

What do Teachers Think About Critical Thinking?

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Abstract

This paper investigated what teachers thought about critical thinking. This study adopted a qualitative research design. The sample consisted of 21 participants. Data were collected using a semi-structured interview guide. The data were analyzed using descriptive analysis. As a result of the analysis, it was observed that teachers perceive critical thinking as questioning, deep understanding, evaluation, and considering different perspectives. Teachers believed critical thinking was necessary for achieving self-improvement, developing different perspectives, building resilience to misinformation, and solving problems. They stated that teachers with critical thinking skills were tolerant and self-critical individuals who could look at things from a different angle. They noted that they conducted discussion, problem-solving, and question-and-answer sessions to help their students develop critical thinking skills. They recommended that teachers provide safe environments for students to spark their curiosity and encourage them to question things to help them develop critical thinking skills.

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INTRODUCTION

Scientific and technological advancements, along with developments in teaching methods, have had a profound impact on the roles expected from individuals. Critical thinking, a vital component of twenty-first-century skills, is a key objective in education.

Critical thinking is more than just a way of thinking. Critical thinking serves as the distinguishing factor between knowledge and non-knowledge. It is a cognitive approach that seeks to attain understanding and facilitates precise assessments rooted in knowledge (Arlı Çil, 2021). Critical thinking helps one make correct judgments (Lipman, 2003). Critical thinking is not about a negative approach aimed at uncovering flaws. Instead, it involves impartial and unbiased assessments of either our own beliefs or the assertions of others (Haskins, 2006). Critical thinking is the ability to construct arguments. To construct good arguments, we need to justify ideas and draw conclusions through connected thinking (Bowell, Cowan, & Kemp, 2022). While most researchers treat critical thinking as a systematic, connected, and coherent thinking activity, they ignore the relationship between critical thinking and knowledge, especially ethical knowledge. However, we need to decipher this relationship to understand what critical thinking is. The relationship between critical thinking and knowledge can only be established from a philosophical perspective. Considering the relationship between knowledge and critical thinking, we can state that the latter is nothing but philosophical thinking (Arlı Çil, 2021, p.129). Critical thinking enables individuals to combat propaganda, scrutinize implicit assumptions, discern deception, evaluate the credibility of information sources, and methodically navigate problems or decisions in the most effective manner (Halpern, 2003). Critical thinking involves posing, analyzing, and resolving questions based on a logical foundation and placing trust in the outcomes (Nosich, 2018). Critical thinking relies on specific criteria and methodologies, including clarity, coherence, consistency, reasonableness, skepticism, and accurate reasoning concerning a subject, fact, or idea. Critical thinking is a mode of thought that identifies erroneous modes of thinking, embodies a research-driven inclination toward deeper thinking, instills an attitude and skill that values evidence and outcomes, strives to arrive at not just any conclusion but coherent and rational conclusions and judgments, and remains open to change and self-correction through continual monitoring of its own thought processes, thanks to its capacity to both solve problems and recognize them (Gündoğdu, 2009).

Koç Erdamar and Bangir Alpan (2017) conducted a qualitative study to survey teachers regarding their perceptions of critical thinking. The study revealed that teachers viewed thinking as a limited, narrowly defined capability inherent in all individuals, involving the capacity to utilize information. Critical thinking, in their perspective, was described as a process encompassing the interpretation, analysis, and evaluation of information—a profound and systematic skill possessed by not every individual. Kestel and Şahin (2018) also conducted a qualitative study to unveil what science, social studies, and religious culture and ethics teachers thought about critical thinking and critical thinking skills. In their quantitative research, Korkmaz (2009), Polat and Konaş (2018), and Kurban and Tok (2019) focused on teachers' critical thinking tendencies and levels. Koç Erdamar and Bangir Alpan (2017) investigated the impact of teachers' critical thinking tendencies on their organizational commitment. Iliman Püsküllüoğlu and Altinkurt (2018) compared the learning styles and critical thinking dispositions of secondary school teachers. Tunçer and Sapanıcı (2021) addressed the relationship between teachers' critical thinking dispositions and organizational opposition behaviors. Alper (2010) concentrated on the relationship between critical thinking dispositions and perceptions of practice. Other quantitative studies have investigated preservice teachers' critical thinking dispositions (Can and Kaymakçı, 2015; Durukan and Maden, 2010; Ekinçi and Aybek, 2010; Ocak, Eymir and Ocak, 2016; Kartal, 2012; Kuvaç and Koç, 2014; Yıldız and Yılmaz, 2020).

Education systems aim to instill skills in individuals that encompass interpreting and evaluating information, problem-solving, constructing arguments, reasoning, applying logic, and discerning erroneous modes of thinking. These skills are considered important expectations from

individuals within educational contexts. Curricula developed by the Ministry of National Education aim to turn students into individuals with critical thinking skills. Teachers play a key role in helping students develop critical thinking skills. There is only a small body of research on teachers' views on critical thinking. Therefore, we believe that this study will make a valuable contribution to the existing literature.

This study investigated what teachers thought about critical thinking. Research questions are as follows: What are teachers' views on critical thinking?

METHOD

Research Model

This qualitative study adopted a phenomenological research design to unveil teachers' views on critical thinking. Phenomena are events, experiences, perceptions, orientations, concepts, and situations. Phenomenology focuses on investigating the phenomena that we often encounter in daily life but cannot fully understand (Yıldırım & Şimşek, 2006, p.72). Qualitative research seeks to comprehend a phenomenon from the viewpoint of the participants (Merriam & Grenier, 2019).

Study Group

The study population consisted of all teachers in the province of Van, Türkiye. The sample consisted of 21 teachers recruited using convenience sampling, which is a purposive sampling method (Patton, 1987; Yıldırım & Şimşek, 2006). Convenience sampling is a cost- and time-effective method that is often employed when obtaining a truly random or representative sample is challenging (Yıldırım & Şimşek, 2006).

Table 1. Characteristics

Characteristics	Number (N)
Gender	
Woman	7
Man	14
Branch	
Classroom	9
Preschool	2
Special Education	2
Science	1
Physical Education	1
Biology	1
Information Technologies	1
Visual Arts	1
Fashion Design and Technology	1
Turkish	1
Social sciences	1

Two-thirds of the participants were men (66.6%). The sample consisted of classroom (n=9), preschool (n=2), special education (n=2), science (n=1), physical education (n=1), biology (n=1), information technologies (n=1), visual arts (n=1), fashion design and technology (n=1), Turkish (n=1), and social sciences (n=1) teachers.

Data Collection

The data were collected using a semi-structured interview guide developed by the researcher based on a literature review. The guide consisted of open-ended questions. The researcher consulted two experts and asked them to check the questions for intelligibility and relevance. Then, she briefed all teachers about the research purpose and procedure and received informed consent from those who volunteered to participate. Each interview lasted 20-25 minutes. The following are the research questions:

1. What does critical thinking mean?
2. Why critical thinking is necessary?
3. What characteristics teachers with critical thinking skills have?
4. In what way critical thinking help students?
5. What methods and techniques help students develop critical thinking skills?
6. How do we help students develop critical thinking skills?

Data Analysis

The data were analyzed using descriptive analysis, which is used to obtain related concepts and associations. Researchers use descriptive analysis to group similar data under specific concepts and themes and then organize and interpret this data in a manner that facilitates comprehension for the reader (Yıldırım & Şimşek, 2006)

First, the researcher read the raw data and then coded them. She assigned a code to each participant (P1, P2, P3, etc.). She then developed themes and used direct quotations to illustrate each theme.

RESULTS

This section presented the findings based on the research questions.

WHAT DOES CRITICAL THINKING MEAN TO YOU?

Participants were asked the question, “What does critical thinking mean to you?” Their responses were grouped under four themes: (1) questioning, (2) in-depth comprehension, (3) assessment, and (4) a different perspective.

Most participants associated critical thinking with questioning. The following are some quotations:

“Critical thinking means you have to ask questions about what's going on, and don't forget to question those assumptions too (P4).”

“Critical thinking means questioning a thought (P10).”

“I'd define critical thinking as all about asking questions and coming up with fresh, unique perspectives (P13).”

“Critical thinking is all about questioning and thinking about the how and why (P15).”

Most participants viewed critical thinking as in-depth comprehension. The following are some quotations:

“Critical thinking is all about the power to think deeply and logically from multiple angles to crack problems and unearth creative solutions (P3).”

“Critical thinking is a skill that helps us understand the reality and depth of words and sentences (P7).”

“Critical thinking is all about really digging into an event or problem, looking at it from all angles (P18).”

Most participants established a connection between critical thinking and assessment.

The following are some quotations:

“Critical thinking sharpens our minds, letting us size up situations and put our analytical superpowers to work (P5).”

“Critical thinking is all about reasoning, analysis, and evaluation (P8).”

Most participants believed that critical thinking had something to do with developing a different perspective. The following are some quotations:

“Critical thinking is about looking from a variety of perspectives

(P4).” “I’d define critical thinking as developing new perspectives

(P13).”

“Critical thinking means taking a good look at events from various angles (P18).”

WHY DO YOU THINK CRITICAL THINKING IS NECESSARY?

The second research question was, “Why do you think critical thinking is necessary?” Participants’ responses were collected under four themes: (1) for improvement, (2) developing a different perspective, (3) building resilience to misinformation, and (4) problem-solving.

Most participants believed that critical thinking was essential for improvement. The following are some quotations:

“Critical thinking is a crucial skill for individuals to grow, evolve, and adapt to ever-changing circumstances (P2).”

“Criticism is essential for a healthy development plan (P3).”

“Critical thinking helps us figure out and dive into stuff we’re not yet in the know about (P17).”

Most participants believed that critical thinking was necessary for developing a different perspective. The following are some quotations:

“Critical thinking is like a mental tool that lets us really get what info’s all about, keep our thinking fair, do our own thing, and see things from different angles (P1).”

“Critical thinking is necessary to reach different ideas and perspectives (P6).”

” Critical thinking encourages us to ask questions, put our brains to work, see things from various angles, and break free from the “just follow orders” mindset (P20).”

Most participants noted that critical thinking helped us build resilience to misinformation. The following are some quotations:

“Critical thinking is like our superpower against getting duped by sneaky stuff and fake news. In this info-packed age, it helps us size up where the info's coming from, spot fakes, and make smarter judgments (P4).”

“Critical thinking is a must to steer clear of trickery and being taken advantage of. When tackling a task, it's vital to consider all the angles, both the good and the bad (P15).”

“Critical thinking helps us figure out and dive into stuff we're not yet in the know about (P17).”

Most participants stated that critical thinking was necessary to solve problems. The following are some quotations:

“Critical thinking is like a workout for our problem-solving muscles. It lets us break down tricky problems, view them from different angles, and cook up smart, creative solutions that actually work (P4).”

“Critical thinking is essential for developing ideas and solving problems (P8).”

WHAT CHARACTERISTICS DO YOU THINK TEACHERS WITH CRITICAL THINKING SKILLS HAVE?

The third research question was, “What characteristics do you think teachers with critical thinking skills have?” Participants’ responses were grouped under three themes: (1) looking at things from different perspectives, (2) developing tolerance, and (3) self-critique.

Most participants believed that teachers with critical thinking skills could look at things from different perspectives. The following are some quotations:

“Teachers with critical thinking skills do not have stereotypes. They don't look at things from one point of view (P2).”

“Teachers with critical thinking skills are versatile and open to different views and opinions. They are useful to others (P6).”

“Teachers with critical thinking skills are cool with getting feedback from their students and others. They're all about looking at and teaching a subject from different angles (P11).”

“Teachers with critical thinking skills are open to improvement and look at things from multiple perspectives (P14).”

Most participants noted that teachers with critical thinking skills were more tolerant. The following are some quotations:

“Teachers with critical thinking skills are pretty tolerant. They read, learn, listen to others, and check out their own ideas (P3).”

“Teachers with critical thinking skills need to find that balance between being laid-back and serious. They've got to stay fair with their students because everyone's unique, and that's something they should always keep in mind (P18).”

“Teachers with critical thinking skills are tolerant individuals who respect the perspectives of others, question them, and view differences as a source of enrichment (P20).”

Most participants remarked that teachers with critical thinking skills could criticize themselves. The following are some quotations:

“Teachers with critical thinking skills set examples for their students. They question their own thoughts and analyze things critically (P4).”

“Teachers with critical thinking skills are down-to-earth folks who can enhance their own abilities, self-critique, and tackle problems effectively (P15).”

“Teachers with critical thinking skills should be the kind of smart teachers who ask questions, stay in the loop with what's happening, and aren't afraid to give themselves a little pep talk (P18).”

IN WHAT WAY DO YOU THINK CRITICAL THINKING HELPS STUDENTS?

The fourth research question was, “In what way do you think critical thinking helps students?” Participants’ responses were collected under three themes: (1) problem-solving skills, (2) self- confidence, and (3) thinking independently.

Most participants noted that critical thinking helped students develop problem-solving skills.

The following are some quotations:

“Critical thinking is very useful for students. Critical thinking skills allow them to consider problems from various perspectives and come up with alternative solutions (P1).”

“Critical thinking is like a workout for our problem-solving muscles. It lets us break down tricky problems, view them from different angles, and cook up smart, creative solutions that actually work (P4).”

“Critical thinking helps students take a step back, look at problems with fresh eyes, come up with innovative solutions, and dive deep into the heart of the matter (P8).”

Most participants remarked that critical thinking helped students build self-confidence. The following are some quotations

“Critical thinking skills help students enjoy learning, develop themselves, and make good decisions. They boost their self-confidence (P3).”

“Critical thinking helps students develop self-confidence (P14).”

“Critical thinking reinforces self-esteem. It helps students discover their own learning methods and allows them to see criticism as an opportunity for self-improvement (P18).”

Most participants stated that critical thinking encouraged students to think independently. The following are some quotations:

“Inquiry and analysis skills help students tell the truth from lies. Critical thinking also enables them to think independently (P1).”

“Critical thinking means you've got the power to think on your own. Instead of just going along with what others say or what society wants, you can think for yourself, break down info, and come to your own conclusions (P4).”

WHAT METHODS AND TECHNIQUES DO YOU USE IN YOUR LECTURES TO HELP YOUR STUDENTS DEVELOP CRITICAL THINKING SKILLS?

The fifth research question was, “What methods and techniques do you use in your lectures to help your students develop critical thinking skills?” Participants’ responses were grouped under three themes: (1) discussion, (2) problem-solving, and (3) Question and Answer.

Most participants stated that they conducted “discussion” sessions in their lectures to help their students develop critical thinking skills. The following are some quotations:

“I want to help students sharpen their critical thinking by getting them talking and sharing ideas in our discussions (P1).”

“I use discussion techniques (P13).”

“Before diving deep into any topic, I start things off by scribbling a few examples on the whiteboard and getting the students to chat about them. After that, I throw in the big questions, like why this topic matters and how it's gonna make life better (P16)”

Most participants noted that they used the “problem-solving” method in their lectures to help their students develop critical thinking skills. The following are some quotations:

“I roll with the problem-solving approach to tackle real-life issues and get students flexing those critical thinking muscles (P1).”

“I toss them a problem and throw out the question: ‘How would you fix it?’ (P8).”

“I'm all about the hands-on, real-life experience, and getting down to problem-solving methods (P20).”

Most participants noted that they held question-and-answer (Q&A) sessions in their lectures to help their students develop critical thinking skills. The following are some quotations:

“I hold Q&A sessions together with all discussion techniques (P2).”

“I'm like the tour guide for my students, leading them on exploration missions through Q&A sessions (P3).”

“By asking each other questions (P9).”

HOW DO YOU THINK WE CAN HELP STUDENTS DEVELOP CRITICAL THINKING SKILLS?

The sixth research question was, “How do you think we can help students develop critical thinking skills?” Participants’ responses were collected under three themes: (1) getting students to develop inquiry skills, (2) providing a safe environment, and (3) arousing curiosity.

Most participants stated that we should get students to develop inquiry skills to help them acquire critical thinking skills. The following are some quotations:

“You should motivate your students to fire away with their questions, helping them question information and stay on the lookout for any hiccups in accuracy or gaps in the story. (P1)”

“I give them a tip: don't just swallow ideas whole; question every single thought that comes your way. (P10).”

“Teach your students to be the question-askers and keep the inspiration flowing with engaging activities. It's not just about them answering your questions, but about them coming up with their own (P16).”

Most participants suggested providing a safe environment to help students develop critical thinking skills. The following are some quotations:

“Create an atmosphere where students feel free to let their thoughts roam. Build a space of trust where no one gets slapped with labels for speaking up (P2).”

“Build a space of trust and make sure students understand that they'll get respect no matter what, and that their opinions won't lead to insults or humiliation (P3).”

“Craft a safe, welcoming space where students enjoy learning and feel free to express themselves (P6).”

Most participants noted that we should arouse students' curiosity to help them develop critical thinking skills. The following are some quotations:

“Fuel students' thirst for knowledge (P1).”

“Stoke curiosity with thought-provoking questions, weave connections between subjects during lectures, and get students actively involved in the lessons through guidance (P11).”

Discussion, Conclusion, and Recommendations

This paper focused on teachers' views on critical thinking. The study sought answers to the following questions: What does critical thinking mean to you?, Why do you think critical thinking is necessary?, What characteristics do you think teachers with critical thinking skills have?, In what way do you think critical thinking helps students?, What methods and techniques do you use in your lectures to help your students develop critical thinking skills?, and How do you think we can help students develop critical thinking skills?

Our participants linked the concept of critical thinking with several key elements, including the act of questioning, delving into a profound understanding of information, the process of evaluation, and the consideration of various viewpoints. Critical thinking, in their perspective, encompassed a multifaceted approach that involved asking questions and thoroughly comprehending the subject matter, critically assessing the information at hand, and acknowledging the importance of different perspectives in reaching well-rounded conclusions. Koç-Erdamar and Bangir Alpan (2017) also found that high school teachers attributed critical thinking to interpreting and making sense of information, scrutinizing and assessing conclusions, and eliminating stagnant or inert knowledge. Nosich (2018) associates critical thinking with asking, examining, resolving questions on a logical basis, and believing in the results. Halpern (2003) argues that critical thinking skills help people recognize propaganda, analyze implicit assumptions, recognize deception, assess the credibility of information sources, and think through a problem or decision in the best possible way. Our participants believed that critical thinking had something to do with understanding phenomena in depth, assessing them thoroughly, and developing different points of view. This result indicates that teachers think that people with critical thinking skills are more likely to make sense of things and assess them from different perspectives.

Our participants held the view that critical thinking empowered individuals to enhance their personal growth, cultivate diverse perspectives, fortify their resistance to misinformation, and effectively address and solve problems. Gündoğdu (2009) claims that critical thinking is the capacity to analytically assess any subject, phenomenon, or idea, employing specific criteria and methods such as clarity, consistency, logic, skepticism, and reasoned examination. To him,

individuals possessing critical thinking skills are adept at identifying flawed thought processes, valuing evidence and conclusions, displaying a propensity for research-driven, profound thinking, arriving at coherent and rational conclusions and judgments, and embracing adaptability by consistently overseeing their own cognitive processes, harnessing both their problem-solving and problem-identifying capabilities (Gündoğdu, 2009). In this context, teachers believe that critical thinking is necessary for solving problems and developing resistance against misleading information. Furthermore, they hold the perspective that critical thinking equips individuals with the ability to explore matters from diverse viewpoints and facilitates personal growth. Kestel and Şahin (2018) documented that all teachers believed that critical thinking skills were essential for students.

The participants' insights shed light on the multifaceted role of teachers equipped with critical thinking skills. From their perspective, such educators were envisioned as dynamic and open-minded individuals who contributed significantly to the learning environment. First and foremost, these teachers were seen as masters of perspective, capable of approaching subjects from a variety of angles. Their willingness to explore different viewpoints not only enriched classroom discussions but also demonstrated a commitment to intellectual diversity and a broad-minded approach to education. Tolerance was a core attribute expected from these teachers. They were seen as individuals who not only respected differing opinions but actively nurtured an atmosphere of acceptance in the classroom. This inclusivity served to create a safe space for students to express their thoughts and ideas without fear of judgment or ridicule. Engaging in self-reflection was another significant trait attributed to teachers with critical thinking skills. These educators were thought to be individuals who routinely assessed their own teaching methods, strategies, and biases. This introspective quality not only enhanced their own professional growth but also set a valuable example for their students by showcasing the importance of self-awareness. The avoidance of stereotypes was a crucial element in the participants' perception of these teachers. They were expected to steer clear of generalizations and preconceived notions, recognizing the dangers of pigeonholing individuals or ideas. By doing so, they helped create a classroom environment that encouraged students to be seen and heard as unique individuals rather than conforming to preconceived notions. A commitment to eschewing one-sided viewpoints was another key expectation. These educators were viewed as individuals who encouraged students to critically evaluate information from multiple sources, emphasizing the significance of a well-rounded understanding. By doing so, they fostered an appreciation for complexity and a capacity for critical analysis. Moreover, the participants regarded teachers with critical thinking skills as open-minded and pragmatic individuals who embraced fresh thoughts and ideas. They were seen as receptive to novel approaches and willing to adapt their teaching methods to reflect changing times and evolving knowledge. Self-improvement was a continuous journey for these teachers. They were expected to actively engage in professional development, remaining current in their fields and seeking opportunities for growth. This lifelong learning attitude set a powerful example for their students, promoting the idea that education is a lifelong pursuit. Additionally, these educators were seen as active listeners who valued the input of their students and colleagues. Their capacity to listen and take into account the perspectives of others not only fostered a sense of collaboration but also ensured that the learning experience was a two-way street. Lastly, practicing self-critique and critically evaluating information were essential habits. These teachers were not immune to error but were open to self-correction and eager to promote a culture of critical thinking and intellectual rigor. This approach contributed to an environment where students were encouraged to question, analyze, and think deeply about the information they encountered.

Participants underscored the fundamental importance of critical thinking skills in the educational landscape. They viewed these skills as not only essential for the academic development of students but also as tools for personal growth. In their view, critical thinking was a catalyst for nurturing problem-solving abilities, allowing students to confront and overcome challenges effectively. Moreover, it was noted that these skills significantly impacted students' self-esteem, instilling a sense of self-assuredness in their ability to analyze and tackle complex

issues. Furthermore, participants stressed that critical thinking skills were instrumental in cultivating students' capacity for independent thought. This independence was seen as a key component of empowerment, as it encouraged students to form their own judgments and perspectives, rather than relying solely on external sources or authorities. In addition, critical thinking was regarded as a dynamic process that encouraged students to explore problems from a spectrum of angles. It was not merely about providing one-size-fits-all solutions but also about encouraging students to engage in a multidimensional examination of issues. Participants believed that critical thinking facilitated the generation of innovative solutions by merging the powers of creativity and sound reasoning. This approach encouraged students to think beyond the conventional and develop a well-rounded skill set that encompassed both imaginative problem-solving and logical analysis.

Our participants emphasized their proactive use of various teaching methods to nurture critical thinking skills in their students. Specifically, they employed discussion sessions, problem-solving exercises, and question-and-answer (Q&A) sessions as integral components of their lectures. The overarching aim of these methods was to stimulate the development of critical thinking capabilities among their students. Discussion sessions played a central role in their instructional strategies. These sessions were designed not only to facilitate lively exchanges of ideas but also to challenge students to think critically about the subject matter. By engaging in discussions, students were encouraged to question assumptions, delve deeper into the topics at hand, and gain a more comprehensive understanding of complex issues. These interactive conversations provided opportunities for students to express their opinions, receive feedback from their peers, and explore diverse perspectives. The environment created during these discussions was one of support and cooperation, fostering a sense of community among the students. Problem-solving activities constituted another essential aspect of their teaching methodology. These exercises were carefully crafted to encourage students to apply critical thinking skills in practical scenarios. By tackling real-world problems, students were prompted to analyze situations, evaluate potential solutions, and make informed decisions. Problem-solving tasks were structured to be collaborative, promoting communication and teamwork as students worked together to arrive at the most effective solutions. Furthermore, the use of Q&A sessions served to maintain a dynamic and engaging learning environment. These sessions encouraged students to actively participate in their own learning process by posing questions, seeking clarification, and probing deeper into the subject matter. By engaging in such interactions, students developed their communication skills and honed their ability to think independently. In summary, our participants' pedagogical approach was rooted in the belief that the integration of discussion, problem-solving, and Q&A sessions into their lectures played a pivotal role in cultivating critical thinking skills. By fostering an environment that prioritized critical examination, promoted active learning, and celebrated diverse viewpoints, they were not only enhancing their students' comprehension of academic content but also preparing them for the complexities of real-world interactions and collaborative problem-solving.

Our participants strongly endorsed the idea that creating an educational environment conducive to critical thinking was contingent on several foundational principles. They emphasized the importance of establishing a safe and supportive atmosphere for students, nurturing their curiosity, and actively fostering inquiry skills as a means to facilitate the development of critical thinking. First and foremost, the concept of a safe environment was viewed as fundamental. Participants believed that students needed to feel secure in expressing their thoughts, opinions, and questions without the fear of ridicule or judgment. By cultivating an atmosphere of trust and respect, educators encouraged open dialogue, enabling students to explore ideas without reservation. In such an environment, students were more likely to engage in the critical examination of concepts and the articulation of their viewpoints. Arousing students' curiosity was seen as a catalyst for fostering critical thinking. Participants noted that stimulating students' natural inquisitiveness piqued their interest in subjects and issues. This curiosity, once ignited, inspired them to delve deeper into topics, ask probing questions, and actively seek out answers. It was acknowledged that an environment that encouraged curiosity was essential for the

intellectual development of students. In tandem with nurturing curiosity, participants underscored the importance of cultivating inquiry skills. These skills were identified as instrumental in the critical thinking process. Inquiry skills involve the ability to ask thoughtful and thought-provoking questions, research and analyze information and apply a systematic approach to problem-solving. By guiding students in developing these skills, educators were essentially empowering them to think critically. Inquiry skills equip students with the tools necessary to evaluate information, consider various viewpoints, and reach well-founded conclusions.

Promoting critical thinking at all levels of education is imperative due to its multifaceted benefits. It enhances problem-solving abilities and decision-making skills, equips individuals to be informed and engaged citizens, fosters adaptability and a love for lifelong learning, improves communication and collaboration, stimulates creativity and innovation, and enhances global competence. Critical thinking also contributes to higher-quality research, prepares individuals for diverse careers, encourages ethical decision-making, and ultimately empowers them to navigate the complexities of the modern world. It is a foundational skill that not only enriches academic pursuits but also molds responsible, agile, and thoughtful individuals who are capable of positively contributing to society.

The following are our recommendations based on the results:

- Teachers should establish a trusting environment that enables students to question information and remain vigilant against inaccurate or incomplete data.
- Teachers should promote a classroom culture where asking questions is not only allowed but actively encouraged. They should encourage students to challenge assumptions, seek clarifications, and explore topics in depth.
- Teachers should stimulate students' natural curiosity by selecting engaging and thought-provoking topics.
- Teachers should use real-world examples, current events, and relatable scenarios to ignite students' interest.
- Teachers should incorporate problem-solving exercises into the curriculum. These activities should encourage students to analyze, evaluate, and apply their knowledge to real-life situations.
- Teachers should organize regular discussion sessions where students can express their opinions and engage in respectful debates.
- Teachers should teach active listening skills, emphasizing the importance of genuinely understanding others' perspectives before responding. This helps students appreciate diverse viewpoints.
- Teachers should encourage students to explore subjects from multiple angles, connecting various disciplines to gain a comprehensive understanding of complex issues.
- Teachers should provide constructive feedback to guide students in improving their critical thinking abilities.
- Teachers should act as role models by openly discussing their thought processes and demonstrating how they analyze information.
- Academics should conduct engaging activities to help preservice teachers develop

critical thinking skills.

- Researchers should conduct experimental studies to encourage teachers, preservice teachers, and students to develop critical thinking skills.

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