

THEORETICAL FOUNDATIONS OF GAMIFICATION AND TERMINOLOGY IN ENGLISH FOR SPECIFIC PURPOSES (ESP)**Hojiyeva O'g'ilniso Karimovna**

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Abstract. Over the last ten years, gamification has been a popular topic of study, especially in the fields of education, psychology, and instructional design.

Deterding et al. (2011) describe gamification as the use of game design features in non-game contexts to boost user engagement and motivation. This term has been essential in the literature, distinguishing gamification from game-based learning, which entails the use of full-scale games for educational purposes. Rather than replacing traditional learning tasks, gamification tries to enrich them by adding motivating such as points, badges, leaderboards, and feedback tools. Kapp (2012) notes that gamification should not be considered only as a collection of reward systems but as a pedagogical method built in cognitive and motivational theories. According to Kapp, effective gamification mixes learning objectives with meaningful challenges, narrative contexts, and chances for reflection

Key words: gamification, English for Specific Purposes, ESP terminology, motivation, learning theories.

Annotatsiya. So'nggi o'n yil ichida geymifikatsiya (o'yinlashtirish), ayniqsa, ta'lim, psixologiya va o'quv dizayni sohalarida ommabop tadqiqot mavzusiga aylandi.

Deterding va boshqalar (2011) geymifikatsiyani foydalanuvchilarning ishtiroki va motivatsiyasini oshirish uchun o'yin bo'lmagan kontekstlarda o'yin dizayni elementlaridan foydalanish deb ta'riflaydi. Ushbu atama adabiyotlarda muhim ahamiyatga ega bo'lib, geymifikatsiyani ta'lim maqsadlarida to'liq ko'lamli o'yinlardan foydalanishni nazarda tutuvchi "o'yinga asoslangan ta'lim"dan (game-based learning) ajratib turadi. Geymifikatsiya an'anaviy ta'lim vazifalarini almashtirish o'rniga, ularni ballar, nishonlar, peshqadamlar jadvali va qayta aloqa vositalari kabi rag'batlantiruvchi elementlar bilan boyitishga harakat qiladi. Kapp (2012) geymifikatsiyani shunchaki mukofotlash tizimlari to'plami sifatida emas, balki kognitiv va motivatsion nazariyalarga asoslangan pedagogik metod sifatida qarash kerakligini ta'kidlaydi.

Kappning so'zlariga ko'ra, samarali geymifikatsiya ta'lim maqsadlarini mazmunli qiyinchiliklar, narrativ (hikoyaviy) kontekstlar va fikr yuritish (refleksiya) imkoniyatlari bilan uyg'unlashtiradi.

Tayanch so'zlar: geymifikatsiya, maxsus maqsadlar uchun ingliz tili (ESP), ESP terminologiyasi, motivatsiya, o'rganish nazariyalari.

Аннотация. За последние десять лет геймификация стала популярной темой исследований, особенно в областях образования, психологии и проектирования учебного процесса. Детердинг и др. (2011) описывают геймификацию как использование элементов игрового дизайна в неигровых контекстах для повышения вовлеченности и мотивации пользователей. Этот термин стал основополагающим в научной литературе, позволяя отличить геймификацию от игрового обучения (game-based learning), которое предполагает использование полноценных игр в образовательных целях. Вместо того чтобы заменять традиционные учебные задачи, геймификация стремится обогатить их, добавляя такие мотивирующие элементы, как баллы, значки, таблицы лидеров и инструменты обратной связи.

Kann (2012) отмечает, что геймификацию следует рассматривать не просто как набор систем вознаграждения, а как педагогический метод, основанный на когнитивных и мотивационных теориях. Согласно Канну, эффективная геймификация сочетает в себе учебные цели с осмысленными вызовами, повествовательным контекстом и возможностями для рефлексии.

Ключевые слова: геймификация, английский для специальных целей (ESP), терминология ESP, мотивация, теории обучения.

Introduction. English for Specific Purposes (ESP) is a form of English language education focusing on satisfying the specific communication demands of learners in academics, professional, or occupational contexts. ESP training emphasizes specific terminology, discourse rules, and communicative techniques appropriate to certain areas such as medicine, engineering, law, or business. Despite its practical importance, ESP learning typically offers obstacles linked to learner motivation, cognitive load, and the intricacy of professional language. Gamification has arisen as a reaction to these issues by integrating elements of game design into educational contexts. Unlike game-based learning, which relies on full-scale games, gamification is the intentional use of game mechanics—such as points, levels, badges, leaderboards, and challenges—to enhance learner engagement and motivation. In ESP contexts, gamification is increasingly considered as a strategy of helping terminology acquisition and contextualized language use. The objective of this study is to explore the theoretical underpinning of gamification and to standardize the vocabulary linked with gamified ESP instruction. By grounding gamification activities in proven learning theories, this study seeks to give a conceptual foundation for their effective and pedagogically sound implementation in ESP courses.

Research and Methodology.

This study utilizes a qualitative systematic literature review design to analyze the theoretical foundations of gamification and related vocabulary in English for Specific Purposes (ESP). Academic sources were collected from Scopus, Web of Science, Eric, and Google Scholar databases. The inclusion criteria comprised of peer-reviewed journal articles and scholarly publications produced in English that addressed gamification in education, language acquisition, or ESP contexts. Studies unrelated to language instruction or focusing entirely on game-based learning were omitted. The selected sources were examined using thematic content analysis. Key learning theories driving gamification and essential gamification terminology were discovered and grouped according to their applicability to ESP education. Analytical dependability was assured through cross-comparison of recurring themes across multiple sources.

LITERATURE REVIEW. Gamification has been extensively explored in educational research as a method for boosting learner interest and drive. Generally, gamification is described as incorporating game design features into contexts that are not games (Deterding et al., 2011). In educational environments, gamification usually includes elements like points, badges, leaderboards, and challenges, which are intended to improve learner involvement without the need for complete games. The theoretical foundation of gamification is based on various learning theories. From a behaviorist viewpoint, rewards and prompt feedback act as reinforcement tools that promote preferred learning behaviors (Skinner, 1953). Cognitive learning theory highlights mental processes such as attention and memory, indicating that gamified activities may facilitate more profound information processing through problem-solving and organized challenges.

Constructivist theory also supports gamification by emphasizing the importance of active participation.

Research in motivation often connects gamification to Self-Determination Theory, which asserts that learning improves when learners feel autonomy, competence, and relatedness (Deci & Ryan, 2000). Gamified learning settings can fulfill these needs by providing options, incremental challenges, and opportunities for social interaction, which in turn fosters intrinsic motivation. In the field of language education, gamification has proven beneficial for vocabulary acquisition and learner engagement, especially within digital learning settings. However, much of the current research centers around General English instead of English for Specific Purposes (ESP). Instruction in ESP focuses on the mastery of specialized vocabulary and communication skills pertinent to specific disciplines (Hutchinson & Waters, 1987). Given the technical nature and context-related challenges of ESP vocabulary, students frequently face difficulties. Recent research indicates that gamification can be particularly beneficial in English for Specific Purposes (ESP) settings as it allows for repeated, contextual practice of professional vocabulary in relevant situations. However, the existing literature shows discrepancies in how gamification terms are applied, such as game mechanics and game dynamics, emphasizing the necessity for more precise theoretical frameworks. This deficiency highlights the significance of methodically exploring the theoretical bases of gamification and its terminology in ESP education and a decline in motivation. Recent research indicates that gamification may be particularly beneficial in ESP scenarios.

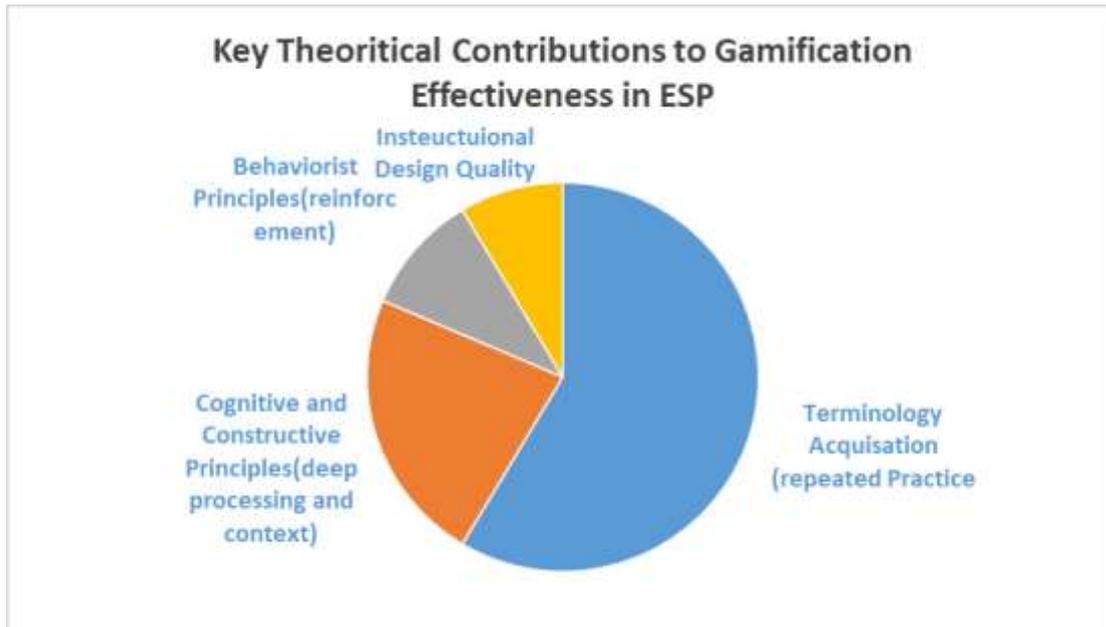
Results. The examination of the chosen literature uncovered a number of recurring themes concerning the theoretical principles of gamification and its use in terminology acquisition for English for Specific Purposes (ESP). A key finding is that gamification is continually rooted in well-established learning and motivation theories instead of being viewed as a standalone educational trend. In the sources reviewed, behaviorism, cognitivism, constructivism, and Self-Determination Theory were identified as the most commonly referenced theoretical frameworks. Another major discovery involves the impact of gamification in terminology acquisition. The evidence indicates that gamified learning settings are particularly useful in enabling the frequent exposure and practice required for mastering specialized ESP vocabulary. Game aspects such as challenges, progression systems, and instant feedback are typically related with higher learner engagement and increased desire to interact with difficult vocabulary. The research also shows frequent gamification terminology used in ESP-related studies. Concepts such as game mechanics, game dynamics, feedback, levels, and quests feature repeatedly; nevertheless, their definitions and usage vary between studies. While some authors employ these phrases in a precise and theoretically informed manner, others utilize them more loosely, frequently without explicit reference to underlying learning theories. Finally, the results imply that gamification is most effective in ESP situations when it is strongly matched with professional scenarios and discipline-specific duties. Studies that integrate actual ESP content into gamified activities indicate higher levels of learner motivation and perceived relevance, compared to approaches that depend on generic or entertainment-focused game aspects.

Theoretical Framework	Key Principles	Application in ESP Terminology Learning
Behaviorism	Stimulus-Response, Repetition, Reinforcement, Habit Formation	Drills, flashcards, rote memorization, immediate

		feedback on accuracy, points for correct answers to reinforce vocabulary retention
Cognitivism	Mental Process, Scheme Formation, Information Processing, Problem-Solving	Contextualized examples, concept classification tasks, problem-solving questions, explaining terms in own words
Constructivism	Active Learning, Knowledge Construction, Social interaction, Real-World Application	Collaborative projects, group discussions, task-based simulations, creating or applying terminology to authentic case studies or scenarios
Self-Determination	Autonomy, competence, Relatedness	Choice of tasks or learning paths, meaningful opportunities for collaboration

Discussions. The results of this study confirm that gamification in ESP is not just a motivational extra but a teaching method based on established educational theory. The frequent mention of behaviorist, cognitive, and constructivist principles shows that gamification relies on different theoretical traditions, each playing a role in various aspects of learning. For example, behaviorist reinforcement methods support repetition and accuracy in terminology learning. In contrast, cognitive and constructivist principles help with deeper processing and contextual understanding. The findings on terminology acquisition are especially important for ESP instruction. Specialized vocabulary can be challenging because it is technical and usually has limited exposure outside of professional settings. The literature suggests that gamification can help by providing structured chances for repeated practice in meaningful situations. This supports earlier claims that ESP learning works best when terminology is part of real-life and task-based contexts. However, the inconsistencies in gamification terminology highlight a key limitation in current research. The different uses of terms like game mechanics and game dynamics can create confusion in both research interpretation and instructional design. This lack of clear definitions emphasizes the need for well-informed frameworks that clearly connect gamification elements to specific learning outcomes in ESP. The results show that the effectiveness of gamification relies more on instructional design than just having game elements.

Poorly designed gamification strategies that do not match ESP objectives may focus too much on competition or rewards instead of meaningful language use. On the other hand, designs that are based on theory and are sensitive to context seem more likely to encourage ongoing motivation and effective terminology learning. The results show that the effectiveness of gamification relies more on instructional design than just having game elements. Poorly designed gamification strategies that do not match ESP objectives may focus too much on competition or rewards instead of meaningful language use. On the other hand, designs that are based on theory and are sensitive to context seem more likely to encourage ongoing motivation and effective terminology learning.



Conclusion. This study has revealed that gamification in English for Specific Purposes (ESP) is a pedagogical strategy built in established learning theories rather than a simply motivating tactic.

Behaviorist, cognitive, constructivist, and self-determination approaches each contribute to different aspects of ESP terminology learning, including accuracy, deep processing, contextual comprehension, and learner motivation.

The analysis reveals that gamification is most beneficial when it facilitates regular and meaningful use of specialized vocabulary within authentic, task-based situations.

The findings further imply that the effectiveness of gamification depends primarily on instructional design rather than on the simple introduction of game elements. Gamified exercises that are theoretically based and matched with ESP aims are more likely to generate sustained motivation and effective terminology acquisition. However, variations in gamification terminology underscore the need for explicit conceptual frameworks in future research.

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