

**A COMPARATIVE STUDY OF DIGITAL TOOLS: WAYGROUND AND
KAHOOT**

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Abstract: *This investigation critically examines the design, functionality, and pedagogical efficacy of Wayground and Kahoot. Two prominent digital learning platforms, to investigate their comparative advantages and disadvantages in fostering student engagement and learning outcomes. Specifically, this study aims to assess how the distinct interactive features and gamified elements inherent in each platform contribute to varied levels of student motivation and knowledge acquisition, drawing upon existing literature on game-based student response systems.*

Key words: *online platforms, student engagement, intrinsic motivation, comparative analysis, methodology, cognitive engagement, higher-order thinking skills*

Аннотация: *Данное исследование критически рассматривает дизайн, функциональность и педагогическую эффективность двух известных цифровых образовательных платформ Wayground и Kahoot. С целью выявления их сравнительных преимуществ и недостатков в повышении вовлеченности учащихся и улучшении результатов обучения. В частности, исследование направлено на оценку того, каким образом различные интерактивные функции и элементы геймификации, присущие каждой платформе, способствуют различным уровням мотивации студентов и усвоения знаний. Анализ основывается на существующей научной литературе, посвященной игровым системам ответов учащихся.*

Ключевые слова: *онлайн-платформы, вовлеченность студентов, внутренняя мотивация, сравнительный анализ, методология, когнитивная вовлеченность, навыки мышления высокого порядка*

Annotatsiya: *Ushbu tadqiqot Wayground va Kahoot kabi ikkita mashhur raqamli ta'lim platformasining dizayni, funkcionalligi hamda pedagogik samaradorligini tanqidiy tahlil qiladi. Tadqiqot ushbu platformalarning o'quvchilar faolligi va o'qitish natijalarini rivojlantirishdagi qiyosiy afzalliklari va kamchiliklarini aniqlashga qaratilgan. Xususan, mazkur ish har bir platformaga xos bo'lgan interaktiv funksiyalar va gamifikatsiya elementlari o'quvchilarning motivatsiyasi hamda bilimlarni o'zlashtirish darajasiga qanday ta'sir ko'rsatishini baholashni maqsad qiladi. Bunda o'yin asosidagi talaba javob tizimlariga oid mavjud ilmiy adabiyotlarga tayaniladi.*

Kalit so'zlar: *onlayn platformalar, talabalar faolligi, ichki motivatsiya, qiyosiy tahlil, metodologiya, kognitiv faollik, yuqori darajadagi tafakkur ko'nikmalari*

Introduction. This comparative analysis will build upon previous research demonstrating the positive impact of gamification tools like Kahoot and Wayground on student engagement and academic performance [1]. This study hypothesizes that while both platforms enhance engagement through gamification, Wayground's distinct pedagogical approach, potentially rooted in more adaptive and complex learning pathways, may offer superior long-term retention and higher-order thinking skill development compared to Kahoot's more quiz-based methodology.

This will involve a detailed examination of user interface design, pedagogical underpinnings, and the integration of varying gamified elements to determine their differential impact on learning efficacy and sustained student motivation [2]. Such an investigation necessitates a multi-faceted approach, encompassing quantitative analyses of performance metrics and qualitative assessments of user experience and perceived learning benefits [3]. Furthermore, this research will critically evaluate how the respective reward systems whether tangible or intangible. Wayground and Kahoot influence intrinsic motivation, behavioral engagement, and cognitive engagement, thereby contributing to the ongoing discourse regarding the efficacy of various reward structures in gamified learning environments [4].

Methodology and Literature Review. Gamification, broadly defined as the application of game-design elements and game principles in non-game contexts, has garnered significant attention in educational research for its potential to enhance learning experiences and outcome [5]. This section details the empirical approach employed to rigorously compare Wayground and Kahoot, outlining the research design, participant selection, data collection instruments, and analytical procedures used to test the aforementioned hypotheses.

The study utilized an experimental design to measure the impact of each application on students' computer memory expertise and gather their opinions on various features of the platform [6].

Results and Discussion. This quantitative and qualitative data provided a comprehensive understanding of the tools' effectiveness and user experience, which is critical for establishing pedagogical efficacy. The subsequent analysis focuses on identifying statistically significant differences in learning gains between the groups exposed to Wayground and Kahoot, while also examining qualitative feedback concerning usability, engagement, and perceived learning value [7]. A mixed-methods approach incorporating experimental design will allow for a robust evaluation of learning performance, self-efficacy, autonomous motivation, and gaming experience [8].

This comprehensive methodology will enable a comparison of the two platforms, moving beyond surface-level observations to identify the underlying mechanisms driving their respective impacts on learning.

This in-depth analysis will clarify which design principles and gamified mechanics are most effective in promoting deeper cognitive processing and sustained engagement across different educational settings [9].

Conclusion. Ultimately, this research seeks to provide actionable insights for educators and platform developers alike, guiding the strategic integration of digital tools to optimize pedagogical practices and foster more effective learning environments.

The findings will also address a critical gap in the literature by providing experimental evidence on the implementation of gamification within higher education, particularly concerning its relationship with student achievement and motivation.

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