ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ



# DEVELOPMENT OF CRITICAL THINKING IN THE EDUCATIONAL PROCESS AND ITS SIGNIFICANCE

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Annotation: The article talks about the development of students' critical thinking skills and its importance in the global education process. Critical thinking plays an important role in the development of students' intellectual potential, an independent and deep approach to problems, the formation of the ability to draw correct conclusions and make decisions. The article analyzes the integration of critical thinking into the educational process, the approaches of students to defend their points of view and the use of analytical approaches, and the didactic methods necessary for the development of critical thinking in the modern education system. Also, effective approaches to develop critical thinking in the creation of future textbooks are recommended

**Keywords:** critical thinking, educational process, students, analytical approach, independent thinking, didactic methods, modern education, intellectual potential.

## INTRODUCTION

The issue of critical thinking has been studied by scholars from the CIS and abroad across various fields. Notably, the necessity of teaching students independent critical thinking in educational institutions that embody Eastern educational values has been emphasized by great thinkers of the Middle Ages like Al-Khwarizmi, Al-Farabi, and Ibn Sina. In today's globalized context, it is crucial to demonstrate that knowledge acquired through critical thinking holds significant advantages over information

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sourced from specific references. This cognitive process involves systematic analysis of information, assessing the reliability of evidence, and forming reasoned conclusions.

"Critical thinking is a cognitive process that involves systematically analyzing information, evaluating the reliability of evidence, weighing opposing viewpoints, and forming reasoned conclusions. This ability is an integral part of effectively adapting to modern realities".

# LITERATURE ANALYSIS

Farabi considers the development of critical thinking to be very important in his work "The Virtuous City".<sup>1</sup> According to him, to achieve true knowledge, individuals must think independently, rigorously examine evidence, and analyze various viewpoints. In an ideal society, every citizen should express their opinions in a reasoned and logical manner. He also encourages people to abandon dogmatic thinking and to embrace doubt and inquiry. Farabi views critical thinking as a key factor in intellectual development, aiming to contribute to the overall progress of society.<sup>2</sup>

S.S. Gulomov defines critical thinking in his research as "remembering evidence and proving ideas".<sup>3</sup> O.S. Dadabolayeva emphasizes in her study titled "Mechanisms for Developing Critical Thinking Skills in Primary School Students" that "Critical thinking leads to the development of a more advanced individual as a result of the student's independent knowledge acquisition under the guidance of the teacher".<sup>4</sup> T.B. Nazarov defines critical thinking as "a positive skill that creates opportunities for successfully fulfilling the requirements of the 21st century and helps us understand our work more deeply".<sup>5</sup> M.V. Klarin, in his technology titled "Development of Critical and Creative Thinking," states, "We believe that intuitive and analytical thinking

<sup>&</sup>lt;sup>1</sup> Abu nast farobiy-Fozil odamlar shaxril tarjimonlar Abdusodiq Irisov, Mahkam Mahmudov, Urfon Otajon, mas'ul maharrirlar M.Xayrullaev, M.Jakbarov. Toshkent: Yangi asr avlodi, 2016.-320 b.

<sup>&</sup>lt;sup>2</sup> A.Hayitov, S.Arizova Abu Naw Farobiyning "Foril odamlar shahri asari" bugungi kun yoshlarining ma'naviyar maktabi sifatida

<sup>&</sup>lt;sup>3</sup> Гузомов. С.С. Далилларни эслаб колиш ва гояларии исботлаш. Тошкент: Укитувчи. -2005.

<sup>&</sup>lt;sup>4</sup> O.Dadabolayeva. Boshlang'ich sinf o'quvchilarida tanqidiy fikrlash qobiliyatlarini shakllantirish mexanizmlari

<sup>&</sup>lt;sup>5</sup> TB Nazarov Tanqidiy-tahliliy fikrlash qobiliyatini rivojlantirish bo'yicha xorijiy tajribalar tadqiq



reinforce each other. A person can make an invention or discovery based on intuition that an analyst cannot, but the analyst can provide the formal expression related to it".<sup>6</sup>

Abay Qunanbayuli opened a new horizon for critical thinking in Kazakh philosophy. His poetry and speeches, which emphasize resistance to authority and demand rational clarity and evidence in knowledge and belief, can be considered excellent examples of critical thinking.<sup>7</sup> Among modern scholars, John Dewey, Ludwig Wittgenstein, and Jean Piaget have also contributed to this field. Critical thinking skills were developed through the work of Robert Ennis in the 1960s, later implemented in schools and workplaces. Critical thinkers approach learning environments differently, asking more demanding questions and actively engaging in the learning process, which continues into the workplace after school.

R. Ennis concluded that critical thinking is "focused on determining what to believe or what to do" through years of study, analysis, instruction, and practice.

#### **RESEARCH METHODOLOGY**

The article employs a comparative analysis methodology to study the extent to which materials aimed at developing critical thinking skills are provided in general education and creative schools, as well as their significance in education. The research process includes content analysis, textbook evaluation, and substantive analyses based on expert conclusions. By using the method of studying comparative situations, the research evaluates the content aspects of textbooks from creative and general education schools, focusing on their aim to enhance critical thinking development.

Based on a targeted selection strategy, widely used textbooks from general and creative schools were chosen for analysis. At least five textbooks from each school type, covering grades 6-12, were selected. The selection process focused on textbooks published in the last five years to ensure alignment with current teaching practices. Additionally, foreign literature discussing the importance and process of critical

<sup>&</sup>lt;sup>6</sup> Кларин М.В. Развитие критическано и творческого мышления. // Школные телологии. 2004.

<sup>&</sup>lt;sup>7</sup> Qobdahay Qabdituraqyti: Abay pyedagogikasi tarbiye iliminių tynig'i





thinking was reviewed, providing examples. Data will be revisited through qualitative thematic analysis and content frequency analysis. Similarities and differences in materials presented for developing critical thinking skills will be identified, and results will be compared between creative and general education schools.

The research results are aimed at identifying opportunities for better integration of critical thinking skills in English language textbooks, particularly focusing on providing effective recommendations for general education schools.

# **ANALYSIS AND RESULTS**

Critical thinking and the diversity of ideas and experiences can only be realized when educators understand and value them. Critical thinking does not emerge from adopting a "single correct answer" mentality. Developing critical thinking is not an easy task; it is not something to be completed and forgotten at a certain age. Furthermore, there is no perfect path for critical thinking development. However, several specific educational conditions can aid in its formation for critical thinkers:

- Providing time and opportunities to gain critical thinking experience.
- Allowing students and youth the opportunity to think.
- Accepting diverse ideas and opinions.
- Ensuring student engagement in the educational process.
- Encouraging students not to be complacent.
- Fostering a sense of confidence in each student's critical thinking abilities.
- Valuing the emergence of critical thinking.

critical thinking .

In this regard, students should:

- Gain self-confidence and understand the value of their thoughts and ideas.

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- Actively participate in the learning process.
- Listen attentively to diverse opinions.
- Be preared to develop and revise their "judgments".

**Time.** Critical thinking requires time. According to Pearson, Hansen, and Gordon, creating one's imagination leads individuals to archaeologically investigate previous ideas, concepts, encounters, and experiences. The "Foundations of Critical Thinking" interdisciplinary program by the Open Society Foundations emphasizes the importance of:

- Expressing one's thoughts in their own words.
- Engaging in critical dialogue.
- Being able to articulate thoughts and respond to constructive suggestions.

- Implementing ideas in a comfortable environment and fully and clearly expressing one's opinions.

These aspects are crucial for effective critical thinking.

**Diversity of thoughts and ideas in thinking.** Students and young people generate various thoughts and ideas during their thinking process. These diverse thoughts and ideas emerge only when the illusion of a single correct answer fades away. If the expression of thoughts is limited, students' thinking is also restricted. When there is only one answer, students are allowed to use various tools and processes to find that answer.

**The Impact of Critical Thinking on Students' Communication with Others.** Critical thinking is directly linked to students' engagement. Typically, students tend to be passive listeners because they believe the teacher is knowledgeable or that the text reflects the teacher's knowledge, thus placing the responsibility for their learning on





the teacher. When students actively participate in the educational process and are ready to take responsibility for their learning, it leads to expected outcomes in critical thinking. This encourages students to think and express their thoughts and reflections.

The pedagogical approach of encouragement enhances student engagement. As Mikhail Chikjentmikhali noted, when students actively participate in a complex learning process, they gain significant benefits from their involvement and experience a deep sense of satisfaction.<sup>8</sup>

**Students' willingness to take risks in critical thinking.** Risk-taking is fundamental to free thinking. It is important to encourage individuals who are willing to take risks without fear in their activities. During the thinking process, there may be instances of "foolish ideas" that consist of unconventional combinations and proposed concepts. The teacher should explain this as a natural aspect of the educational process.<sup>9</sup> Students' active participation in thinking activities can be highly encouraged without risks, meaning that diverse ideas are valued.

The emergency of a feeling of gratitude. One of the factors of critical thinking is the assessment of students' thinking processes. In an organized thinking process, students and young people understand that their ideas and imaginations are valued by the teacher, leading them to respond with deep responsibility and attention. Students strive to demonstrate that they appreciate their own thinking processes, and they begin to take the consequences seriously.

**Formation of personality value.** It is essential to instill in students the value of their thoughts and critical analyses during the organization of the thinking process. When teachers require students to process specific material, it should be free from ready-made templates and examples. Through extensive discussions, students enhance their ability to analyze and identify their reflections, integrating them into a system of

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<sup>&</sup>lt;sup>8</sup> Podlasiy 1.P. Pedagogika. Yangi kurs. Kitob 1 M., «Vladass, 2000, 79 b

<sup>&</sup>lt;sup>9</sup> Аганов И.Г. К вопроси о формированийе критического образованийе. 2001 № 2



ideas formed from knowledge and life experiences.Several models exist for organizing the thinking process, including:

- Self-confidence;
- Active participation in work;
- Exchanging ideas with peers and teachers;
- Listening to others' opinions.<sup>10</sup>

**Tolerance.** The relationship between tolerance and critical thinking is expressed through complex and interrelated processes. Critical thinking involves analyzing various perspectives, considering them fairly and openly, and drawing reasoned conclusions. Tolerance signifies respect and openness towards different opinions, cultures, and beliefs. It serves as a key factor in developing critical thinking, helping students listen to and analyze opposing views, collaborate effectively, and embrace diversity.<sup>11</sup> According to the University of Wisconsin, recent studies indicate that specialized instruction and practice in critical thinking is an essential life skill that helps children develop abilities necessary for economic competition in a global world and prepares them for college challenges. Recent findings confirm that teaching critical thinking strategies in high school English classes leads to better performance in evaluating subsequent education compared to those who did not receive such instruction.<sup>12</sup>

There are numerous resources available to help develop critical thinking skills among young people in Uzbekistan. Schools and universities are beginning to place

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https://scientific-jl.org/obr

<sup>&</sup>lt;sup>10</sup> Nishonov A, Xaydarov B., Nuriddinov B. va boshqalar. Baholash usulları. O'quv qo'llanma. T., 2003. 190 bet

<sup>&</sup>lt;sup>11</sup> М.М. Якуббаев, Талабаларда миллатлараро толерантликни ривожлантиришница этнопедагогтік асосларини такомиллаштириш. Наманган 2021

<sup>&</sup>lt;sup>12</sup> Hove, G. Developing critical thinking skills in the high school English classroom. Unpublished Master dissertation, Menominee, WI: The Graduate School University of Wisconsin-Stout. 2011



more emphasis on critical thinking in their curricula, and various online courses and resources are accessible for those looking to improve these skills.

Beyond formal education, parents and educators can also play a role in fostering critical thinking by encouraging children to ask questions, evaluate information, and consider different perspectives. Developing critical thinking skills is crucial for the success of Uzbek youth in today's rapidly changing world. By prioritizing this skill in education and daily life, Uzbekistan can better prepare its citizens for future challenges.

It's important to note that enhancing critical thinking skills does not mean completely abandoning standardized testing. Instead, it involves shifting focus from rote memorization to developing analytical skills that serve students beyond the classroom. This includes the ability to analyze information, assess evidence, and make reasoned decisions, which are essential for success in both work and everyday life.

In addition to personal advantages for adults, critical thinking leads to greater opportunities, better job security, and higher income, benefiting society when the entire population can think creatively and deeply. Peskator emphasizes that "for social change to occur, citizens must not only critically reflect on what they read and see but also engage with the world". <sup>13</sup> Educated critical thinkers can examine broader implications rather than accepting information at face value.

The National Association for Media Literacy Education highlights the importance of teaching students to engage in active inquiry and critical thinking about the messages they consume and create. Critical thinking skills do not develop on their own; students require guided, deliberate practice to cultivate deep thinking. Education is a fundamental process that contributes to human growth and should prioritize developing children's cognitive abilities. However, curricula often lack sufficient emphasis on



<sup>&</sup>lt;sup>13</sup> Pescatore, C. Current events as empowering literacy: For English and social studies teachers. Journal of Adolescent & Adult Literacy, 51(4), 326-339.



teaching these skills. A second strategy advocates for teaching critical thinking as a core component across all subjects.<sup>14</sup>

As Horun Ar-Rashid notes, critical thinking skills are highly valued in academic settings, professional environments, and daily life. This ability involves evaluating information, assessing claims, and drawing reasoned conclusions based on facts and logic. Individuals with critical thinking skills can communicate more clearly, identify fallacies, and solve complex problems. This post will discuss the importance of critical thinking in the classroom and its impact on students' learning activities.<sup>15</sup>

In our opinion, critical thinking is the process of independently making decisions by logically analyzing information, evaluating the validity of arguments, exploring opposing viewpoints, and drawing reasoned and clear conclusions.

For many reasons, critical thinking holds essential importance in education. It primarily helps develop autonomous thinking, thoughtful decision-making, and problem-solving skills in children. Critical thinking is a crucial ability that assists students in overcoming challenges they may face in today's complex and rapidly changing world.

Secondly, successful academic performance is linked to critical thinking. It helps students understand and analyze information, evaluate evidence, and draw well-informed conclusions based on facts and logic. Students who engage in critical thinking can achieve success in their studies and attain academic accomplishments.

Thirdly, continuous learning requires the use of critical thinking. It teaches children to seek out and analyze information, encourages them to ask questions, and fosters a thirst for knowledge. Students with critical thinking skills are more likely to remain curious about learning throughout their lives and actively participate in society.

<sup>&</sup>lt;sup>14</sup> Nada J. Alsaleh Teaching Critical Thinking Skills: Literature Review, Turkish Online Journal of Educational Technology-TOJET, v19 nl p21-39 Jan 2020 Md.

<sup>&</sup>lt;sup>15</sup> Harun Ar-Rashid., The role of education in the tourism sector, Library & information management academic blog., 11, 2023



Critical thinking is a skill that can be taught through education. Here are some strategies to develop critical thinking in the classroom:

**Promoting question-and-answer among students:** A fundamental component of critical thinking is asking questions. Teachers can help students develop their critical thinking skills by encouraging them to ask questions. Using open-ended questions that require analysis and evaluation can be promoted by teachers. This approach enables students to gain knowledge in information analysis and argument evaluation.<sup>16</sup>

Teaching students to evaluate information is a crucial part of developing critical thinking skills. It is essential for students to understand how to assess the credibility and reliability of information sources. This includes identifying fallacies in arguments and logical errors, as well as distinguishing facts from opinions.

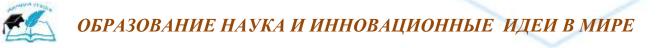
**Teaching students to analyze information:** Breaking down complex material into its constituent elements and analyzing them constitutes the critical thinking skill of information analysis. By providing students with opportunities to study information from various sources, including texts, films, and images, teachers can help their students develop this skill.

**Developing Creative Thinking in Students:** It is essential to develop creative thinking in your students, as it is a crucial component of critical thinking. By providing students with the opportunity to come up with new ideas and find creative solutions to problems, teachers can inspire children to think creatively. As a result, students gain experience in problem-solving and learn to approach issues from various perspectives.

It is very important to give people the opportunity to think because this helps them develop critical thinking skills. Teachers can provide students with the chance to assess their learning and reflect on their experiences. This way, students will acquire metacognitive skills that are vital for critical thinking.



<sup>&</sup>lt;sup>16</sup> Sh.Rakhmonova, B.Rakhmatov, Bloom's taxonomy and didactic significance of critical thinking method in the educational process, Zenodo, 07. 2023





**Teaching Students Effective Communication Skills:** Critical thinking requires effective communication. By providing students with opportunities to express their thoughts and arguments both orally and in writing, teachers can help their students learn how to communicate successfully. As a result, students will develop communication skills and the ability to articulate their ideas logically and clearly.

#### CONCLUSION

Critical thinking plays a fundamental role in the educational process by teaching students to acquire knowledge independently, analyze evidence critically, and evaluate various opinions logically. Such thinking methods are crucial for students' intellectual development, especially in articulating their thoughts logically and forming active citizens in society. This, in turn, facilitates an effective educational process that meets contemporary demands.

The national and international significance of critical thinking is highlighted by scholars like Al-Khwarizmi, Al-Farabi, and Ibn Sina, who recognized its vital importance in students' intellectual growth and the advancement of national education systems. Modern research also acknowledges critical thinking as a key skill necessary for success in the global world, affirming its essential place in both national and international education systems.

## **REFERENCE BOOKS**

1. Abu nast farobiy -Fozil odamlar shaxril tarjimonlar Abdusodiq Irisov, Mahkam Mahmudov, Urfon Mas'ul muharrirlar M.Xayrullaev, M.Jakbarov. - Toshkent: Yangi asr avlodi, 2016.-320 b.

2. A.Hayitov, S.Azizova Abu Nasr Farobiyning "Fozil odamlar shahri" asari bugungi kun yoshlarining ma'naviyat maktabi sifatida

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3. D.R.Garrison, H.Kanuka: Blended learning: Uncovering its transformative potential in higher education, The Internet and Higher Education, Volume 7, Issue 2, 2nd Quarter 2004, Pages 95-105

4. Hove, G. Developing critical thinking skills in the high school English classroom. Unpublished Master dissertation, Menominee, WI: The Graduate School University of Wisconsin-Stout. 2011

5. M.Karakoç, The Significance of Critical Thinking Ability in terms of Education, Istanbul Aydın University Institute of Social Sciences, Turkey

6. Md. Harun Ar-Rashid., The role of education in the tourism sector. Library & information management

academic blog.. 11, 2023

7. Nada J. Alsaleh Teaching Critical Thinking Skills: Literature Review, Turkish Online Journal of Educational Technology - TOJET, v19 nl p21-39 Jan 2020

8. Nishonov A, Xaydarov B., Nuriddinov B. va boshqalar. Baholash usullari. O'quv qo'llanma. T., 2003. 190 bet.

9. O.Dadabolayeva. Boshlang'ich sinf o'quvchilarida tanqidiy fikrlash qobiliyatlarini shakllantirish mexanizmlari

10. Özkaya, O.Miraç, S.Nuriye. Öğretim Etkinliklerinin Öğrencilerin Sınıf-İçi Eleştirel Düşünme Engellerinin Kaldırılmasına Etkisi

11. Pescatore, C. Current events as empowering literacy: For English and social studies teachers. Journal of Adolescent & Adult Literacy, 51(4), 326-339.

12. Podlasiy LP. Pedagogika. Yangi kurs. Kitob 1. M., «Vlados », 2000. 79 b.

13 . Qobdabay Qabdirazaqyli: Abay pyedagogikasi tarbiye iliminin tynig'i 14.R.H.Ennis, Critical Thinking. Upper Saddle River, NJ: Prentice-Hall 1996







15. R.H.Ennis. Applying soundness standards to qualified reasoning. Informal Logic,

24, 1, 23-39. 2004

16. Ruggiero, V. R. The art of thinking: A guide to critical and creative thought (10th ed.), New York, NY Longman. 2012



