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PEDAGOGICAL TECHNOLOGY AS AN IMPORTANT FACTOR FOR THE DEVELOPMENT OF CRITICAL THINKING

Abstract: *This article discusses the technology of "Developing Critical Thinking through Reading and Writing". In addition, the Critical Thinking Mechanism describes the processes of thinking and reasoning. Also, the formation of critical thinking in students and the motivation of students in the learning process, the technique of "mental attack", Venn diagrams, double-entry diaries; lecture, pair presentation development, "insert" - reading the text with notes, and other methods are extensively covered.*

Key words: *critical thinking, critical thinking mechanism, reflection, motivation, written speech, reproductive thinking, effective thinking, independent thinking, logical thinking, personal culture, social thinking, Venn diagram, "brainstorming" technique, "insert".*

Language: *English*

Introduction

In today's globalization process, young people who are intellectually mature, independent and critical thinkers in society are more than ever needed for the development of society. "Critical thinking means using curiosity and research methods: asking questions, looking for answers systematically. Critical thinking works on many levels, not being satisfied with facts, but revealing the causes and consequences of these facts. Critical thinking involves polite skepticism, skepticism of accepted truths, the constant question: "What if?" Critical thinking refers to the ability to develop a point of view on a particular issue and defend that point of view with logical arguments. Critical thinking involves paying attention to the opponent's arguments and understanding them logically. Critical thinking is a healthy suspicion of something. My job is to work for the end result, to teach the kids to find the main thing. The authors say, and I agree with them, that we give the child a hook, not a fish, i.e. he "catches" it himself. "Everyone gets as much as they invest." In a changing world, students need to be able to analyze information and decide what is important, express their views on new ideas and knowledge, understand new things, and reject inappropriate and unnecessary information.[1]

Critical thinking is a special type of mental activity that allows a person to draw the right conclusions about the attitudes or behaviors offered to them. Critical thinking reflects their own mental activity, the ability to work with concepts, considerations, conclusions, questions, develop analytical activity skills, as well as the ability to evaluate other people's similar abilities. Critical thinking usually has a practical direction. Therefore, it can be interpreted as a form of practical logic that is considered within the context of thinking and the individual characteristics of the subject of thinking and depending on it.

The mechanism of critical thinking includes mental operations that determine the process of thinking and reasoning: goal setting, problem identification, hypothesis making, argumentation, substantiation, prediction of consequences, acceptance or rejection of alternative views. It includes the ability to apply basic intellectual skills (knowledge and understanding) to synthesize, analyze, and evaluate complex and uncertain

situations and problems. These include the ability to identify a problem, clarify a situation, analyze an argument, study a problem in detail, develop criteria for evaluating the reliability of solutions and sources of information, and avoid generalizations.

Critical thinking is the use of cognitive methods or strategies that increase the likelihood of achieving the desired end result. This definition defines thinking control as something that is characterized by validity and expediency, as a type of thinking used in problem solving, drawing conclusions, evaluating probabilities, and making decisions. At the same time, the thinker uses skills that are reasonable and effective for a particular situation and the type of problem being solved. Critical thinking is social and independent thinking. Information is not the end point of critical thinking, but the starting point. Critical thinking begins with asking questions and understanding the problems that need to be addressed. Critical thinking tends to think confidently.

Literature Analysis: "Developing Critical Thinking through Reading and Writing" technology emerged in America in the 1980s. In Russia, the technology has been known since the late 1990s, otherwise known as "reading and writing" to develop critical thinking. It is based on the ideas and rules of J. Piaget's theory of the stages of a child's mental development, L.S. Vygotsky on the proximal developmental zone and the inextricable link between learning and the overall development of the child, K. Popper and R. Paul on the foundations of the formation and development of critical thinking, E. Brown and I. Beck on metacognitive, teaching, civil and legal education, etc. The undeniable services of active developers of technology, in particular Curtis Meredith, Charles Temple and Ginny Still, were that they were able to "translate" the provisions of these theories into practical language and bring their work to the level of pedagogical technology. highlight the criteria.[3]

Therefore, their development can be used by a large number of teachers and can be effective in their work. Children are inquisitive by nature, they want to explore the world, they are able to address serious issues and advance original ideas. The role of the teacher is to be a thoughtful facilitator who encourages students to continuously learn and develop effective thinking skills;

- critical thinking, primarily in discussions, written work and active work texts. Students are familiar with these forms of work, they only need to be slightly modified;

- There is an integral link between the development of thinking skills and the formation of a democratic civic consciousness.

I will go into more detail about the technology itself. To give children the opportunity to actively work with the knowledge gained, the authors of the technology suggest building the lesson according to the usual scheme: "introduction - the main part - the conclusion". A similar scheme works in problem solving: "problem-solving - approaches to solving it - reflecting the outcome".

Research Methodology: The first stage is the challenge (motivation), when the topic of the lesson is identified, when the existing knowledge on the topic is updated, it becomes clear that the children already know or want to know about it or what they need to know. need to learn and know why. Different teaching methods are used for this, for example, to form a cluster or association in which the keyword of the course topic is clearly visible in relation to other concepts or events. The role of the teacher at this stage is small, the children need to feel comfortable. At this stage, a "brainstorming" technique is used that activates the attention of all students (both weak and strong). Children develop an interest in the topic of conversation. In the difficulty phase, students are able to make predictions using their prior knowledge, independently determining the goals of cognitive activity in this lesson.[6]

The second stage is understanding (looking for answers), looking for answers to the questions asked at the beginning of the lesson. The child works more independently, in pairs or in groups. If something is not clear, he can ask the teacher for help. This is a learning phase in which students have the opportunity to become acquainted with new information, ideas or concepts, connect them with existing knowledge, and actively monitor their understanding. Different techniques are used for this: reading the text with pauses; spreadsheets, Venn diagrams, double-entry diaries; lecture, pair presentation development, "Insert" - reading the text with notes, and more.

The third stage - reflection - allows you to determine how well the child understands the topic. Both closed (single feedback) and open (multiple feedback) questions are asked. Answers should be as complete and extended as possible. Students understand everything they learn in class, expressing ideas and concepts through the information they receive. This stage is also carried out using different methods (strategies): group discussion, mini-essay or essay writing, pentastic - syncwine, Cluster ("collection"), discussion card, author's course. There is a holistic understanding, generalization and assimilation of the received information, development of the relation to the studied material and identification of the still unknown. The importance of this technology is that it teaches children to listen and hear, develops speech, allows communication, activates mental activity, cognitive curiosity, motivates children to action, so everyone works. Fear disappears, the student becomes more responsible for their own response, and teachers and students participate together in learning.[2]

Teaching critical thinking is not an easy task. There is no clear list of steps that can lead to critical thinking. But according to the authors of the technology, there are certain conditions and approaches that develop critical thinking:

- students should have time and opportunity to practice critical thinking;

- students should be encouraged in the learning process;

- different opinions and opinions should be accepted;

- create an atmosphere in the classroom that does not make fun of someone's opinion;

The teacher must believe in the ability of each student.

Thus, students who think critically, are involved in the active process of systematic work, think about their knowledge, can assert themselves and recognize themselves correctly in the world around them. An effective way to address this problem is to develop critical thinking in school students. Critical thinking refers to the ability to see a problem, to be willing to find non-standard solutions, to think about one's own intellectual activity, to analyze one's own actions, and to recognize mistakes. A student with the ability to think critically knows different ways of interpreting and evaluating an information message, is able to distinguish between contradictions in the text and the types of structures in it, is able to prove his point not only on the basis of logic. Such a student feels confident in working with different types of information, can effectively use different resources at the level of values, a critical thinking student radically accepts the multipolarity of the world around him and interacts effectively with information spaces; the possibility of coexistence of different views within the framework of universal values. Consequently, it can adapt more successfully to modern life. Teachers have already identified that the main focus in teaching should be on developing students 'thinking rather than mastering the information provided by students and mechanically memorizing the learning material. It is also necessary to teach analytically, to consider the field of study, which includes the study of fragmentation, fragmentation, principles, elementary principles, as a result of which thinking becomes visual.

Developing students' critical thinking in the learning process is important not only in relation to the new tasks facing the school. Methods of forming critical thinking in person-centered pedagogy should be consistent with the development of modern society and the growing focus on the inner world of the individual. There is a sufficient understanding of the formation of students' theoretical and practical, productive and reproductive thinking, there is a holistic understanding of problem-based learning as a means of developing creative, problem-based thinking in the process of acquiring knowledge. Many teachers strive to find acceptable forms and methods of teaching critical thinking, but almost no attention is paid to the formation of critical thinking in teacher training.

Analysis and Conclusions: The process of developing critical thinking is complex and takes place in all academic subjects and extracurricular activities. Thinking answers questions that cannot be solved directly, through emotional reflection. Because of thinking, a person directs himself correctly in the world around him, using generalizations previously obtained in a new, unique environment. Knowledge of the laws of human activity is reasonable because of the interdependence of objective reality. Critical thinking is a natural way of interacting with ideas and information, a starting point. Skills are needed not only to master it, but also to critically evaluate, understand and apply it. Students should learn to look at new information from different perspectives and draw conclusions about its importance and accuracy as they receive it. In the lessons, the student should engage in information that he or she needs to know that the learning is more related to his or her personality and interests than to the teaching methods and tools set by the teacher.

Teachers highlight the following signs of critical thinking:

• Effective thinking (forms a positive experience from everything that happens to a person);

• Thinking independently and responsibly (the first stage of work is individual, the student is responsible for their own learning outcomes);

• Logical reasoning (thoughtful decisions are supported by convincing evidence);

• Individual thinking (forms a personal culture of working with information);

• Social thinking (work is done in pairs and groups, interaction in the form of discussion).

Modern life defines its priorities: not just knowing the facts, not the skills, but the ability to use what is gained; the ability to receive and model information, not the amount of information; create and collaborate, not consumer. Organically incorporating work on critical thinking technology into the school education system allows for personal growth, as such work is primarily focused on the child, his or her individuality.Critical thinking does not consider anything simple. Using it, a person asks questions and seeks answers to them systematically using specific methods of working with research methods and information sources. Critical thinking begins with questions, and problems with the teacher, not with answers to all of the student's questions. Critical thinking involves thinking correctly in gaining important and reliable knowledge about the world. A critical thinker can answer specific questions by gathering important information, effectively sorting it out, drawing logical conclusions from that

information, and gaining important and reliable knowledge about the world. In the most general sense, critical thinking is an ability, and people are not born with the ability to think critically. Critical thinking is a skill that needs to be taught.

Writing skills play a crucial role in developing critical thinking because they allow you to correct unformed thoughts or images, look at them from all angles, and "awaken the mind". Written speech deepens comprehension: the writer corrects the thought, then studies its writing, and in response to this fixed thought, a new, more interesting idea emerges. Written speech enhances curiosity, making children more active observers, because in order to fix something, you have to learn it, learn more about it.

Oddiy fikrlashdan farqli o'laroq, tanqidiy fikrlash mulohazalarning noaniqligi va noaniqligini fikrlarni ifodalashning aniqligi va o'ziga xosligi bilan almashtiradi. Muvofiqlik, mantiqsizlik, yuzakilik, oddiylik, tarafkashlik tanqidiy fikrlashning izchilligi, chuqurligi, ahamiyatliligi, xolisligi o'z o'rnini bosadi.

Teachers who develop critical thinking in the classroom are encouraged to consider different perspectives on the problem, to create conditions for the student to think independently, to make decisions, to draw conclusions, and to try to use all types of pair and group work in their lessons. In particular, pay close attention to developing the qualities needed for effective communication in discussions: tolerance, ability to listen to others, responsibility for one's own point of view. The study of the phenomenon of "critical thinking" shows that this type of thinking can develop spontaneously, but spontaneous development does not provide a high level of formation of critical thinking. Only in the process of learning activities can structural elements of this type of thinking be formed, such as the search for possible irregularities; see the pros and cons of the object of cognition; distinguishing subjectively derived value judgments from fact-based judgments; looking for ways to justify detected errors.[7]

Thus, the development of critical thinking should take place in an environment where learning is associated with problem-solving. Critical Thinking Technology gives the teacher the ability to use a learning model and a system of effective methods that help to create an environment of openness and responsible collaboration in the classroom, developing critical thinking and independence in the learning process. Being a practitioner who can competently analyze their own work will be a valuable source of professional information for other teachers. The formation and manifestation of critical thinking in school students cannot be considered a spontaneous process, it depends on many factors. The manifestation and "growth" of the level of critical thinking depends on the nature of the guidance signal, the sequence and characteristics of the structure of the experimental material. The manifestation of critical

thinking in children also depends on the nature of the tasks presented. Children find mistakes independently and justify them with a general suggestion that "it won't happen," but sometimes there are situations where they try to explain why it's not possible to do so. Depends on how actively you are involved in the search for errors in the unit. At each age stage of human development, both general characteristics specific to a social group and specific, individual characteristics are formed. Children of the same age differ from each other in typological features of higher nervous activity, thinking, physical and spiritual development, abilities, interests, and so on. Thus, the class consists of students with different developmental, different preparation, different learning outcomes, and attitudes toward reading, and different characteristics of attention and memory. From the first grade, the teacher often conducts classes based on average level - average development, average preparation, average academic performance. This often leads to artificially limited development of "strong" students, loss of interest in teaching, which does not require them to have mental strength: "weak" students, on the contrary, are often doomed to chronic delays and they lose interest. In teaching, it takes a lot of mental stress on them. The question arises as to how to build the learning process so that the "weak" student is able and interested in it, and the "strong" student does not lose the desire to work because of the ease and simplicity of teaching. The development of thinking at the primary school age has a special place. With the onset of education, thinking becomes the center of a child's mental development and, under its influence, plays a decisive role in the system of other mental functions that are intellectualized and arbitrary. The pedagogical condition for the development of critical thinking in children of primary school age is, first of all, the use of various tools and methods. Given that most teachers are still working on traditional programs, the methodological material that practical teachers need is focused on developing logical thinking, mental operations that can be used in the classroom. By combining methods and techniques for developing critical thinking, a teacher can plan lessons according to students' level of maturity, lesson objectives, and volume of teaching material. The possibility of integration is not of great importance to the teacher himself - he can feel free to work on this technology, adapting it to his own preferences, goals and objectives.

In conclusion, critical thinking is not innate, that is, it is necessary to develop students' thinking (and the ability to use mental operations) throughout their school years, to teach them to think critically. is of great importance, because through this the scope of the child's knowledge and ideas is significantly expanded, new concepts enter a coherent system, the reader draws more conclusions. Critical thinking is

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not only possible, but must be developed at every stage of school. Learning activities, the level of knowledge acquisition, the quality of education are increasing, and most importantly, the desire of children to learn is growing! I think this is the biggest problem of the modern school and it can be solved successfully. It is also confirmed by various materials, theses, trainings, seminars, methods, as well as many tests of these methods that the problem of developing critical thinking is extremely important. By developing critical thinking in school students, teachers encourage them to solve problems independently, create new opportunities, and seek the information they need. People who were trained to solve problems in their childhood can later solve much wider problems than those who were not trained. In our time, it is very important to develop critical thinking in children - this child begins to enjoy reading books, analyzes them and learns to draw independent conclusions, so he learns to ask smart questions and find creative answers to them. Teaching will be fun if it brings a significant joy of learning new things, of feeling one's participation in the world of knowledge described in the book. Based on these teaching methods, when a child is studying history, geography, or literature, he or she does not later say that it is not clear, necessary, or interesting. Teachers and parents make sure their children know the topic and are able to think critically and creatively. Teaching children to think critically means asking the right questions, directing them in the right direction, teaching them, drawing their own conclusions and finding solutions. I like the types of learning activities that give students the material to think, the opportunity to explore initiative and independence, they need mental strain, ingenuity and creativity.

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