



2nd INTERNATIONAL SCIENTIFIC-PRACTICAL CONFERENCE

"EUROINTEGRATION IN ART, SCIENCE AND EDUCATION: EXPERIENCE, DEVELOPMENT PERSPECTIVES"

ІІ МІЖНАРОДНА НАУКОВО-ПРАКТИЧНА КОНФЕРЕНЦІЯ

"ЄВРОІНТЕГРАЦІЯ В МИСТЕЦТВІ, НАУЦІ ТА ОСВІТІ: ДОСВІД, ПЕРСПЕКТИВИ РОЗВИТКУ" Bibliografinė informacija pateikiama Lietuvos integralios bibliotekų informacinės sistemos (LIBIS) portale ibiblioteka.lt

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Foreword

The Second International Conference *EUROINTEGRATION IN THE ARTS, SCIENCE AND EDUCATION: PERSPECTIVES, PERSPECTIVES OF IMPLEMENTATION* is an event that demonstrates the support of Ukrainian scientists by Lithuanian colleagues and is dedicated to the topical issues of fine arts, culture and pedagogy.

For the second year in a row, researchers with many years of experience, as well as undergraduate and graduate students, meet in the scientific space of the conference, which is in line with the principle of equality and aims to combine traditions and alternative approaches.

The conference proceedings reflect the main goal of the event - to bring together European and Ukrainian researchers, to highlight non-standard opinions and to establish ways of interaction in the field of interdisciplinary research. Our tasks are to find answers to the questions of how intergenerational knowledge and diverse perspectives can improve the sustainable development of education and science, how to integrate theoretical achievements into life, and how to combine science and art in the context of new demands and requirements of society.

The publication of the proceedings in an online format is a deliberate move by the conference organisers, in consistence with one of the priorities of the European Green Deal - the rational use of natural resources and the development of an ecological consciousness in the global scientific community.

Compilers

Передмова

Друга Міжнародна конференція «ЄВРОІНТЕГРАЦІЯ В МИСТЕЦТВІ, НАУЦІ ТА ОСВІТІ: ДОСВІД, ПЕРСПЕКТИВИ РОЗВИТКУ» — захід, що демонструє підтримку українських вчених литовськими колегами, присвячений актуальним проблемам образотворчого мистецтва, культури і педагогіки.

Другий рік поспіль в науковому просторі конференції зустрічаються дослідники з багаторічним досвідом та студенти і аспіранти, що відповідає принципу рівності та спрямовано на поєднання традицій і альтернативних підходів.

Матеріали конференції віддзеркалюють головну мету заходу — об'єднання європейських і українських дослідників, висвітлення нестандартних думок та налагодження шляхів взаємодії у царині міждисциплінарних досліджень. Наші завдання — це пошук відповідей на запитання, як знання різних поколінь та різноманітні точки зору можуть покращити сталий розвиток освіти і науки, як інтегрувати теоретичні здобутки в життя та поєднати науку і мистецтво в контексті нових запитів та вимог суспільства.

Публікація матеріалів в онлайн-форматі — усвідомлений крок організаторів конференції, який відповідає одному з пріоритетних напрямів у реалізації європейського «зеленого курсу» — раціональному використанню природних ресурсів та формуванню еко-свідомості у світовій спільноті вчених.

Упорядники

THE ROLE OF GAMIFICATION IN THE TEACHING OF DESIGN DISCIPLINES

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Annotation. The article considers the application of gamification in the educational process, in particular in teaching design disciplines. Modern approaches to the use of game mechanics, their influence on the motivation of those seeking education and the effectiveness of the educational process are analyzed. The psychological foundations of gamification, its key elements and mechanisms are described. Examples of successful implementation of gamification in design curricula are given, the prospects for the use of virtual reality and artificial intelligence technologies are considered. The research of scientists of the 21st century on this topic is analyzed and the prospects for further development of gamified methods in design education are outlined.

Keywords: gamification, design education, educational process, motivation, game mechanics.

Introduction. Modern education is undergoing significant transformations, in particular due to the introduction of new technologies and interactive teaching methods. One of these methods is gamification - the use of game elements in non-game contexts to increase the engagement and motivation of learners. Teaching design disciplines requires a creative approach and active participation of students in the educational process, which makes gamification an effective tool for developing their skills and increasing the level of mastery of the material.

Theoretical part

According to researchers, motivation is a key factor in successful learning. According to the theory of self-determination (Ryan and Deci, 2000), there are three main psychological needs that determine the effectiveness of learning:

- 1. Autonomy the feeling of control over one's educational process.
- 2. Competence the ability to achieve results and improve skills.
- 3. Social interaction a sense of belonging to a group or community.

Gamification meets these needs by creating an interactive environment that supports student motivation and engagement. A study by K. Williams (2021) found that students enrolled in a gamified program had 35% higher engagement and productivity levels compared to those in traditional learning settings. Applying gamification in design education significantly improves students' skills in composition, color theory, UX/UI design, and interactive arts (Ortega, 2022). Key Game Mechanics in Design Education:

- 1. Achievement System Using levels, badges, and rewards to encourage students to progress through learning stages. For example, in graphic design courses, a "quest" system can be implemented where students unlock new tools upon successfully completing tasks.
- 2. Competitions Organizing contests and leaderboards increases student engagement. For instance, in a web design course, students can compete to create the best UX/UI project.

- 3. Storylines and Scenarios Incorporating narrative tasks deepens immersion in the learning process. Students can participate in "design missions," working as members of a fictional design studio.
- 4. VR and AR Applications Virtual and augmented reality offer new possibilities in design education. Students can work with 3D models or test their UI/UX solutions in a virtual environment (Griffin, 2024).

One well-known example of effective gamification in design education is the "Design Quests" course at Stanford University, where students solve real-world cases in a game-based format. Additionally, Adobe has developed the Adobe Gamified Learning platform, helping students master design tools through interactive tasks.

The "design quest" method developed by J. Robinson (2023) incorporates scenario-based tasks, interactive platforms, and digital simulations to enhance students' creative thinking.

Competitive elements in group projects, as proposed by S. Tanaka (2023), contribute to the development of teamwork skills and innovative approaches to design concept creation.

Despite its evident advantages, implementing gamification in education presents certain challenges:

- The need for substantial resources to develop interactive content.
- The complexity of adapting traditional courses to gamified formats.
- The risk of excessive emphasis on entertainment at the expense of educational content. Prospects for further research in this area include the development of adaptive gamified programs that consider individual student characteristics and integrating artificial intelligence to create personalized learning experiences.

Conclusions. Gamification is an effective method for improving the quality of design education. The use of game mechanics fosters active student engagement, enhances creativity, and improves teamwork skills. Further research can explore the development of individualized gamified strategies for different areas of design education and the integration of cutting-edge technologies into the learning process.

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