

# ENGAGING THE ADULT ELS: AN IN-DEPTH ANALYSIS OF GAMIFICATION'S IMPACT OM MOTIVATION AND LEARNING EFFICACY IN BEGINNER ELS GRAMMAR CLASSROOM

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## ABSTRACT

This study investigates the impact of gamification on motivation, engagement, and assessment anxiety among adult learners in an ESL grammar classroom. With the increasing adoption of digital learning tools, understanding their effects on adult learners, especially in language acquisition, is crucial. Participants in this study were adult learners at a beginner English proficiency level, who engaged in a grammar assessment through the Kahoot platform. The assessment included various grammar tasks designed to evaluate comprehension and retention. Employing thematic analysis of the data revealed significant findings: gamification led to improved motivation and engagement, enhanced visual learning, decreased test anxiety, and heightened enjoyment. These outcomes suggest that integrating gamification into ESL grammar teaching can create a more dynamic and inclusive learning environment, catering to diverse learning styles. The research underscores the potential of gamification not just in teaching, but also in evaluating student comprehension effectively. The study calls for further studies to explore the long-term impacts of gamification and its applicability across different stages of ESL learning.

*Keywords:* ESL grammar, Adult learning, gamification, motivation, test anxiety

## INTRODUCTION

In recent years, the field of education has seen a paradigm shift, with digital technology playing an increasingly central role in shaping how learning is delivered and experienced. This change is particularly pronounced in the realm of language education, where the traditional methods of teaching are being supplemented, and in some cases replaced, by innovative approaches that leverage the advancements in technology. One such approach that has garnered significant attention is gamification. Originally conceptualized by Deterding, Dixon, Khaled, and Nacke (2011), gamification refers to the application of game-design elements in non-game contexts. This concept has found its way into various educational frameworks, including language learning. The role of gamification in language learning is particularly significant, given its potential to create engaging, motivating, and enjoyable learning environments (Dehghanzadeh et al., 2019). Furthermore, the challenges faced by adult ESL learners, such as difficulties in grasping new languages and varying cultural backgrounds, underscore the need for effective learning strategies. In this regard, the potential of gamification in education is vast, particularly in the realm of English as a Second Language (ESL) education. Adult ESL learners face unique challenges in their educational journey. These include not only the inherent difficulties of mastering a new language but also the diverse cultural and educational backgrounds from which these learners come. For many adult learners, traditional methods of language instruction can be daunting, often leading to disengagement or a lack of motivation. This is where gamification comes into play. By introducing elements typically associated with games – such as point scoring, competition, and rules of play – into the learning environment, educators can create a more engaging, interactive, and enjoyable experience for learners.

The impact of gamification on learning and teaching, particularly in digital game-based language learning (DGBLL), is increasingly recognized for its positive effects on language acquisition. Reinders and Wattana (2015) emphasize that gameplay in language learning effectively lowers affective barriers and boosts communication willingness, creating a motivating learning environment. This approach enhances language skills and positively influences learners' attitudes and confidence. Similarly, Dehghanzadeh et al. (2019) found that gamification in ESL significantly improves engagement, motivation, and satisfaction while reducing anxiety. These studies collectively highlight gamification's role in enhancing various aspects of language learning, including vocabulary, grammar, and speaking skills.

This study delves into the specific context of adult ESL (English as a Second Language) learners, exploring how gamification influences their learning process, especially in mastering grammar. ESL learners, often facing challenges in grasping the nuances of a new language, require innovative and engaging teaching methodologies to enhance their learning experience.

Gamification, which involves the application of game-design elements in non-game contexts, offers a promising approach to making learning more interactive and enjoyable.

This research focuses on adult beginners in an ESL program, a demographic that typically encounters unique challenges due to varying cultural backgrounds and previous educational experiences. The study aims to investigate the impacts of gamification on aspects such as student motivation, engagement, test anxiety, and anxiety in grammar learning. Grammar, often considered one of the more challenging aspects of language learning, can particularly benefit from the engaging and interactive elements of gamification. With the increasing diversity in classrooms and the continuous evolution of digital learning tools, understanding the effectiveness of gamification in language education becomes crucial. In addition to examining the overall impact of gamification on ESL learning, this study seeks to understand how specific gamified elements influence different aspects of the learning process. The study includes investigating the role of competitive elements, such as leaderboards and point scoring, and their effect on learner motivation and engagement. It also involves exploring how the integration of visual and interactive elements in gamified content aids in the comprehension and retention of grammatical concepts. Furthermore, the study will delve into the psychological impact of gamification on ESL learners, particularly in relation to test anxiety. Test anxiety is a common issue among language learners, often impacting their performance and overall learning outcomes. By examining how gamified quizzes and assessments influence learners' perceptions and experiences of being tested, the study aims to provide insights into how gamification can be used to alleviate such anxieties, thereby creating a more conducive learning environment.

The study aims to answer the following research questions:

1. How does gamification affect adult ESL learners' motivation and engagement in grammar learning?
2. What impact does gamification have on learners' test anxiety and their perception of grammar quizzes?

## **LITERATURE REVIEW**

In this chapter, I review and critique the research and scholarship on gamification's impact in ESL learning. The literature review on gamification's impact in classrooms incorporates diverse studies. Dehghanzadeh et al. (2019) found gamification positively affects ESL learners' motivation and satisfaction. Reinders and Wattana (2015) demonstrated digital games increase willingness to communicate and reduce anxiety in language learning. Dreimane (2018) and Dicheva et al. (2015) identified gamification's benefits on student engagement and motivation, with a need for further research on specific gamification elements. Manzano-León et al. (2021) suggested gamification enhances student engagement and performance. Garland (2015) indicated mixed effects of

gamification, dependent on context and implementation. Mohandas et al. (2020) concluded gamification boosts morale and participation in ESL classrooms, highlighting the need for practical application research.

Although studies in this field have examined the effects on general student motivation and engagement, they have not delved deeply into its specific impact on beginner ESL grammar learning. This literature review provides additional insight into the nuanced effects of gamification in this specialized context. The analytic focus on individual gamification elements offers another insight. This review analyzes how these elements specifically influence beginner ESL learners in grammar. Additionally, while numerous studies have identified the broad benefits of gamification in education, little analytic attention has been paid to its unique implications in language learning for adult beginners. I address this issue by demonstrating the value of a targeted analysis of gamification in beginner ESL grammar classrooms with adult ESL learners.

Dehghanzadeh et al. (2019) conducted a systematic review focusing on the use of gamification to support learning English as a Second Language (ESL). It involved analyzing 22 publications from 2008 through 2019. The research aimed to map learning experiences and outcomes related to ESL through gamification. The findings indicated positive effects of gamification on learners' experiences and outcomes, enhancing engagement, motivation, and satisfaction, although no specific gamification elements were directly associated with these outcomes. This study highlights a research gap in identifying and linking specific gamification elements to learning experiences and outcomes in ESL, suggesting a direction for future research.

Reinders and Wattana (2015) explored the impact of digital game-based learning on English as a Foreign Language (EFL) students' willingness to communicate in English. Conducted with 30 Thai university students over a 15-week language course, the research involved integrating the game 'Ragnarok Online' into classroom activities. Data were collected through semi-structured interviews with five randomly selected students, supplemented by WTC questionnaires. Analysis focused on communication experiences and willingness to communicate in English. The findings indicated increased willingness to communicate, reduced anxiety, and enhanced confidence in language use among participants. This research highlights the potential of digital games in language learning but also points to the need for further investigation into their long-term effects and broader applicability in different learning contexts.

Dreimane (2018) reviewed publications on gamification in education to explore the concept and its application. This systematic review covered 91 articles, focusing on the context of education among other fields. The findings demonstrated that gamification positively influences student motivation, engagement, and learning outcomes. However, the study identified a research gap in understanding the specific effects of individual gamification elements on learning processes, which is pertinent for this research focusing on gamification's impact in beginner ESL grammar classrooms.

Dicheva et al. (2015) systematically maps the use of gamification in education. The research analyzed 91 articles, focusing on the application of game elements in educational contexts. The findings suggest that gamification enhances student motivation, engagement, and learning outcomes. However, the study identifies a gap in understanding the specific effects of individual gamification elements on learning processes, which is pertinent to research focusing on beginner ESL grammar classrooms. The implications for broader educational practice and further research in specific learning contexts are significant.

The study by Manzano et al. (2021) systematically reviews the impact of gamification in education, focusing on motivation and academic performance. The research included a variety of educational levels and analyzed 750 articles, with 14 meeting the inclusion criteria. Findings suggest gamification positively influences student engagement and achievement. However, the study indicates a need for more specific research on gamification's impact on adult beginner ESL grammar learning, highlighting a gap which this research aims to address.

Garland (2015) carried out a meta-analysis exploring the implications of gamification in second language education. It analyzes various studies to determine gamification's impact on learning and motivation. The research found mixed results, indicating that while gamification can be beneficial in certain contexts, its effectiveness varies based on implementation and individual differences. These findings provide insights into the application of gamification in language learning but also highlight a gap in understanding the specific conditions under which gamification is most effective, particularly in beginner ESL grammar classrooms.

Mohandas, Hussin, and Ahmad (2020) focused on language gamification in ESL classrooms from a teaching perspective. It explores how gamification can be integrated into language teaching, emphasizing its potential to enhance the learning experience. The study does not specify participants or data collection methods as it is a conceptual paper. It concludes that gamification can significantly boost student morale, motivation, and classroom participation. However, it identifies a research gap in the practical application and long-term effects of gamification in ESL classrooms, specifically for beginner learners in grammar, which this research aims to address.

The existing research on gamification in ESL learning consistently highlights its positive impact on motivation, engagement, and learning outcomes. However, a notable research gap is identified in understanding the specific effects of individual gamification elements on learning processes, especially in the context of adult beginner ESL grammar classrooms. This gap presents an opportunity for further exploration into how distinct aspects of gamification directly influence the learning efficacy and motivation in this specific learner group.

## **METHODOLOGY**

### ***Research Approach***

For this study, a qualitative case study approach was selected due to its suitability for examining the impact of gamification on motivation and learning efficacy in adult ESL grammar classrooms. This approach was chosen for its ability to provide a detailed, contextual analysis of a specific educational setting.

The case study method is particularly effective in exploring the unique dynamics of adult ESL learners using gamification tools like Kahoot. It provides a comprehensive understanding of how these tools influence factors such as learner engagement, motivation, anxiety levels, and overall learning efficacy. The qualitative nature of this approach is beneficial for capturing the complexities and subtleties of adult learners' experiences and perceptions, which are often rich in detail but not easily quantifiable.

By using a case study approach, the research gains the advantage of collecting diverse and in-depth data through interviews, observations, and document analysis. This methodology enables the construction of a vivid and detailed picture of the gamification's impact in the ESL grammar classroom. The richness of this data is crucial for understanding the integration and effectiveness of gamification in language learning. Furthermore, the flexibility inherent in qualitative case studies allows for an in-depth examination of specific instances. This depth is essential for uncovering the deeper implications of using gamification in grammar teaching and understanding its potential benefits and challenges.

### **Participants**

For this qualitative case study, the participants were chosen from an Intensive English Program in the USA, comprising four adult ESL beginners. Each participant brought a unique cultural perspective to the study, hailing from Japan, Venezuela, Saudi Arabia, and Puerto Rico. The diversity in their backgrounds was a critical aspect of the selection process, as it provided a rich variety of views on the impact of gamification in ESL grammar learning.

The selection was primarily influenced by the need for cultural diversity to understand how gamification is perceived and interacted with across different cultural contexts, particularly relevant in language learning environments. These learners, being at the beginner level in their ESL journey, offered insights into the initial impact of gamified learning tools, a stage where such interventions might have significant effects.

Moreover, the study aimed to gather rich and diverse data, and the varied educational and cultural backgrounds of the participants promised to yield this. Their experiences and perceptions were expected to provide different perspectives on the effectiveness of gamification, thereby enriching the overall findings of the research.

### **Sampling**

In this qualitative case study, convenience sampling was employed to select four adult ESL beginners from an Intensive English Program in the USA. This approach facilitated the inclusion

of participants from diverse cultural backgrounds, including Japan, Venezuela, Saudi Arabia, and Puerto Rico, thereby enriching the study with varied perspectives on the impact of gamification in ESL grammar learning. This diversity was instrumental in understanding how gamification is perceived across different cultural contexts, enhancing the study's insights into the initial effects of gamified learning tools on beginner level learners.

### ***Data Collection***

The data collection process in this study was planned to capture a comprehensive understanding of the participants' experiences with gamification in ESL grammar learning. It involved a combination of researcher observation and semi-structured interviews. During the sessions where participants engaged in Kahoot-based grammar assessments on countable noun vs uncountable noun and detailed observations were conducted. The researcher focused on noting the students' participation levels, responses, and reactions to the activities. This observation was critical in understanding how participants interacted with the gamified elements and the immediate impacts these elements had on their learning experience. Attention was paid to both verbal and non-verbal cues, providing a holistic view of their engagement and emotional responses to the gamification process.

Following the completion of the Kahoot grammar assessments, semi-structured interviews were conducted with each participant. These interviews were designed to delve deeper into the participants' experiences. By using a semi-structured format, the researcher was able to guide the conversation with a set of prepared questions while also allowing flexibility for participants to share their thoughts and experiences freely. This approach ensured that while the key research questions were addressed, participants also had the opportunity to provide insights that might not have been anticipated at the outset of the study. A significant aspect of the interview process was the use of "Wh-questions" (who, what, when, where, why, and how). These questions were instrumental in extracting nuanced details about the participants' experiences. By asking open-ended questions, the participants were encouraged to elaborate on their thoughts, feelings, and perceptions regarding the use of gamification in their grammar learning process. This approach provided a depth of understanding that was essential for capturing the complexities and subtleties of their learning experiences. In the data collection phase of the study, special consideration was given to the language preferences of the participants, recognizing their status as beginner English learners. To ensure that they could express themselves comfortably and accurately, participants were given the option to respond to questions in their native languages if they wished. This approach was adopted to facilitate ease of communication and to ensure that language barriers did not impede the expression of their true thoughts and experiences. Once the participants had provided their responses in their native languages, Google Translator was employed to translate these responses into English.

The combination of observational data and detailed interviews allowed for a rich, multifaceted collection of data. This methodology was essential in painting a comprehensive picture of the impact of gamification on adult ESL learners, encompassing both observable behaviors during the learning process and reflective insights post-assessment.

### ***Data Analysis***

In this study, the data collected from both observations and interviews underwent a meticulous thematic analysis following Braun and Clarke's (2006) methodology. This approach was chosen for its effectiveness in identifying and interpreting patterns within qualitative data, offering a nuanced understanding of the impact of gamification on ESL grammar learning.

The analysis began with an in-depth examination of the data, where each piece was carefully reviewed to gain a thorough understanding of the participants' experiences. This initial stage was crucial for recognizing relevant concepts and laying the groundwork for the subsequent coding process. During coding, key elements from the observations and interviews were encapsulated, such as reactions to gamification, levels of engagement, and emotional responses. This detailed and iterative process ensured that all aspects of the data were captured. Following the coding, the data was organized into potential themes. This stage was instrumental in revealing significant patterns and insights within the data. Each theme was developed by compiling all related coded data, allowing for a meaningful organization of the findings. The themes were then reviewed to assess their relevance to the coded extracts and the overall data set. This involved a refining process where themes were combined, separated, or even discarded based on their significance and contribution to the overarching narrative of the study. Once the main themes were identified, they were defined and named. This stage involved distilling the essence of each theme and assigning a descriptive name that accurately reflected its aspect of the data. The clear definitions for each theme facilitated a coherent understanding of their significance. The final phase of the analysis involved developing a narrative that effectively told the story of the data through these themes. This narrative integrated the analytical findings with relevant data extracts and contextualized the analysis within the existing literature on gamification in education.

The emergent themes from this analysis provided a comprehensive understanding of the multifaceted roles of gamification in language learning. They illuminated aspects such as the impact of gamification on learner motivation, the dynamics of engagement, emotional responses to digital learning tools, and the overall efficacy of learning, offering valuable insights into the effectiveness and potential of gamification in educational contexts.

### ***Ensuring Trustworthiness***

In this study, ensuring the trustworthiness of the findings was of paramount importance. To achieve this, the researcher employed the method of member checking. Member checking is a crucial process in qualitative research where the participants are given an opportunity to review



and comment on the researcher's findings or interpretations. This method serves to validate the accuracy and credibility of the data collected and the conclusions drawn from it.

After the initial data analysis, the findings were presented back to the participants. They were invited to provide feedback and express their views on whether the interpretations and conclusions accurately reflected their experiences and perspectives. This step was critical in ensuring that the research findings were a true representation of the participants' experiences and not merely the researcher's interpretations. Member checking also provided an opportunity for participants to clarify any misunderstandings or misinterpretations, further enhancing the reliability of the research. This process of engaging participants in validating the findings helped in reinforcing the validity and credibility of the study.

## **RESULTS**

The results of the study on the integration of gamification in ESL learning indicate a positive response from students. The incorporation of gamification elements in their learning process, particularly in quizzes focusing on countable and uncountable nouns, was found to be intriguing and engaging. This engagement was not only a result of the interactive format but also due to the visual elements and competitive aspects integrated into the learning activities.

The study's findings provide insightful answers to the research questions regarding the impact of gamification on adult ESL learners. The results, categorized according to the research questions, are as follows:

### ***Research Question 1***

How does gamification affect adult ESL learners' motivation and engagement in grammar learning?

#### **Motivational Enhancement and Engagement Through Competition**

The themes of 'Motivational Enhancement and Engagement Through Competition' directly address this question. The incorporation of gamification in grammar quizzes, such as those on countable and uncountable nouns, significantly uplifted students' motivation. This was evidenced by their increased eagerness to learn and actively participate. A student's reflection, "The gamified elements in the grammar quizzes made me eager to learn more and participate actively (originally expressed in Japanese, has been translated into English)," highlights this motivational boost. Additionally, the competitive elements, like leaderboards, enhanced their overall engagement, making learning both exciting and enjoyable. A student commented on this aspect, saying, "Competing with classmates on the leaderboard made learning exciting and fun, not stressful ((originally expressed in Spanish, has been translated into English))."

#### **Visual Learning Stimulation**

'The Visual Learning Stimulation' theme also contributes to understanding the impact on engagement. The visual elements in the gamified content were particularly effective in maintaining interest and enhancing understanding of grammatical concepts, as noted by a student: "The visuals

in the gamified content helped me grasp the concepts of countable and uncountable nouns more effectively (originally expressed in Spanish, has been translated into English))."

### ***Research Question 2***

What impact does gamification have on learners' test anxiety and their perception of grammar quizzes?

#### **Anxiety Reduction**

The theme of 'Anxiety Reduction' speaks directly to this question. The study found that the playful and interactive format of gamified quizzes reduced test-related anxiety. This reduction was attributed to the fun and engaging nature of the quizzes, shifting the focus from testing stress to learning enjoyment. One student captured this sentiment, saying, "The quizzes were fun and took the pressure off, making me less anxious about being tested (originally expressed in Arabic, has been translated into English)."

#### **Perceived Enjoyment**

The theme of 'Perceived Enjoyment' also addresses the impact on learners' perception of grammar quizzes. Students reported high levels of enjoyment and amusement with the gamification process, which significantly contributed to a more enjoyable learning experience. This was exemplified by a student's statement: "I actually had fun during the quiz, it was entertaining and interesting in a way that traditional tests are not (originally expressed in Spanish, has been translated into English)," indicating how gamification transformed the perception of grammar quizzes from a traditional testing format to an enjoyable activity.

In general, the study revealed that gamification in ESL learning positively affects student motivation and engagement, reduces anxiety, enhances engagement through competition, stimulates visual learning, and increases perceived enjoyment. These findings underscore the potential of gamification as a powerful tool in enhancing the learning experience in ESL classrooms, providing answers to the research questions, and highlighting its benefits in language education.

## **DISCUSSIONS**

The study's investigation into the integration of gamification in ESL learning has provided compelling evidence of its positive impact on students. The results indicated that the incorporation of gamification elements, particularly in quizzes focusing on grammatical concepts such as countable and uncountable nouns, significantly enhanced the learning experience. These findings are discussed in relation to the study's two main research questions.

The study found that gamification had a profound effect on enhancing students' motivation and engagement in grammar learning. This was evident in the theme of 'Motivational Enhancement and Engagement Through Competition'. Students expressed increased eagerness to learn and actively participate, a direct result of the gamified elements in the grammar quizzes. The

competitive aspects, like leaderboards, added to this by making learning both exciting and enjoyable. Moreover, the ‘Visual Learning Stimulation’ theme demonstrated the effectiveness of visual elements in maintaining interest and enhancing understanding, indicating that gamified content's visual appeal significantly contributes to engagement in learning.

The ‘Anxiety Reduction’ theme revealed a significant decrease in test-related anxiety due to the playful and interactive format of the gamified quizzes. This aspect of gamification shifted the focus from the stress of testing to the enjoyment of learning, indicating its potential to transform the experience of assessments. Furthermore, the ‘Perceived Enjoyment’ theme highlighted that student found the gamification process highly enjoyable, which significantly contributed to a more positive perception of grammar quizzes. This enjoyment transformed grammar quizzes from traditional testing formats to an engaging and entertaining learning activity.

Overall, the study revealed that gamification in ESL learning positively affects student motivation, reduces anxiety, enhances engagement through competition, stimulates visual learning, and increases perceived enjoyment. These findings underscore the potential of gamification as a powerful educational tool, capable of significantly enhancing the ESL learning experience.

## **LIMITATIONS**

This study's primary limitation lies in its small sample size and the specific cultural backgrounds of the participants, potentially restricting the broader applicability of its findings. Furthermore, the dependence on self-reported data, coupled with the use of Google Translator for translating participant responses, might lead to biases or inaccuracies in interpretation. However, to mitigate these issues, the study incorporated member checking, which helped enhance the reliability of the interpreted data.

## **IMPLICATION AND FURTHER RESEARCH**

The study's findings highlight the potential of gamification in enhancing ESL learning, suggesting its broader application in diverse educational settings. This points to the need for curriculum designers to consider incorporating gamified elements to boost motivation and engagement in language learning. Future research should focus on larger, more diverse participant groups to validate these findings and explore the long-term effects of gamification on language acquisition. Additionally, examining the effectiveness of gamification in different linguistic and cultural contexts would provide deeper insights into its global applicability in language education.

## **CONCLUSION**

This study underscores the significant role of gamification in improving motivation, engagement, and reducing anxiety in ESL grammar learning. The positive response from students highlights gamification's potential as a transformative educational tool. While the findings are

promising, they also call for further exploration in more diverse and extensive settings to fully understand the scope and impact of gamification in language education.

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