



Improving the Model of Developing the Creative Ability of Primary Students Through The 5e Model in The Educational Process

OPEN ACCESS

SUBMITTED 31 March 2025

ACCEPTED 29 April 2025

PUBLISHED 31 May 2025

VOLUME Vol.05 Issue05 2025

COPYRIGHT

© 2025 Original content from this work may be used under the terms of the creative commons attributes 4.0 License.

Shoeva Yulduz Amin qizi

Bukhara State Pedagogical Institute, Teacher of the Department of Primary Education, Uzbekistan

Abstract: This article presents ways to develop creativity and independent thinking skills in elementary school students based on the 5 "E" model.

Keywords: 5E model, creative ability, creativity, education, independent learning, creative exercises.

Introduction: Observations carried out over recent years show that in every field, the logical thinking and reasoning abilities of advanced young people are considerably higher than those of their peers.

In an era of rapid global development, including Uzbekistan among the ranks of developed countries is a pressing issue of today. In this regard, our country's leader has also made a number of decisions and is carrying out swift reforms. The strategic documents adopted for the development of the Republic of Uzbekistan until 2030 are among these. This strategy consists of several directions, with its main goal being to transform Uzbekistan into a strong economy, a prosperous population, and a lawful democratic state. To achieve this, the teaching profession requires great skill and responsibility to nurture competitive, knowledgeable youth who meet modern demands. For this reason, developing logical abilities is considered a very important factor, and the relevance of our topic is reflected precisely in these ideas.

The main goal of the changes being implemented in the education sector in our country is to introduce foreign programs into our system and better prepare our students for international assessment programs. It is no exaggeration to say that the introduction of these programs into the system has proven successful in a short

period of time. As a result of these innovations, a number of positive qualities have developed in students, such as independent thinking, the ability to accurately assess situations, creatively approach problematic situations, and seek ways to solve problems.

Preparing our students for a number of international assessment programs such as PISA, PIRLS, TIMSS, EGMA, EGRA, and STEAM, and improving their practical skills and knowledge capacity, has become a priority task today. Special attention within the science system has especially increased towards practical sciences, including physics, chemistry, geography, and biology. In primary grades, natural sciences are considered the subjects that form initial concepts and ideas about these fields, and many practical tasks can be found in the textbooks for these subjects. Achieving results in completing these tasks can be facilitated through the 5 "E" model, which simplifies the process of helping students form an understanding of the topic. First of all, let us focus on the content, characteristics, advantages, and components of the 5 "E" model.

The 5E model is a pedagogical approach aimed at developing and deepening students' knowledge during the learning process. This model is constructivist (Constructivist perception is the process in which a person does not passively receive the environment, but actively shapes it based on their own knowledge and experience).

The concept of constructivist perception:

"Constructivist" means to create, build, or form.

"Perception" is the process by which a person's senses and mind receive and understand existence.

Thus, constructivist perception is the process by which a person actively understands new knowledge by connecting it with their experience and existing knowledge, and interprets it in a way that suits them.

Examples:

1. In the learning process: When a student understands a new topic not just by memorizing, but by connecting it with their previous knowledge, this is constructivist perception.
2. In daily life: When learning new technologies, a person understands the new information by applying their previously acquired knowledge.
3. In art and literature: A person who reads a work interprets its meanings uniquely based on their worldview and experience.

Importance of constructivist perception:

- Develops critical thinking.
- Helps strengthen knowledge.

- Forms innovative approaches and creative thinking.

It is based on educational theory and helps engage students actively in the learning process.

The 5E model is a widely used pedagogical approach in education, particularly effective in the field of science education (STEM). The model consists of five phases: Engage, Explore, Explain, Elaborate, and Evaluate. It is designed to promote active student participation and help learners develop a deeper understanding of concepts.

Subject Areas Where the 5E Model Can Be Applied:

1. Natural Sciences:

Physics
Chemistry
Biology
Geography

2. Mathematics:

For problem-solving and step-by-step concept development.

3. Technology and Engineering:

For delivering knowledge through hands-on activities and project-based learning.

4. General Education Subjects:

In some cases, it can also be used in social studies (e.g., history, economics) to encourage active learning.

In short: The 5E model is primarily used in the fields of natural sciences and mathematics, as it allows students to gain knowledge through scientific inquiry and experimentation. However, it can also be adapted to other subjects to make the learning process more interactive and effective.

Stages of the 5E model: The 5E model consists of five stages, each serving to deepen students' understanding:

Engage

- To capture students' interest and attention in the topic.
- To activate prior knowledge related to the topic.
- To stimulate students' curiosity through questions, problems, or experiments.

Explore

- Students independently or collaboratively investigate the topic.
- They gain knowledge through experiments, observations, and hands-on activities.
- The teacher guides the process but does not provide direct explanations.

Explain

- Students attempt to explain the knowledge they have learned.
- The teacher clarifies the topic and explains the key concepts.
- Explanations are given to reinforce logical connections and understanding.

Elaborate

- Students deepen their knowledge by completing additional tasks and using real-life examples.
- They apply their prior knowledge in new situations.
- This stage develops problem-solving and independent thinking skills.

Evaluate

- Assessing students' understanding and skills.
- Determining the level of mastery through tests, written assignments, or projects.
- Students reflect on their knowledge and identify ways to improve in the future.

Advantages of the 5E model:

- Encourages active learning — students independently explore and acquire knowledge through their own experience.
- Helps deepen understanding of the topic — students learn not just to memorize, but to apply concepts practically.
- Develops problem-solving skills — critical thinking is formed through real-life relevant problems.
- Enhances diligence and teamwork — group work and idea exchange become more active.

It is most appropriate to apply this model mainly to subjects that involve a practical approach. The explanatory work conducted with students on the topic becomes much faster. This not only saves time but also significantly increases the possibility of ensuring equal participation of everyone during the lesson. In primary grades, applying this model especially in technology and natural sciences increases students' interest in new inventions from a young age. In an era of advanced technology, engaging students in such activities is considered a major achievement.

REFERENCES

Sh.M.Mirziyoyev- "O'zbekiston-2030" 2023-yil 11-sentyabrdagi PF-158-son farmoni.

Saidova M.J, Mutaxassislikka kirish (matematika o'qitish metodikasi) darslik. "Durdona" nashriyoti Buxoro 2023 y

Saidova M.J., "Xalqaro baholash dasturi" darslik. 2024-yil

Shoyeva, Y. S. (2023). USE OF EDUCATIONAL TECHNOLOGIES IN PRIMARY CLASS MATHEMATICS LESSONS. *Confrencea*, 12(12), 229-231.

Шоева, Ю. (2022). Общие принципы работы над задачами математики в младших классах. *Science and Education*, 3(9), 428-433.

. Shoyeva, Y., & Ravshanova, O. (2024). THE ROLE OF CHILDREN'S LITERATURE IN PRIMARY GRADES. *Modern Science and Research*, 3(12), 158-161.

Aminovna, S. Y. (2024). Boshlang'ich sinf matematika kursi masalalarining ahamiyati. *NOFORMAL TA'LIMDAGI EVROPA JURNALI*, 4, 329-335.

8. Zhurayeva Dilnoz Rahmidinovna, The Role of Using Negation in Improving Information Competence in Students in Elementary School Technology Classes, *European Journal of Innovation in Nonformal Education (EJINE)* Volume 4 | Issue 4 | Apr - 2024 ISSN: 2795-8612

D.R.Jo'rayeva, Texnologiya darslarida qog'ozdan amali ishlar bajarish orqali o'quvchilarning ijodkorligini oshirish metodikasi, "Zamonaviy ta'lim-uchinchi renessans poydevorini qurish omili sifatida" nomli ilmiy metodik tavsiyalar va maqolalar to'plami 2024-yil 15-aprel

Jurayeva Dilnoz Rahmidinovna, Scientific theoretical significance of innovation and integrated educational technologies in primary class technology lessons, 2024-07-18