

## **Effective Pedagogical Techniques of Forming Critical and Creative Thinking in Primary Class Students**

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### **Abstract**

this article discusses effective pedagogical techniques for the formation of critical and creative thinking in primary school students.

**Keywords:** critical thinking, creative thinking, technique, case-study, "thick" and "thin" question, insert, association method, Bloom's cube technique, game, method, value of time, cognitive, psychomotor, taxonomy.

Pedagogical techniques for the formation of creative and critical thinking in elementary school students can be conditionally classified into three groups (first (simple), second (with medium complexity), third (complex)) depending on the level of difficulty of the tasks.

### **The system of pedagogical techniques for the formation of critical and creative thinking in elementary school students (based on the classification of K. Nuraliyeva)**

<b>The first group</b>	<b>The second group</b>	<b>Such a group</b>
<ul style="list-style-type: none"> <li>Blum for trees.</li> <li>True/False</li> <li>Method of associations.</li> <li>•Accidentally.</li> <li>A pile of ideas.</li> <li>Sinveyn didactics.</li> <li>It will be delayed.</li> <li>Interchangeable pairs.</li> <li>Think, unite, share.</li> <li>Quick message.</li> <li>It looks like... It looks like...</li> </ul>	<ul style="list-style-type: none"> <li>Epigraph.</li> <li>Non stop speaking</li> <li>Insert.</li> <li>"Thick" and "thin" question</li> <li>Plus-minus- interesting</li> <li>Four peas.</li> <li>Six thinking caps.</li> <li>Cluster.</li> <li>Connection diagram.</li> </ul>	<ul style="list-style-type: none"> <li>SWOT analysis.</li> <li>SMARTER.</li> <li>Case study.</li> <li>Circles.</li> <li>Friend diagram.</li> <li>A heuristic study.</li> <li>Disney method.</li> <li>Aquarium.</li> <li>Five "What's that?".</li> <li>Blum .</li> </ul>

### **Bloom cube technique.**

How can you develop critical thinking skills in your students? What techniques and technologies should be used? We offer one of the famous methods of critical thinking technology developed by the American scientist and psychologist Benjamin Bloom. This method is called Bloom's cube. Benjamin Blum is known as the author of a unique system of algorithms for pedagogical activity. The theory or "taxonomy" he proposed divides educational goals into three blocks: cognitive, psychomotor, and affective. Simply put, these goals can be defined by the blocks "I know", "I create" and "I can do". That is, the child is not offered ready-made knowledge, but a

problem is presented. And he should use his experience and knowledge to find ways to solve this problem.

### **For example.**

**Topic: "DIVERSITY OF ANIMALS" (Natural sciences, 2nd grade)**

#### **Saying the name.**

- List the names of both vertebrate and invertebrate animals that you know.
- Tell me which animals you have seen, both vertebrates and invertebrates.
- Tell us what animals, both vertebrates and invertebrates, are found in our region.

#### **What is that?**

- Why do we call them "both vertebrates and invertebrates"?
- Why is the spider's body covered with a hard shell?
- What is the difference between vertebrates and invertebrates?

#### **To think.**

- Think of the similarities between bumblebees and bees.
- Think about how bees differ from honeybees.
- Think about the importance of bees in nature.
- Think of the benefits that shittak can bring to trees.

#### **Make an offer.**

- Suggest how knowing about jellyfish would benefit you.
- Suggest how humans can help Medusa live in a changing environment.

#### **Explanation.**

- How does a jellyfish breathe with its skin or is it not true?
- Do you think jellyfish are an important part of the ecosystem?

#### **Share.**

- Share with others how frogs make you feel.
- How do you feel about frogs?
- Tell me what was the most interesting and the most boring (unpleasant) part of the lesson.

**"True-False" technique.** Each participant writes on a sheet of paper three correct ideas and one incorrect idea about the topic being studied or studied. Participants gather in pairs, exchange sheets and find out which idea was wrong.

Scope of use: it can be used during the examination of homework, to strengthen the subject learned in natural and concrete sciences.

Advantages: develops the skill of observation, selection of information, teaches children to find mistakes and express thoughts, allows the teacher to check the knowledge of students.

Difficulties: children who have not mastered the material risk not being able to complete the task. It is difficult to allocate time to monitor the accuracy and correctness of thoughts, conduct exercises, because students often do not have the ability to clearly express their thoughts.

### **For example.**

**Topic: Forest doctors (Mother language and reading literacy, 1st grade).**

1. If you hear the sound of "knock...knock...knock..." in a place where trees grow thickly, know that there is a red fox here.

True/False

2. In the forests of Uzbekistan, there are no red foxes.

True/False

3. Kizilishtans only walk on trees, they cannot eat.

True/False

4. Kizilishtans build nests in tree hollows.

True/False

5. The largest red fox in the world lives in America.

True/False

6. Kizilishtans use plants for their work.

True/False

7. The mother red herring lays 2 to 12 eggs.

True/False

8. There are more than 220 species of them all over the world.

True/False

**Method of associations** connection of images determined by previous life experiences in the mind of a person, certain images that appear in the mind due to these connections create other images that are related according to signs of similarity, proximity and opposition. A. appears on the basis of past experience and reflects the objective relations of things and events. Manifestation of a mental process A. due to this, it creates a second (related to the previous) mental process.

**Topic: The value of time (Mother language and reading literacy, 2nd grade).**

Say these words from words that have a comparative and opposite meaning.

For example:

Be alert – careless.

Lazy - responsible.

Orderly - disorderly.

Good - bad.

Wide - narrow.

Sweet - bitter.

Happy - sad.

Productive - unproductive.

**Sinkvey** - means "5 lines" in French. Cinquain is an unrhymed poem that helps to synthesize (bring together) information. expressed in variants and through diverse perspectives.

Syntax is an important skill to express complex ideas, feelings and emotions in just a few words.

The process of creating a syncway helps to better understand the topic.

Line 1: The topic is stated in one word (usually a noun is chosen).

Line 2: the subject is represented by two adjectives (2 adjectives are written).

3rd line: the behavior within the subject is expressed in three words (write 3 verbs or adverbs).

Line 4: write a four-word opinion (write a 4-word sentence).

Line 5: write one word that repeats the essence of the topic and is close to it in meaning (write a synonym for the topic).

**Sample (Native language and reading literacy, 3rd grade).**

1. Nature.
2. Blue-blue, beautiful.
3. Feeds, grows, changes.
4. Nature is a supreme blessing.
5. Environment.

**Non stop speaking** – try to make as many links as possible before time runs out.

**Topic: WHY IS A MAN STRONGEST IN THE WORLD? (Native language and reading literacy, 3rd grade).**

One day, a pheasant came to the river bank to drink water. As the water was frozen, he poked it with his beak and warmed up a little water. But in this short time, the wing got stuck in the ice.

- O ice, you are very happy! - exclaimed the pheasant.
- No, - answered the ice, - it's raining from me. Whenever it rains, I immediately start to melt. The rain, listening to this conversation in the bosom of the clouds in the sky, also spoke:

"Could it be that I'm crazy?" No, the ground is very wet. No matter how much it rains, he will absorb me, he said. Then the earth spoke:

- The forest is madder than me. He stands over me, squeezes all the energy in my body, he said.

"No, I don't have much money," said the forest. - The fire is stronger than me. If it can catch fire, it will burn wet and dry!

Hearing these words, the fire said:

- I'm afraid of the wind. He can easily outgrow me.

"That's right, I can uproot a tree and make a flame grow in an instant," said the wind. - But I am powerless in front of an ordinary lawn. No matter how much it blows, he will regain his height.

I think the grass is the best! Maysa objected to this:

- I don't have any hash or kush. The sheep will eat me! That's why he's so angry with everyone. Hearing this, the sheep shook its head:
- What kind of kush should I have? If a wolf comes, tell me I lost my butt! Think carefully! Isn't he the best of all? - he said. Suddenly a wolf appeared. "Well, you don't know anything," he said. - In the world, a person is the best! He catches the pheasants, melts the ice, does not spare the rain, plows the ground, cuts down the forest, makes fire, tames the wind, mows the grass, He will kill us, he will also shoot and kill us wolves. Hearing all this, the man said: - No, you are mistaken, in fact, one of us is not better than the other. I can be happy with you. But I always need your help. I can't do the things you do. Without any of you, I will lose my cool. So, everything in nature is connected to each other like a chain. We can only be united.

Questions and assignments on the topic

1. Tell me, what started the debate about who is a Kushli?
2. Why does the ice think that the rain is colder than itself? Is it raining?

3. What did the earth show as the reason why the forest is lush? Is it a forest?
4. What is Alan afraid of? Explain that the flame is no better than ordinary grass.
5. Sheep or wolf? What is that?
6. Why is a person the happiest in the world?
7. How to connect with nature like a chain?
8. Tell me, in fact, what should a person who is the happiest of all be like?

On the basis of these questions and assignments, the subject will be mastered better and a positive result will be achieved by using the "Let's write without stopping" method.

### **Insert technique.**

**ABOUT** When working with the text, the chaser puts a number of symbols, which mean the following:

IN- confirms what I know.  
 + - new information.  
 - - contradicts what I know.  
 ? - made me think.

For example.

**Topic: ШОЛІ (Natural sciences, 2nd grade).**

The steppes are arid places with very hot summers and very cold winters, little rainfall, and unique flora and fauna. Some areas of the paddy fields turn green in the spring. During the rainy season, water collects in the depressions and puddles form. Plants grow thickly around the ponds. On hot summer days, puddles dry up and barrens form. Marshes are the habitat of some living organisms. Saxovol, incense, side and yulgen grow in paddy fields. Reptiles, mammals and birds live. People live in the irrigated and developed parts of the marshes in our country. Rice is often used to feed livestock. In medicine, wild plants - frankincense and yarrow are used a lot.

IN- the temperature is very hot in summer and very cold in winter.  
 + - on hot summer days, puddles dry up and barrens form.  
 - - it rarely rains.  
 ? - reptiles, mammals and birds live.

**Method of "thick" and "thin" questions.** When using questions in the educational process, it is accepted to divide them into two types: simple and complex questions. Here, simple questions are questions that can be answered with "yes" or "no" or any other words. They can also be called English questions by making them shorter or more descriptive. Complex questions consist of questions that need to be answered with a few words, phrases, sentences, or, as appropriate, statements and explanations. They can also be called thick questions by making them full or broad. Accordingly, the name of this method of "thick" and "thin" questions can also be called the method of "full" and "short" or "wide" and "large" questions. This method can be used at various stages of training for the purpose of quick monitoring of students' learning and increasing their activity. For this, the teacher should prepare a table of "bold" and "thin" questions related to the topic of the lesson in advance.

For example.

**Topic: LIVE SHOPPING (Education, 2nd grade).**

<b>"Thin" questions</b>	<b>"Bold" questions</b>
Why couldn't the butterfly help the chick?	What do you think about the fairy tale "Live

	Basket"?
Why couldn't Sparrow help the chick?	What would you do if you were the chick?
Why didn't Shuvalshang's advice work?	How would you help the chick?
How to help the chick gave?	Who is the main character in the story? What is that?
Who kept banging his beak on the egg?	What did you understand about harmony, unity, truth, and many words?

### **The game "Plus and minus sides".**

The purpose of the game is to teach students to identify their social behavior towards each other and to think positively and negatively.

The course of the game: each student writes three positive and three negative aspects of himself on three separate pieces of paper. Then all the papers are mixed up and placed in the middle of the class. Children sit in a circle, take turns taking one piece of paper, read it silently, and pass it to the person about whom they think it is written (turn the text upside down without) they put. Then everyone reads the papers placed in front of them. Comments are provided upon request.

#### **For example.**

#### **Topic: Summer (Mother language and reading literacy, 1st grade).**

Each student will say 3 positive and 3 negative thoughts on the topic of summer.

#### **POSITIVE:**

1. Summer is the hottest season of the year.
2. Many fruits ripen in this season.
3. With the arrival of summer, vacations begin and children go to camps.

#### **NEGATIVE:**

1. In summer, the whole place gets very hot.
2. Many children drown because they want to take a bath.
3. The day is long and the night is short. It is very difficult to get enough sleep in the morning.

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