

СУЧАСНА ПЕДАГОГІЧНА ОСВІТА: ПРОБЛЕМИ ТА ПЕРСПЕКТИВИ

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UNLOCKING POTENTIAL: LEVERAGING ACHIEVEMENT SYSTEMS TO INSPIRE SECONDARY STUDENTS' LEARNING IN THE DIGITAL ERA

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This publication delves into the transformative potential of achievement-based gamification within Ukrainian secondary education, focusing on English and Geography classes. As the digital revolution reshapes pedagogical practices, Ukrainian schools are integrating gamified strategies to enhance both motivation and engagement among students. The study introduces a system of "achievements" inspired by popular gaming platforms such as Steam, PlayStation Network, and Xbox Live, reimagining academic tasks as motivational challenges that encourage incremental progress, mastery, and personal growth.

Grounded in educational psychology and gamification theory, the research highlights how achievements tailored to core competencies – such as reading, writing, speaking, listening, and digital literacy for English classes, and map skills, cultural awareness, and environmental studies for Geography – can foster intrinsic motivation and a sense of accomplishment among learners. By presenting practical examples of achievements and step-by-step implementation strategies, the study provides educators with actionable insights into leveraging gamification to promote self-motivation, collaboration, and 21st-century skills in Ukrainian classrooms.

Key findings underscore the positive impact of gamified achievements on self-regulation, goal setting, and the cultivation of digital literacy. The publication concludes with detailed recommendations for deploying a tiered achievements system, comprehensive teacher training, and innovative reward structures to sustain an engaging and productive learning environment. This work significantly enriches the discourse on educational gamification, positioning structured achievements as a powerful tool for inspiring the next generation of learners in a rapidly digitalizing world.

Key words:

gamification in education; learning achievement system; student motivation; secondary school students; English language; Geography education; goal-oriented learning.

Анотація:

Обозний Владислав, Маслова Аліна. Розкриття потенціалу: використання систем досягнень для натхнення на навчання школярів у цифрову епоху.

У статті досліджено трансформаційний потенціал гейміфікації навчальних досягнень здобувачів середньої освіти, що може бути використаний на уроках англійської мови та географії. Дослідженням запропоновано систему «досягнень», натхненну популярними ігровими платформами, такими як Steam, PlayStation Network та Xbox Live, переосмислюючи навчальні завдання як мотиваційні виклики. У статті наведено практичні приклади застосування навчальних досягнень та покрокові стратегії їх впровадження.

Авторами підкреслено, що пропонується система навчальних досягнень, адаптована до ключових компетентностей – таких як читання, письмо, говоріння, аудіювання та цифрова грамотність для уроків англійської мови, а також робота з картами, культурна обізнаність і дослідження навколишнього середовища для географії – може розвивати внутрішню мотивацію та відчуття успіху серед школярів.

Ключові слова:

гейміфікація в освіті; система навчальних досягнень; мотивація учнів; здобувачі середньої освіти; англійська мова; географія; цілеспрямоване навчання.

Setting of the problem. The rapid advancement of digital technologies is reshaping educational methodologies worldwide, and Ukrainian secondary education is no exception. However, traditional teaching methods often fail to engage digitally-minded students, leading to a lack of motivation and active participation in learning. Despite the integration of digital tools, there still remains a gap in utilizing game-based strategies, such as learning achievement systems, to foster secondary school learners' engagement and autonomy. This gap underscores the need to explore how gamification can be applied to address motivational challenges and enhance students' outcomes in Ukrainian schools, particularly in English and Geography classes.

Analysis of Recent Research and Publications. The issue of gamification in education has recently attracted attention of both – domestic (O. Ameridze,

O. Karabin, Ye. Kriukova, N. Moshkova, L. Mykhailova, O. Sagan, I. Semenyshyna, etc.) and foreign scholars (N. Ayansina, N. Cavus, J. Chen, E. Deci, D. Dixon, S. Deterding, J.P. Gee, J. Hamari, J. Hammer, I. Ibrahim, R. Khaled, K. Kapp, J. Koivisto, L. Marques, T. Modupeola, M. Liang, J. Lee, L. Nacke, M. Okonkwo, S. Rigo, R. Ryan, H. Sarsa, R. Smiderle, etc.). Nevertheless, we consider that certain aspects of the stated problem remain insufficiently explored, highlighting the importance and urgency of further research in this field.

Gamification, defined as the application of game design elements in non-game contexts (Smiderle et al., 2020; Chen & Liang, 2022), has been recognized as a powerful tool for increasing engagement and motivation in education. Research by Deterding et al. highlights its ability to create

compelling learning environments that align with students' goals through structured rewards (Deterding et al., 2011, p. 10). Ryan and Deci's Self-determination theory emphasizes the importance of autonomy, competence, and relatedness in fostering intrinsic motivation, all of which can be supported by gamified achievement systems (Ryan & Deci, 2000, p. 77). Moreover, integrating educational practices with game elements can bring significant benefits, particularly in fostering essential 21st-century skills. Gamification has the potential to inspire students to actively participate in the classroom, provide teachers with more effective tools to support and reward learners, and encourage students to fully immerse themselves in the learning process. It highlights how education can be an enjoyable journey, and by merging informal and formal learning, it motivates students to embrace learning as a holistic, lifelong, and deeply enriching experience based on achieving desired outcomes (Lee & Hammer, 2011, p. 4).

Hamari, Koivisto, and Sarsa demonstrate that achievement-based learning can encourage goal setting, collaboration, and personal growth (Hamari et al., 2014, p. 3028). In the Ukrainian context, educational reforms emphasize digital literacy and innovative teaching practices, such as gamification and ICT tools, to enhance classroom engagement and prepare students for a digital society (Ukrainian Ministry of Education, 2020). This idea is confirmed by numerous research of domestic scholars which consider gamification as a modern educational trend (Sagan, 2022, p. 13), innovative learning and teaching technology which improves educational process (Moshkova et al., 2024, p. 85), and innovative case of professional training of teaching staff of higher education institutions (Mykhailova et al., 2023). However, there is limited exploration of gamification's practical application in specific subjects such as English and Geography, presenting a significant research opportunity.

Achievement systems in gaming platforms such as Steam and PlayStation Network have shown how players are motivated to complete tasks for rewards. Transferring similar strategies to the classroom can be effective, where achievements act as motivational drivers, encouraging students to master content and skills incrementally (Gee, 2008, p. 38).

Introducing an achievement system in English classes can make language learning more dynamic and engaging. Examples include "Bookworm Badge," "Grammar Guru," and "Creative Composer," which focus on key competencies like reading, writing, and digital literacy (Kapp, 2012, p. 22). Geography classes can similarly benefit from badges like "Cartography Cadet" or "Eco Warrior," which enhance map skills, environmental awareness, and sustainability education.

Thus, the **purpose** of this publication is to propose and analyze a structured achievement system tailored to English and Geography classes in secondary schools. This system seeks to enhance student engagement and motivation by integrating game-based elements into the learning process.

Recent studies highlight gamification as a tool that increases students' intrinsic motivation and academic engagement (Deterding et al., 2011, p. 15). It creates a compelling learning environment by aligning student goals with achievable rewards. A well-designed achievements system meets three main motivational needs: autonomy, competence, and relatedness (Ryan & Deci, 2000, p. 14).

Ukraine's educational reform emphasizes digital literacy and innovative teaching methods, including the integration of ICT tools and gamification in the classroom (Ministry of Education and Science of Ukraine, 2020). This shift prepares students for the demands of a digital society and promotes digital citizenship from an early age.

Achievement-based learning can stimulate competition, collaboration, and personal growth (Cavus et al., 2023, p. 212). Students are more likely to set learning goals, work towards them, and feel a sense of accomplishment, which strengthens their commitment to learning.

Achievement systems in gaming platforms such as Steam and PlayStation Network have shown how players are motivated to complete tasks for rewards. Translating similar strategies to the classroom can be effective, where achievements act as motivational drivers, encouraging students to master content and skills incrementally (Gee, 2008, p. 28).

Introducing an achievement system in English classes can make language learning more dynamic and engaging. We suggest that the following examples demonstrate potential English achievements across reading, writing, speaking, listening, vocabulary, and digital literacy:

Linguistic Achievements

"Bookworm Badge": read a set number of books, stories, articles (e.g., 5, 10, 15).

"Diverse Reader": read different genres, such as mystery, sci-fi, fantasy, biography, etc.

"Reading Marathon": read a book every week for a certain number of weeks.

"Detail Detective": answer comprehension questions correctly or identify key themes and details in a story.

"Close Reader": spot and explain five figurative language examples (e.g., similes, metaphors) in a reading passage.

"Grammar Guru": complete grammar exercises with a high level of accuracy.

"Word Wizard": use a list of advanced vocabulary words correctly in sentences or writing assignments.

"Creative Composer": write an original story, poem, or essay on a given topic.

"Peer Editor": provide helpful feedback on classmates' writing, focusing on both content and grammar.

"Perfect Paragraph": write a coherent, well-structured paragraph with a clear main idea and supporting details.

"Self-Reflector": review a previous piece of writing, revise it, and identify areas of improvement.

"Clear Communicator": give a short speech or presentation on a chosen topic.

"Smooth Speaker": hold a conversation without using filler words (e.g., "like," "um") for a certain time.

"Discussion Leader": lead a class discussion, keeping it organized and on topic.

"Role Player": act out a character or situation in a role-play activity using expressive language.

"Persuasive Speaker": present a persuasive argument on a chosen topic using logical reasoning and supporting evidence.

"Attentive Listener": take accurate notes during a lecture or class discussion.

"Active Listener": show good listening skills by responding to classmates' points in discussions.

"Comprehension Champ": answer comprehension questions based on an audio clip or spoken passage.

"Detail Spotter": identify specific details in a story, news clip, or video.

"Vocab Champion": learn and use a set number of new vocabulary words each week.

"Idiom Insider": use a list of idioms or expressions correctly in speaking or writing.

"Perfect Pronouncer": pronounce a list of challenging words correctly after practicing.

"Synonym Finder": replace simple words with more advanced or precise synonyms in writing.

"Self-Starter": complete an additional assignment or activity outside of regular classwork.

"Curious Learner": research and share something interesting about English literature or language history.

"Language Explorer": try learning phrases or words from a dialect or accent within the English language.

Platinum Achievement – "Master of Language"

To earn the "Master of Language" title, students should complete an advanced, multifaceted English project that demonstrates excellence in a range of skills:

Literary Analysis: read a classic novel or advanced literary work and write a detailed, analytical essay (minimum 1000 words) including themes, character development, and historical context.

Creative Composition: write an original story or collection inspired by the analyzed work, demonstrating polished grammar and creative use of literary devices.

Presentation and Public Speaking: present their analysis and creative work in a 10-minute presentation, answering questions from peers.

Peer Mentoring: assist a peer with an English assignment, reflecting on the process and its insights.

Community Engagement: contribute to an English-related project outside the classroom, such as a book club or newsletter.

Geographical Achievements

"Cartography Cadet": create a hand-drawn or digital map of a local area, labeling major landmarks and physical features accurately.

"Map Master": analyze and interpret topographic, political, and climate maps to answer specific questions.

"Pathfinder": complete a mapping exercise where students must plot an optimal route between two locations, considering physical barriers.

"Data Detective": use a set of geographic data (e.g., climate, population, or economic) to create a simple graph or chart.

"Population Analyst": compare population data for two countries and create an infographic or report on key differences.

"Climate Correlator": analyze climate data for a location over time and draw conclusions about climate trends or anomalies.

"Eco Warrior": complete a project on a local environmental issue, such as pollution or habitat loss, including research and possible solutions.

"Biodiversity Buddy": research a local ecosystem and present findings on its flora, fauna, and environmental threats.

"Sustainable Scholar": present a case study on sustainability practices in a chosen country, covering agriculture, energy, or urban planning.

"Culture Explorer": research and present on the culture, language, and traditions of a country or region of interest.

"Global Cuisine Chef": research traditional food from a specific region and prepare a dish with an explanation of its cultural significance.

"Traditions Tracker": identify and explain the significance of a cultural festival from another country.

"Disaster Analyst": research a recent natural disaster and present its causes, effects, and mitigation strategies.

"Conflict Cartographer": map the geographic impact of a historical or current conflict, explaining key factors like resources and borders.

"Global Health Analyst": research a global health issue and create an infographic about geography's influence on its spread or control.

"GIS Rookie": complete a project using Geographic Information Systems (GIS) to create a thematic map.

"Satellite Sleuth": analyze satellite imagery to identify landforms, weather patterns, or human impact (e.g., deforestation).

"Interactive Map Maker": use a digital tool to create an interactive map with layered data sets (e.g., population density, climate zones).

Platinum Achievement – "Master of Geography"

To earn the "Master of Geography" title, students must complete a comprehensive capstone project, including:

Research: analyze a key geographic issue in a major world region, producing a 1500-word report with background research and proposed solutions.

GIS Mapping: create a detailed thematic map to support the research findings, with annotated data layers.

Fieldwork and Documentation: conduct field observations of a local site, documenting findings with photos and notes.

Presentation: summarize findings in a clear, well-organized class presentation, answering peers' questions.

Community Contribution: engage in a community project related to geography, such as a sustainability campaign or environmental awareness initiative.

The successful integration of achievements in Ukrainian schools depends on a clear, structured implementation process. The following methods are recommended:

Conclusions and prospects for further investigation in the area. Achievement-based gamification in education provides a promising approach addressing the motivational challenges faced by modern classrooms, particularly in Ukraine, where digital reforms are actively transforming the educational landscape. By incorporating achievements modeled after popular gaming platforms, this study demonstrates the potential to enhance secondary students' engagement, promote incremental mastery, and foster a sense of

accomplishment across diverse subjects such as English and Geography. Achievement systems not only make learning more interactive and rewarding but also align with key educational objectives like digital literacy, collaboration, and self-motivation. Examples such as "Bookworm Badge" in English or "Eco Warrior" in Geography show how achievements can be tailored to encourage specific skills while maintaining a friendly and engaging environment for students.

The findings emphasize that well-structured achievement systems can meet critical motivational needs, such as autonomy, competence, and relatedness, as outlined in Self-Determination Theory. Through a combination of practical tasks, digital tools, and teacher-guided implementation strategies, gamification in the classroom bridges the gap between traditional pedagogy and the expectations of digitally minded learners. A tiered system of rewards, coupled with teacher training and clear objectives, ensures sustainability and scalability across various educational contexts. Furthermore, this system aligns well with Ukraine's broader reforms, which prioritize innovative teaching methods, ICT integration, and preparation for the demands of a global digital society.

Looking ahead, the adoption of gamification strategies presents exciting opportunities for educators to foster deeper engagement and lifelong learning among students. By leveraging achievements as a motivational tool, secondary schools can create classrooms where students are not only active participants but also take ownership of their learning journeys. Future research should explore the long-term impacts of gamification on academic performance and emotional resilience, as well as its potential integration with emerging technologies such as virtual and augmented reality. With the right investment in teacher training and resource development, gamified education can inspire a new generation of learners to embrace challenges with enthusiasm and confidence in a rapidly evolving digital world.

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