

Exploring the Underlying Ways of Enhancing Critical Thinking Skills
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ABSTRACT

Critical thinking skills in the present dynamic and rapidly changing world are crucial skills that enable individuals to engage in rational and independent thinking to make decent and consistent decisions. This article aims at exploring multifarious underlying ways of enhancing critical thinking skills. It provides readers with definitions of critical thinking and critical thinking skills. It pinpoints key components of critical thinking, barriers to critical thinking, and the major strategies for enhancing these skills. Qualitative data related to critical thinking skills were gathered in the forms of lexes and lexical expressions through a scrupulous review of journal articles, website documents and relevant books published between 1984 and 2023. They served as secondary sources of qualitative data that were explored and analyzed through instances that led to broader concepts regarding critical thinking skills. It is concluded that both acquisition and application of these skills were imperative for individuals to adeptly formulate their fair decisions. Teachers, students, researchers and critics will find this article highly valuable as it equips them with the necessary skills to think critically and make well-versed decisions about a given subject matter.

1. INTRODUCTION

Cultivation of critical thinking skills stands as a paramount objective for fostering intellectual growth and preparing individuals to navigate the complexities of an increasingly complex world.

Critical thinking is a fundamental aptitude that is essential for success in the modern epoch. The ability to think critically enables individuals to evaluate information, solve complex problems, and make trustworthy decisions. It is a common course in college and university settings

today (Murawski, 2014), and is focused on deciding what to believe or do (Ennis, 2011). It is a skill which can be developed (Walsh & Paul, 1988). Skills signify competencies that an individual hold or builds up through learning, performance, and experience. They can be categorized as specific, measurable, and observable behaviors that enable a person to perform a task well or solve a problem effectively. Critical thinkers are those who produce both more ideas and improved ideas than poor thinkers (Ruggiero, 2012). This article discusses the

key components of critical thinking skills which involve a range of cognitive skills, including analysis, interpretation, evaluation, inference, explanation, and self-regulation. Moreover, it explores the importance of critical thinking skills and how they can benefit individuals in their personal and professional lives. Teaching children to become effective thinkers is increasingly recognized as an immediate goal of education (Robinson, 1987). The most basic premise in the current thinking skills movement is the notion that students can learn to think better if schools concentrate on teaching them how to do so (Presseisen, 1986). Critical thinking skill is not merely an academic pursuit, but a crucial life skill with far-reaching implications for personal and professional success. This journal article investigates the multifaceted ways of enhancing critical thinking skills that contribute to the development of this indispensable cognitive ability. It is necessary to teach critical thinking skills to the students at all levels of their studies. Teaching such skills will help them identify and analyze problems, evaluate evidence, and develop solutions based on sound reasoning.

The significance of critical thinking in contemporary society cannot be overlooked. The capacity to discern, question, and analyze information critically becomes essential for informed decision-making and problem-solving. The educational landscape has recognized the centrality of critical thinking, with curricula across disciplines increasingly emphasizing its cultivation. However, the challenge lies not only in recognizing the importance of critical thinking, but it is also in understanding how to effectively enhance and integrate it into educational practices.

The literature on critical thinking enhancement is vast and spans various educational levels, from primary education to higher education and beyond. While numerous pedagogical approaches claim to nurture critical thinking skills, there is a need for a comprehensive exploration of the underlying mechanisms that drive these enhancements. Metacognition, or the ability

to monitor and regulate one's thinking processes, has been identified as a crucial component in the development of critical thinking skills. Understanding how individuals become aware of their thinking patterns, engage in reflective practices, and apply strategic approaches to problem-solving can provide valuable insights into effective interventions for critical thinking enrichment. Investigating the interplay between emotions and critical thinking is essential for a holistic understanding of the processes involved. Strategies that harness emotions to facilitate rather than hinder critical thinking can be pivotal in designing interventions that resonate with learners across diverse contexts.

In addition to cognitive and emotional aspects, the social context within which critical thinking develops warrants careful consideration. Collaborative learning environments, diverse perspectives, and inclusive educational practices contribute to a rich array of experiences that can stimulate critical thinking. Exploring how social interactions and contextual factors influence the acquisition and application of critical thinking skills is crucial for designing educational approaches that are not only effective but also adaptable to various settings. Through an extensive review of the journal articles, website materials and books, this article aspires to offer educators, researchers, and policymakers a genuine understanding that can inform the development of pedagogical strategies conducive to nurturing critical thinkers for making them capable of navigating the challenges of the 21st century.

1.1 LITERATURE REVIEW

The following aspects have been concisely reviewed in this article:

1.1.1 CRITICAL THINKING

Critical thinking is an unbiased process of analyzing, evaluating, and synthesizing information to make sound judgments. It is a stimulus-bound phenomenon (Fischer et al., 2009). Case (2005) argues that critical thinking can teach the content and skills embedded in

the curriculum. It is taken as the mental processes, strategies, and representations people use to solve problems, make decisions, and learn new concepts (Sternberg, 1986), the use of those cognitive skills or strategies that increase the probability of a desirable outcome (Halpern, 1998). Critical thinking involves in seeing both sides of an issue being open to new evidence that disconfirms your ideas, reasoning dispassionately, demanding that claims be backed by evidence, deducing and inferring conclusions from available facts, solving problems, and so forth (Willingham, 2007). Similarly, it is viewed as the propensity and skill to engage in an activity with reflective skepticism (McPeck, 1981), reflective and reasonable thinking that is focused on deciding what to believe or do (Ennis, 1985), skillful, responsible thinking that facilitates good judgment because it relies upon criteria. It is self-correcting, and it is sensitive to context (Lipman, 1988), purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or conceptual considerations upon which that judgment is based (Facione, 1990), disciplined, self-directed thinking that exemplifies the perfections of thinking appropriate to a particular mode or domain of thought (Paul, 1992), thinking that is goal-directed and purposive, thinking aimed at forming a judgment where the thinking itself meets standards of adequacy and accuracy (Bailin et al., 1999b), and judging in a reflective way what to do or what to believe (Facione, 2000).

Critical thinking characteristics include open-mindedness (Bailin et al., 1999; Ennis, 1985; Facione 1990, 2000; Halpern, 1998), fair-mindedness (Bailin et al., 1999; Facione, 1990), the propensity to seek reason (Bailin et al., 1999; Ennis, 1985; Paul, 1992), inquisitiveness (Bailin et al., 1999; Facione, 1990, 2000), the desire to be well-informed (Ennis, 1985; Facione, 1990), flexibility (Facione, 1990; Halpern, 1998), respect for and willingness to entertain,

others' viewpoints (Bailin et al., 1999; Facione, 1990).

1.1.2 CRITICAL THINKING SKILLS

Critical thinking skills refer to the abilities that an individual possesses or develops through training, practice, and experience. Critical thinking skills and abilities are unlikely to develop in the absence of explicit instruction (Abrami et al., 2008; Case, 2005; Facione, 1990; Halpern, 1998; Paul, 1992). Researchers have highlighted the diverse aspects of critical thinking abilities, such as analyzing arguments, claims, or evidence (Ennis, 1985; Facione, 1990; Halpern, 1998; Paul, 1992), making inferences using inductive or deductive reasoning (Ennis, 1985; Facione, 1990; Paul, 1992; Willingham, 2007), judging or evaluating (Case, 2005; Ennis, 1985; Facione, 1990; Lipman, 1988; Tindal & Nolet, 1995), and making decisions or solving problems (Ennis, 1985; Halpern, 1998; Willingham, 2007).

Thinking skills are taken as important skills necessary for intellectuals in the fast transfiguring world (Gough, 1991). Such skills are necessary tools in a society characterized by rapid change, many alternatives of actions, and numerous individual and collective choices and decisions (Beyth-Marom et al., 1987). Thinking is the manipulation or transformation of some internal representation (Halpern, 1996). It is reasoning, and that reason is a chain of simple ideas linked by applying strict rules of logic (McGregor, 2007). Critical thinking ability is not widespread. Most students do not score good marks on tests that measure ability to recognize assumptions, evaluate arguments, and appraise inferences (Norris, 1985). It can be taken as a thoughtful and reasonable process whose main purpose is to make sensible decisions about what to believe or what to do (Ennis, 1989). It is dynamic and its skills and qualities can be cultivated (Ennis, 1989; Lipman, 1991). It refers to meta-cognition (Tempelaar, 2006) or the process of thinking about thinking (Flavell, 1979). It is an important factor that has a direct

relationship with language learning and it is a very important component of education in this century (Lai, 2011). It is regarded as reflective thinking and it is defined as an active, persistent, and careful consideration of a belief (Dewey, 1991). It is the ability to analyze information objectively and systematically, using logic and reason to evaluate evidence and draw conclusions. It is the process of determining the authenticity, accuracy and worth of information or knowledge claims (Beyer, 1985). It is that mode of thinking about any subject, content or problem in which the thinker improves the quality of his or her thinking by skillfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them (Paul et al., 1993). It involves several cognitive skills, including analysis, interpretation, evaluation, inference, explanation, and self-regulation. It is not just about being skeptical or negative but rather involves the ability to recognize assumptions, evaluate evidence, and consider alternative perspectives. It is a reasonable, reflective thinking that is focused on deciding what to believe or do (Norris & Ennis, 1989). It is skilled and active interpretation and evaluation of observations and communications, information and argumentation (Fisher & Scriven, 1997). It calls for a persistent effort to examine any belief or supposed form of knowledge in the light of the evidence that supports it (Glaser, 1941). It provides a vehicle for educating the mind (Paul & Elder, 2008). It can be divided into various aspects, namely induction, deduction, value judgement, definition, observation, identification of assumptions, giving meaning and determining credibility (Ennis, 1984). It is more complex than ordinary thinking. It involves careful argumentation which avoids guessing, making logical conclusions based on criteria, providing opinions substantiated by proof, moving away from believing to assuming, and moving away from assumptions to hypotheses (Lipman, 1988). It is classified as the ability to identify the nature of a problem and decide on the processes necessary to solve the

problem, monitor and evaluate a problem-solving process, make conclusions, react effectively to new tasks and situations, and process information effectively, which involves the ability to classify, compare, categorize, analyze and evaluate (Sternberg, 1984). It implies specific measurable skills, which can function within or apart from subject content (McPeck, 1990; Ennis, 1990). It is thinking clearly and rationally. It involves thinking precisely and systematically, and following the rules of logic and scientific reasoning, among other things (Lau, 2011). A critical thinker is able to understand the logical connections between ideas, formulate ideas succinctly and precisely, Identify, construct, and evaluate arguments, evaluate the pros and cons of a decision, evaluate the evidence for and against a hypothesis, detect inconsistencies and common mistakes in reasoning, analyze problems systematically, identify the relevance and importance of ideas, justify one's beliefs and values and reflect and evaluate one's thinking skills (Lau, 2011). It is disciplined thinking governed by clear intellectual standards. Among the most important of these intellectual standards are clarity, precision, accuracy, relevance, consistency, logical correctness, completeness, and fairness. Critical thinking can be applied in different settings, such as education, workplace, civic engagement, prosomal development, etc.

1.1.3 COMPONENTS OF CRITICAL THINKING SKILLS

Critical thinking skills are important because they enable students to deal effectively with social, scientific, and practical problems (Shakirova, 2007). Students seldom use critical thinking skills to solve complex, real-world problems (Bartlett, 2002; Rippen et al., 2002). These skills are generally seen as very important in equipping individuals to participate in a rapidly changing democratic society and economy (Davies, 2015). The ability to think critically has been identified as an essential life skill (Galinsky, 2010). The intellectual standards of critical thinking are clarity, precision, accuracy, relevance, consistency,

logical correctness, completeness, and fairness (Bassham et al., 2011). Skills are acquired, improved, and judged by performance (Butterworth & Thwaites, 2013).

Critical thinking is the general term given to a wide range of cognitive skills and intellectual dispositions needed to effectively identify, analyze, and evaluate arguments and claim, discover and overcome personal preconceptions and biases, formulate and present convincing reasons in support of conclusions; and to make reasonable, intelligent decisions about what to believe and what to do (Bassham et al., 2011). Effective critical thinking comprises of three important components: the ability to reflect, question and judge information effectively, a strong knowledge base in the specific subject area where the critical thinking skills are to be utilized and the capacity to use language to execute critical thinking (McPeck, 1990). These skills involve decision making, problem solving, fluency, observation, exploration, classification, generating hypotheses (Crump et al., 1988; Horton & Ryba, 1986; Herrnstein et al., 1986; Kagan, 1988; Matthews, 1989; Ristow, 1988; Robinson, 1987; Tenenbaum, 1986).

Analysis, interpretation, evaluation, inference, explanation and self-regulation are the basic components of critical thinking. Analysis, which is one of the components of critical thinking, refers to the process of breaking down complex information into smaller parts to identify the relationships between them. Interpretation involves explaining the meaning of information and to draw conclusions based on the available evidence. Evaluation assesses the quality and relevance of information and judges the credibility of sources. Inference draws logical conclusions based on the available evidence. Explanation engrosses clear and concise communication of complex ideas and arguments. Similarly, self-regulation reflects on one's own thinking to monitor and adjust one's cognitive processes as needed.

1.1.4 BENEFITS OF CRITICAL THINKING

Critical thinking is valuable in many contexts outside the classroom and the workplace. Critical thinking can help us avoid making foolish personal decisions. It plays a vital role in promoting democratic processes. It is worth studying for its own sake, simply for the personal enrichment it can bring to our lives. It can help free us from the unexamined assumptions and biases of our upbringing and our society. Research studies have shown that thinking skill instructions enhance academic achievement (Barba & Merchant, 1990; Bass & Perkins, 1984; Bransford et al., 1986; Crump et al., 1988; Freseman, 1990; Haller et al., 1988; Horton & Ryba, 1986; Snapp & Glover, 1990; Tenenbaum, 1986).

These skills enable individuals to evaluate evidence objectively, consider multiple perspectives, and make informed decisions based on reasoned judgments, allow individuals to think outside the box and generate innovative ideas and solutions to complex problems, enable individuals to express themselves clearly and concisely and communicate complex ideas effectively, enable individuals to identify and analyze problems systematically, evaluate potential solutions, and choose the best course of action. These skills are essential for academic success as they enable students to analyze and evaluate information critically, develop arguments, and communicate effectively. They are essential for problem-solving, decision-making, and innovation in the workplace. The ability to think critically is crucial for solving complex problems. Critical thinkers can identify the root cause of a problem, evaluate potential solutions, and choose the best course of action. By thinking critically, individuals can approach problems with a clear and objective mindset, which can lead to more effective and efficient solutions. Critical thinking is essential for making informed decisions. By evaluating evidence objectively, critical thinkers can make reasoned judgments based on logic and reason. In today's fast-paced world, decisions often have to be made quickly, and critical thinking skills can help

individuals make better decisions under pressure. The ability to think critically can also improve communication skills. Critical thinkers can express themselves clearly and concisely, using logical and persuasive arguments to convey their message. By communicating effectively, individuals can influence others, build relationships, and achieve their goals. These skills can also enhance creativity. By thinking outside the box and considering alternative perspectives, individuals can generate innovative ideas and solutions to complex problems. It can help individuals challenge assumptions, break down barriers, and find new and innovative solutions to old problems. These skills are also essential for personal growth. By reflecting on one's own thinking and learning from mistakes, individuals can improve their cognitive processes and develop a deeper understanding of themselves and the world around them. It can also help individuals develop empathy, tolerance, and a more earnest understanding of complex issues.

1.1.5 ENHANCING CRITICAL THINKING SKILLS

Several teaching practices have been justified by research studies as effective in fostering the development of thinking skills. Critical thinking skills can be enhanced through increasing students' content knowledge (Cotton, 1988; Pearson, 1982; Robinson, 1987; Tenenbaum, 1986), asking higher order questions (Baum, 1990; Cotton, 1988; Herrnstein et al., 1986; Matthews, 1989; Robinson, 1987; Sternberg & Bhana, 1986), lengthening the amount of time the teacher is willing to wait for a student to respond after posing a question (Cotton, 1988; Hudgins & Edelman, 1986; Pogrow, 1988) and increasing in student engaged time/level of participation (Cotton, 1988; Freseman, 1990). The Computer Added Information (CAI) programs designed to improve students' thinking skills were effective. The programs focused on skill building in areas such as verbal analogies, logical reasoning, and inductive/deductive thinking. Research studies can be fruitful for enhancing such skills (Bass & Perkins, 1984; Horton & Ryba,

1986; Riding & Plowel, 1987; Sadowski, 1985), training teachers to teach thinking skills leads to student achievement gains (Sternberg & Bhana, 1986; Baum, 1990), and a positive relationship between teacher training and student achievement has also been identified useful in studies conducted by Crump et al. (1988), Hudgins and Edelman (1986) and Robinson (1987). Teachers and administrators should systematically evaluate the general culture of their classrooms and schools and should estimate how this culture affects their ability to promote critical reasoning habits among students (Orr & Klein, 1991).

Critical thinking skills can be enhanced through active listening to others, questioning for knowledge, diversity of thought for different perspectives and opinions, reflective practice on personal experiences, logic and reasoning in puzzles, games, and activities, skeptical mindset for alternative explanations, problem-based learning, Socratic dialogue for encouraging open-ended discussions, integration into educational and professional settings, metacognition for reflecting on identifying our biases, and actively seeking strategies to overcome them., curriculum design, and so on.

1.1.6 BARRIERS TO CRITICAL THINKING

Egocentrism, sociocentrism, unwarranted assumptions, relativistic thinking, and wishful thinking are the impediments to critical thinking (Bassham et al., 2011). Egocentrism is the tendency to see reality as centered on oneself. Sociocentrism is group-centered thinking. Just as egocentrism can hinder rational thinking by focusing excessively on the self, so sociocentrism can hinder rational thinking by focusing excessively on the group. An unwarranted assumption is something taken for granted without good reason. Relativism is the view that truth is a matter of opinion. There are two popular forms of relativism: subjectivism and cultural relativism. Subjectivism is the view that truth is a matter of individual opinion. Cultural relativism is a matter of social or cultural opinion. Wishful thinking believes

something not because a person has good evidence for it but simply because he or she wishes it is true. By terminating these impediments, we can enhance critical thinking.

2. MATERIALS AND METHOD

This article relied on secondary sources of information, such as journal articles, website documents and relevant books published from 1984 to 2023 to explore various ways of enhancing critical thinking skills. Substances related to critical thinking skills were the materials of this article. The study was based on the qualitative method which employed words and lexical expressions as data for analysis. This article explores the concept of critical thinking, critical thinking skills, key components of critical thinking, benefits of critical thinking, impediments to critical thinking, and diverse ways of enhancing critical thinking skills through instances that

created a broader concept. Instances in this study worked as codes and broader concepts functioned as themes. Codes are simple tags of rudimentary categories, whereas themes are more abstract and higher-level concepts (Turner, 2022).

2.1 ANALYZING DIVERSE LEXES AND LEXICAL EXPRESSIONS REGARDING CRITICAL THINKING

In this study, some key lexes and lexical expressions regarding the critical thinking have been presented in the tables after a comprehensive review of related literature, and such lexes and lexical expressions with the identical attributes and roles have been deployed to generate broader concepts. An abstract or generic idea generalized from particular instances is termed as a concept (Merriam-Webster, 2023).

Table 1: Instances of Critical Thinking

Lexes and Lexical Expressions	Broader Concept
Analyzing	Critical thinking
Evaluating	
Synthesizing	
Rational thinking	
Independent thinking	
Activity with reflective skepticism	
Self-correcting	
self-regulatory judgment	
Disciplined, self-directed thinking	
Open-mindedness	
Fair-mindedness	
Inquisitiveness	
Desire to be well-informed	
Flexibility	
Propensity to seek reason	
Stimulus-bound phenomenon	
Dynamism	
More complex than ordinary thinking	
Careful argumentation	
Critical thinking encompasses a spectrum of intellectual processes that collectively contribute to a discerning and analytical mindset. Central to this framework is the capacity for analyzing information, involving a systematic examination of data to extract meaning and relevance. Evaluation, a key facet, enables individuals to assess the reliability and validity of information, fostering a discerning approach to knowledge. Synthesizing, the skill of integrating diverse elements into a cohesive whole, highlights	

the ability to derive comprehensive insights. Critical thinking is characterized by rational thinking, emphasizing logical reasoning and sound judgment. Independent thinking plays a pivotal role, encouraging individuals to form their own perspectives and conclusions. The dynamic nature of critical thinking implies adaptability and responsiveness to evolving circumstances. It transcends ordinary thinking, embracing a level of complexity that goes beyond the

conventional. Finally, careful argumentation underscores the importance of constructing well-reasoned and supported positions, reinforcing the meticulous nature of critical thinking processes. It makes people open-minded, fair and curious. In essence, critical thinking encompasses a dynamic, multifaceted approach to cognitive engagement that extends beyond routine thought processes.

Table 2: Instances of Critical Thinking Skills

Lexes and Lexical Expressions	Broader Concept
Important skills	Critical thinking skills
Necessary tools	
Crucial skills	
Life skills	
Cognitive skills	
Analyzing arguments, claims, or evidence	
Making inferences using inductive or deductive reasoning	
Applying strict rules of logic	
Thinking precisely and systematically	

Critical thinking skills are indispensable components that encompass a range of important abilities, serving as necessary tools for navigating the complexities of life and decision-making. These crucial skills go beyond mere cognitive aptitude, embodying essential life skills that are integral to one's personal and professional development. The term "important skills" underscores their significance in various contexts, while the designation of "necessary tools" emphasizes their instrumental role in problem-solving and analytical reasoning.

Described as "crucial skills," these elements form the bedrock of effective cognitive engagement, enabling individuals to approach challenges with depth and discernment. Categorized as "life skills," critical thinking abilities extend beyond academic realms, proving essential for success in diverse aspects of life. In essence, critical thinking skills encapsulate a comprehensive set of cognitive, analytical, and life skills that are fundamental for navigating the complexities of the modern world.

Table 3: Instances of Key Components of Critical Thinking

Lexes and Lexical Expressions	Broader Concept
Analysis of complex information	Key components of critical thinking
Interpretation of information	
Evaluation of information	
Inference from the available evidence	
Explanation of complex ideas and arguments	
Self-regulation	

Critical thinking, as an intellectual discipline, encompasses several key

components that collectively contribute to its efficacy. The initial facet involves the rigorous analysis of complex information,

demanding a skillful dissection and understanding of intricate data sets. Following this, the interpretative dimension surfaces, highlighting the ability to derive meaningful insights and context from the information at hand. Subsequently, critical thinkers engage in a systematic evaluation of information, critically assessing its reliability, relevance, and implications. The capacity for making informed inferences from available evidence becomes crucial, showcasing the knack for drawing logical conclusions based on the presented facts.

Furthermore, the adept explanation of complex ideas and arguments characterizes another integral aspect of critical thinking, emphasizing effective communication of intricate concepts. Finally, self-regulation emerges as a paramount feature, illustrating the metacognitive ability to monitor and adjust cognitive processes, ensuring a reflective and adaptive approach to thinking. Together, these components form the foundation of a robust critical thinking framework.

Table 4: *Instances of Benefits of Critical Thinking*

Lexes and Lexical Expressions	Broader Concept
Avoidance of making foolish decisions	Benefits of critical thinking
Enhancement of academic achievement	
Evaluation of evidence objectively	
Consideration of multiple perspectives	
Informed decision making	
Generation of innovative ideas	
Complex problem solving	
Improvement of communication skills	
Enhancement of creativity	
Improvement of cognitive process	

Engaging in critical thinking yields a plethora of tangible benefits across various facets of life. Foremost among these advantages is the avoidance of making foolish decisions, as individuals adept in critical thinking navigate choices with discernment and rationale. Academic achievement experiences a significant boost, given the enhanced cognitive processes and analytical skills that are inherent in critical thinking. Objectively evaluating evidence becomes a hallmark, fostering an environment of rational discourse and well-founded conclusions. The consideration of multiple perspectives enriches individuals' understanding of

complex issues and nurtures a more inclusive worldview. Informed decision-making becomes second nature, as critical thinkers draw on analytical thinking to weigh options and anticipate outcomes. Moreover, critical thinkers excel in generating innovative ideas, tackling complex problems with creativity and adaptability. Lastly, communication skills see marked improvement, as critical thinkers articulate their thoughts with clarity and coherence, contributing to effective dialogue and collaboration. Collectively, these benefits underscore the transformative impact of critical thinking on individual growth and cognitive prowess.

Table 5: *Instances of Impediments to Critical Thinking*

Lexes and Lexical Expressions	Broader Concept
Egocentrism	Impediments to critical thinking
Sociocentrism	
Unwarranted assumptions	
Relativistic thinking	
Wishful thinking	

Several impediments can hinder the development and application of critical thinking, hindering the objective analysis of information and decision-making processes. Egocentrism, characterized by a self-centered perspective, can limit one's ability to consider alternative viewpoints and recognize the broader context of an issue. Sociocentrism, on the other hand, involves the tendency to view situations from a societal or cultural bias, potentially leading to a narrow and biased understanding. Unwarranted assumptions act as barriers by introducing unsupported beliefs into

reasoning, distorting the interpretation of information. Relativistic thinking, where individuals perceive all perspectives as equally valid, may undermine the discernment of well-founded arguments and evidence. Additionally, wishful thinking, driven by personal desires rather than objective analysis, can cloud judgment and impede rational decision-making. Identifying and overcoming these impediments is essential for cultivating a robust and effective critical thinking mindset.

Table 6: *Instances of Ways of Enhancing Critical Thinking Skills*

Lexes and Lexical Expressions	Broader Concept
Increasing students' content knowledge	Ways of enhancing critical thinking skills
Asking higher order questions	
Increasing in students' engaged time	
Computer added information (CAI) programs	
Training teachers for teaching critically	
Developing positive relationship between teacher training and students' achievement	
Active listening to others	
Questioning for knowledge	
Diversity of thought for different perspectives and opinions	
Reflective practice on personal experiences, logic and reasoning in puzzles, games, and activities	
Developing skeptical mindset for alternative explanations,	
Problem-based learning	
Conducting Socratic dialogue for encouraging open-ended discussions	
Integration into educational and professional settings	
Metacognition for reflecting on identifying our biases	
Introduction of curriculum design on critical thinking skills	

The enhancement of critical thinking skills can be achieved through a multifaceted approach that encompasses various strategies and practices. Firstly, increasing students' content knowledge lays a solid foundation, providing the necessary information for analytical thinking. Asking higher-order questions prompts students to engage in deeper cognitive processes, fostering critical thinking development. Furthermore, maximizing students' engaged time, whether through Computer-Aided Information (CAI) programs or other

interactive methods, ensures sustained focus and active participation. Teacher training plays a pivotal role, as educators equipped to teach critically facilitate a positive relationship between training and students' achievement. Active listening and questioning for knowledge cultivate a diversity of thought, encouraging different perspectives and opinions. Reflective practice, embedded in puzzles, games, and activities, enhances logic and reasoning skills. Developing a skeptical mindset for alternative explanations and embracing problem-based learning contribute to a more robust critical thinking framework.

Socratic dialogue fosters open-ended discussions, and the integration of critical thinking into educational and professional settings ensures practical application. Metacognition encourages individuals to reflect on and identify their biases, fostering self-awareness. Finally, the introduction of curriculum design focused on critical thinking skills provides a structured and intentional approach to skill development. Altogether, these strategies collectively contribute to the comprehensive enrichment of critical thinking abilities.

3. CONCLUSION

Critical thinking is a crucial skill that enables individuals to make informed decisions, solve complex problems, and communicate effectively. The ability to think critically is essential in today's complex and rapidly changing world. Developing critical thinking skills requires practice and perseverance, but the benefits are significant, both personally and professionally. By developing critical thinking skills, individuals can improve their decision-making, creativity, problem-solving, communication, academic performance, and employability. It is a crucial skill that is essential for success in today's world. Critical thinking skills can be enhanced through multiple ways, such as posing higher-order questions and optimizing students' engaged time in learning, integrating Computer Added Information (CAI) programs, giving teachers trainings to instill critical thinking skills, and establishing a positive correlation between teacher training and students' academic success. Effective communication skills, such as active listening and purposeful questioning contribute to a diverse range of perspectives and opinions. Additionally, fostering a reflective mindset through problem-based learning, Socratic dialogues, and metacognition aids in developing a skeptical approach to alternative explanations, and ensuring seamless integration into educational and professional environments are key ways of enhancing critical thinking skills. By developing critical thinking skills, individuals

can improve their problem-solving, decision-making, communication, creativity, and personal growth. It requires practice and perseverance. Whether in the workplace or in everyday life, critical thinking skills are essential for success, and individuals who develop these skills will have a distinct advantage to make a sound and fair judgement towards somebody or something in the modern world. This article is directed towards encouraging students, teachers, researchers and critics to adopt critical thinking skills before making any decisions and comments about a case or a situation.

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