DEVELOPMENT OF CRITICAL THINKING

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The article reveals the technology of critical thinking. The authors suggest that the thought process begins with the emergence of a problem or problem that does not have a ready-made solution. Through the desire to understand something and to sort out something, thinking is born. The article reveals the essence of innovative thinking of critical thinking. Examples of critical thinking and their use in practice are considered.

Keywords: critical thinking, innovative technologies, semantic understanding, methods of teaching, expressing one's opinion, logical comment

The concept of modernization of Kazakhstan education for the period until 2020 determines the goals of general education at the present stage. It emphasizes the need for "orientation of education not only to assimilate a certain amount of knowledge to learners, but also to the development of his personality, his cognitive and creative abilities". The general education school must form an integral system of universal knowledge, skills and skills, as well as independent activity and personal responsibility of students, etc. the key competencies that determine the current quality of education. So, the priority task of the modern school is not to learn a certain set of knowledge, abilities, skills (which is certainly important), but bringing up the clever and internally free person who is able to formulate and reasonably defend own point of view, set goals and find effective ways to achieve them.

The aim of the technology is to develop critical thinking skills of students, which are necessary not only in education but also in everyday life (the ability to make informed decisions, work with information, analyze various aspects of phenomena, etc.). [1]

What is the "innovation" of the presented technology? This model going beyond the framework of the classical technology strategy, nevertheless represents the experience of practical implementation of the personality-oriented approach in teaching.

Specialists in the field of applied informatics should be able to develop various software products taking into account the requirements of the customer and effectively implement them in enterprises. One of the necessary conditions for the formation of these competences is the inclusion in the process of preparing students for innovative teaching methods. Innovative teaching methods are based on the use of new teaching methods and effective forms to ensure student self-fulfillment. Innovative methods involve the use of information resources that increase the effectiveness of training, specially developed tools and training systems [2]. Innovative methods are aimed at developing the creative abilities of the individual, through the interaction of students and teachers in the form of cooperation and mutual assistance [3].

The peculiarity of this pedagogical technology is that the student constructs this process in the process of learning, proceeding from real and specific goals, he tracks the directions of his development, determines the final result. On the other hand, the use of this strategy is focused on developing skills in thoughtful work with information.

"Tell me – I will forget,
Show me – I'll remember,
Involve me – I will understand".

Technology "Development of critical thinking" developed by American educators Ginny Style, Curtis Meredith, Charles Temple and Scott Walter.

Critical thinking is understood as the manifestation of children's curiosity, the development of one's own point of view on a certain issue, the ability to defend it with logical arguments, the use of research methods. [4]

The theory of intelligent learning through reading and writing is based on the technology of forming of critical thinking by L.S. Vygotsky "... all thinking is the result of an internal dispute, as if a person was repeating in relation to himself the forms and ways of behavior that he used earlier to others".

This technology involves the use of three stages on the lesson: challenge, semantic and the reflection.

1 – challenge

Tasks (functions) of the stage:

- update and analyze existing knowledge and views on the topic;
- awaken interest to it;
- to activate the learner, to give them the opportunity to think purposefully, expressing their thoughts in their own words;
- to structure the subsequent process of studying the material.

2 – comprehension – the search for a strategy to solve the problem and draw up a plan for specific activities; theoretical and practical work on the implementation of the worked out solution way.

Functions of the stage:

● obtaining new information;

● its comprehension (also you need to reread a part of the text if the student don't understand it and by perceiving the message asks questions or writes down what remains unclear to clarify this in the future);

● correlation of new information with own knowledge. Trainees consciously build bridges between old and new knowledge in order to create a new understanding;

● maintaining the activity, interest and inertia of the movement created during the challenge phase.

3 – reflection

Functions of the stage:

● expression of new ideas and information in one's own words;

● a holistic comprehension and generalization of the information received on the basis of an exchange of opinions between the trainees with each other and the teacher;

● analysis of the whole process of studying the material;

● development of own attitude to the studied material and its repeated problematization (a new "challenge").

The basic model (challenge-comprehension-reflection) specifies the logic of the construction of the lesson, the sequence and ways of combining specific technological methods.

The existence of an integral structure of knowledge significantly increases the effectiveness of the perception of new information, the level of use of knowledge, interest in learning, the skills of independent search and processing of information. The child finally receives an "instrument" that helps him to realize in practice the principle of his own activity as a subject of learning. The teacher gets the practical opportunity to become an equal partner of the child in his education.

Each stage has its own methodical techniques that aimed at accomplishing the tasks of the stage. By combining them, the teacher can plan lessons in accordance with the level of maturity of the students, the objectives of the lesson and the volume of the teaching material.

Let's consider some techniques.

Method –a table "I know – I want to know – I learned"

One of the methods of graphic organization and logical and semantic structuring of the material. The form is convenient, as it provides a comprehensive approach to the content of the topic. There are three columns in it: I know, I learned a new one, I want to know more. In each of the columns it is necessary to spread the information received during the reading. A special requirement – to write down information, concepts or facts only in your own words, without quoting a textbook or other text that you worked with. Method allows the teacher to control the work of each student with the text and put a mark for the work in the lesson.

Method "Cinquain"

It comes from the French word "cing" – five. This poem consists of five lines. Used as a method of synthesis of the material. The conciseness of form develops the ability to summarize information, expound a thought in several meaningful words, capacious and concise expressions.

Cinquain can be proposed as an individual independent task; For working in pairs; Less often as a collective creativity. The boundaries of the subject area depend on the flexibility of the teacher's imagination. Usually Cinquain is used at the stage of reflection, although it can also be given as an unconventional form in the stage of a call.

As experience shows, synclines can be useful as:

1) a tool for synthesizing complex information;

2) a way of assessing the students' concept baggage;

3) means of developing creative expressiveness.

Method "Basket of ideas"

This method organizes the individual and group work of students at the initial stage of the lesson, when the actual experience and knowledge is being updated. It allows you to find out everything that the students know or think about the topic of the lesson. On the board, you can draw a basket icon, in which everything that all students know about the topic being studied will be conventionally collected.

Method "Insert"

In literal translation, the insert from English means: an interactive recording system for effective reading and reflection. Method is carried out in several stages.

Method promotes the development of analytical thinking that is a means of tracking the understanding of the material.

Stages of INSERT correspond to three stages: challenge, comprehension, reflection.

Method "Reading with a stop"

Reading with stops and Bloom's questions

The conditional name of the methodical method of reading the organization using different types of questions.

Note: reading with stops is advisable to use at the stage of comprehension, supplementing this technique with other techniques of technology at the stage of challenge and reflection.

Method "Six Hats of Thinking"

Method "Six Hats of Thinking" is used at the stage of reflection, when summarizing the work in the lesson. Each student is asked to choose one of the hats in color. The color of the hat indicates the main points that need to be comprehended and generalized.

Method "Thick and subtle questions"

The table of "Thick" and "Subtle" questions can be used in any of the three phases of the lesson: at the stage of the call, these are questions before the study of the topic, at the stage of comprehension – the way of actively recording questions during reading, listening, and thinking – demonstrating an understanding of what has been done.

In the course of working with the table, questions that require a simple, monosyllabic answer are written in the right column. In the left column, detailed answers are written for required questions.

Critical thinking does not automatically appear as a side effect of conventional learning in some area. To achieve the expected effect, it is necessary to make systematic efforts to improve thinking. Teaching critical thinking must include a large number of examples from different spheres of life. The best way to solve this task is to develop critical thinking among students. [5] Critical thinking involves the ability to see problems, readiness to find non-standard solutions, the ability to reflect their own intellectual activity, analyze their actions and identify the mistakes. In addition, this type of thinking includes the willingness to abandon its decision in favor of more effective, openness to new ideas, the ability to draw objective conclusions which causes an understanding of the ambiguity of the world. A student, who knows how to think critically has various ways of interpreting and evaluating an information message, is able to distinguish in the text the contradictions and types of presented structures in it, to argue his point of view, relying not only on logic but also on the interlocutor's ideas.

To implement the goal and objectives of the study the following methods are used:

– theoretical (analysis and synthesis of psychological and educational literature on the problem of "Development of critical thinking");

– empirical (observations, questionnaires, testing, conversations, pedagogical experiment, mathematical data processing).

At the first stage, the initial theoretical position, the working apparatus of the study, was determined at the meetings of the teachers of primary schools; studied scientific and methodical literature, materials of advanced pedagogical experience. Defining the topic, purpose and objectives of the study, formulating a hypothesis.

At the second stage – preliminary experimental work was carried out. Specification of the methodology for carrying out experimental work, conducting practical activities (open lessons).

The third stage. Conducting an experimental work on the implementation of critical thinking in practice. Generalization and systematization of research materials.

And here is an example of practicing the language for expressing critical thinking.

Sometimes teachers think their students have no opinions because they are unable to express their opinions. In fact, students often do have strong and thoughtful opinions but they are not confident with the language they need to express themselves. This activity provides input and practice with the language they will need.

1. Before the lesson, you need to make copies of expressions below and cut them into slips of paper.

The main point is…	I agree because…
It's because…	In my opinion…
Another reason is…	I know because…
Also…	I disagree because…
Because…	In conclusion…

2. Make groups of three or four student and sit them in a circle around a table. Give each group one set of the cut-up expressions. They deal out the slips of paper so each player has the same amount. Put any extra slips to one side.

3. Write a topic for debate on the board. It could be something you have been discussing recently or a topic which doesn't need too much specialized knowledge.

4. Explain that the groups must discuss the topic but that they can only speak by using the words on one of their slips of paper and placing it in the middle of the table. One player begins and then the player on the left must continue with a logical comment. Then the next player on the left speaks so that the discussion moves anti-clockwise around the circle. The aim is for a player to use all his/her expressions and to get rid of all the slips of paper. If the group

thinks that a player uses an expression incorrectly, they can challenge the player and make him/her miss a turn.

5. When the groups finish, repeat the activity by writing a new discussion topic on the board and dealing the slips of paper again.

Once the students become more confident with the game, you can change the rules so that any player can speak in order to use up the expressions first. This version is more chaotic but it's a lot of fun.

The main results of the study are as follows: an optimal set of pedagogical conditions has been identified that ensure the formation of critical thinking of students in the classroom.

The more advanced the student, the better they should be able to understand meaning from context and offer reasonable responses to more obscure exercises. In many tasks they will be asked questions that don't have defined right or wrong answers, and so they will have to simply rely on thinking critically about the question, their opinion, and the reasons they have to have formed that opinion.

Success in studying subjects causes positive emotions, a positive attitude towards the subject, and a desire to develop in this direction. Developed speech, the ability to express thoughts in their own words, creative imagination contribute to the mastery of educational material, contribute to the formation of an intellectual personality. It is known that the process of social adaptation is most successfully carried out in the event that the cognitive and social activity of a person is formed, the independence of thinking, the ability to set and solve various problems.

References

1. Zagashev I.O. Critical thinking: technology development / I.O. Zagashev, S.I. Zair-Bek. – SPb: Alliance-Delta, 2003.

2. Subocheva A.D., Subocheva O.N. Innovative methods of teaching as a way of activating the thinking activity of students. // International Scientific and Research Journal. Sociological sciences. 2014. The issue is September. URL http://research-journal.org/social/innovacionnye-metody-obucheniya-kak-sposoby-aktivizacii-myslitelnoj-deyatelnosti-studentov/ (reference date: August 12, 2016).

3. Yuldashev Z.Yu., Bobokhuzhaev Z.I. Innovative methods of teaching: features of the distance learning method and methods of its application: Textbook. Allowance. Tashkent. 2006. 180 p.

4. Zair-Beck S.I. Development of critical thinking in the lesson. M.: Enlightenment, 2004.

5. Halpern D. Psychology of critical thinking / D. Halpern. – Spb: Peter, 2000 – (series of "Masters of Psychology").

6. URL: http://studopedia.ru/17_129889_innovatsionnie-metodi-obucheniya.html.