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КЛАССТА СЫНЧЫЛЫК ОЙЛОНУУНУ ӨНҮКТҮРҮҮНҮН МЕТОДДОРУ

МЕТОДЫ РАЗВИТИЯ КРИТИЧЕСКОГО МЫШЛЕНИЯ В КЛАССЕ

METHODS OF DEVELOPING CRITICAL THINKING IN THE CLASSROOM

Кыскача мүнөздөмө: Азыркы маалыматка бай дүйнөдө критикалык ой жүгүртүү жөн гана каалоо эмес, зарыл болгон жөндөмгө айланып баратат. Бул маалыматты талдоо жөндөмү гана эмес, ошондой эле жоопкерчиликтүү чечимдерди кабыл алуу, өз пикирин калыптандыруу жана маалыматтардын агымын натыйжалуу башкаруу үчүн негиз болуп саналат. Мына ушундан улам бул өнөрдү өнүктүрүүгө, анын ичинде окуу жайларында да өзгөчө көңүл буруу абдан маанилүү.

Аннотация: В современном мире, насыщенном информацией, умение критически мыслить становится не просто желаемым, а необходимым навыком. Это не только способность анализировать информацию, но и основа для принятия ответственных решений, формирования собственного мнения и эффективной навигации в потоке данных. Именно поэтому так важно уделять особое внимание развитию этого навыка, в том числе в образовательных учреждениях.

Abstract: In today's information-rich world, the ability to think critically is becoming not just a desirable, but a necessary skill. This is not only the ability to analyze information, but also the foundation for making responsible decisions, forming one's own opinion and effectively navigating the data stream. That is why it is so important to pay special attention to this skill, including in educational institutions.

Негизги сөздөр: методдору; иштеп чыгуу; критикалык ой жүгүртүү; талдоо; компоненттер; мисалдар.

Ключевые слова: методы; развитие; критическое мышление; анализ; компоненты; примеры. **Keywords:** methods; development; critical thinking; analysis; components; examples.

«Critical thinking is the use of cognitive techniques and strategies that increase the likelihood of achieving the desired end result» Diane Halpern.

Critical thinking is the ability to look at things from different perspectives, analyze facts, examine information, and come to objective conclusions. It's not just a skill, it's a real intellectual tool that helps us better understand the world around us, evaluate events, and make informed decisions.

Developed critical thinking is more than just the ability to solve problems. It helps shape your thinking and ability to cope with the challenges of life. With critical thinking skills, it's much easier for you to filter information by highlighting key points, because our world is heavily overloaded with data. The ability to justify your point of view, that is, the ability to clearly express and argue your views, is also one of the indicators of your ability to think critically. Plus, these skills will help you solve problems much more effectively. In a world where everything is changing fast, the ability to analyze a situation and find solutions is becoming key [1, p. 22].

"The development of modern society and the resulting changes in the content of school education have placed significant responsibilities on higher education institutions in preparing teachers. The success of the process of reforming and developing the Kyrgyz education system largely depends on pedagogical personnel, the process of training future teachers, and their orientation toward societal values. One of the

main tasks of higher pedagogical education in the Kyrgyz Republic is to train future educators who can adapt to various social situations and work effectively under conditions of differentiation and innovation in modern educational practice." [7, pp. 53-58].

Critical thinking is the process of actively, creatively, and consciously using the mind to analyze information rationally and objectively. It includes operations such as:

- setting goals and objectives;
- collecting and evaluating facts and evidence;
- highlighting the main and secondary;
- recognizing difficulties and finding answers;
- identification and study of logical and causal relationships;
- comparison of different positions and arguments of the parties;
- identifying the strengths and weaknesses of one's own and others' opinions and beliefs;
 - formulation of the results.

The ability to think critically does not mean denying or refuting everything we are told or shown. It is the ability to think independently, check, have doubts, ask questions, look at a situation from different angles, choose and create your life.

Critical thinking is a key skill needed to successfully solve complex problems.

Its main features are: The ability to think analytically: to analyze data, identify the main aspects and the connections between them. Reflection: the ability to critically evaluate your thoughts, assumptions, and preferences, and take into account their impact on decision-making. Information validation: the ability to evaluate the reliability of sources and distinguish facts from opinions and beliefs. The ability to think systematically: to consider, explore, understand complex systems, including their interactions and consequences. Critical analysis: the ability to analyze arguments and evidence based on logic and common sense. Critical thinking is one of the ten most important skills because the world is becoming more complex and requires solving a variety of problems. The ability to think critically allows us to analyze the situation more deeply, choose conscious actions, and look at things and phenomena from different angles.

Every teacher wants an atmosphere of creativity and spiritual liberation to reign in the classroom. That is why it is necessary to constantly think about how to build the learning process so that students show vivid imagination, imagination, can compare and associate, analyze,

think deeply, rely on intuition and the subconscious. In other words, it is necessary to develop students' critical thinking.

The rapid development of technological progress, international politics, as well as the processes taking place in society – all this leads to an overabundance of communication channels with information that is difficult to verify and analyze. Every day, people face the need to master new types of activities, quickly process large amounts of data, and expand the field of contacts, both real and virtual. The above-mentioned processes also affect the labor market: in order to be successful in the profession, a certain set of knowledge and skills is not enough, you need to constantly study, to improve, to develop. For a teacher who has the responsibility of educating a new generation, it is more important than anyone else to know how to teach a child to navigate the world around them: to independently find the necessary information, formulate and express opinions, take part in discussions, provide arguments, and so on.

So, D. Halpern writes in the book "Psychology of Critical Thinking": "Critical thinking is the use of cognitive techniques and strategies that increase the likelihood of obtaining the desired end result." This definition characterizes thinking as something. Characterized by controllability, reasonableness, and purposefulness, it is a type of thinking that is used in solving problems, drawing conclusions, probabilistic evaluation, decision-making. At the same time, the thinker uses skills that are reasonable and effective for the specific situation and the type of task being solved. Critical thinking involves evaluating the thought process itself—the reasoning process that led to our conclusions, or the factors that we took this into account when making the decision" [2, p. 43].

What is the importance of critical thinking? This extremely important skill has a profound impact on various aspects of our lives. It not only allows us to adequately see and assess the situation, but also makes a significant contribution to the emotional state of a person, whether an adult or a child. With this skill, we are able to analyze information more accurately and draw informed conclusions. This gives a person the opportunity to choose the right actions in various areas of life -from professional growth to personal relationships. One of the most important advantages of the ability to think critically is the ability to look at a case from all sides and take into account its various aspects before drawing conclusions. This allows us to predict possible outcomes and choose informed actions in everyday life. In addition, critical thinking allows us to be responsible for our actions. We become aware and careful in making decisions, as we understand their consequences. This helps to minimize risks and create working strategies. The ability to think critically is an integral part of our development, it affects our positive emotions, the ability to assess the situation, argue opinions and choose the right actions. This gives us advantages in various areas of life and allows us to be more successful and self-confident.

What is critical thinking? Critical thinking is the ability to comprehensively analyze information and draw reasonable (ideally objective) conclusions. Critical thinking is also understood as the ability to question any information, including one's own beliefs.

Signs of advanced critical thinking: When we say that a person has critical thinking, it means that he: Observant, attentive and inquisitive; rational — his conclusions and decisions are based on logic and analysis; He gives an objective assessment of what is happening, which allows him to make informed decisions.; has a flexible mind; I am ready to admit my mistakes.

The main components of critical thinking include the following (see Table 1).

Table 1. The main components of critical thinking

№	Components	Description
1	Analysis	Dividing information into parts, studying its structure
		and identifying key elements
2	Interpretation	Understanding the meaning of information, defining its
		context and identifying hidden meanings
3	Evaluation	Determination of information reliability, identification
		of bias, errors and manipulations
4	Synthesis	Combining different pieces of information into a single
		whole, forming your own opinions and conclusions.
5	Application	Using the acquired knowledge and skills to solve
		problems, make decisions, and achieve goals

Critical thinking Independent /everyone formulates their ideas, assessments, and beliefs independently of others/. Information is the starting point, not the end point of critical thinking / to generate a complex thought, you need to recycle a mountain of facts, ideas, theories. But each new fact is subjected to critical reflection [3, p. 18].

Critical thinking begins with asking questions and understanding the problems that need to be solved. It is necessary to replace traditional funded education with problem-based education. Critical thinking strives for convincing argumentation (statement – evidence – conclusion). The main methods for developing critical thinking are given in the following table 2.

Table 2. Basic methods of developing critical thinking

Method name	Method description	Stage of use
«Brainstorming»	Purpose of use: 1) finding out what the children know about the topic; 2) sketching out ideas and assumptions on the topic; 3) activation of existing knowledge.	Challenge
«INSERT»	Reading the text with notes: + I knew it, - I didn't know it, ! That surprised me. ? I would like to know more details. Compilation of the table, the main provisions are written out from the text + - ! ?	Comprehension
«Role-playing game»	Purpose: to interest students, surprise them, surprise them, and pose problems. Staged	Challenge

«Free writing»	A reasoned letter. Within a few minutes, students express their own thoughts on the topic. It can be an essay. The rationale for choosing one or another aphorism, proverb as the main idea	
«SINKWEIN»	Pentameter: The theme 2 adjectives describing the topic 3 verbs characterizing the action A 4-word phrase that contains the main idea A synonym for the topic. The cinquain reflects the essence of the concept, there should be no single-root words, to express the typical features of the concept.	

Using such methods allows children to formulate their thoughts more clearly, to memorize what they have learned better. I use both individual and group forms of work at all stages of my work. During the lesson, it is necessary to encourage the work of each child, I listen to everyone, I never criticize the personal opinions of children [4, p. 6].

Many teachers check their memory capacity. Understanding is a complex mental operation, but students work hard to comprehend someone else's idea. The student translates other people's ideas into an accessible language and mental level. However, thinking is passive: what is created by others is perceived. Critical thinking occurs when new, already understood ideas are tested, evaluated, developed, and validated. Critical thinking Independent/everyone formulates their ideas, assessments, and beliefs independently of others. Information is the starting point, not the

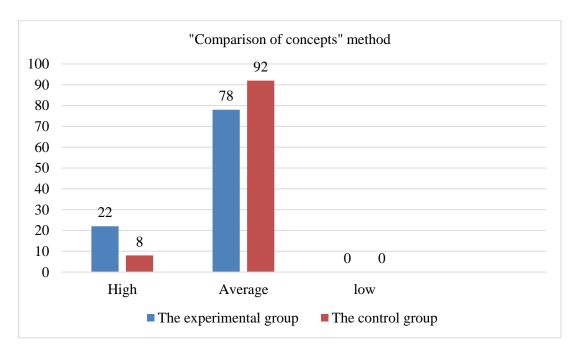
end point of critical thinking / to generate a complex thought, you need to recycle a mountain of facts, ideas, theories. But each new fact is subjected to critical reflection [5].

An experimental study of the development of students' critical thinking was conducted on the basis of the Eurasian Humanities Institute named after A.K.Kussayinov in Astana, there were only 27 students in the discipline of "Critical Thinking", the experimental group consisted of 14 people, for the purity of the experiment, the rest of the group of children formed a control group.

Methodology: "Comparison of concepts". The purpose of the work: to establish the formation of comparative skills. Materials: a pair of comparable concepts. The evaluation form of the test results according to the methodology is shown in Table 3. The results of the study using this technique are presented in Figure 1.

Table 3. – Quantitative processing of results using the "Comparison of concepts" method

The experimental group						The control group							
Name	1	2	3	4	points	level	Name	1	2	3	4	points	level
A	+	+	-	+	3	average	V	+	+	+	+	4	high
M	+	+	+	+	4	high	D	+	+	+	-	3	average
U	+	-	+	-	2	average	A	+	+	-	+	3	average
D	+	+	+	+	4	high	R	+	+	+	-	3	average
P	+	-	+	+	3	average	K	+	+	-	-	2	average
A	+	-	+	+	3	average	N	+	+	-	-	2	average
O	+	+	-	-	2	average	M	+	+	+	-	3	average
N	+	+	+	+	4	high	I	+	+	-	-	2	average
K	+	+	-	+	3	average	C	+	+	-	-	2	average
P	+	+	+	-	3	average	M	+	+	+	-	3	average
K	+	+	-	-	2	average							



Results of the "Comparison of concepts" test methodology

The quantitative results were distributed as follows. In the experimental group, 78% were at the average level, which is 10 people from the group and 22% at the high level. The control group also performed well on the task. 12 people showed an average score of 92% and one high score of 8%.

The data in Figure 2 shows that most students are able to identify commonalities and find differences in two concepts, but they have difficulty expressing differences by river. In particular, if

Almost everyone said the lake was round, but they couldn't describe the river in one word. The options were different: long, narrow, wide shallow.

As a definition, thinking can be viewed through a set of mental processes that underlie cognition. The ability to think is usually understood as the ability to analyze, make judgments based on analysis in accordance with cause-effect relationships, and be logical. The research conducted in the work has shown that almost all students have all mental operations. In education, the development of verbal and logical thinking receives priority. Logical games, exercises, tasks, riddles were selected for the lesson, the effectiveness of the methods was shown by the results of the experiment. Experimental studies to determine effectiveness of pedagogical conditions for the development of students' critical thinking in critical thinking lessons showed good results.

Critical thinking begins with asking questions and understanding the problems that need to be solved. It is necessary to replace traditional funded education with problem-based education. Critical thinking strives for convincing argumentation (statement – evidence – conclusion).

In conclusion, I would like to note once again that it is important not to give knowledge in a ready-made form, but to extract it together. The work carried out within the framework of the development of critical thinking is to teach children to analyze, synthesize, compare, and draw conclusions. "The primary driving force behind the country's socio-economic and digital development is the education system. It depends on increasing students' interest in learning and their cognitive activity." [6].

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