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THE ANALYSIS OF CLASSIFICATION OF ACTIVITIES AND TASKS TO DEVELOP CRITICAL THINKING SKILLS OF EFL STUDENTS THROUGH GAMIFICATION.

Mirbakieva Nigora Azadovna
Doctor of Philosophy (PhD) in Philological Sciences
Uzbekistan State University of World Languages Tashkent Uzbekistan
e-mail: mirbakieva.nigora@mail.ru
Tel: +998 99 868 02 08

Abstract: The integration of gamification into English as a Foreign Language (EFL) instruction has become an important pedagogical approach for enhancing student engagement, motivation, and higher-order thinking skills. Recent studies indicate that gamified learning environments can positively influence language acquisition and cognitive development when instructional activities are carefully designed and aligned with learning objectives [1]. Critical thinking is recognized as one of the essential twenty-first-century competencies and is closely associated with learners' ability to analyze, evaluate, interpret, and solve problems in academic contexts. The present article analyzes the classification of gamified activities and tasks used for the development of critical thinking skills among EFL students. The study is based on a review and synthesis of contemporary scholarly literature on gamification, critical thinking, and EFL education. Different categories of gamified activities, including problem-solving tasks, collaborative challenges, role-playing activities, decision-making games, digital quizzes, and simulation-based learning tasks, are examined according to their contribution to critical thinking development. The findings demonstrate that gamification supports critical thinking when game mechanics encourage reflection, analysis, argumentation, and evidence-based decision-making rather than simple reward collection. The article also discusses pedagogical implications for EFL teachers seeking to integrate gamification into language instruction effectively.

Keywords: Gamification, critical thinking, EFL students, language learning, game-based learning, higher-order thinking skills, collaborative learning, problem-solving, educational technology, language education.

Introduction

The rapid development of digital technologies has transformed contemporary educational practices and created new opportunities for language learning. Among innovative pedagogical approaches, gamification has attracted considerable attention from researchers and educators. Gamification refers to the application of game design elements such as points, badges, leaderboards, challenges, and rewards in non-game educational contexts to enhance motivation and engagement [2].

In EFL education, gamification has been widely implemented to improve vocabulary acquisition, grammar learning, reading comprehension, speaking performance, and learner motivation [1]. Systematic reviews indicate that gamification has become increasingly popular in more than ten countries where English is taught as a foreign or second language [3]. Research findings suggest that gamified instruction can positively influence learners' attitudes, emotional engagement, and overall language achievement [3].

At the same time, educational systems worldwide increasingly emphasize the importance of critical thinking skills. Critical thinking involves analyzing information, evaluating evidence, identifying assumptions, drawing logical conclusions, and making reasoned decisions. These skills are considered essential for academic success, professional development, and participation in modern society. In language learning environments, critical thinking contributes to deeper text comprehension, effective communication, argumentation, and intercultural understanding [4].

Traditional language instruction often focuses on memorization and reproduction of linguistic knowledge. However, modern educational paradigms advocate the development of higher-order thinking skills through active and learner-centered approaches. Gamification offers a promising framework for achieving this goal because well-designed game activities require learners to solve problems, make decisions, collaborate with peers, and reflect on outcomes [5].

Recent studies have reported positive relationships between gamification and cognitive development. Gamified environments have been shown to enhance attention, memory retention, motivation, and engagement, all of which contribute to more meaningful learning experiences [6]. Nevertheless, researchers emphasize that the effectiveness of gamification depends on instructional design and the alignment of game mechanics with educational objectives [5].

The purpose of this article is to analyze the classification of activities and tasks used in gamified EFL environments to foster critical thinking skills. The study seeks to identify major categories of gamified tasks and evaluate their educational value for critical thinking development.

Methodology

The study employs a qualitative literature review methodology based on the analysis of peer-reviewed journal articles, systematic reviews, books, and scholarly reports related to gamification, critical thinking, and EFL education.

The literature selection was guided by the following criteria:

- relevance to gamification in educational contexts;
- focus on EFL or ESL instruction;
- discussion of critical thinking, cognitive development, or higher-order thinking skills;
- publication in scholarly journals, academic books, or reputable educational databases.

The analytical process involved:

- identifying key gamification elements utilized in EFL instruction;
- examining classifications of learning activities reported in previous studies;
- analyzing the relationship between gamified tasks and critical thinking processes;
- synthesizing findings into a comprehensive classification framework.

The conceptual basis for classification was informed by critical thinking theories, Bloom's revised taxonomy, constructivist learning theory, and contemporary gamification frameworks discussed in educational research [1][3][7].

Results

The review revealed that gamified EFL activities promoting critical thinking can be classified into six major categories.

Problem-Solving Activities

Problem-solving activities represent one of the most effective categories for critical thinking development. These tasks require learners to identify problems, analyze available information, evaluate alternative solutions, and justify decisions.

Examples include:

- language-based mystery games;
- escape room activities;
- puzzle-solving challenges;
- quest-based learning scenarios.

In gamified EFL classrooms, students may be presented with narrative situations requiring them to interpret clues, analyze texts, and collaborate to solve linguistic or contextual problems. Such activities stimulate analytical thinking and encourage learners to apply language knowledge in authentic contexts [1].

Decision-Making Tasks

Decision-making tasks require students to evaluate different options and predict possible consequences before selecting a course of action.

Examples include:

- branching story games;
- interactive digital narratives;
- scenario-based simulations;
- ethical dilemma discussions.

These tasks develop learners' ability to assess evidence and make informed judgments. Research indicates that decision-making activities encourage deeper cognitive processing because students must justify their choices and consider alternative perspectives [5].

Collaborative Challenge Activities

Collaborative gamified activities emphasize teamwork and collective problem-solving. Students work together to complete missions, achieve goals, and overcome challenges.

Common examples include:

- team competitions;
- cooperative quests;
- group-based language missions;
- collaborative storytelling games.

Studies demonstrate that collaborative learning environments promote critical thinking by exposing learners to diverse viewpoints and encouraging discussion, negotiation, and reflection [8].

Role-Playing Activities

Role-playing activities constitute an important category of gamified tasks that support critical thinking development in EFL contexts. Learners assume specific roles and engage in simulated situations requiring communication, negotiation, argumentation, and decision-making. Examples include diplomatic negotiations, business meetings, courtroom simulations, and problem-based social scenarios.

These activities promote critical thinking because students must analyze information from multiple perspectives, evaluate evidence, formulate arguments, and defend their positions using the target language. Role-playing also contributes to the development of communicative competence and intercultural awareness, both of which are essential components of modern EFL education. Research indicates that gamified role-playing environments create authentic opportunities for higher-order cognitive engagement and reflective learning.

Digital Quiz-Based Tasks

Quiz-based activities represent one of the most frequently used forms of gamification in EFL instruction. Platforms such as Kahoot!, Quizizz, and Socrative incorporate points, leaderboards, badges, and immediate feedback mechanisms.

While simple recall quizzes primarily support lower-order cognitive skills, carefully designed quiz tasks can promote critical thinking through:

- analysis of authentic texts;
- interpretation of contextual information;
- evaluation of arguments;
- identification of logical inconsistencies;
- application of language knowledge to novel situations.

Studies demonstrate that gamified quizzes improve learner engagement and motivation, especially when questions require reasoning rather than memorization. Immediate feedback allows students to reflect on errors and refine their understanding.

Simulation-Based Learning Activities

Simulation activities immerse learners in realistic environments where they must apply language knowledge to solve complex problems. Simulations often integrate multiple game elements, including missions, challenges, narratives, and collaborative objectives.

Examples include:

- virtual travel scenarios;
- international business simulations;
- crisis-management activities;
- intercultural communication projects.

Simulation-based learning encourages students to synthesize information from various sources, evaluate possible solutions, and make evidence-based decisions. Such tasks correspond to the highest levels of Bloom's revised taxonomy, including analysis, evaluation, and creation. Research suggests that simulation environments can significantly enhance learners' cognitive engagement and critical thinking performance when appropriately designed.

Analysis and Discussion

The findings indicate that gamification can contribute substantially to the development of critical thinking skills among EFL students when instructional design prioritizes cognitive engagement rather than mere entertainment. Contemporary research consistently demonstrates that gamification positively influences learner motivation, participation, and academic performance. However, the extent to which critical thinking develops depends largely on the nature of the tasks employed.

The classification presented in this article reveals significant differences among gamified activities regarding their cognitive demands. Problem-solving tasks, simulations, and decision-making activities generally require higher levels of cognitive processing than simple quiz-based activities. These task types encourage learners to engage in analysis, evaluation, inference, and reflection, which are recognized as core dimensions of critical thinking.

From the perspective of Bloom's revised taxonomy, problem-solving and simulation activities predominantly target the upper cognitive levels of analyzing, evaluating, and creating. In contrast, basic quiz activities often focus on remembering and understanding unless deliberately designed to incorporate higher-order thinking requirements. Therefore, EFL teachers should avoid equating gamification solely with point systems or competitive quizzes and instead emphasize meaningful intellectual challenges.

Collaborative challenges also play a significant role in critical thinking development. Cooperative learning theories suggest that interaction with peers promotes deeper understanding through discussion, argumentation, and negotiation of meaning. When learners collaborate to

achieve common objectives, they are exposed to diverse perspectives that stimulate analytical reasoning and reflective judgment. This observation aligns with research emphasizing the effectiveness of cooperative learning environments in fostering critical thinking.

Another important consideration concerns the balance between intrinsic and extrinsic motivation. Excessive emphasis on rewards, points, or leaderboards may encourage superficial participation without promoting meaningful learning. Researchers have warned that poorly designed gamification can result in short-term engagement while diverting attention from educational objectives. Effective gamification therefore requires alignment between game mechanics and intended learning outcomes.

The literature further suggests that gamified learning environments are most effective when they incorporate authentic communication tasks. Critical thinking develops more successfully when students confront realistic problems that require interpretation, evaluation, and evidence-based decision-making. Consequently, role-playing, simulations, and narrative-based challenges should occupy a central place within gamified EFL curricula.

Furthermore, technological advancements have expanded opportunities for implementing sophisticated gamification strategies. Digital learning platforms allow educators to design adaptive challenges, branching narratives, collaborative missions, and interactive simulations capable of supporting complex cognitive processes. These developments indicate substantial potential for future research and pedagogical innovation in EFL education.

Overall, the evidence suggests that gamification functions not merely as a motivational tool but also as a pedagogical framework capable of supporting higher-order thinking when combined with carefully structured learning activities.

Conclusion

The present study analyzed the classification of gamified activities and tasks used to develop critical thinking skills among EFL students. Based on the review of scholarly literature, six major categories of gamified activities were identified: problem-solving activities, decision-making tasks, collaborative challenges, role-playing activities, digital quiz-based tasks, and simulation-based learning activities.

The analysis demonstrates that the effectiveness of gamification in fostering critical thinking depends primarily on instructional design rather than the mere presence of game elements. Activities requiring analysis, evaluation, interpretation, reasoning, and decision-making contribute more effectively to critical thinking development than tasks focused exclusively on memorization or competition.

Problem-solving tasks, simulations, and role-playing activities emerged as particularly valuable for promoting higher-order cognitive skills. Collaborative challenges further support critical thinking by encouraging discussion, negotiation, and exposure to multiple perspectives. Although quiz-based activities remain popular in EFL classrooms, their educational value increases significantly when they require learners to engage in reasoning and evidence-based judgment.

The findings confirm that gamification can serve as an effective pedagogical approach for developing critical thinking skills in EFL education when game mechanics are aligned with meaningful learning objectives. Future research should continue investigating the long-term impact of specific gamified task types on critical thinking development across different educational contexts.

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