



FIVE BENEFITS OF TEACHING WITH EDUCATIONAL GAMES

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Abstract

In recent years, the integration of educational games into the learning environment has gained widespread recognition as a dynamic teaching strategy. This research article explores the major benefits of incorporating educational games into instruction, highlighting how they enhance student engagement, motivation, knowledge retention, collaborative skills, and problem-solving abilities. Drawing from contemporary studies and classroom observations, this paper aims to present a compelling case for the systematic use of educational games in modern education.

Introduction

The traditional classroom has undergone significant transformations with the advent of technology and innovative pedagogical strategies. Among these innovations, educational games have emerged as a powerful tool to support learning. Educational games, whether digital or physical, combine subject matter with interactive elements, fostering a rich learning experience that extends beyond rote memorization. This article examines five key benefits of teaching with educational games and discusses their implications for improving teaching effectiveness and student outcomes. Games can be motivating and engaging for students due to their interactive nature. Games allow teachers to provide an exciting learning environment that encourages youth to actively participate in their lessons.

Board games, card games, computer games, game-show style games, and other similar formats can be utilized to engage a wide variety of students. Games provide immediate feedback, scaffolding (manageable sections or chunks), and multiple opportunities for practice. These methods effectively assist students in remembering information and retaining concepts. Games can also be designed to align with learning objectives and help students acquire new knowledge and skills. For



instance, Tang Math provides online games to help students acquire the expected skills at each grade level.

1. Increased Student Engagement

These days playing games in the classroom is an integral part of the learning process. We know that kids learn through play, and the research is piling up that proves the value of classroom games for students as it makes learning concepts some kids might otherwise resist into something fun and irresistible. Gameplay in the classroom has become similar to parents hiding broccoli in their kids' hamburgers, and it's working.

From connecting kids to the material they've learned to providing rewards and motivation, you know there are benefits to classroom games. But what's the science? How can games help students learn, and what's the real value of games in education? The teachers on our teacher team did a deep dive into the research of game-based learning to find out what's really going to work in your classroom.

One of the most immediate benefits of using educational games is the heightened level of student engagement. Games capture students' attention through challenges, rewards, competition, and collaboration. Unlike traditional lectures, games demand active participation, making students co-creators of their learning experience. Engaged students are more likely to persist through difficult tasks, stay focused during lessons, and develop a deeper interest in the subject matter. Research by Annetta et al. (2009) found that students who participated in game-based learning activities demonstrated higher levels of concentration and enthusiasm compared to those in conventional classroom settings.

2. Enhanced Motivation

Educational games leverage intrinsic and extrinsic motivators, such as scoring points, advancing levels, and receiving instant feedback. These elements help sustain students' motivation, which is crucial for long-term academic success. Additionally, the sense of achievement derived from game milestones can boost students' confidence and foster a positive attitude towards learning. Studies have shown that game elements such as badges, leaderboards, and rewards



increase students' willingness to tackle challenging content (Domínguez et al., 2013). Games generally require players to use critical thinking (i.e., the evaluation and assessment of a situation), problem-solving, and decision-making skills to progress through levels and overcome challenges. These skills are highly valued in many career fields and can be transferred to real-world situations.

3. Improved Knowledge Retention

Active learning strategies, like those found in educational games, are proven to improve knowledge retention. When students are engaged in a game, they are often required to apply what they have learned in real-time scenarios, reinforcing content through practice and repetition. Moreover, the emotional connections formed during game-based experiences enhance memory consolidation. A study conducted by Sitzmann (2011) revealed that participants who learned through simulation games demonstrated a 9% higher retention rate compared to traditional instructional methods. Games can be adapted to different age groups and skill levels, making them flexible for teaching. Teachers utilize games in math, science, social studies, language arts, foreign languages, and more.

4. Development of Collaborative and Social Skills

Many educational games are designed to be played in teams or pairs, encouraging collaboration among students. By working together towards common goals, students develop communication, teamwork, leadership, and conflict-resolution skills. These interpersonal skills are increasingly recognized as critical competencies for success in the 21st-century workforce. Research highlights that cooperative game-based learning significantly enhances social interaction and fosters a sense of community within the classroom (Vygotsky, 1978). Cooperative learning skills are being taught to students within the scope of many courses, as a natural reflection of the importance it provides in today's world with the benefits it provides to the cognitive and affective development of individuals. The social studies course is one of these courses that cooperative learning skills are trying to be gotten by students. When considering the advantages of cooperative learning and the objectives of the social studies course, it seems that they overlap. Because it is unreasonable to expect pupils



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to become active citizens solely by listening to their instructor (Slavin, 1992). Thus, students are encouraged to cooperate through developing their interpersonal interactions and sense of responsibility through the social studies course (Sözer, 1992). Collaboration skills are one of the fundamental skills that are highlighted in the Social Studies Curriculum.

5. Promotion of Critical Thinking and Problem-Solving Abilities

Educational games often involve problem-solving challenges that require players to think critically, make decisions, and adapt strategies. This nurtures higher-order thinking skills, as students must analyze situations, evaluate options, and execute solutions — skills essential not only for academic achievement but also for real-world application. Gee (2003) argues that well-designed games create "cycles of expertise," whereby players are continually challenged to improve their skills through complex problem-solving activities. Another way to foster critical thinking and problem-solving skills is to provide authentic tasks and scenarios that relate to real-world situations and problems. Authentic tasks and scenarios engage students' interest, curiosity, and motivation, and allow them to apply their knowledge and skills in meaningful contexts. You can design authentic tasks and scenarios based on your curriculum, students' interests, or current issues. For example, instead of asking students to memorize the steps of photosynthesis, you can ask them to design a plant-based solution for a food or energy problem.

Conclusion

Educational games represent a versatile and effective pedagogical tool that offers numerous benefits, including heightened engagement, sustained motivation, better retention of information, stronger collaborative skills, and enhanced critical thinking. As education continues to evolve to meet the needs of 21st-century learners, embracing game-based learning strategies can significantly enrich the teaching and learning experience. Future research should focus on best practices for integrating games into diverse curricular areas and assessing their long-term impact on student achievement.



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