.

2. RESEARCH QUESTION

i. What is the actual understanding concept of thinking?
ii. What is the actual understanding concept of critical thinking?
iii. What connection exists between thinking and critical thinking in education?
iv. What Role Does Play Critical Thinking in education?

3. OBJECTIVES OF THE STUDY:

* To understand the actual concept of thinking.
* To understand the actual concept of critical thinking.
* In light of prior studies, recognize and examine the connection between thinking and critical thinking.
* To understand the importance of critical thinking in education.

4. METHODOLOGY:

The focus of the methodology is "Qualitative Research Methodology." This research is conducted using secondary data sources. All secondary data were collected from a variety of sources, including books, journal articles, conference papers, reports, and news and feature articles from recent publications. Although the number of references gained from newspapers is limited, journal articles have been utilized extensively. All citations and references follow the 'APA 7th edition Referencing guide'.

5. DISCUSSION AND CONCLUSION :

Research Question i: What is the actual understanding concept of thinking?

Thinking is a complex cognitive process involving the manipulation of information, ideas, and concepts to comprehend, solve problems, make decisions, and generate new insights. It is an essential component of human intelligence and plays a vital role in our daily existence. The essence of thinking is the mental representation and manipulation of symbols, images, and abstract concepts. It includes a variety of cognitive processes, including perception, attention, memory, reasoning, problem-solving, decision-making, and creative thought.

Types of Thinking

Psychologists and researchers have identified a variety of distinct styles of thought. Here are some typical examples:

i. Critical Thinking: Critical thinking involves logically and objectively analyzing and evaluating information, arguments, or situations. It entails evaluating the dependability and credibility of sources, recognizing biases, recognizing logical fallacies, and making reasonable judgments.

ii. Creative Thinking: Creative thinking entails the generation of novel concepts, strategies, or approaches. It promotes out-of-the-box thinking, the creation of connections between seemingly unrelated concepts, and the exploration of new possibilities.

iii. Analytical Thinking: Analytical thinking focuses on deconstructing complex problems or situations into their constituent parts in order to comprehend their underlying structure and relationships. It involves analyzing data, recognizing patterns, and drawing conclusions using logical reasoning.

iv. Reflective Thinking: Introspection and careful contemplation of one's experiences, beliefs, and actions constitute reflective thought. It consists of self-awareness, the examination of assumptions and biases, and the consideration of alternative viewpoints in order to obtain insights and personal development.

v. Convergent Thinking: The opposite of divergent thinking is convergent thinking. It emphasizes discovering the optimal solution or response to a problem. It requires logical and deductive reasoning, the elimination of unnecessary options, and the formulation of a specific conclusion.

vi. Divergent Thinking: Divergent thinking is the capacity to generate a variety of concepts or solutions to a problem. It entails investigating various possibilities, engaging in ideation, and encouraging creativity by delaying judgment and embracing unconventional thought.

vii. Lateral Thinking: Thinking laterally involves approaching problems or situations from unorthodox and unanticipated perspectives. It encourages reasoning outside of conventional or linear patterns and promotes originality and creativity.

viii. Holistic Thinking: Holistic thinking entails taking into account the big picture and recognizing the interdependence of various factors. It requires a systems-based approach, context awareness, and consideration of broader implications and consequences.

It is essential to recognize that these modes of thought are not mutually exclusive and frequently intersect. Individuals may employ various modes of thought depending on the circumstances, their particular proclivities, and the demands of the task at hand.

Research Question ii: What is the actual understanding concept of critical thinking?

Critical thinking is a cognitive process that entails analyzing, evaluating, and making reasoned judgments concerning information, arguments, or situations. It goes beyond accepting information at face value and instead encourages individuals to actively engage with and query the content in an effort to comprehend its underlying assumptions, evidence, and logical coherence. Critical thinking is distinguished by intellectual inquiry, scepticism, and a dedication to rationality and evidence-based reasoning.

Component of Critical Thinking:

The two fundamental aspects of critical thinking are motivation and metacognition (attitudes are typically defined as dispositions, inclinations...., something akin to motivations, but at the same time to metacognition). motivations are what drive us to think critically. Reasoning, problem-solving, and decision-making remain to form the important core of critical thinking; nevertheless, why should we include additional ideas, such as motivation, in the definition of critical thinking? When speaking of critical thinking, it was established a number of years ago that addressing merely the abilities associated with such thinking does not provide the entirety of the complexities associated with such thinking to be tackled. The purpose of the diagram depicted in Figure 1.1 is to make it easier to understand the meaning of the word "critical" when it appears in the phrase "critical thinking."

Figure 1.1: Component of critical thinking.
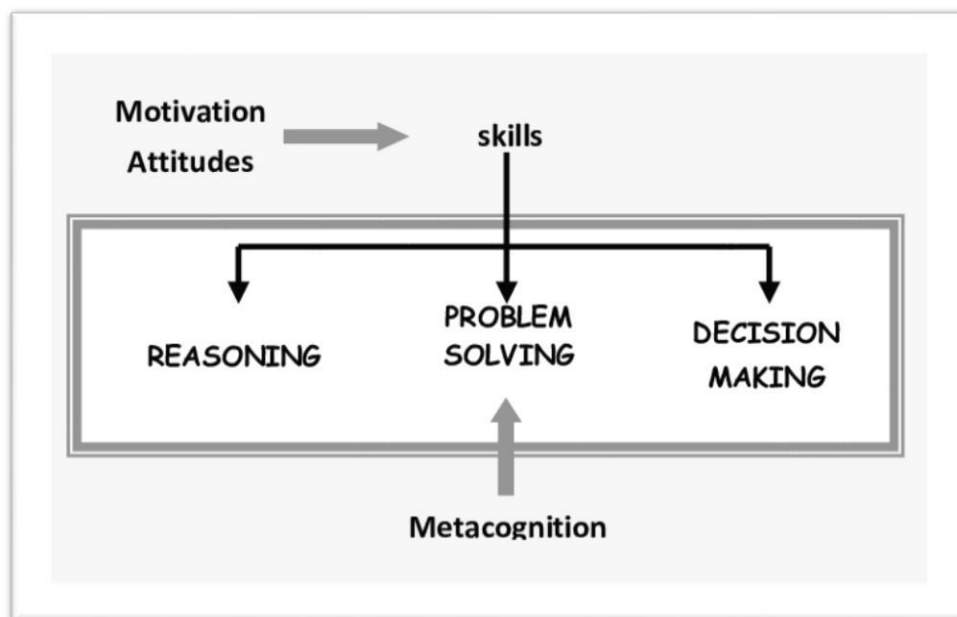
Research Question iii: What connection exists between thinking and critical thinking in Education?

Thinking and critical thinking are closely related, with critical thinking constituting a subset or specialized form of thinking. Critical thinking is a mode of thinking that is characterized by analysis, evaluation, and reasoned judgment. While thinking is a broad term that incorporates all cognitive processes engaged in mental activity, critical thinking refers specifically to a mode of thinking characterized by analysis, evaluation, and reasoned judgment. The following are some important aspects to consider regarding the connection between thinking and critical thinking:

i. **Critical Thinking is a Type of Thinking:** Critical thinking refers to a certain kind of thinking that places an emphasis on analysis that is both purposeful and thoughtful. It is a cognitive ability of a higher order that builds upon lower-order thinking processes such as perception, attention, memory, and reasoning.
ii. **Critical Thinking Analytically:** Critical thinking requires analytical thinking, which is the capacity to dissect complex information into smaller pieces, recognize patterns, and discern relationships. Analytical thinking is a fundamental aspect of general intelligence and plays a crucial role in critical thinking by enabling individuals to systematically analyze and evaluate arguments, evidence, or situations.
iii. **Rationality and Logic:** Critical thinking relies significantly on reasoning and logical thinking, which are fundamental components of thought. Reasoning is the process of making logical connections, drawing inferences, and arriving at conclusions based on available evidence. The framework for evaluating the validity and coherence of arguments and reasoning is provided by logic. Reasoning and logic contribute to critical thinking by fostering analysis and evaluation that are logical and coherent.
iv. **Evaluation and Assessment:** Thinking critically involves evaluating and assessing information, arguments, or claims. Individuals are required to employ intellectual criteria, such as lucidity, accuracy, relevance, and logical consistency, to determine the quality and credibility of the information. Evaluation is a vital cognitive process that is fundamental to critical thought.
v. **Problem-Solving and Decision-Making:** Problem-solving and decision-making are closely related to thinking and critical reasoning. Identifying and defining problems, analyzing pertinent information, generating and evaluating potential solutions, and making well-informed decisions are required for both tasks. Critical thinking strengthens problem-solving abilities by emphasizing analytical rigour, evidence-based reasoning, and multiple perspectives.
vi. **Metacognition in Critical Thinking:** Critical thinking also entails metacognitive thought, which is pondering about one's own thought processes. It entails being conscious of cognitive biases, ruminating on assumptions and biases, and actively monitoring and modifying one's thought process. Metacognition improves critical thinking by fostering self-awareness and self-control of thought.

Research Question iv: What Role Does Play Critical Thinking in Education?

Critical thinking plays a crucial role in education because it equips students with the skills and mindset they need to navigate and flourish in a world that is increasingly complex and dynamic. Here are some of the most important functions of critical thinking in education:

i**. Developing Analytical Skills:** Critical thinking fosters analytic abilities, allowing students to scrutinize information, arguments, and evidence with discernment. It enables them to break down complex concepts into their component parts, recognize patterns, and comprehend relationships, thereby nurturing a deeper understanding of subjects across disciplines.

ii**. Enhancing Problem-Solving Abilities:** Critical thinking equips students with problem-solving abilities by encouraging them to approach obstacles methodically and creatively. It fosters the ability to identify problems, analyze their fundamental causes, and generate novel solutions by weighing multiple perspectives and evidence.

iii. Encouraging Independent and Reflective Thinking: Critical thinking encourages students to develop their own ideas and opinions through independent thought. It encourages reflection, self-awareness, and metacognition, enabling students to evaluate their own cognitive processes, biases, and assumptions. This fosters intellectual autonomy, independence, and a propensity to query and challenge established ideas.

iv. Promoting Effective Communication: Students' communication skills are enhanced by critical thinking because it enables them to organize and articulate their thoughts coherently. It encourages the ability to present well-supported arguments, engage in constructive dialogue, and listen carefully to the perspectives of others. In both academic and professional settings, effective communication is essential.

v. Fostering Research Skills and Information Literacy: Critical thinking is crucial to the development of research and information literacy abilities. It teaches students how to evaluate sources, distinguish credible information from misinformation, and analyze research results critically. In an era of bountiful information and digital media, these skills are becoming increasingly vital.

vi. Cultivating Ethical Reasoning: Students are prompted to consider the ethical implications and consequences of their actions and choices by critical thinking. It promotes ethical reasoning by encouraging students to evaluate the ethical dimensions of various issues and to reach principled conclusions based on moral values and ethical frameworks.

vii. Nurturing Lifelong Learning: Critical thinking fosters a passion for learning and an inquisitive mindset. It encourages students to seek out new information, engage in continuous learning, and adapt to varying circumstances by fostering an understanding that knowledge is dynamic and evolving.

Students gain the capacity to successfully analyze, evaluate, and find solutions to challenges when critical thinking is incorporated into their educational experience. They develop into learners who are active and involved in the learning process, and they are equipped with the abilities necessary to traverse difficult obstacles, make informed decisions, and make important contributions to society.

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