European Journal of Pedagogical Initiatives and Educational Practices
ISSN (E): 2938-3625
Volume 3, Issue 3, March - 2025

FOSTERING CRITICAL THINKING IN CHILDREN: A FOUNDATION FOR LIFELONG SUCCESS

O'ktamova Mubinabonu Baxtiyor qizi
Kimyo International University in Tashkent

Abstract
Critical thinking is an essential skill that helps children analyze information, solve problems, and make informed decisions. As the world becomes increasingly complex, fostering critical thinking from an early age is crucial for lifelong success. This article explores various strategies parents and educators can use to nurture these skills in children, including inquiry-based learning, problem-solving activities, and media literacy. It also examines the role of technology in shaping children's cognitive abilities. By understanding and implementing these approaches, we can better equip children with the critical thinking skills needed for academic, personal, and professional growth.

Keywords: Inquiry-based learning, active learning strategies, classroom engagement, creative thinking, STEAM, ChatGPT and critical thinking.

Introduction

In today's fast-paced, information-driven world, critical thinking is one of the most essential skills children need to succeed. Research suggests that children exposed to critical thinking strategies demonstrate greater problem-solving abilities, academic success, and adaptability in life (Smith, 2020). Critical thinking empowers children to analyze information, evaluate sources, and make informed decisions rather than relying on emotions or external influence. As they grow, these skills enable them to navigate challenges, solve problems independently, and become lifelong learners. However, despite its importance, many education systems still prioritize rote memorization over analytical thinking. This article explores the significance of fostering critical thinking in children, discusses effective strategies for parents and educators, and highlights potential barriers to its development.

Scientists are paying particular attention to the issues of thinking, healthy thinking, and the appearance of human thinking as a topic of discussion, according to an analysis of research, scientific treatises, and articles pertaining to the challenges of the formation and evolution of human thinking. Jean Piaget, Lev Vygotsky, Richard Paul & Linda Elder, Stanovich & West covered the problem we raised, namely, in their research, harmonizing the problems of thought education, logic, creative, critical and independent thought expression, the formation of independent and healthy thinking. Jean Piaget's theories provide a strong foundation for understanding critical thinking in children. His key message to the public regarding critical thinking was: "Children must be active participants in their own learning process, engaging in exploration, questioning, and problem-solving rather than simply absorbing information from others."

Several studies have explored the development of critical thinking in children, highlighting its importance **in** education, cognitive development, and problem-solving**.** Jean Piaget's research plays a crucial role in understanding how critical thinking develops in children. In his Cognitive Development Theory, Piaget emphasized that children do not passively absorb knowledge but actively construct it through their experiences. He identified four stages of cognitive development, highlighting that in the formal operational stage (from around age 12), children begin to develop abstract reasoning, logical analysis, and the ability to evaluate different perspectives—all key components of critical thinking. His research suggests that children enhance their critical thinking skills when they are given opportunities to explore, question, and solve problems independently rather than simply memorizing information. Therefore, fostering critical thinking in education requires encouraging inquiry-based learning, promoting open discussions, and allowing children to compare different viewpoints and develop reasoned arguments. Research by developmental psychologist Ellen Galinsky reveals a critical connection between executive function and children's analytical thinking abilities. In "Mind in the Making" (2010), Galinsky explains how the brain's "air traffic control system"—comprising working memory, inhibitory control, and cognitive flexibility—forms the neurological foundation for critical thinking. Studies cited in her work demonstrate that children with stronger executive function skills show marked improvement in their ability to evaluate evidence, consider multiple perspectives, and solve complex problems. Particularly noteworthy is the finding that these skills can be deliberately fostered through structured activities that challenge children to hold information in mind while manipulating it, resist immediate impulses in favor of thoughtful responses, and shift flexibly between different mental frameworks. As Galinsky notes, "When we help children develop these executive function skills, we're literally building the neural pathways that make sophisticated critical thinking possible throughout life." How Can We Develop Critical Thinking in Children? Children's critical thinking skills are crucial for their capacity to evaluate data, resolve issues, and reach reasoned conclusions. Parents and educators are essential in promoting critical thinking because it is an acquired skill rather than a natural one. The following are practical methods for fostering critical thinking in kids. Inquiry and curiosity are the foundation of critical thinking because they push children to ask questions, seek answers, and explore the world around them**.** When children are encouraged to be curious, they develop problem-solving skills, logical reasoning, and the ability to think independently rather than just accepting information at face value. Instead of giving children direct answers, ask thought-provoking questions that make them think critically. Instead of saying, "The sun sets in the west," ask, *"Why do you think the sun moves across the sky?"* Encourage children to ask *"Why?"* and *"How?"* questions in daily conversations. Let them make predictions and test their ideas through experiments. Various games - board games, puzzles - can help teachers and parents in this regard. Puzzles demand problem-solving, logical reasoning, and pattern detection, making them a great tool for fostering critical thinking. Kids who solve puzzles are better able to evaluate circumstances, try out various approaches, and think methodically—all of which are critical thinking and cognitive development skills. To encourage critical thinking among young students, educators can utilize various strategies, including:

1. Encouraging questions;
2. Promoting independent learning;
3. Utilizing real-life scenario;
4. Incorporating collaborative learning activities;
5. Providing opportunities for creative- problem solving;

Each of these strategies involves engaging students in meaningful conversations, allowing them to explore ideas independently, and exposing them to practical situations that require critical thinking. By employing these strategies, educators can help young learners develop essential skills that will prepare them for academic and personal success in the future. Many schools in Uzbekistan are currently using the STEM method, which can also help develop critical thinking in children. The capacity for critical thought is essential in the STEAM fields. It encourages creativity and invention in addition to assisting people in analyzing data and discoveries. Early instruction in critical thinking techniques promotes autonomous thought and problem-solving. Students will get a thorough understanding of the ideas in STEAM subjects and be more prepared to handle real-world issues if these skills are fostered in the classroom. However, there are also shortcomings in the education system that hinder the development of critical thinking. One of the most significant obstacles is the weakness of the education system, which often prioritizes memorization over analytical thinking. In many traditional educational models, students are expected to recall facts rather than engage in deep reasoning, problem-solving, and creativity. This approach limits their ability to analyze, evaluate, and apply knowledge in real-world situations. Below, we explore how rote memorization affects critical thinking and strategies to overcome this challenge. In many classrooms, students are taught to memorize facts, formulas, and historical dates without understanding their broader significance. When students focus only on repeating information**,** they do not learn how to apply knowledge to new situations**.** They struggle to analyze, compare, and evaluate different perspectives, which are essential skills for critical thinking. In addition, teachers take standardized tests from students at regular intervals that specialize in memorizing and recalling information. Instead of exploring different viewpoints **or** applying knowledge to real-world problems**,** students focus on rote learning to score well. In a history exam, students might be asked *"What year did World War II begin?"* instead of *"What were the key political and economic factors that led to World War II?"* By emphasizing memorization, inhibiting open-ended reasoning, and encouraging inflexible thinking, standardized tests restrict critical thinking. Education systems need to include more discussion-based learning, inquiry-driven examinations, and practical problem-solving activities in order to develop strong critical thinkers. By moving away from high-stakes pressure and rote memorization, kids can cultivate the abilities necessary for adaptation and lifelong learning. Furthermore, the rapid development of the Internet and technology is currently leading to a decrease in critical thinking in children. Even though ChatGPT and other AI tools can help with learning, if they are not used properly, they can seriously harm children's ability to develop critical thinking skills. An excessive dependence on AI-generated responses may result in a loss of independent reasoning, passive learning, and diminished problem-solving abilities. The main detrimental impacts of ChatGPT on children's critical thinking are listed below, along with solutions. As a result, it leads to

learning to accept a ready-made answer without making an independent decision and without deeply analyzing the issue. Instead of banning AI completely**,** parents and educators should implement strategies that encourage responsible and mindful AI usage while strengthening children's ability to analyze, evaluate, and think critically.

Even if ChatGPT and other AI tools can improve learning, a dependence on them that is too great can impair children's capacity for critical thought, autonomous problem-solving, and profound reasoning. Setting precise guidelines on when and how AI should be utilized is crucial to avoiding this. AI shouldn't replace human judgment; rather, it should be used as a learning tool. Promoting the "Think First, Ask Later" method, in which kids try to figure out problems or examine subjects without the assistance of AI, is one successful tactic. Additionally, to guarantee that kids acquire creativity and logical reasoning abilities, AI use should be restricted to creative and analytical tasks like essay writing and critical thinking exercises. A good balance between technology-assisted learning and more conventional approaches, including reading, discussing, and solving problems, can also be maintained by imposing time limits on AI use. Additionally, educators and parents should keep an eye on how AI is being used and encourage kids to talk about its limitations, check facts, and consider responses that are created by AI. Children can benefit from AI while maintaining critical cognitive abilities required for flexibility and lifetime learning by following these organized principles.

In today's fast-paced, information-driven world, critical thinking is more essential than ever for children. It enables them to analyze information, solve problems, and make well-reasoned decisions, skills that are crucial for lifelong success. However, several obstacles—such as memorization-based education systems, digital distractions, and overreliance on AI tools like ChatGPT—threaten the development of independent thought. To overcome these challenges, educators and parents must prioritize inquiry-based learning, problem-solving activities, and responsible AI usage to ensure that children engage deeply with knowledge rather than passively consuming it.

By fostering questioning, discussion, and independent reasoning, we can equip children with the skills they need to navigate a rapidly changing world with confidence and adaptability. The responsibility lies with teachers, parents, and society as a whole to create environments that encourage curiosity and analytical thinking. If we commit to this effort, we can ensure that the next generation is not just well-informed, but also capable of thinking critically, making informed decisions, and shaping a better future.

REFERENCES:

1. Odiljonova Kholbuvi // PSYCHOLOGICAL FEATURES OF THE DEVELOPMENT OF HEALTHY THINKING IN STUDENTS – page 267 – 2023- INTERNATIONAL SCIENTIFIC JOURNAL VOLUME

2. Sheranova Maryam Bazarbaevna// BOSHLANG'ICH SINFLARDA TANQIDIY FIKIRLASHNI RIVOJLANTIRISH- page 383 - Spanish international scientific online conference PROSPECTS AND MAIN TRANDS IN MODERN SCIENCE

3.www.spacefoundation.org/2023/10/05/critical-thinking-steam

4.Piaget, J. (1952). *The origins of intelligence in children.* Norton.

5.Ellen Galinsky // “Mind in the Making” 2010 by HarperCollins.
6.Children’s Critical Thinking When Learning From Others - PMC
7.Maxammatova Ma’muraxon Jalilovna // BOSHLANG'ICH SINF O'QUVCHILARIDA TANQIDIY FIKRLASH KO'NIKMALARINI SHAKLLANTIRISH INTELLEKTUAL QOBILIYATNI OSHIRISHNING ASOSIDIR – page 437 – 2024- TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI.