

## DEVELOPMENT OF STUDENTS' CREATIVE THINKING COMPETENCIES THROUGH DIGITAL PLATFORMS AND ONLINE INTERACTIVE GAME SERVICES

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### KEYWORDS

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Miro, Kahoot, Quizizz,  
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QuizAlize, Gimkit, Plickers.

### ABSTRACT

This article discusses digital platforms widely used in modern education, the capabilities of digital platforms, and the functions of online interactive gaming services in education.

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In the current era of rapid development of information technologies, the education system is also integrating into the digital environment. This process is fundamentally changing not only teaching methods but also teaching and learning strategies. In particular, the role of digital platforms and interactive game services in the formation of students as individuals with modern competencies, creative thinking, and an innovative approach is invaluable. Creative thinking is recognized as one of the main competencies in today's education. This competence teaches students to approach the problem in a new way, to think unconventionally, to create innovations, and to put forward competitive ideas.

Digital educational tools create an open, independent, interactive, and creative learning environment for the student in this process.

Digital platforms, widely used in modern education, are important tools that simplify the educational process, support interactive and creative activity. Through such platforms, opportunities are created for organizing the educational process remotely and freely, sharing creative tasks, team projects, analytical developments, and exchanging ideas.

The following digital platforms are effective in developing students' creative thinking:

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- Google Classroom and Microsoft Teams - allow students to give assignments based on problem situations and conduct independent research in response to them. Creative approaches are formed through collective discussions and presentations.
- Miro and Padlet - these online whiteboards are suitable for students to create ideological maps and conduct brainstorming exercises. These platforms organize creative thoughts and allow for visual representation.
- Through test and quiz platforms such as Kahoot, Quizizz, Mentimeter, Educaplay, QuizAlize, Gimkit, Plickers, Playfactile, knowledge learned in an interactive environment is creatively reinforced. This process increases students' interest and ensures their activity.

Through such capabilities of digital platforms, students develop the following competencies:

- development of an independent idea;
- critical analysis of information;
- creative problem-solving;
- visualization of the idea using digital tools;
- offer new approaches to teamwork.

Online interactive gaming services and their role

The approach of gamification (introduction of game elements into teaching) is becoming increasingly popular in education. In particular, teaching through interactive games not only increases the student's interest in the learning process, but also stimulates creative thinking.

Through online interactive gaming services, the following aspects will be developed:

- motivation and interest: tasks in the form of games encourage students to actively participate. At each stage, problem situations, questions, or quests are posed, forcing them to think unusually.
- strategic thinking and decision-making: during the game, the student feels responsible for their choice, makes every decision thoughtfully, which increases their problem-solving skills.
- team creative thinking: in multi-user games, students try to solve the problem together, which leads to the development of new approaches, inspired by each other's ideas.

As an example, we can cite the following online interactive gaming services:

- minecraft Education Edition - through creative projects, games based on architecture and engineering, the student demonstrates their idea in a real environment.
- Roblox Studio - develops students' programming, design, and creative approach by designing and creating their own interactive games.
- Classcraft - creates a stimulating, collective, and creative learning environment through the gamification of the learning process.

Through these services, students develop the following forms of creative thinking:

- finding a solution to a creative problem;
- Virtual design and modeling;
- Unusual strategic thinking;
- Visual imagination and design skills;
- Independent study and testing.

For the correct and effective integration of digital platforms and interactive game tools into

the educational process, the following methods are recommended:

1. Inclusion of creative tasks in classes: Problem-based tasks, project work, critical questions direct students towards creative research.
2. Application of elements of gamification: the introduction of game mechanisms such as points, badges, leadership tables encourages students and increases their creative activity.
3. Digital storytelling (creating a digital story): Allowing students to express their ideas in the form of video, audio, infographics, or animation develops creative thinking.
4. Engaging students in online competitions and projects: Through digital project exhibitions, hackathons, and virtual competitions, students will test their ideas in practice.
5. Reflection and Assessment: At the end of each creative process, students observe their development through reflection, analysis, and self-assessment.

In conclusion, digital platforms and online interactive game services serve as a modern and effective tool for the development of creative thinking competencies in students. Thanks to these tools, the learning process becomes more interesting, interactive, and creative. Students learn to search independently, think in a new way, and implement their ideas using digital technologies. One of the most important tasks for future education is to create conditions that allow each student to fully realize their potential by combining digital tools with the teacher's creative methodology. Only then will we be able to train specialists who are innovative, creative, and meet the requirements of the modern world.

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