2. The concept of continuous education of children and young people in the Republic of Belarus [Electronic resource]. – Access mode: https://ndtp.by/. – Access date: 01/20/2023.

3. Glazachev, A., Perfilova, O. Ecological competence. Formation, problems, prospects: textbook / A. Glazachev, O. Perfilova. – M. : RIO MGGU named after M. A. Sholokhova, 2008. – 124 p.

4. Koshman, A. Methodological guidelines for the formation of ecological culture of high school students / A. Koshman // Bulletin of the Mazyrsk State Pedagogical University named after I. P. Shamyakina. – 2009. – No. 10. – P. 73–75.

5. Anisimov, O. Thinking of a strategist: model plots / O. Agisimov. – Moscow : Real Print, 2016. – 485 p.

**E. E. Koshman**

## GAME FORMAT PROJECTING IN EDUCATION

*The article discusses the essence of active teaching methods and their classification. The structure of game design, its specific features and potentialities are revealed. Attention is focused on the fact that the method of game design is universal and can be applied at all levels of school education and in the process of teaching various school subjects.*

The paradigmatic and theoretical and methodological foundations in the humanitarian sphere impose certain requirements on the modernization of education in the modern school. In recent decades, the problem of developing basic approaches to improving education in society has been sharply discussed in the scientific and methodological literature. The main goal of education is the development of a creative, independent, responsible personality capable of mastering and transforming the world, creating new forms of social life and culture in general. In the studies of a number of authors (A. A. Verbitsky, S. A. Gabrusevich, A. I. Zhuk, N. N. Koshel, Yu. E. Krasnov, V. N. Sternberg), the effectiveness of forms and methods of active, interactive, game-modelling, innovative, problem-based and creative learning for students. Along with this, the authors recommend using research, design, design and other teaching methods. Information methods and techniques of the program-algorithmic type in the activity methodological system have a secondary, auxiliary, additional character and are in demand as needed. With this approach, group, individual, club forms of education, a variable composition of students, and the widespread use of forms of creative organization of educational and cognitive activity are provided.

The term «active teaching methods» in pedagogical theory and educational practice appeared on the basis of reflection on the manifestation of the activity of the student (subject) in the educational process, creating conditions for his creative development. According to the ideologists of this approach, active learning methods in education are methods of activity aimed at self-development of subjects of activity. Active teaching methods, the researchers note, unlike traditional methods, contribute to the development of increased activity (sustainable and long-term) of students, based on their motivation and emotionality; intensification of the educational process; activation of students' thinking; joint activities of the teacher and students; education of a creative character; independent development of solutions based on the constant interaction of students and teachers in the process of dialogic and polylogical forms of organizing the educational process; the manifestation of the reflexive self-organization of the teacher and students in joint educational activities; development of abilities of self-organization and self-management [1].

The most common in modern pedagogical theory is the classification of active teaching methods proposed by a number of authors (O. S. Anisimov, A. A. Verbitsky, S. A. Gabrusevich, A. I. Zhuk, N. N. Koshel), where all methods active learning are divided into non-imitation and

simulation (non-game and game). In his typology of active teaching methods, O. S. Anisimov distinguishes such groups of methods as traditional, new (imitation), and the latest (developing). The author points out that traditional methods provide a translation function, the latest methods perform a developing function, and new (simulation) teaching methods can implement both those and other functions. The traditional forms of education A. I. Zhuk and N. N. Koshel include: lectures, seminars, practical classes and trainings, which provide the accumulation of knowledge and skills, as well as increasing their level. New forms of training (simulation teaching methods) ensure the strengthening of the role of thinking and the development of trainees' motivation. These forms are used within the framework of both translational (classical) pedagogy and non-classical pedagogy. They are divided into non-game (case analysis), simulation exercises, action according to instructions, analysis of documentation) and game (business game, role-playing, game design, internship with the performance of roles). The latest forms of education (innovative games, organizational-activity games (OAG), organizational-thinking games (OTG)) provide the formation of an intellectual culture and a culture of self-development [2].

As the analysis of the typology of active learning methods has shown, game design refers to new forms of learning (simulation, game teaching methods), characterized by an increase in the importance of thinking and the development of students' motivation in the game process. The specific features of simulation (game) classes are the presence of a simulation model of the process under study, simulation of individual and (or) joint activities. In the process of these classes, intensive mental communication of the subjects of the educational-game process (teaching and trainees) is carried out in the performance of roles and (or) decision-making. Game design in education is an imitation game type of activity, where the participants of the educational process perform certain roles (sociocultural, production and game) in solving educational problems and environmental problems in the process of developing various educational projects. It is based on the essential characteristics of the project activity of students, the «project method» as a promising means of implementing a new activity-reflexive model of education aimed at exploring the world around us through self-knowledge and carried out in a playful way of learning.

In the special literature on active learning, this method is little studied and underdeveloped, which does not allow to effectively realize its potential as a pedagogical tool in educational practice. The reflection of the scientific and methodological literature shows that there are no special studies devoted to the disclosure of its essential characteristics and methodological foundations for its use in practical pedagogy. Therefore, we will dwell on the disclosure of its specific features as a method of active learning.

In intellectual and socio-cultural terms, design is designated as an absolutely universal and independent type of activity that must be mastered by students and can potentially be used in school practice to solve any educational problems, in particular, the formation of an ecological culture of high school students. The word «project» comes from the Latin projectus, which literally means – «thrown forward», «protruding», «stretched», «conspicuous», from the French projef, that is, «a realistic plan for the desired future».

Project activity as a socio-cultural mechanism that develops over time, an act of changing the world, focused on implementation in material, technological and organizational conditions, with a single approach, is characterized by a variety of areas of its application and is especially in demand in the education system at its various levels. The essence of project activity lies in the fact that it is a set of certain design activities initiated by sociocultural (including educational) needs, aimed at cognition, reproduction and creative solution of practice-oriented tasks implemented in the form of projects. In modern design and research technology, the «educational project», notes E. A. Rotmirova, is understood not as a rigidly formulated task for the student, aimed at obtaining a visually representable result, derived through their independent group creative activity, but actually given and discussed topics together, goals, results, conditions for organizing independent-group activities within the framework of the project and the material and technical equipment of this activity [3].

42

Based on the study of the essential characteristics of this method based on the materials of pedagogical theoretical and methodological research and the results of its use in educational practice, the potentialities of the project method were identified, which are as follows:

– helps to educate a thinking, independent, ready for joint activity student, who understands that knowledge is not an end in itself, but a means of developing him as a person;

– helps the student himself to find information, contributes to his inclusion in the intellectual creative search. For a student, education becomes an organic, natural thing that has arisen as a way to realize their own needs;

– contributes to the creative work of students in solving specific vital situations, as students independently search for material, study and use additional sources of information;

– focuses the entire educational process on the student, his interests, life experience, individual abilities;

– affects the emotional sphere of the child, enhances the motivation for learning, develops individual responsibility of students for specific work, teaches partnership, cooperation, interaction of students with each other and with the teacher.

An analysis of the literature confirms that the project method is universal and can be applied at all levels of school education and in the process of teaching various school subjects. However, the historical experience of applying this method in the domestic and foreign schools convinces us that it is impossible to evaluate any of the methods as the only true one and replace all the others with it. Only by maintaining a balance in the arsenal of teaching methods, a modern teacher is able to competently solve the tasks. Summarizing the above, we can conclude that game design combines the features of ALM, in particular the game method, as well as the characteristic pedagogical features of the project method. In accordance with this, the distinctive features of game design include:

– goal-setting in game design is aimed at working with the future, at the development of the designed object and subjects of educational activity;

– the teacher takes different positions in joint activities with students depending on the learning situation, scenario (partner, assistant, consultant-coordinator, theorist, methodologist, regulator-organizer, manager, psychologist, independent expert, etc.);

– the student takes the position of the subject of educational activity;

– pedagogical interaction is based on subject-subject relations, which helps to increase motivation, activate thinking, emotionality, interest, activity and responsibility of students in the learning process; manifestation of creativity and independence in making decisions; formation of abilities to effectively solve educational tasks and problems; the formation of thought-communication culture of students; intensification of the educational process; reflexive self-organization of subjects of educational activity;

– the educational environment is characterized by creativity, productivity, information content, saturation with modern knowledge, collective mental activity, cooperativeness, dialogic and polylogic, interdisciplinary, integrative, multi-subject, imitation, modeling, conditionality of the educational and project situation, task-targeted form of educational activity;

– the effectiveness of game design is associated with the development of students and obtaining a product in joint learning activities.

Methodological analysis of the essential characteristics of game design shows that this method of active learning combines the features of the game method and the project method. This is a kind of implementation of project activities by students in a playful way. Therefore, it is obvious that at first, students must master the methodology and technology of game activity, and then master the project activity in the game process. Game modeling is implemented in educational practice through various gaming technologies and the design of educational and gaming complexes. Game problems in education are intensively developing and there are a large number of different types of games. In the education system, for the formation of a gaming culture among students, it is necessary to use the following types of gaming technologies: analysis of problem situations, interactive teaching methods, role-playing games, didactic games, business games, organizational and educational games, organizational and pedagogical games, organizational and mental games and organizational and activity games.

Game design in education is based on the modern pedagogical paradigm, values, theoretical patterns and methodological foundations of the designed educational process. It should be noted that it must be used in close connection with the information-task form of training. It is implemented through such various educational projects in gaming activities as subject, practice-activity, research, innovative and complex. Let us reveal the essence and characteristics of each type of projects in education.

The subject project can be used in the process of teaching various (science and humanities) disciplines in education. Tasks of the subject project:

– the formation of the need-motivational sphere of the personality of students;

– systematization of subject knowledge in various (science and humanitarian) disciplines in education;

– transformation of the acquired subject knowledge into practical methods of activity in one or another sphere of subject existence;

– development of mental activity of students.

The practical-activity project is aimed at mastering (formation and improvement) cultural norms and methods of a specific objective activity. Its tasks are:

– the formation of the need-motivational sphere of the personality of students to master the mechanism for the implementation and development of a specific objective activity;

– consolidation and systematization of students' knowledge on a multi-subject and multi-disciplinary basis in the system of cultural and historical forms of practical activity (industrial production and reproduction system);

– integration of subject knowledge in various disciplines in education;

– mastery of specific methods of practical activity;

– development of a culture of mental activity of students.

The research project is aimed at mastering the laws of research activity by students. Research project objectives are:

– the formation of the need-motivational sphere of students for the knowledge of the world, its transformation on the basis of universal values and knowledge;

– systematization and updating of subject knowledge and their updating;

– mastery of the methodology and methodology for conducting scientific research in various subject areas (on the basis of academic disciplines);

– obtaining new disciplinary knowledge in various academic subjects and areas of human activity;

– application of new disciplinary knowledge for solving practical problems in various activities;

– development of methodological culture of students.

The essence of an innovation project is to develop innovative and creative proposals, initiatives, innovations aimed at improving the activities and life of the region, country, world. Tasks of the innovation project are:

– to explore topical problems in the activities and life of the region, country, world;

– put forward an idea and a mechanism for designing innovation and innovation aimed at solving a fixed problem;

– mastering the methodology of innovative activity;

– to form knowledge, values, methods and norms of activity, the ability to design and develop an innovative project;

– development of a culture of innovative mental activity of students.

The complex project is aimed at solving practical problems (all the rest are about solving practical problems) based on an integrative approach. These problems are solved in a multi-subject, multi-disciplinary and integration way in the system genesis of the structural components of innovation activity: research activity (discovery of new subject, disciplinary knowledge), project activity (associated with the use of knowledge and the construction of a practical innovation – an object based on knowledge), practice-oriented activity (used this practical innovation and the assessment of the practical effectiveness of this object is carried out). Tasks of the complex project:

– mastering the methodology of an integrated approach to solving practical problems in various activities;

– systematization and integration of different disciplinary knowledge and values;

– mastering the innovative activity of students in various subject areas of the socio-economic development of the country;

– mastering the ways of solving urgent practical problems in different types of activities on an integrated basis.

– development of a culture of reflective mental activity of students.

Thus, the development and implementation of game design technology, which can be represented by separate projects or a complex, a system of educational projects for one or a cycle (for example, humanities) of academic disciplines, will allow students to carry out the activity and personal development of students in education.

## List of literature used

1. Koshman, E. Game format projecting as a means of improving the quality of pedagogical education / E. Koshman // Quality education: problems and prospects: Sat. scientific articles, resp. ed. : D.K. Bartosh. – M : MGPU, 2016. – P. 159–166.

2. Koshman, E. Possibilities of game format projecting in university education / E. Koshman // International Scientific and Practical. Internet conference for young researchers «Alpha-2017» : Sat. scientific articles, editorial : I. Kavinkina (responsible editor); – Grodno: GrGU, 2017. – P. 144–148.

3. Rotmirova, A. Fundamentals of project knowledge in the teacher's portfolio / A. Rotmirova. – Minsk: Zorny Verasok Publishing House, 2018 – 146 p.

E. E. Koshman, A. M. Koshman

## CURRENT VECTORS OF MODERNIZING SCHOOL EDUCATION

*The article reveals the main theoretical and methodological vectors of the modernization of modern school education. The social, psychological and pedagogical aspects of ensuring the interests of participants in the educational process at school are considered. The characteristic of the main types of responsibility of the teacher. In conceptual terms, disciplinary procedures are disclosed in the school.*

Dynamic changes in the socio-economic situation in the developed countries of the world, the aggravation of national and universal problems required a rethinking of the role of education. The inseparable connection of education with the processes taking place in the economy, society, in all spheres of practical and spiritual human activity has become apparent, the importance of the educational sphere as a mechanism for the development of society has increased. Education is a relatively independent sphere, which under the current conditions, with appropriate policies, can set an impetus, accelerate the development of the region, and move society forward. Education can and should become an integral mechanism for the consolidation of the nation and the development of national identity – a phenomenon through which each nation comes to realize its historical destiny, its place and role in the development of world civilization and culture. The identification and definition of one's own goal and one's own interest is becoming today an effective factor in the self-organization and revival of the nation, the principle of the social policy of the state of Belarus.

The school should become the most important factor in the humanization of socio-economic relations, the formation of new life attitudes of the individual. The result of the humanistic orientation of the pedagogical process is modern educated, moral, enterprising people who independently make