Aigul Uteshkalieva
Kh. Dosmukhamedov University
Ave. Studencheskii 1, Atyrau, Kazakhstan
Email: aigul_bekbol@mail.ru
https://orcid.org/0000-0002-7571-6279

Aigerim Izmukhanova
Kh. Dosmukhamedov University
Ave. Studencheskii 1, Atyrau, Kazakhstan
Email: detsad_15atyrau@mail.ru

Aidana Bekturova
Abai Kazakh National Pedagogical University
Ave. Dostyk, 13, Almaty, Kazakhstan
Email: bekturova1009@mail.ru

Potential of interactive technologies for the development of creativity of younger school children

Abstract: The targets of primary general education require the formation and development of creativity of younger schoolchildren. One of the ways to develop creativity is interactive technologies, which are a special form of organizing the activities of students, which has a specific goal – to create comfortable conditions for learning, in which every child feels his success, intellectual ability, and the possibility of creative manifestation. The development of creativity of younger schoolchildren through interactive technologies is carried out through interactive lectures, work in pairs, work in micro groups, training sessions, etc., as well as using the following methods: heuristic conversation, case method, training, discussions, and projects.

Keywords: heuristic conversation, case method, training, discussions, projects, technology.

Introduction

Primary general education is the first stage of general education, the purpose of which is the development of elementary general education knowledge by students, ensuring the development of cognitive abilities and social communication, as well as the formation of basic skills of educational activities of primary school children. Modification of the model of primary general education at the moment creates a condition for the need to implement educational technologies that will focus on the development of students, taking into account their characteristics and the full disclosure of their intellectual and personal potential. The development of creative abilities and creativity of primary school children is an integral line of personal development of students in primary school and requires both specially selected educational content and purposeful selection of pedagogical technologies associated with it. Let us dwell in more detail on the rationale for the selection of pedagogical technologies that allow solving the tasks of developing the creativity of younger schoolchildren in educational activities implemented in the classroom. Currently, there are many interpretations of this concept, let's imagine some of them. B.T. Likhachev understands pedagogical technology as a certain set of psychological and pedagogical attitudes that determine a specific set and layout of forms, methods, methods, teaching techniques, educational tools; pedagogical technology is the organizational and methodological tools of the pedagogical process (Bogoyavlenskaya, 1983).

Slastenin et al. (1996) understand pedagogical technology as a set and sequence of methods, and processes of transformation of source materials that allow obtaining the final result (product) with the specified parameters.

G.M. Kojaspirova, in his definition, represents pedagogical technology from the point of view of a certain system of methods, techniques, steps, the sequence of which ensures the solution of the tasks of education, training, and personal development of the student, and the activity itself is presented procedurally, i.e. as a certain system of actions; development and procedural embodiment of the components of the pedagogical process in the form of a system of sequential actions, providing a guaranteed positive result (Fetiskin et al., 2002).

Summarizing the proposed definitions, it can be concluded that pedagogical technology as a whole is understood as a built-up model of joint pedagogical activity of teachers and students in the design, organization, and conduct of the educational process with the provision of the most comfortable and productive conditions for participants of the educational process. The peculiarities of pedagogical technology also include the fact that each technological element, system, chain, and reception needs to find its appropriate place in the holistic pedagogical process. But it should be taken into account that no technology can replace live, emotional human communication (Ilyin, 2004).

One of the types of pedagogical technologies actively used in educational activities is interactive technologies that not only provide the formation of subject competencies but are also specially designed to enrich educational situations with communications between their participants in order to support the activity of students, create emotional comfort, transfer values, and cultural practices. NS. Leonova understands interactive technology such as an organization of the learning process, in the implementation of which it is impossible for a student not to take part in a collective, interacting, complementary process of learning cognition (Kulagina, 1998).

According to V.A. Mazurina, interactive technologies represent a special form of organization of cognitive activity of students, which has a specific goal – to create comfortable conditions for learning, in which each student feels his success, and intellectual viability.

Within the framework of interactive technology, the ability of teaching staff to create conditions in which priority is given to the activity of students comes first. Interactive technologies were first used in the 60s. Twentieth century. During these years, significant changes in the nature of communication took place in the media. There was no clear concept of interactive methods and tools then. The interaction was understood as the interaction of the user and the program, the database with the subjects of management of these programs.

However, interactive technologies used in the learning process became widespread only in the nineteenth century. In the conditions of the existing classroom-based learning system, interactive technologies most easily fit into the educational process without transforming the actual content of learning, which is determined by the Federal State Educational Standards of Primary General Education and is not subject to any serious adjustments. The introduction of interactive technologies into the real educational process makes it possible to achieve the set goals educational goals for the subject in other, alternative traditional methods (Leonova, 2013).

Materials and Methods

Interactive technology has a number of goals.

1. Within the framework of this technology, special attention is paid to creating comfortable learning conditions in which the student achieves a positive result, and success in a particular activity, which significantly increases his motivation for learning activities.

2. Organization of a dialog form of communication, which leads to greater mutual understanding between the participants of the educational process and to the joint most effective solution of tasks that are significant for everyone.

3. Interactive technologies teach you to think critically, considering several alternative solutions and choosing the optimal one. At the same time, respect the opinion of each participant and the absence of a single dominant opinion.

 4. Produced skills of participation in discussions, polemics, and the ability to convey your opinion to others in a reasoned manner.

The method of express projects. Contributes to the achievement of the educational goal through a detailed study of the problem, which should end with a very real practical result, framed in one way or another.

The essence of interactive learning is that the educational process is carried out with constant, active interaction of all its participants. Interactive interaction excludes both the predominance of one idea or the dominance of one participant in the educational process over another and one thought over others. Interactive technologies are based on the direct interaction of students with the educational environment. The learning environment acts as a reality in which the student finds himself as an area of the learning experience, and it is not just about connecting his empirical observations, and life impressions of the student as an auxiliary material or illustrative supplement. His life experience occupies a central place that can activate learning cognition. In the traditional teaching system, the teacher plays the role of a "filter" that passes through educational information, in the interactive one he is assigned the role of an assistant in work, one of the factors that activate the mutually directed flows of information (Uteshkaliyeva & Kinzhibayeva, 2021).

The main tasks of interactive technology (Figure 1) include (Bryksina, 2018):
- development of communication skills and abilities;
- establishing emotional contact among participants of educational activities;
- saturation of the educational process with the necessary information;
- development of analysis and synthesis skills;
- formation of the skills of working in the project team, development of communication skills

Development of communication skills and abilities

Formation of the skills of working in the project team, development of communication skills.

Establishing emotional contact among participants of educational activities

Interactive technology

Development of analysis and synthesis skills

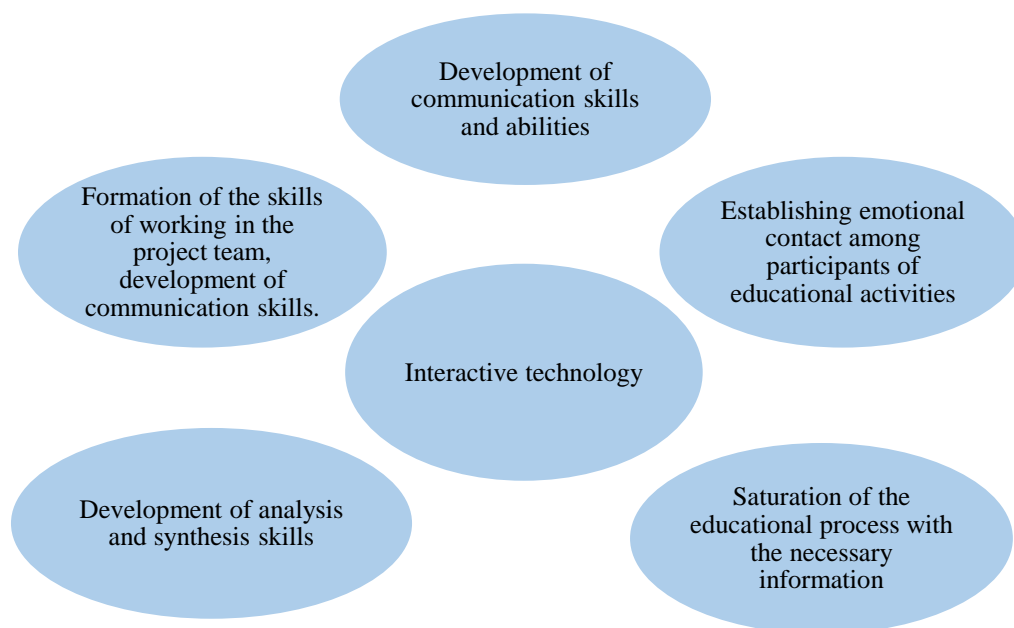Saturation of the educational process with the necessary information

Figure 1. Interactive technologies

Among the main methods of interactive technologies used in primary general education, the following are distinguished

1. The method of heuristic conversation, otherwise it is called the universal method. When using this method, the teacher identifies a number of problematic issues, and students come to new solutions and discoveries by logical reasoning based on their past experiences.

2. Case method. Within the framework of this method, the teacher, together with the students, analyzes a specific situation, case, or exercise. For the most productive analysis of the situation, it is advisable to divide students into small groups, in which they will work, offer solutions, choose the optimal one and describe it.

3. Training sessions. This method makes it possible to improve the socio-psychological climate in the school team. Improve communication skills and the ability to conduct a dialogue.

4. The method of discussion. Within the framework of this method, there is a free exchange of information, knowledge, judgments, ideas or opinions about a given problem question, under the guidance of a teacher.

In this case, students learn to express their conclusions, to argue their point of view.

5. The method of projects. In this case, students independently conduct project activities regarding any issue. They learn to work with information sources: to collect, analyze, and select the most relevant and interesting information. And also, to structure it and present it to other participants of the educational process.

Many authors consider the main forms of work with a group of students within the framework of interactive technologies: interactive lecture, work in pairs, work in microgroups, training sessions, etc.

Effective exercises for the development of creativity

The effectiveness of the development of creativity in younger schoolchildren in the classroom is achieved with the help of special techniques and methods used, first of all, at the stage of interactive exercises.

The "Saw" or "Zigzag" technique. Students are divided into subgroups to work on the task, which is divided into fragments. Each subgroup finds and studies the material in its own part. Further, members of subgroups studying the same question meet and exchange this information as experts on this issue. This is called an "expert meeting". After that, they return to their small groups and teach everything new that they have learned from other members of small groups. Those, in turn, report on their part of the task (like the teeth of one saw). When implementing this technique, each member of the subgroup is responsible not only for his individual result but also helps his teammates learn, thereby achieving a common goal together while having equal chances.

The "Brainstorming" technique. It is a method of frontal training. Each student is invited to express his opinion and an answer option on the proposed problem.

The "Learning together" technique. Students are divided into subgroups with different levels of assimilation of educational material. Each subgroup receives one task, which is a subtask of some control that the entire class is working on. As a result of the joint work of the subgroups, the solution of a common task is achieved. To complete the task, each member of the subgroup must actively participate in the overall work in accordance with their capabilities. According to the developers of this technique, much attention should be paid to the issue of completing small groups (taking into account the individual and psychological characteristics of each member) and developing tasks for each specific small group.

Reception "Verbal associations". It is a method of frontal training. Each student is asked to choose and name an association for a particular word.

The "Business Game" or "Didactic game" method. They are a method of simulating a situation with the adoption of roles and solving a problem. This method can also include dramatization (staging, acting out the roles of the content of educational material in the classroom. Roles can be assigned not only to living characters but also to any inanimate objects and phenomena from any field of knowledge); theatricalization (theatrical performances of different genres based on educational material during extracurricular time with a large number of participants, long-lasting, with scenery and other attributes).

The method of express projects. Contributes to the achievement of the educational goal through a detailed study of the problem, which should end with a very real practical result, framed in one way or another.

Results and Discussion

As practice shows, the use and implementation of interactive educational technologies in primary school improves the quality of the educational process, the quality of the presentation of lesson material, and the effectiveness of the assimilation of this material by students, increases the motivational readiness

of students to study this or that material and promotes the development of constructive cooperation between the teacher and students (Mitina, 2003).

One of the conditions for the successful development of creativity of primary school students is the inclusion in the learning process of interactive technologies that allow students to interact with each other. The formation of a student's personality of creative type involves the development of a fundamentally new culture of thinking by younger schoolchildren, the essence of which is the development of intelligence with the help of interactive learning technologies. In such technologies, the emphasis is not so much on the organization and processing of knowledge, as on their generation. It should be noted that the design of the learning process in this context should be built within the framework of personality-oriented, competence-based, system-activity approaches.

The use of interactive technologies for the development of creativity of primary school children is carried out through the implementation of the following areas:

* correctional and developmental impact, which is aimed at the formation of creative motives and the development of the qualities of the creative personality of the child;
* special training lessons (tasks, exercises) on the development of individual skills and abilities and on the consolidation of acquired skills and personal shifts in creative development (Uteshkalieva & Kumarova, 2021).

These areas of psychological and pedagogical development of creativity of primary school children are successfully used within the framework of interactive technologies and special interactive lessons (classes), which are built according to the rules of interactive learning, but take into account the factor of their parallelism with the educational process, solve the tasks of developing the personal foundations of creative thinking, the tasks of forming specific skills and abilities that form the basis of the updated creative process, and make it possible to consolidate the resulting effects. E.V. Mitina for the development of creativity of primary school children suggests developing its components, and identifies the following basic conditions for the formation of creativity in the educational process:

* Taking into account the principles of developmental learning (individualization of education, research training, problematization);
* Building a pedagogical process based on the principles of a humanistic approach to children (lack of self-esteem, acceptance, safety, and support);
* Conducting purposeful creative classes aimed at developing the creativity of younger schoolchildren (Former, 2012).

Among the main characteristics of interactive learning technologies in the aspect of developing the creative abilities of younger schoolchildren, the following were highlighted: contextuality; dialogicity; cooperation with the teacher; individual learning trajectory; creation of free creative space; independent active cognitive activity of students; reflection; variability and flexibility of the learning content.

Most of the exercises and tasks for the development of creativity of younger schoolchildren should be aimed at integrating mental spheres and processes involved in the creative search, and tasks should also involve both the cognitive sphere and the personality of students in the development process. Classes and lessons are based on a constant balance of influences on the personality of younger students and exercises-training of special skills and abilities. Only with the help of this it is possible to implement the principles of consistency and integrity of impact and achieve significant results in the development of creativity and creative potential of children. Interactive technologies for the development of creativity in primary school should:

* to facilitate the transition from ordinary states of consciousness to unusual ones (which allows you to place "emotional anchors" and go out to internal self-stimulation techniques);
* to excite the interaction of intellectual, volitional and emotional educational, and cognitive functions;
* provide a realistic encounter with the problem and immersion in it;
* to ensure the collision of opposite concepts, images, and ideas and demonstrate the insufficiency of stereotypical methods of solving problems (Federal Law, 2012).

The development of creativity of younger schoolchildren needs a supportive environment that provides a set of incentives. Therefore, the development of creativity is directly related to the development

of the information and educational environment, forms of communication, and other ways and means of interaction between the subjects of the educational process.

Conclusion

Thus, the targets of primary general education require the formation and development of creativity of younger schoolchildren. One of the ways to develop creativity is interactive technologies, which are a special form of organizing the activities of students, which has a specific goal – to create comfortable conditions for learning, in which every child feels his success, intellectual ability, and the possibility of creative manifestation. The development of creativity of younger schoolchildren through interactive technologies is carried out through interactive lectures, work in pairs, work in micro groups, training sessions, etc., as well as using the following methods: heuristic conversation, case method, training, discussions, and projects.

References

Bogoyavlenskaya, D.B. (1983) Intellectual activity as a problem of creativity. Rostov- n/A.
Bryksina, O.F. (2018). Methodological recommendations for the formation of creative thinking of students [Electronic resource] / O. F. Bryksina. – URL: http://gymn1sam.ru/files/coi/creative.pdf (date of application:23.04.2018)
Diagnostics of personal creativity (E.E.Tunik) / Fetiskin N.P., Kozlov V.V., Manuilov G.M. Socio-psychological diagnostics of personality development and small groups. – M., 2002. pp.59-64.
Federal Law No. 273-FZ of 29.12.2012 "On Education in the Russian Federation Federation".
Former, M.V. (2012). Problems of continuity in the context of the continuity of the education system. Pedagogical education in Russia. No.3. p. 28-32
Ilyin, E.P. (2004) Psychology of creativity, creativity, giftedness. – St. Petersburg: Peter Publishing House.
Kulagina, I.Yu. (1998). Age psychology (child development from birth to 17 years): textbook. M.: "URAO".
Leonova, N.S. (2013). Interactive learning technologies as a means of realizing students' creative abilities // Pedagogical workshop (Basis). No. 6. p.9.
Mitina, JI.M. (2003). Intellectual flexibility of the teacher: psychological content, diagnostics, correction Text: textbook. manual / L.M. Mitina, N.S.Efimova. M.: Moscow Psychological and Social Institute: Flint, 2003. - 144 p.
Slastenin, V.A., Isaev, I.F., Mishchenko, V, Shiyalov, V. (1996). Pedagogy: Textbook / - M.: Shkola-Press, 185 p.
Uteshkalieva A.; Kumarova Z. (2021). Organizational and managerial conditions for creating a health-saving environment of an educational organization. Challenges of Science. Issue IV, pp. 99-102. https://doi.org/10.31643/2021.015
Uteshkaliyeva A.; Kinzhibayeva F. (2021). The main approaches to the organization of research activities in primary education in the Republic of Kazakhstan. Challenges of Science. Issue IV, 2021, pp. 95-98. https://doi.org/10.31643/2021.14