



## GAMIFICATION APPROACH IN EDUCATION

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**Abstract:** This article is devoted to revealing the essence of the gamification approach in education. Scientific research shows that gamification methods are effective in increasing students' attention, forming long-term memory and independent thinking, and are more engaging than traditional teaching methods. Game technologies are one of the unique forms of education, which allows not only to make students' creative and research work, but also to make everyday lessons interesting.

**Keywords:** gamification, innovative technologies, education, teamwork, games, active approach

Gamification is a strategy to increase engagement, interest, and motivation in non-game activities by introducing game elements into non-game areas. In the modern education system, gamification plays an important role in increasing students' motivation to learn through elements such as achievements, points, leaderboards, competitions, and rewards. Scientific research shows that gamification methods are effective in increasing students' attention span, long-term memory, and independent thinking, making them more engaging than traditional teaching methods. Gamification also allows for cross-curricular integration, innovative approaches, and the successful application of digital technologies to the educational process. This approach not only improves academic performance, but also develops students' social engagement, teamwork, and problem-solving skills. Therefore, gamification is gaining more and more attention as an effective mechanism not only in education, but also in the fields of management, medicine, marketing, and personnel training.

The level of education and upbringing in the educational process is largely determined by the pedagogical process, as well as by the age of the student and the degree to which it is oriented towards the psychology of individual development. This includes psychological and pedagogical study of schoolchildren throughout the entire period of study in order to identify the individual development opportunities and creative abilities of each student, to enhance his positive activity, to reveal the uniqueness of his personality and to provide timely assistance in case of lagging behind. This is especially important in the lower grades of the school, when the purposeful learning of the individual is just beginning, when learning becomes a leading activity, when the child's mental characteristics and qualities, primarily cognitive processes and his attitude towards himself, are formed. The topic studied in the process of game activity is less and more slowly forgotten by students than the topic in which the game was not used. This is explained, first of all, by the fact that the game harmoniously combines entertainment and activity, which makes the educational process open and interesting for schoolchildren, as a result of which participation in the educational process and the assimilation of knowledge become more qualitative. Determining the place and role of game technology in the educational process, the combination of game and teaching elements



largely depends on the teacher's understanding of the functions and classification of pedagogical games.

Although the concept of gamification was first officially used in 2002 by British programmer Nick Pelling, its roots go back much further. Various game elements aimed at motivating people, encouraging activity, and creating a competitive environment were also found in ancient cultures. For example, in ancient China and Greece, game methods were used in education and military training. The formation of gamification in the modern sense is closely related to the development of information technologies and digital tools. Since the 2010s, the use of gamification in business, education, and other areas has become widespread. In particular, in 2011, the Gartner analysis company assessed gamification as a leading global trend in the near future. During this period, increasing user participation through the use of game mechanics on platforms such as Duolingo, Khan Academy, and Nike was noted as a successful experience. Behaviorism, cognitive psychology, and motivation theories have had a great influence on the development of gamification. B.F. Skinner's idea of reward-based motivation and Desi and Ryan's Self-Determination Theory served as the main theoretical basis for gamification designs. It has been noted that with the implementation of gamification in education, students' learning performance, active participation in classes, and interest in independent learning have increased dramatically. At the same time, gamification is also subject to critical approaches. Some experts express their opinion about its dependence on external motivation, reduction of deep thinking, and the risk of rapid obsolescence.

School age is characterized by the brightness and spontaneity of perception, ease of access to images. Children are easily involved in any activity, especially in the game. They continue to play with objects organized in the form of group games on their own, and non-imitative games also appear. The current state of education of schoolchildren requires the use of new and traditional methods of improving the quality of their theoretical preparation, readiness for independent creative work, and most importantly, the need to generalize the means and methods, including teaching aids and methods.

Pedagogical technologies that meet the tasks of modern education include:

- developmental training;
- problem-based learning;
- communicative training;
- design technology;
- game technologies;
- information and communication technologies;
- group technologies;
- competency-based approach;
- activity approach;

Each of the technologies is valuable at the current stage of education. Game technologies are one of the unique forms of education, which allows not only to make students' creative and research work, but also to make everyday lessons interesting. Currently, the relevance of the game is increasing due to the saturation of modern schoolchildren with information. The game is a natural and humane form of education for a child. When teaching through the game, we teach children educational material not in a way that is convenient for adults, but in a way that is convenient and natural for children to master. The use of game forms of organizing educational activities helps to increase students' cognitive activity, form interest in



knowledge, develop learning motivation and initiative, and strive for creative activity. In addition, the use of game forms of learning prevents fatigue. When using didactic games, educational tasks are also solved, for example, instilling patience and tolerance, developing accuracy and the ability to complete tasks. In group work, the ability to work together is developed, listening to the opinions of other students, tolerating criticism directed at oneself and being sensitive to the mistakes of their comrades; oratory skills, the desire and ability to achieve goals are acquired. This is a universal educational activity put forward by the standards. The game allows you to interest students in the material being studied and present knowledge in an easier form.

Conversational games (dialogues). The game-conversation is based on communication between the teacher and children, children with the teacher, and children with each other. This communication has a specific feature of educational and gaming activities based on the game for children. In a game-conversation, the teacher often starts not with himself, but with a character close to the children, thereby not only maintaining playful communication, but also increasing its joy and desire to repeat the game.

In terms of educational and educational significance - the subject of the game, it arouses interest in certain aspects of the object of study reflected in the game. The cognitive content of the game does not lie "on the surface": it must be found, discovered, and as a result, something must be learned.

The importance of the conversational game is that it imposes requirements for the activation of emotional and mental processes: the unity of words, actions, thoughts and children's imagination. The conversational game develops the ability to listen and hear the teacher's questions, children's questions and answers, pay attention to the content of the conversation, supplement what has been said and express an opinion. All this characterizes an active search for a solution to the problem posed by the game. The ability to participate in a conversation, which characterizes the level of good behavior, is of great importance.

The main means of the conversational game are based on words, verbal images, an introductory story about something. The result of the game enhances the pleasure received by children and the child's sense of satisfaction with his knowledge.

Didactic games are a complex phenomenon, but it clearly reveals the structure. the main elements that characterize the game as a form of learning and gaming activity at the same time. One of the main elements of the game is a didactic task, which is determined by the purpose of teaching and educational impact. Cognitive content is taken from the school curriculum.

In a didactic game, the child's emotional development occurs inextricably linked with the development of his logical thinking and the ability to express his thoughts in words. To solve a game problem, it is necessary to compare the properties of objects, identify similarities and differences, generalize and draw conclusions. Thus, the ability to draw conclusions and apply their knowledge in various situations develops. This is possible only if children have accurate knowledge of the objects and phenomena that make up the content of the game. The game is not only a means of optimizing and stimulating the learning process, but also an important aspect of psychological comfort and relieving mental stress of students.

Didactic games can be used in lessons, to consolidate, generalize and control knowledge, and in extracurricular activities. In addition, the possibility of using didactic games when doing homework cannot be denied.



In conclusion, gamification is an interdisciplinary approach that has gradually developed and enriched theoretically and practically, and is increasingly used as an innovative tool for increasing human activity in the 21st century digital society. Its history and development are an example of successful collaboration between the fields of education, psychology, marketing and technology.

### References:

1. Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). "From Game Design Elements to Gamefulness: Defining Gamification". Proceedings of the 15th International Academic MindTrek Conference. DOI: 10.1145/2181037.2181040
2. Huotari, K., & Hamari, J. (2012). "Defining Gamification - A Service Marketing Perspective". Proceedings of the 16th International Academic MindTrek Conference. DOI: 10.1145/2393132.2393137
3. Zichermann, G., & Cunningham, C. (2011). "Gamification by Design: Implementing Game Mechanics in Web and Mobile Apps". ISBN: 978-1-4493-4354-9