

## The Impact of Using Some Gamification Strategies on EFL Prospective Teachers' Vocabulary Learning and Class Engagement

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### Abstract

This study aimed to measure the impact of using some gamification strategies on EFL prospective faculty of education teachers' vocabulary learning and class engagement. A quasi-experimental pre-post control group design was used to achieve the study objectives. One hundred and eight students were randomly chosen from fourth-year prospective English majors at the Faculty of Education Minia University during the first semester of the academic year 2021/2022. They were divided into two intact groups: experimental and control. The experimental group students were trained using gamification strategies to develop their vocabulary learning and class engagement. The control group students were taught the same content through the regular method. The study instruments included a vocabulary learning test and a class engagement scale. Data collected from the participants (using a t-test) revealed that the experimental group outperformed the control group significantly in the post-test performance and on the scale. The study provides findings, recommendations, and suggestions for further research.

**Keywords:** gamification, vocabulary learning, class engagement, prospective teachers

المستخلص

**أثر استخدام بعض استراتيجيات الألعاب التحفيزية (التلعيب) على تعلم المفردات**

**والاندماج الفصلي لدى الطلاب المتخصصون في اللغة الانجليزية**

هدفت هذه الدراسة إلى قياس أثر استخدام بعض استراتيجيات الألعاب التحفيزية (التلعيب) على تعلم المفردات والاندماج الفصلي لدى الطلاب المعلمين بكلية التربية . استخدمت الدراسة التصميم شبه التجريبي ذو المجموعتين لتحقيق أهداف الدراسة. تم اختيار مائة وثمانية طالب و طالبة تم اختيارهم عشوائيًا من طلاب الفرقة الرابعة تخصص اللغة الإنجليزية في كلية التربية بجامعة المنيا خلال الترم الأول من العام الأكاديمي ٢٠٢١/٢٠٢٢. تم تقسيمهم إلى مجموعتين: تجريبية وضابطة. تم تدريب طلاب المجموعة التجريبية باستخدام بعض استراتيجيات الألعاب التحفيزية (التلعيب) لتطوير تعلمهم للمفردات والاندماج الفصلي. بينما تم تعليم طلاب المجموعة الضابطة نفس المحتوى بالطريقة التقليدية. تضمنت أدوات الدراسة اختبار تعلم المفردات ومقياس الاندماج الفصلي. أظهرت تحليلات البيانات التي تم الحصول عليها من المشاركين (باستخدام اختبار t) أن أداء المجموعة التجريبية كان أعلى بشكل ملحوظ من المجموعة الضابطة في الأداء البعدي للاختبار وعلى المقياس. تم تقديم النتائج والتوصيات والاقتراحات لمزيد من البحث.

**الكلمات المفتاحية:** استراتيجيات الألعاب التحفيزية (التلعيب) ، تعلم المفردات، الاندماج

الفصلي، الطلاب المتخصصون في اللغة الانجليزية

## Introduction

Vocabulary learning is essential to language acquisition and critical for effectively understanding and using a new language. It involves memorizing words and understanding their meanings, uses, connotations, and relationships with other words. Effective vocabulary learning can significantly enhance a learner's reading, writing, listening, and speaking skills, increasing language proficiency. Recent advances in educational technology have introduced innovative methods for vocabulary acquisition, including gamification, mobile apps, and online resources that provide collaborative and appealing learning experiences. These tools frequently incorporate multimedia elements, adaptive learning algorithms, and social interaction, catering to diverse learning styles and preferences.

Moreover, integrating vocabulary learning with further language skills—such as reading comprehension, listening exercises, and speaking activities—creates a holistic approach that enhances overall language proficiency. Educators can foster more profound understanding and long-term retention by continually exposing learners to new vocabulary in varied contexts. Vocabulary learning is a dynamic and multifaceted aspect of language education. Employing various strategies and tools can support learners in developing a robust and functional vocabulary, ultimately leading to greater linguistic competence and confidence in communication Ghonivita et al. (2021).

Class engagement is a critical aspect of the educational process, significantly influencing students' academic success and overall learning experience. It refers to students' attention, interest, curiosity, and involvement in learning activities. High levels of class engagement are associated with good academic performance, higher retention rates, and a more positive attitude toward learning. Class engagement is essential for effective learning and academic success. By understanding and implementing strategies that enhance behavioral, emotional, and cognitive engagement, instructors can produce a more stimulating and supportive learning environment that encourages students to actively participate and invest in their education (Moubayed, 2020).

English as a foreign language EFL class engagement involves learners' active participation and emotional investment in language learning activities, which can be enhanced through interactive and communicative teaching methods (Dörnyei, 2021). Engagement in EFL settings refers to the extent to which students are involved in and committed to English

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language learning. It can be influenced by teaching strategies, classroom environment, and individual learner factors (Ellis, 2020).

Gamification, blending game elements into non-game contexts, has appeared as a successful approach to enhancing engagement and learning outcomes in educational settings. As mentioned by Hoidn and Reusser (2020), in recent years, the educational landscape has witnessed a shift towards more student-centered and interactive learning approaches. Traditional methods of language teaching, often characterized by rote memorization and passive learning, are being re-evaluated in favor of strategies that actively engage students and foster intrinsic motivation. Ofosu-Ampong (2020) stated that gamification aligns with this shift by leveraging the motivational aspects of games, such as challenge, competition, and reward, to enhance the learning experience.

A good example of gamification strategies is interactive games and simulations. They have been shown to transform the learning process by providing students with immediate feedback, adaptive challenges, and opportunities to apply knowledge in simulated real-world contexts. For instance, platforms like Kahoot! and Quizlet have gained popularity in classrooms for their ability to make learning fun and competitive, thereby increasing student motivation and participation. Research has demonstrated that these tools can significantly improve vocabulary acquisition and retention, enabling repeated exposure to new words and providing contextually rich environments for practice (Hamari et al., 2020).

Another integral part of gamification is the collaborative activities, which emphasize the social aspect of learning. By working in groups, students can share knowledge, negotiate meaning, and provide mutual support, enhancing their language skills through social interaction. Group projects, debate clubs, and peer review sessions are examples of collaborative activities that can be effectively integrated into EFL classes to promote active learning and engagement (Asad et al., 2021).

The pedagogical benefits of collaborative learning are well-documented, particularly in the context of language learning. Collaborative activities encourage students to engage in meaningful dialogue, negotiate meaning, and provide mutual support, which is essential for language acquisition. Group projects, debate clubs, and peer review sessions allow students to practice new vocabulary in communicative contexts, reinforcing their learning. Studies have shown that students involved in collaborative

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learning tend to show higher levels of motivation, a more profound understanding of content, and improved social skills (Johnson et al., 2014).

As a result, integrating gamification into vocabulary learning influences games' motivational and engaging elements to enhance language acquisition. By making learning more entertaining and interactive, gamification can improve retention, greater learner motivation, and a more positive attitude toward language learning. As technology evolves, the potential for advanced gamified vocabulary learning experiences will likely expand, offering even more effective tools and strategies for educators and learners alike.

This study attempts to explore the impact of two gamification strategies, interactive games, simulations, and collaborative activities, on vocabulary learning and engagement among Minia faculty of Education fourth-year English majors.

### **Theoretical Background and Related Previous Studies**

This study is grounded in social constructivism, self-determination theories emphasizing collaborative learning and intrinsic motivation, and social learning theory.

- **Constructivist Learning Theory:**

Constructivist learning theory hypothesizes that learners construct knowledge through experiences and engagement with their environment. According to Vygotsky (1978), social interaction is fundamental to cognitive development. In the context of gamification, interactive games and simulations provide a rich, interactive environment where learners can engage with content actively, thereby constructing their understanding of new vocabulary.

Collaborative activities, supported by the constructivist approach, facilitate peer interaction and cooperative learning. This approach aligns with Vygotsky's Zone of Proximal Development (ZPD) concept, where learners can accomplish higher levels of understanding with more educated peers or through structured activities that promote scaffolding.

- **Self-Determination Theory (SDT):**

Deci and Ryan's self-determination theory (1985) underlines the importance of independence, aptitude, and relatedness in fostering essential motivation. Gamification strategies influence these principles by incorporating game elements that promote a sense of achievement

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(competence), allow for choice and personalization (autonomy), and foster collaboration and social interaction (relatedness).

Interactive games and simulations often provide immediate feedback and progressively challenging tasks, which enhance learners' sense of competence. Collaborative activities, on the other hand, satisfy the need for relatedness by encouraging social interaction and teamwork.

- **Motivation Theories:**

Theories of motivation, such as Keller's ARCS Model (Attention, Relevance, Confidence, and Satisfaction), directly apply to gamification. Interactive games capture learners' attention through engaging and visually appealing content. Simulations and collaborative activities make learning relevant by providing real-world context and applications. These strategies build confidence and satisfaction in learners by providing achievable challenges and recognizing accomplishments.

According to Bandura's **Social Learning Theory** (1977), individuals learn by observing and modeling others' behaviors. Gamified environments often include elements like leaderboards and badges, which allow students to see and aspire to the achievements of their peers, thus motivating them to engage more deeply with the learning material.

### **Vocabulary Learning Skills**

Vocabulary learning skills are the techniques and abilities that help individuals effectively acquire, retain, and use new words. These skills are essential for language development and comprehension. Developing these skills is crucial for EFL students to improve language proficiency and overall communication. Here are some vocabulary learning skills (Nation, 2013) and (Webb, 2007).

#### **1. Contextual Guessing:**

- Using context clues from sentences or paragraphs to infer the meaning of unknown words.
- Understanding how a word fits into a sentence or the overall text.

#### **2. Word Formation Knowledge:**

- Recognizing and understanding prefixes, suffixes, root words, and compound words.
  - Using knowledge of word families to deduce meanings and form new words.
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### **3. Memorization Techniques:**

- Employing mnemonic devices, such as acronyms, visualization, or association, to remember new vocabulary.
- Repeating words and phrases regularly to enhance retention.

### **4. Use of Dictionaries and Thesauruses:**

- Effectively using bilingual or monolingual dictionaries to look up definitions, pronunciation, and usage examples.
- Utilizing thesauruses to find synonyms and antonyms, expanding word choice.

### **5. Active Usage:**

- Practicing new vocabulary in speaking and writing activities to reinforce learning.
- Engaging in conversations, writing essays, or creating sentences using newly learned words.

### **6. Reading and Listening:**

- Reading various texts (books, articles, essays) and listening to diverse audio materials (podcasts, lectures, conversations) to encounter new vocabulary in different contexts.
- Noting down unfamiliar words and looking up their meanings.

### **7. Flashcards and Vocabulary Lists:**

- Creating and using flashcards to test knowledge of new words and their meanings.
- Maintain and review vocabulary lists regularly (Putu et al., 2021).

### **8. Language Games and Activities:**

- Participating in vocabulary games, such as crosswords, word searches, and matching exercises, to make learning engaging and enjoyable.
- Using interactive apps and online platforms designed to build vocabulary skills.

### **9. Collocation Awareness:**

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- Learning common word pairs and phrases (collocations) to understand how words are typically used together.
- Practicing using collocations in sentences to improve fluency and accuracy. Ariffin et al. (2020).

### 10. Self-assessment and Reflection:

- Regularly testing on newly learned vocabulary to assess retention and understanding.
- Reflecting on which strategies work best and adjusting learning methods accordingly (Gorgoz et al., 2020).

### The Importance of Learning Vocabulary

Vocabulary is crucial for improving a learner's language proficiency and acquiring the four primary skills: reading, writing, listening, and speaking (Nation, 2011). Research has shown that language learning is heavily dependent on vocabulary acquisition, and those who lack a strong vocabulary often need help with language learning. Therefore, a solid vocabulary is essential for effective written or spoken communication. Teachers must emphasize the importance of vocabulary to students from an early age. Vocabulary instruction should be interactive and appealing to make lessons more effective and efficient (Al-Neyadi, 2007; Davies & Pears, 2003). Using gamification in vocabulary learning aligns with modern, student-centered teaching methods, allowing students to learn independently with minimal teacher support (Mirzoveya & Kabdrgalinova, 2021).

### Class Engagement Dimensions

To effectively measure and understand student engagement in EFL classes, it is essential to consider multiple dimensions. Each dimension encompasses various aspects of student behavior, attitudes, and participation that contribute to overall engagement (Smith & Waring, 2021), (Reeve, 2021) and (Fredricks et al., 2020)

#### 1. Behavioral Engagement

- **Active Participation:** Frequency and quality of student contributions to class discussions, asking questions, and involvement in classroom activities.
  - **Attendance and Punctuality:** Regularity of attending classes and being on time.
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- **Effort and Persistence:** The level of effort students put into their work and their persistence in overcoming challenges.

## 2. Cognitive Engagement

- **Self-regulation:** Ability to set goals, monitor progress, and adjust learning strategies.
- **Critical Thinking:** Applying analytical skills to understand and evaluate language and cultural contexts.
- **Task Completion:** Consistency in completing assignments and engaging with learning materials.

## 3. Emotional Engagement

- **Interest and Enthusiasm:** Students' interest in and enthusiasm for learning English.
- **Motivation:** Intrinsic and extrinsic factors that drive students to learn.
- **Positive Attitude:** Students' attitudes towards learning English and their resilience in facing difficulties.

## 4. Social Engagement

- **Collaborative Learning:** Participation in group work and peer interactions.
- **Communication Skills:** Effectiveness in communicating with classmates and instructors.
- **Cultural Awareness:** Respect and appreciation for cultural diversity in the classroom.

## 5. Behavioral Engagement with Technology

- **Utilization of Digital Tools:** Frequency and effectiveness of using technology (apps, online resources, etc.) for language learning.
- **Online Participation:** Involvement in online discussions, forums, and digital platforms.
- **Feedback Utilization:** Seeking and applying feedback through digital means.

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## Gamification strategies for improving vocabulary learning and class engagement

In the context of EFL education, various gamification strategies can be employed to improve vocabulary learning and class engagement. These strategies leverage game mechanics to create an interactive and motivating learning environment. Previous research supports the efficacy of gamification strategies in improving engagement, motivation, and learning outcomes in educational contexts (Asad et al. 2021). Below are some key gamification strategies that can be applied according to (Kapp, 2021), (Smith & Waring, 2021) and (Werbach & Hunter, 2020).

### 1. Points, Badges, and Leaderboards (PBL)

- **Points:** Students earn points for completing tasks, participating in activities, or achieving certain milestones. Points can be awarded for correct answers, participation, and consistent effort.
- **Badges** are visual representations of achievements that students can earn for completing specific challenges or reaching milestones. For example, a student might earn a "Vocabulary Master" badge for learning a certain number of new words.
- **Leaderboards** display students' rankings based on their points or achievements. This can foster a sense of competition and motivate students to improve their performance.

### 2. Quests and Challenges

- **Quests** are structured tasks or assignments students complete to progress in the game. Quests can be designed to align with curriculum objectives, such as learning new vocabulary words through reading assignments or interactive exercises.
- **Challenges** require students to employ their knowledge or skills to solve problems. For example, a vocabulary challenge might involve using new words in sentences or finding synonyms and antonyms.

### 3. Storytelling and Narrative

- **Narrative:** Creating a narrative or storyline can make learning more engaging by providing context and purpose. Students

can be part of a story where they must use their vocabulary knowledge to help characters solve mysteries or complete missions.

- **Role-playing:** Role-playing activities allow students to assume different characters or personas, which can help them practice vocabulary more effectively and meaningfully.

#### 4. Interactive Games and Simulations

- **Digital Games:** Incorporating digital games focusing on vocabulary learning can make the process more fun and interactive. These games can include word puzzles, matching games, and interactive quizzes.

- **Simulations:** Simulations can create realistic scenarios where students must use their vocabulary knowledge. For example, a virtual marketplace simulation can help students practice words related to shopping and transactions.

#### 5. Collaborative Activities

- **Team-based Competitions:** Students can work in teams to collectively complete tasks and earn points. This fosters collaboration and helps students learn from each other.

- **Peer Reviews:** Encouraging students to review each other's work can provide additional feedback and promote collaborative learning. Peer reviews can be gamified by awarding points for constructive feedback.

#### 6. Rewards and Incentives

- **Rewards:** Tangible or intangible rewards can motivate students to engage with the learning material. Rewards might include extra credit, certificates, or small prizes.

- **Incentives:** Creating a system of incentives, such as unlocking new levels or earning privileges, can encourage students to stay engaged and motivated.

#### 7. Progress Tracking and Feedback

- **Progress Bars:** Visual progress bars can help students track their academic advancement. Seeing their progress can motivate students to keep going.

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- **Instant Feedback:** Providing immediate feedback on tasks and quizzes helps students understand and learn from their mistakes. Instant feedback can be gamified by showing how close they are to achieving their goals.

### 8. Customization and Personalization

- **Avatars:** Allowing students to create and customize avatars can make the learning experience more personal and enjoyable. As rewards for achieving milestones, avatars can earn new outfits or accessories.
- **Personalized Learning Paths:** Customizing the learning experience to match individual student needs and preferences can enhance engagement. Personalized paths can be designed based on students' proficiency levels and learning styles.

The best gamification strategy for EFL students depends on the student's age, proficiency level, learning preferences, and specific educational context. Thus, some strategies are more effective for English majors because they can enhance their language skills, maintain engagement, and provide meaningful learning experiences. According to these factors, the current research selected two particularly effective strategies for EFL student teachers in 4<sup>th</sup> year at the Faculty of Education to enhance their vocabulary learning and class engagement. These strategies are determined after consulting TEFL experts who ensure the suitability of these skills to the targeted students. They include:

### 1. Interactive Games and Simulations

The main features are:

- **Engagement:** Interactive games are highly engaging and can make learning fun.
- **Practical Application:** Simulations provide real-life contexts for language use, helping students apply vocabulary meaningfully.
- **Instant Feedback:** Many games and simulations offer immediate feedback, which is crucial for language learning (Sanina et al., 2020).

## 2. Collaborative Activities

The main features are:

- **Social Learning:** Language learning is inherently social, and collaboration helps students learn from each other.
- **Peer Support:** Team-based activities provide peer support and foster a sense of community.
- **Communication Practice:** Collaborative tasks require students to use their language skills to communicate and solve problems together (Pürbudak et al., 2021).

Gamification in education has been extensively researched and proven to enhance student engagement, reduce anxiety, increase motivation, and improve learning outcomes. It involves integrating game-like elements into learning activities to make them enjoyable and captivating. This approach is convenient for vocabulary learning as it encourages students to interact actively with new words and phrases through interactive games.

Introducing gamification tools into vocabulary learning has received positive feedback from students, significantly boosting their participation and interest in English language classes by making them enjoyable, inspiring, and engaging. Confirming student engagement and satisfaction is crucial to enhancing their motivation to learn. Research conducted by Zou et al. (2019) suggests that gamification improves listening and reading comprehension while enhancing students' vocabulary knowledge in English learning.

These tools are particularly advantageous for students with lower proficiency in English, addressing challenges such as limited exposure to the language. Educators can effectively stimulate students' interest and participation in learning by creating stimulating and engaging language lessons. Proficiency in a language, including English, heavily relies on vocabulary knowledge, highlighting the significance of gamified methods in language education (Panmei et al., 2022).

### **Previous Studies:**

#### **Gamification and vocabulary learning**

Basuki and Hidayati (2020) conducted a quasi-experimental study with both a control group and an experimental group. The experimental group used the Quizlet app for vocabulary learning, whereas the control group received traditional instruction. Vocabulary acquisition was

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measured through pre-tests and post-tests, and a questionnaire assessed student motivation. Results showed that the experimental group achieved significantly better vocabulary acquisition and that Quizlet increased students' motivation and engagement in learning vocabulary.

Liu and Chu (2021) carried out a study with 60 EFL learners divided into experimental and control groups. The experimental group used a mobile gamification app for vocabulary learning, while the control group used conventional methods. Pre-tests and post-tests assessed vocabulary acquisition, and interviews provided qualitative insights into student experiences. The experimental group outperformed the control group in vocabulary acquisition, and students found the gamification app enjoyable and effective in maintaining their motivation and engagement through its interactive and competitive features.

Wang and Tahir (2021) conducted a meta-analysis of 20 studies on game-based learning and vocabulary acquisition. They used statistical techniques to synthesize effect sizes and assess the overall impact. The meta-analysis revealed a moderate to large positive effect of game-based learning on vocabulary acquisition among EFL learners, with significant improvements in vocabulary retention and recall. The study emphasized the importance of designing educational games that are well-aligned with learning objectives.

Hung et al. (2018) explored the impact of a gamified learning system on elementary students' vocabulary learning in a blended learning environment. The system integrated game elements into traditional classroom activities. Results indicated that the gamified learning system significantly enhanced students' vocabulary acquisition and retention. Students in the gamified environment reported higher engagement and enjoyment, contributing to their improved learning outcomes.

Alabbasi (2017) examined the use of gamification in EFL settings and its effect on student motivation and language learning. The results indicated that gamified activities significantly enhanced student engagement and vocabulary learning, suggesting that game elements can effectively support language instruction.

Dichev and Dicheva (2017) provided a comprehensive review of gamification in education, specifically focusing on its application in language learning and vocabulary acquisition. It analyzed various gamified approaches and their effectiveness in educational contexts. The review concluded that gamification positively impacts vocabulary learning by

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increasing student motivation and engagement. The study emphasized the importance of thoughtful integration of game elements to maximize educational benefits.

Chen and Law (2016) explored using gamified learning platforms in language education. Their research highlighted that incorporating game-based elements into vocabulary exercises led to higher student satisfaction and better vocabulary retention rates.

Vahdat and Behbahani (۲۰۱۳) explored using digital games to enhance vocabulary learning among EFL students. They focused on how game-based learning environments can impact vocabulary retention and engagement. The study indicated that students who used digital games for vocabulary learning showed significantly enhanced vocabulary retention and motivation compared to regular methods. Games' interactive and immersive nature was identified as a critical factor in these improvements.

Liu and Chu (2010) explored using mobile phone-based gamified learning activities to improve vocabulary acquisition among EFL learners. The researchers examined how mobile games influenced vocabulary learning and student attitudes. The results found that mobile gamified learning activities significantly enhanced vocabulary learning outcomes. Students reported higher levels of engagement and positive attitudes towards learning vocabulary through mobile games compared to traditional methods.

Nguyen and Nga (2003) claimed that games aid students in quickly remembering new words. Additionally, students in experimental groups enjoyed the learning process more. They interacted, cooperated, and were motivated to win. These findings are consistent with Ashraf et al. (2014), who highlighted the significant role of games in generating an enjoyable classroom environment. Scores on the post-test indicated that using games was beneficial in foreign language classrooms. However, contrary to Nguyen and Nga (2003), some teachers stated that using games can sometimes take time and effort. This opposing view may be due to teachers feeling overwhelmed by heavy workloads or limited instructional time. Teachers often adhere to a curriculum with firm deadlines, which can prevent them from incorporating games into their lessons.

### **Gamification and class engagement**

Kapp and Blair (2022) conducted a case study to examine how gamification influences student motivation and engagement in higher education. They found that gamification positively affected motivation and

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engagement, with game-based challenges and rewards increasing participation and enthusiasm.

Pratama et al. (2020) conducted research to clarify participants' views on gamification in education, finding it to be a significant innovation. They also found that student motivation and interest greatly influence educational performance, with highly motivated and interested students tending to perform better. Gamification effectively captures students' attention during lessons and boosts their engagement. In summary, prior research indicates that students respond positively to using gamification in learning.

Hamari et al. (2020) conducted a study on the effect of gamification on students' engagement and learning outcomes. They found that gamified elements, such as points and leaderboards, significantly increased student participation and motivation, improving vocabulary retention.

A study by Sailer et al. (2017) explored the psychological impact of game design elements on students. The research indicated that interactive simulations provided a more immersive learning experience, enhancing students' engagement and understanding of complex vocabulary.

Johnson, Johnson, and Smith (2014) reviewed the effects of cooperative learning on student achievement. Their meta-analysis showed that students involved in collaborative activities exhibited higher academic performance and better vocabulary retention than those in traditional, individualistic settings.

Lee and Kim (2020) investigated the effectiveness of collaborative learning strategies in EFL classrooms. Their findings demonstrated that collaborative activities improved vocabulary acquisition and increased students' confidence in using the target language.

All these studies assured the positive effect of gamification on vocabulary learning, demonstrating increased engagement, motivation, and improved learning outcomes.

The current study uniquely examines a targeted group—EFL prospective teachers—and looks at both vocabulary acquisition and class engagement within the framework of gamification. Unlike other research that might focus solely on one of these aspects, this study explores both simultaneously. It delves into specific gamification techniques and their distinct effects, setting it apart from studies that investigate a broader range of methods. By addressing the teaching methods and educational environment pertinent to future teachers, this research provides insights that may not apply to general EFL learners or students in other settings.

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Moreover, the outcomes have important implications for teacher training programs, offering valuable guidance on incorporating gamification into teacher education to improve teaching strategies and student engagement.

### **Commentary**

The rationale behind focusing on these gamification strategies lies in their potential to address common challenges in EFL education. Vocabulary acquisition, a fundamental component of language proficiency, often requires repetitive practice and contextual usage, which can be facilitated through interactive games and simulations. Moreover, maintaining high levels of student engagement in language learning can be challenging, particularly in traditional classroom settings. Collaborative activities can help mitigate this issue by empowering a sense of community and shared accountability among students.

This study aims to provide empirical evidence on the effectiveness of these gamification strategies in enhancing vocabulary learning and engagement among fourth-year EFL prospective teachers. By comparing the outcomes of interactive game simulations and collaborative activities with traditional teaching methods, the study seeks to offer insights into best practices for integrating gamification into EFL education.

Previous studies' empirical evidence further supports the theoretical underpinnings of gamification strategies. For instance, Hamari et al. (2020) and Sailer et al. (2017) have shown that gamified elements can significantly reinforce student engagement and learning outcomes. These studies underscore the importance of designing gamified experiences that are fun and educationally meaningful.

Studies by Lee and Kim (2020) and Alabbasi (2017) highlight the specific benefits of gamification in EFL settings. These studies suggest that gamification strategies can enhance motivation, increase student participation, and improve vocabulary acquisition. Chen and Law (2016) further demonstrate that digital game-based learning can increase student satisfaction and retention rates. This indicates that integrating gamified elements can make language learning more effective and enjoyable.

This study will contribute to the increasing frame of literature on gamification in education by offering new perspectives on the advantages and challenges of implementing interactive game simulations and collaborative activities in EFL settings. The findings will have practical pedagogical implications for stakeholders and curriculum developers,

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guiding them in designing and integrating gamified learning experiences that enhance language acquisition and student engagement.

### **Context of the Problem**

As a faculty member teaching English language courses at the Faculty of Education, the researcher noted that fourth-year prospective EFL teachers exhibited inadequate language proficiency during their lectures. Consequently, the current research addresses the issue of English majors at the Faculty of Education needing help with low language use levels and lack of motivation. A sample of 30 students was selected for the pilot study. This revealed that students had low performance levels in language skills. Furthermore, reviewing the related literature emphasized the obligation of using gamification as an independent variable to improve vocabulary learning outcomes and increase class engagement among fourth-year English majors.

In traditional EFL classrooms, students face challenges maintaining motivation and actively engaging with language learning materials. Gamification offers potential solutions by leveraging game mechanics to enhance motivation, collaboration, and interaction, addressing these educational challenges.

This study aims to bridge the gaps in the current literature by specifically investigating how gamification strategies impact vocabulary acquisition and class engagement among fourth-year English majors. By examining both theoretical foundations and empirical evidence, the study seeks to provide insights into effective gamification strategies in EFL education.

In the current educational model, there is a growing emphasis on innovative teaching methodologies that impart knowledge and foster student engagement and motivation. The advent of gamification in education represents a significant shift towards creating more interactive, immersive, and compelling learning experiences. This study's focus on the gamification strategies of interactive game simulations and collaborative activities is timely and relevant, given the increasing reliance on technology and cooperative learning in modern classrooms.

The integration of these gamification strategies into EFL education is particularly pertinent. Vocabulary learning, a cornerstone of language proficiency, often poses challenges for students due to its reliance on memorization and repetitive practice. Educators can create engaging and contextually meaningful experiences that enhance vocabulary acquisition

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by incorporating interactive games and simulations. Similarly, collaborative activities can address the issue of student disengagement by fostering a sense of community and shared responsibility, thus promoting active participation and sustained interest in learning.

### **Statement of the problem**

This study investigates how integrating gamification strategies into EFL classes can improve vocabulary learning outcomes and increase class engagement among fourth-year English majors.

### **Aims of the Study**

The current study aimed to:

1. explore how interactive games and simulations can enhance vocabulary learning among fourth-year English majors.
2. assess the impact of collaborative activities on student engagement and participation in EFL classes.
3. compare the effectiveness of these gamification strategies with traditional teaching methods.
4. analyze and compare learning outcomes between experimental and control groups.

### **Questions of the Study:**

The study's main question was, "What is the impact of using some gamification strategies on vocabulary learning and class engagement of EFL prospective teachers?"

### **Sub questions:**

- 1- Are there any statistically significant differences between the means of the scores of the study groups in the post-administration of the vocabulary learning skills pre-posttest?
  - 2- Are there any statistically significant differences in the mean values of the study groups in the post-application of the class engagement scale?
  - 3- What is the effectiveness of gamification strategies in improving vocabulary learning skills of the Faculty of Education EFL prospective teachers?
  - 4- What is the effectiveness of gamification strategies on the class engagement of Faculty of Education EFL prospective teachers?
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### Significance

This study contributes to the field of EFL education by providing practical evidence on the effectiveness of gamification strategies in enhancing vocabulary learning and student engagement.

1. For students, gamification enhances engagement by making learning interactive and enjoyable. It fosters motivation through rewards, challenges, and progression systems, which can increase their interest and commitment to learning. Gamified learning environments encourage active participation and problem-solving skills, promoting a deeper understanding of concepts.

2. Teachers benefit from gamification as it provides practical tools to create dynamic and engaging lessons. It allows for tailored learning experiences to individual student needs. Teachers can track progress more effectively, identify areas of improvement, and adjust teaching strategies accordingly. Gamification can also reduce classroom management issues by keeping students focused and motivated.

3. Educators generally find gamification valuable as it aligns with modern educational theories emphasizing active learning and student-centered approaches. It supports the development of 21st-century skills such as collaboration, critical thinking, and digital literacy.

4. Stakeholders, including parents, administrators, and policymakers, recognize gamification's potential to improve educational outcomes. They appreciate its ability to make learning more accessible and enjoyable, potentially increasing student retention and academic performance. Additionally, gamification can contribute to the overall positive perception of educational institutions by demonstrating innovation and responsiveness to students' evolving needs.

In summary, gamification holds promise as a transformative tool in education. It can benefit students by enhancing engagement and learning outcomes, supporting teachers in effective instruction, empowering

educators with valuable insights, and garnering support from various stakeholders for its potential to advance educational practices.

### **Delimitations**

1.Participants: One hundred eight students from fourth-year prospective EFL teachers at Minia University, Faculty of Education, participated in the study. They are supposed to enhance their vocabulary skills to communicate successfully in real-life situations in the following years after they graduate.

2.The following gamification strategies will be employed:

- interactive games and simulations
- collaborative activities

3.Only the following vocabulary learning skills will be included:

- contextual guessing
- word-formation knowledge
- memorization techniques
- use of dictionaries and thesauruses
- active usage
- reading and listening
- flashcards and vocabulary lists
- language games and activities
- collocation awareness
- self-assessment and reflection

4.The class engagement scale included the following dimensions:

- Behavioral engagement
- Cognitive engagement
- Emotional engagement
- Social engagement
- Behavioral engagement with technology

5.Duration of Study: The study was conducted in the Methods of Teaching course during the first term of the academic year 2021/2022.

6.Geographical Context: The study was conducted within Minia University - Faculty of Education.

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# The Impact of Using Some Gamification Strategies on EFL Prospective Teachers' Vocabulary Learning and Class Engagement

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## Definitions

### **Gamification strategies:**

It refers to using game-like components and principles in non-game contexts to drive user engagement, motivation, and learning outcomes. These strategies include incorporating points, badges, leaderboards, challenges, and feedback systems (Werbach & Hunter, 2020).

Gamification strategies in education involve systematically integrating game mechanics and dynamics into instructional design to enhance student participation, learning, and motivation. These strategies include using competition, reward systems, and storytelling elements to create an engaging learning environment (Kapp, 2021).

The Operational Definition: Gamification strategies refer to the specific methods and techniques involving game design elements such as points, badges, challenges, leaderboards, and feedback systems integrated into educational activities to enhance vocabulary learning and class engagement among fourth-year prospective EFL teachers. These strategies will be employed by implementing interactive game simulations and collaborative activities.

### **Interactive Games and Simulations**

Interactive educational games are digital or physical games designed to engage learners through direct interaction with game elements, facilitating active learning and immediate feedback (Smith & Waring, 2021).

The Operational Definition: Interactive games are digital or physical games designed to enhance vocabulary learning among fourth-year prospective EFL teachers. These games include quizzes, puzzles, and role-playing scenarios, which require students to actively engage with vocabulary items and receive immediate feedback on their performance.

### **Collaborative Learning:**

Collaborative activities are structured tasks that require students to collaborate, communicate, and share knowledge to complete assignments, enhancing their learning experiences and social skills (Slavin, 2014).

The Operational Definition: Collaborative activities involve structured group tasks designed to facilitate vocabulary learning and EFL class engagement among fourth-year prospective EFL teachers. These activities include group discussions, peer reviews, and cooperative projects



where students work together to complete assignments, exchange ideas, and support each other's learning.

### **Vocabulary Learning:**

Schmitt (2021) defined vocabulary learning as the gradual assimilation of new words into one's lexicon through various instructional methods and repeated exposure.

According to Thornbury (2020), vocabulary learning refers to acquiring words and phrases in a foreign language context, facilitated by instructional techniques such as word games, flashcards, and context-based learning.

The Operational Definition: Vocabulary learning refers to the acquisition and retention of English vocabulary by fourth-year prospective EFL teachers. This is assessed through tasks such as vocabulary quizzes, usage in writing assignments, and participation in class activities that require the application of new vocabulary.

### **Class Engagement**

refers to the level of attention, curiosity, interest, and enthusiasm students display during learning or instruction, extending beyond their mere motivation to learn and advance in their education (Fredricks et al., 2020).

In educational contexts, engagement is defined as the involvement and enthusiasm of students in the learning process, characterized by behavioral, emotional, and cognitive engagement (Reeve, 2021).

The Operational Definition: EFL class engagement is measured by the degree of active participation, attention, and enthusiasm shown by fourth-year prospective EFL teachers during their lectures. This includes behaviors such as contribution to class discussions, involvement in interactive activities, and overall attentiveness during lessons, as observed and recorded by the teacher and through student self-reports.

### **Method**

#### **Research Design**

This study adopted a quasi-experimental pre-post control group design to assess the effects of some gamification strategies on vocabulary learning and class engagement among fourth-year prospective EFL teachers at the Faculty of Education. The session materials were derived from the current term's "Methods of Teaching" course topics.

#### **Participants**

The study included (108) fourth-year prospective EFL teachers randomly chosen from the Faculty of Education during the first term of the

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## **The Impact of Using Some Gamification Strategies on EFL Prospective Teachers' Vocabulary Learning and Class Engagement**

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2021-2022 academic year. These students were divided into two intact groups, each comprising (54) students. The experimental group received training through a program incorporating various gamification strategies to improve their vocabulary learning and class engagement. In contrast, the control group was taught using the standard teaching method.

### **Variables:**

#### **Independent Variable:**

- Some gamification strategies

#### **Dependent Variables:**

- Vocabulary Learning
- Class Engagement

### **The instructor**

The researcher employed gamification strategies to train participants to enhance vocabulary learning and class engagement with 4th-year prospective EFL teachers.

### **The Pilot Study**

The study's instruments and materials were tested before the main experiment to ensure their validity, reliability, difficulty level, and appropriate timing. This preliminary testing was conducted with a randomly selected sample of 30 fourth-year English majors from the Faculty of Education in the first week of the 1<sup>st</sup> term of the 2021/2022 academic year.

### **Instruments of the Study**

1. A Vocabulary Learning Test
2. An EFL Class Engagement Scale

### **1. The Vocabulary Learning Test (See Appendix 1)**

#### **The aim of the test**

The vocabulary learning test was designed to measure students' grasp of English vocabulary before and after exposure to gamification strategies. It serves as a tool to assess the impact of gamified activities on vocabulary acquisition among fourth-year prospective EFL teachers.

#### **Construction**

The test consisted of 50 items aligned with the material's core objectives and encompassing various vocabulary learning skills. It was divided into ten sections.

1. Contextual Guessing (5 items from 1-5)
2. Word Formation Knowledge (5 items from 6-10)
3. Memorization Techniques (5 items from 11-15)
4. Use of Dictionaries and Thesauruses (5 items from 16-20)
5. Active Usage (5 items from 21-25)
6. Reading and Listening (5 items from 26-30)
7. Flashcards and Vocabulary Lists (5 items from 31-35)
8. Language Games and Activities (5 items from 36-40)
9. Collocation Awareness (5 items from 41-45)
10. Self-assessment and Reflection (5 items from 46-50)

### **Timing**

It was divided into ten sections, and each student's completion time was recorded and averaged across the entire group, with a total test duration of 120 minutes.

**Scoring:** Scoring was based on a total of 50 marks.

### **Instructions**

The test instructions, presented in English, were concise, accurate, and free from vagueness. They outlined the test's purpose and allotted time.

### **Validity**

Internal consistency was assessed using the Pearson correlation formula, yielding coefficients ranging from 0.65 to 0.82.

### **Reliability**

The test's reliability, as determined by the Alpha Cronbach formula, was 0.77, indicating satisfactory reliability.

## **2. The EFL Class Engagement Scale (See Appendix 2)**

### **The aim of the scale**

It was designed to gather data on students' engagement, motivation, and satisfaction with gamified EFL sessions before and after exposure to gamification strategies in EFL teaching.

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# The Impact of Using Some Gamification Strategies on EFL Prospective Teachers' Vocabulary Learning and Class Engagement

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## **Construction**

The scale comprised 15 items aligned with the material's core objectives and encompassing various class engagement dimensions. It was divided into five dimensions, and each student's completion time was recorded and averaged across the entire group. The total scale duration was 30 minutes.

1. Behavioral Engagement (3 items from 1-3)
2. Cognitive Engagement (3 items from 4-6)
3. Emotional Engagement (3 items from 7-9)
4. Social Engagement (3 items from 10-12)
5. Behavioral Engagement with Technology (3 items from 13-15)

## **Timing**

It was divided into ten sections, and each student's completion time was recorded and averaged across the entire group, with a total test duration of 30 minutes.

**Scoring:** Scoring was based on a total of 75 marks

## **Instructions**

The scale instructions, presented in English, were brief, specific, and free from ambiguity. They outlined the scale's purpose and allotted time.

## **Validity**

Internal consistency was assessed using the Pearson correlation formula, yielding coefficients ranging from 0.69 to 0.85.

## **Reliability**

The scale's reliability, as determined by the Alpha Cronbach formula, was 0.71, indicating satisfactory reliability.

## **Experimentation**

During the first term of the 2021/2022 academic year, 108 fourth-year prospective EFL teachers participated in the study. They were split into two groups: experimental and control groups. An introduction session was held to explain the experiment's purpose and ensure the students were proficient in using gamification strategies to effectively enhance vocabulary learning and EFL class engagement.

## **Steps in Building the Gamification Program:**

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1. Conduct a literature review on gamification, vocabulary learning, and class engagement.
2. Create a comprehensive list of required skills.
3. Have the list assessed by a panel of seven TEFL experts.
4. Define and evaluate the primary objectives of the program.
5. Have language experts review the entire program to ensure clarity, verify content, and assess the relevance of activities.

### **The Gamification Program**

It integrates gamification strategies of interactive games and collaborative activities to effectively enhance vocabulary learning and EFL class engagement. Each session incorporates hands-on, interactive elements to promote active participation, critical thinking, and meaningful language use in diverse contexts. Regular feedback and reflection opportunities ensure continuous improvement and reinforcement of language skills. (See Appendix 3)

#### **Content**

The material consists of the following sessions:

Session 1: Introduction to Gamification and Vocabulary Learning

Session 2: Collaborative Vocabulary Building

Session 3: Interactive Games for Vocabulary Practice

Session 4: Role-playing for Contextual Learning

Session 5: Gamified Vocabulary Assessments

Session 6: Collaborative Storytelling with Vocabulary

Session 7: Virtual Field Trip for Language Exploration

Session 8: Gamified Vocabulary Review

Session 9: Simulation-Based Language Practice

Session 10: Culminating Project and Reflection

#### **Steps in Implementing the Session:**

1. Session Initiation: Each session started with in-class interactions to engage participants.
  2. Session Content Overview: The researcher provided an outline of the session's content.
  3. Objectives and Content Delivery: Participants were informed about the program's objectives and the method of content delivery.
  4. Session Duration: Each session lasted two hours per week.
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## **The Impact of Using Some Gamification Strategies on EFL Prospective Teachers' Vocabulary Learning and Class Engagement**

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### **Activities:**

**The gamification program highlighted these types of activities:**

- Session 1: Icebreaker Game - Vocabulary Race- Discussion
- Session 2: Group Work Association- Vocabulary Quiz Show
- Session 3: Virtual Scavenger Hunt- Online Simulation Game
- Session 4: Role-play Scenarios- Feedback and Reflection
- Session 5: Kahoot! Quiz- Vocabulary Board Game
- Session 6: Group Story Creation- Story Presentation
- Session 7: Virtual Museum Tour- Reflective Discussion
- Session 8: Escape Room Challenge- Vocabulary Bingo
- Session 9: Business Simulation- Peer Feedback
- Session 10: Culminating Project- Class Reflection

### **Duration**

The training period extended from September 2021 to mid-December 2021 (first term). Throughout this period, the program's objectives were covered in weekly sessions, each lasting two hours.

### **Role of the Instructor**

In the context of gamified EFL instruction, the role of the instructor is vital in facilitating compelling learning experiences and maximizing the benefits of gamification strategies. Here are the vital roles and responsibilities of the instructor:

1. Facilitator of Learning: guiding students through gamified learning activities, creating a supportive environment where students feel encouraged to explore, experiment, and engage with the content.
2. Designer of Gamified Activities: designing and developing gamified activities that align with learning objectives and cater to students' language proficiency levels. This involved selecting appropriate games, simulations, and collaborative tasks that enhance vocabulary acquisition and language skills.
3. Integration of Game Elements: integrating game elements such as points, badges, leaderboards, challenges, and immediate feedback into instructional design was a crucial responsibility.
4. Personalization and Differentiation: recognizing students' diverse learning needs and preferences, the instructor personalized gamified activities to accommodate different learning styles and abilities.
5. Motivator and Engager: playing a fundamental role in motivating students to participate actively in gamified lessons, fostering a sense of

excitement and curiosity about learning through gamified experiences, thereby increasing student engagement.

6. Monitor and Adjust: monitoring students' progress and participation levels throughout the gamified learning process.

7. Support and Guidance: assisting students in understanding game mechanics, clarifying language concepts, and offering constructive feedback to enhance learning outcomes, facilitating peer collaboration, and encouraging teamwork during group tasks.

8. Evaluator of Learning Outcomes: evaluating learning outcomes by assessing improved vocabulary acquisition, language proficiency, and overall engagement.

By assuming these roles and responsibilities, the instructor can effectively harness the potential of gamification to make dynamic and engaging learning environments that enhance active participation, meaningful interaction, and improved language learning outcomes for EFL students.

### **Role of Students**

In gamified EFL instruction, students play an active and integral role in their learning experiences. Here are the key roles and responsibilities of students in this context:

1. Students were encouraged to actively participate in gamified activities by engaging in interactive games, simulations, and collaborative tasks. They actively completed challenges, solved problems, and explored language concepts within the gamified environment.

2. Students acted as explorers, navigating various gamified learning modules and experimenting with different game mechanics. They took the initiative to explore new vocabulary words, practiced language skills, and discovered language patterns through interactive gameplay.

3. Gamification enhanced students' motivation by involving game elements such as points, badges, and rewards. Students were motivated to achieve goals, earn virtual rewards, and track their progress, enhancing their intrinsic motivation to learn English vocabulary.

4. Students worked together in teams or groups. They collaborated with peers to complete tasks, solve language-related challenges, and achieve collective goals. Collaboration promoted peer learning, communication skills, and teamwork.



## **The Impact of Using Some Gamification Strategies on EFL Prospective Teachers' Vocabulary Learning and Class Engagement**

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5. Students made decisions within the gamified environment. They exercised autonomy in selecting activities or approaches that matched their learning preferences and goals.

6. Students reflected on their learning experiences and outcomes within the gamified context. They evaluated their progress, identified strengths and areas for improvement, and adapted their strategies based on feedback and self-assessment.

7. Students actively sought feedback from instructors and peers to improve their language skills. They used feedback to refine their understanding of vocabulary concepts, correct language usage, and enhance their overall proficiency in English.

Students actively contribute to a dynamic and engaging gamified EFL learning environment by embracing these roles and responsibilities. They leverage gamification strategies to enhance language proficiency, foster peer collaboration, and develop essential English communication skills.

### **Evaluation Techniques**

The assessment comprised multiple-choice questions (MCQs), open-ended questions, and short-answer questions.

### **Evaluating The Gamification Program**

1. Reviewing the literature
  2. Conducting informal interviews with students, instructors, and stakeholders to determine learning needs.
  3. Specifying the desired outcomes and objectives of the gamification program.
  4. Setting criteria for measuring the program's success, including student engagement, knowledge acquisition, skill development, and collaboration.
  5. Developing comprehensive plans for the program, detailing timelines, resources, and instructional strategies.
  6. Ensuring these plans align with learning objectives and standards.
  7. Conduct a pilot version of the PBL program with a small group of students.
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8. Consulting TEFL experts to assess the suitability of the content to the students' levels and the relatedness of the objectives to the general aims of the gamification program.

**Pre-experimentation**

(a) The researcher conducted the pre-test for EFL vocabulary learning. The analysis of t-values showed no statistically significant differences in the means of scores of the two study groups on the pre-test, indicating that both groups were equivalent and had similar EFL vocabulary learning skills. Table (1) exhibits the means and the standard deviations of scores from both groups on the pre-test, encompassing sub-skills and total scores. The pre-test for vocabulary learning skills indicates that the t-value is 0.41, as depicted in Table (1).

**Table (1)**  
**t-test and significance of the vocabulary learning skills pre-test.**

Test	Groups	Independent Samples T-test				
		No.	Mean	SD	t value	sig. level
vocabulary learning skills	Control group	4	7.11	.14	.41	.22
	Experimental group	4	7.50	.68		

Table (1) highlights no significant difference between the study groups, control, and experimental groups in the pre-test at the 0.05 significance level, demonstrating the groups' similarity before the study began.

(b) The pre-test for the class engagement scale included calculating t-values, as depicted in Table (2).

**Table (2)**  
**t-test and significance of the class engagement scale pre-test.**

Test	Groups	Independent Samples T-test				
		No.	Mean	SD	t value	sig. level
Behavioral engagement	Control group	4	.12	.88	.75	.06
	Experimental group	4	.16	.92		

## The Impact of Using Some Gamification Strategies on EFL Prospective Teachers' Vocabulary Learning and Class Engagement

Cognitive engagement	Control group	4	.09	.77	.91	.06
	Experimental group	4	.11	.81		
Emotional engagement	Control group	4	.00	.99	.98	.07
	Experimental group	4	.98	.02		
Social engagement	Control group	4	.77	.88	.02	.06
	Experimental group	4	.81	.92		
Behavioral engagement with technology	Control group	4	.52	.97	.96	.07
	Experimental group	4	.49	.01		
EFL Engagement Class	Control group	4	7.50	.68	2.26	.06
	Experimental group	4	7.55	.84		

Table (2) displays no significant difference between the study groups, control, and experimental groups in the pre-test at the 0.05 significance level, demonstrating the groups' similarity before the study began.

### Post-Testing

After the sessions, students were assessed on their EFL vocabulary learning skills through a post-test. They also engaged in reflecting on their learning experiences. The data were subjected to statistical analysis, and the concluded results are outlined below.

### Results

This research examined the impact of using some gamification strategies on vocabulary learning and class engagement among fourth-year prospective EFL teachers in the Faculty of Education. The study's data were analyzed using t-tests to compare pre-test and post-test scores, evaluating improvements in student performance.

#### The first question:

To answer question one, "Are there any statistically significant differences in the means of scores of the two study groups in the post-application of the vocabulary learning skills pre-posttest?" a t-test was conducted to analyze the data. The analysis aimed to determine if there

were significant differences in the mean scores between the two groups following the intervention. Analysis of data using t-test was utilized, as shown in Table (3)

**Table (3)**  
**t-test and Significance of the vocabulary learning skills post-test.**

Test	Groups	Independent Samples T-test				
		n	Mean	SD	t value	sig. level
vocabulary learning skills	Control group	4	8.16	.14	22.47	.004
	Experimental group	4	3.70	.68		

Upon reviewing Table (3), it becomes evident that there is a statistically significant difference between the control and experimental groups in the post-assessment of the EFL vocabulary learning skills test. The t-value (22.47) indicates significance at the 0.01 level, favoring the experimental group. Hence, the first research question has been addressed.

**The second question**

To answer this question, "Are there any statistically significant differences in the mean values of both the experimental and control groups in the post-application of the class engagement scale?" a t-test was conducted to analyze the data. The analysis aimed to determine if there were significant differences in the mean values between the two groups following the intervention. Analysis of data using t-test was utilized, as shown in Table (4)

## The Impact of Using Some Gamification Strategies on EFL Prospective Teachers' Vocabulary Learning and Class Engagement

**Table (4)**  
**t-test and Significance of the class engagement scale post-test.**

Test	Groups	Independent Samples T-test				
		n	Mean	SD	t-value	sig. level
Behavioral engagement	Control group	4	.8	.24	3.55	.05
	Experimental group	4	.4	.16		
Cognitive engagement	Control group	4	.11	.19	2.97	.05
	Experimental group	4	.17	.02		
Emotional engagement	Control group	4	.97	.03	0.18	.05
	Experimental group	4	.70	.98		
Social engagement	Control group	4	.20	.22	1.65	.05
	Experimental group	4	.98	.88		
Behavioral engagement with technology	Control group	4	.04	.05	0.91	.05
	Experimental group	4	.91	.64		
EFL Engagement Class	Control group	4	1.12	.73	4.10	.05
	Experimental group	4	0.16	.68		

Upon reviewing Table (4), it becomes evident that there is a statistically significant difference between the control and experimental groups in the post-assessment of the class engagement. The t-values (14.10) indicate significance at the 0.05 level, favoring the experimental group. Hence, the second research question has been addressed.

### The third question

To answer the question: ‘What is the effectiveness of using some gamification strategies on vocabulary learning skills of Faculty of Education English majors?’, the effect size was calculated by calculating the Eta square value (0.73) as shown in table (5).

**Table (5)**  
**The Effect Size for the post-application of the vocabulary learning test on the experimental group**

Test	Eta square value
vocabulary learning	0.73

By examining Table (5), it becomes clear that the effect size of the post-application of the vocabulary learning skills test on the experimental group is high.

**The fourth question**

To answer this question: ‘What is the effectiveness of using some gamification strategies on the class engagement of Faculty of Education English majors?’ the effect size was calculated by calculating the Eta square value (0.67) as shown in Table (6).

**Table (6)**  
**The Effect Size for the post-application of the class engagement scale on the experimental group**

Scale	Eta square value
EFL class engagement	0.67

By examining Table (6), it becomes clear that the EFL class engagement scale's post-application effect size on the experimental group is high.

**Discussion**

Using various gamification strategies, the current study aimed to enhance fourth-year EFL prospective teachers' vocabulary learning and class engagement. As a staff member, the researcher observed an urgent need to improve these skills before implementing the sessions. The researcher administered a pre-test for EFL vocabulary learning. The t-value analysis indicated no significant differences between the mean scores of the study groups, confirming that both groups were homogeneous in their vocabulary learning skills. Students' pre-test scores on vocabulary learning skills and the pre-administration of the class engagement scale showed the necessity of using new strategies for teaching vocabulary and keeping the students' class engagement. Consequently, the sessions allowed students to bridge their vocabulary learning gaps and be more actively engaged.

At the beginning of the sessions, the researcher outlined the objectives, which involved using gamification strategies to improve vocabulary learning skills and emphasized the necessity of transitioning from traditional teaching methods to gamification strategies. The sessions

## **The Impact of Using Some Gamification Strategies on EFL Prospective Teachers' Vocabulary Learning and Class Engagement**

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included various tasks and activities to enhance students' vocabulary learning skills. The study's results demonstrated that the sessions were statistically and educationally effective in improving participants' vocabulary learning.

The study's high gains are attributed to the active role of both the instructor and the students. Using gamification strategies significantly enhanced student teachers' vocabulary learning skills, underlining the necessity of applying various activities. In gamified EFL instruction, the instructor's role was central to simplifying compelling learning experiences and maximizing the benefits of gamification strategies. The instructor acted as a learning facilitator, guiding students through gamified learning activities. The instructor created a supportive environment where students felt encouraged to explore, experiment, and engage with the content. The instructor designed and developed gamified activities aligned with learning objectives and catered to students' language proficiency levels. This involved selecting appropriate games, simulations, and collaborative tasks that enhanced vocabulary acquisition and language skills. These results agreed with those of Tsay, Kofinas, & Luo (2018), Perry (2015), Su & Cheng (2015), and Huang & Soman (2013), who discussed how instructors could effectively integrate game elements into their teaching strategies to enhance student engagement and learning outcomes.

Involving elements such as points, badges, leaderboards, challenges, and immediate feedback into instructional design was a decisive responsibility. The instructor strategically incorporated these elements to motivate students, track progress, and enhance learning outcomes. Recognizing students' diverse learning needs and preferences, the instructor personalized gamified activities to accommodate different learning styles and abilities. Students were allowed to choose activities or paths that matched their interests and strengths. These results coped with Perry (2015), who investigated gamification's effects on EFL students' vocabulary learning, emphasizing the instructor's role in designing and facilitating gamified activities. The research examined how game elements like points, badges, and leaderboards affected student engagement and learning outcomes.

The instructor was pivotal in motivating students to participate actively in gamified lessons and fostering a sense of excitement and curiosity about learning through gamified experiences, thereby increasing student engagement and enthusiasm for EFL classes. The instructor also

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monitored students' progress and participation levels throughout the gamified learning process. It was essential to provide timely support and guidance to students. The instructor assisted students in understanding game mechanics, clarified language concepts, and offered constructive feedback to enhance learning outcomes. She also facilitated peer collaboration and encouraged teamwork during group tasks. The results discussed agreed with Su & Cheng (2015), who explored using digital games in EFL classrooms, focusing on how instructors could utilize gamification to improve language learning and student engagement. The study highlighted the importance of the instructor's role in selecting appropriate games and integrating them into the curriculum.

After the gamified activities, the instructor evaluated learning outcomes by assessing improved vocabulary acquisition, language proficiency, and overall engagement. The instructor continuously evaluated the effectiveness of gamification strategies in meeting educational goals.

Through these roles and responsibilities, the instructor could effectively connect the potential of gamification to make dynamic and engaging learning environments that enhance active participation, meaningful interaction, and improved language learning outcomes for EFL students.

Students' participation in gamified activities helped them recognize and understand the ideas and details in vocabulary learning texts. They engaged in various collaborative activities and felt confident communicating freely with their peers. The study's results indicated significant differences between the means of the scores of the two study groups on the vocabulary learning test, favoring the post-test scores. This improvement is attributed to the well-designed sessions, which included interactive activities that increased student engagement.

The results demonstrated that games can effectively serve as a medium for teaching English vocabulary. The experimental group showed positive achievements, and the participants expressed high satisfaction with this approach, reporting numerous helpful comments and thoroughly enjoying their classes. The study also found that incorporating gamification as a learning technique increased learner engagement, improved knowledge acquisition and retention, and allowed learners to see real-world applications of their learning. The post-test results revealed a positive effect in both groups, supporting the long-term benefits of using games for vocabulary learning due to the active engagement in learning new words.

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## **The Impact of Using Some Gamification Strategies on EFL Prospective Teachers' Vocabulary Learning and Class Engagement**

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The study's results revealed significant differences between the means of the scores of the two study groups on the vocabulary learning test, favoring the post-application scores. This outcome is likely due to the well-structured activities within the sessions. The materials, which included interactive games and activities, effectively developed vocabulary learning skills among English majors by increasing student interaction and engagement. This result is consistent with the study of Pratama et al. (2020), where participants viewed the incorporation of gamification in education as a significant innovation. Student motivation and interest significantly impacted educational performance. Students with high levels of interest and motivation tended to perform better. Gamification effectively captured students' attention during lessons and enhanced their engagement.

Using gamification in learning received positive student feedback. The findings indicated that educational games had numerous positive effects on the participants, as games were found to entertain, educate, motivate, and improve learners' fluency. One student commented, "Through games, I felt the attractiveness of the foreign language class; I was always enthusiastic." The results showed that the experimental group scored higher on post-tests, consistent with Nguyen & Nga's (2003) findings that games facilitated quick learning of new words. Additionally, students in the experimental groups enjoyed the process more, interacting and cooperating, aiming to win. These findings aligned with Ashraf et al. (2014), who highlighted the significant role of games in creating an enjoyable classroom environment. Post-test scores indicated that using games was beneficial in learning vocabulary and class engagement.

### **Students' Reflections**

Students shared their reflections on the experiment:

- "This course was very beneficial as it taught us communication skills and provided insights into gamification strategies."
- "The sessions allowed us to receive tasks and preview the material for the next lecture."
- "The instructor was cooperative, friendly, and engaging."
- "The vocabulary learning activities helped me practice conversations with my group peers."
- "I now feel confident in chatting and communicating with others."

### **Pedagogical Implications**

- The significant improvements observed in EFL learners using gamification strategies underscore their potential for enhancing vocabulary learning. Educators can make a more engaging, effective, and personalized learning experience by thoughtfully incorporating these tools into educational practices. This approach boosts vocabulary learning skills and prepares students for a technologically advanced world where digital literacy is increasingly vital.

- Educators should consider incorporating gamification strategies into their curriculum to enhance EFL vocabulary learning skills. Structured sessions like these can complement traditional teaching methods, providing a blended learning environment that maximizes student engagement and learning outcomes.

- In-class activities and group discussions facilitated by gamification strategies encourage collaborative learning. Students can work together, enhancing their language skills and fostering teamwork and communication abilities. Group discussions offer opportunities for peer feedback, allowing students to learn from one another and gain diverse perspectives on their language use and proficiency.

- It is essential for teachers to be adept at integrating gamification strategies into their teaching practices. Professional development programs should be available to train educators on effectively using these strategies.

### **Challenges:**

The researcher encountered several difficulties during the implementation of the sessions:

1. While gamification can boost motivation for some students, it may not be equally effective for everyone, particularly those less interested in competitive or game-like activities.
2. Maintaining a balance where the entertaining aspects of gamification support rather than reduce learning objectives is crucial.

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3. The competitive nature of gamification can sometimes lead to increased stress and anxiety among students, particularly those who are less confident or sensitive to competition.

4. A few students faced difficulties with vocabulary learning skills.

### **To overcome these challenges:**

1. Students were organized into teams.

2. An orientation session was conducted to motivate and prepare students for active participation.

3. Ensuring that gamification elements are designed to reinforce learning objectives rather than distract from them.

4. Implementing game elements that are designed to be inclusive and supportive, offering options for students to participate in non-competitive ways and providing additional support for those who may struggle with competitive aspects.

### **Conclusions**

The study's findings showed that:

1. Students' vocabulary learning skills improved following the sessions' implementation, likely due to the diverse tasks and strategies introduced by the researcher.

2. Students reported personal growth, including enhanced thinking, self-confidence, communication skills, and teamwork. They also appreciated the instructor's role as a facilitator of learning.

3. Students indicated that incorporating gamification strategies into learning made the tasks more approachable and engaging.

4. Games can be an effective tool for teaching English vocabulary. The experimental group thoroughly enjoyed their classes. Additionally, the study found that using gamification as a learning technique enhanced learner engagement, improved knowledge absorption and retention, and enabled learners to perceive real-world applications of their education.

### **Recommendations**

The following recommendations are suggested:

1. Employing gamification strategies to improve vocabulary learning skills and class engagement among English majors in the Faculty of Education.
2. Offering training sessions for faculty members on incorporating gamification tools into teaching and learning.
3. Designing gamification strategies tailored to meet the specific needs of students and educators.

### **Suggestions for Further Research**

1. Evaluating the effectiveness of gamification strategies in enhancing reading and writing skills among English majors.
2. Examining the impact of gamification strategies on improving literacy skills among English majors.
3. Investigating the effectiveness of gamification strategies in teaching English language courses in education faculties.
4. Applying gamification strategies to improve communication skills among secondary school students.

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## References

- Alabbasi, D. (2017). Exploring teachers' opinions towards using gamification techniques in higher education. *International Journal of Emerging Technologies in Learning (iJET)*, 12(5), 35-52.
- Ariffin, A., & Abdi, B. M. (2020). The relationship between collocation competence and writing skills of EFL learners. *AJELP: Asian Journal of English Language and Pedagogy*, 8(1), 41-52.
- Asad, M. M., Naz, A., Churi, P., & Tahanzadeh, M. M. (2021). Virtual reality as a pedagogical tool to enhance experiential learning: a systematic literature review. *Education Research International*, 2021(1), 7061623.
- Ashraf H., Motlagh F. G., Salami M. (2014). The impact of online games on learning English vocabulary by Iranian (low-intermediate) EFL learners. *Procedia-Social and Behavioral Sciences*, 98, 286–291.
- Basuki, Y., & Hidayati, Y. (2020). The effectiveness of Quizlet application towards students' motivation in learning vocabulary. *Journal of Applied Studies in Language*, 4(2), 160-166. <https://doi.org/10.31940/jasl.v4i2.2256>
- Chen, H. (2021). Practical collaborative learning activities in EFL classrooms. *International Journal of English Language Education*, 9(1), 56-70.
- Chen, H., & Law, N. (2016). Using digital game-based learning to improve primary students' learning performance and motivation in English learning. *Educational Technology & Society*, 19(2), 104-116.
- Deci, E. L., & Ryan, R. M. (2020). *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*. Guilford Press.
- Deterding, S., Sicart, M., Nacke, L., O'Hara, K., & Dixon, D. (2020). *Gamification*. The MIT Press Essential Knowledge Series.
- Dichev, C., & Dicheva, D. (2017). Gamifying education: A critical review: What is known, what is believed, and what remains uncertain. *International Journal of Educational Technology in Higher Education*, 14(1), 9. <https://doi.org/10.1186/s41239-017-0042-5>
- Dörnyei, Z. (2021). *Motivational strategies in the language classroom*. Cambridge University Press.
- Ellis, R. (2020). *The study of second language acquisition*. Oxford University Press.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2020). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59-109.
- Gee, J. P. (2020). *Better video games and better learning: essays on video games, learning, and literacy*. Peter Lang Publishing.
- Ghonivita, Y., Pahamzah, J., Wijayanti, M. A., & Sultan, U. (2021). Improving Students' Listening Skill and Vocabulary Mastery through Contextual Teaching and Learning. *Journal of English Language and Cultural Studies*, 4(1), 1-12.
- Gorgoz, S., & Tican, C. (2020). Investigation of Middle School Students' Self-Regulation Skills and Vocabulary Learning Strategies in Foreign Language. *International Journal of Educational Methodology*, 6(1), 25-42.

- Hamari, J., Alha, K., Järvelä, S., Kivikangas, J. M., Koivisto, J., & Paavilainen, J. (2020). Why do players buy in-game content? An empirical study on concrete purchase motivations. *Computers in Human Behavior*, 107, 106285.
- Hamari, J., Koivisto, J., & Sarsa, H. (2014). Does gamification work? - A literature review of empirical studies on gamification. In 2014 47th Hawaii International Conference on System Sciences (pp. 3025-3034). IEEE.
- Hoidn, S., & Reusser, K. (2020). Foundations of student-centered learning and teaching. In *The Routledge international handbook of student-centered learning and teaching in higher education* 17-46.
- Hung, C. M., Yang, M. T., Hwang, G. J., Chu, H. C., & Wang, C. C. (2018). A scoping review of research on digital game-based language learning. *Educational Technology & Society*, 21(1), 42-59.
- Johnson, D. W., Johnson, R. T., & Smith, K. A. (2014). Cooperative learning: Improving university instruction by basing practice on validated theory. *Journal on Excellence in College Teaching*, 25(3-4), 85-118.
- Kapp, K. M., & Blair, L. (2022). The impact of gamification on student motivation and engagement in higher education: A case study. *Journal of Educational Technology Systems*, 50(1), 56-78.
- Laufer, B. (2021). Vocabulary acquisition in a foreign language: Perspectives from EFL learners. *Language Teaching Research*, 25(3), 427-443.
- Lee, K., & Kim, H. (2020). Collaborative learning in English language teaching: Benefits and challenges. *Journal of Language Teaching and Research*, 11(2), 123-132.
- Liu, T. Y., & Chu, Y. L. (2010). Using ubiquitous games in an English listening and speaking course impacts learning outcomes and motivation. *Computers & Education*, 55(2), 630-643. <https://doi.org/10.1016/j.compedu.2010.02.023>
- Liu, Y., & Chu, H. (2021). Effects of a mobile gamification app on language learning: A case study on enhancing EFL learners' vocabulary. *Educational Technology Research and Development*, 69(3), 1309-1326. <https://doi.org/10.1007/s11423-021-09966-2>
- Nacke, L., Drachen, A., Kuikkaniemi, K., Niesenhaus, J., Korhonen, H. J., Hoogen, W. M. V. D., ... & Prinsloo, G. (2021). Gameful Design in the Age of Ethical AI: Emergent Challenges and Opportunities. In *Extended Abstracts of the 2021 CHI Conference on Human Factors in Computing Systems* (pp. 1-8).
- Nation, I. S. P. (2020). *Learning vocabulary in another language*. Cambridge University Press.
- Nguyen, H. T., Nga K. T. T. (2003). Learning vocabulary through games, the effectiveness of learning language through games. *Asian EFL Journal*, 4, 2.
- Ofosu, A. K. (2020). The shift to gamification in education: A review on dominant issues. *Journal of Educational Technology Systems*, 49(1), 113-137.
- Panmei, B., & Waluyo, B. (2022). The pedagogical use of gamification in English vocabulary training and learning in higher education. *Education Sciences*, 13(1), 24.
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- Perry, B. (2015). Gamifying French language learning: A case study examining a quest-based, augmented reality mobile learning-tool. *Procedia - Social and Behavioral Sciences*, 174, 2308-2315. <https://doi.org/10.1016/j.sbspro.2015.01.892>
- Pürbudak, A., and Ertuğrul U. (2021) "Collaborative group activities in the context of learning styles on web 2.0 environments: An experimental study." *Participatory Educational Research* 8.2 407-420.
- Reeve, J. (2021). A self-determination theory perspective on student engagement. In *Handbook of Research on Student Engagement* (pp. 149-172). Springer.
- Sailer, M., Hense, J. U., Mayr, S. K., & Mandl, H. (2017). How gamification motivates: An experimental study of the effects of specific game design elements on psychological need satisfaction. *Computers in Human Behavior*, 69, 371-380.
- Sanina, A., Kutergina, E., & Balashov, A. (2020). The Co-Creative approach to digital simulation games in social science education. *Computers & Education*, 149, 103813.
- Schmitt, N. (2021). *Vocabulary in language teaching*. Cambridge University Press.
- Slavin, R. E. (2014). Cooperative learning and academic achievement: Why does groupwork work? *Anales de Psicología*, 30(3), 785-791.
- Smith, J. J., & Waring, P. (2021). The influence of gamification on learning and engagement: A systematic review. *Educational Psychology Review*, 33(2), 355-377.
- Thornbury, S. (2020). *The lexical approach: The state of ELT and a way forward*. Cengage Learning.
- Tsay, C. H. H., Kofinas, A. K., & Luo, J. (2018). Enhancing student learning experience with gamification: The effects on student engagement, learning outcomes, and satisfaction. *Journal of Education for Business*, 93(7), 351-359. <https://doi.org/10.1080/08832323.2018.1490687>
- Vahdat, S., & Behbahani, S. M. C. (2013). The effect of video games on Iranian EFL learners' vocabulary learning. *Procedia - Social and Behavioral Sciences*, 93, 2006-2010.
- Wang, W., & Tahir, R. (2021). The impact of game-based learning on EFL learners' vocabulary acquisition: A meta-analysis. *Computer Assisted Language Learning*, 34(7), 947-972.
- Werbach, K., & Hunter, D. (2020). *The Gamification Toolkit: Dynamics, Mechanics, and Components for the Win*. Wharton Digital Press.
- Zou, D., Zhang, R., Wang, M., & Kwan, R. (2019). Individualized word learning for College students: a portfolio-based method for hybrid learning. *Journal of computing in Higher education*, 31, 273-289.
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