

OPTIMIZING GRAMMAR MASTERY IN MIDDLE SCHOOL STUDENTS THROUGH GAMIFICATION: AN ACTION RESEARCH STUDY

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ABSTRAK: Tesis ini mengeksplorasi dampak gamifikasi terhadap penguasaan present simple tense dalam tata bahasa Inggris di antara siswa kelas tujuh di Jakarta Barat. Dengan menggunakan metodologi penelitian tindakan, 35 siswa berpartisipasi dalam kegiatan pembelajaran gamifikasi menggunakan alat seperti Kahoot! dan Bamboozle. Studi ini mengamati peningkatan yang signifikan dalam penguasaan tata bahasa, keterlibatan, dan motivasi, dengan skor pasca-tes meningkat dari 62,28% menjadi 79,71% selama empat siklus. Mengacu pada teori pendidikan modern yang menganjurkan pembelajaran yang berpusat pada siswa, penelitian ini menemukan elemen gamifikasi seperti kompetisi, penghargaan, dan umpan balik secara mengejutkan efektif. Meskipun beberapa keterbatasan, termasuk masalah teknis dan potensi kebosanan dari latihan berulang, temuan tersebut mengungkapkan bahwa gamifikasi dapat meningkatkan pembelajaran dan retensi tata bahasa. Studi ini menyarankan penelitian masa depan untuk memeriksa efek jangka panjang gamifikasi, membandingkannya dengan metode pengajaran lain, dan memeriksa teknologi baru seperti realitas virtual. Ini juga menggarisbawahi pentingnya pelatihan guru untuk memaksimalkan manfaat gamifikasi. Secara keseluruhan, tesis ini menunjukkan bahwa gamifikasi dapat meningkatkan kemampuan tata bahasa dan keterampilan bahasa secara keseluruhan dalam pendidikan menengah.

Kata Kunci: Gamifikasi, Tata Bahasa, Kahoot, Bamboozle.

ABSTRACT: This thesis explores the impact of gamification on mastering the present simple tenses in English grammar among seventh-grade students in West Jakarta. Utilizing an action research methodology, 35 students participated in gamified learning activities using tools like Kahoot! and Bamboozle. The study observed significant improvements in grammar mastery, engagement, and motivation, with post-test scores increasing from 62.28% to 79.71% over four cycles. Drawing on modern educational theories that advocate student-centered learning, the research found gamification elements such as competition, rewards, and feedback to be remarkably effective. Even though some limitations, including technical issues and potential boredom from repetitive exercise, the findings revealing that gamification can enhance grammar learning and retention. The study suggests future research to examine the long-term effects of gamification, compare it with other teaching methods, and examine new technologies like virtual reality. It also underscores the importance of teacher training to maximize the

benefits of gamification. Overall, this thesis demonstrates that gamification can markedly enhanced grammar proficiency and overall language skills in secondary education.

Keywords: *Gamification, Grammar, Kahoot, Bamboozle.*

INTRODUCTION

Indonesian students' studying English as a Foreign Language see grammar as tricky yet necessary to master, citing teachers' pressure and textbooks at school as the key barriers (Komara, 2021). Grammar is a crucial component in English education, acting as the cornerstone for educating students' with the important structures needed to construct sentences and transmit thoughts with clarity and coherence, as Enesi et al. (2023) stated. Adejare (2022) highlight grammar's multidimensional nature by classifying it according to rules, inflections, theoretical constructions, descriptive frameworks, pedagogical content, and exercise. As acknowledged by Ilyasova et al. (2022) and Enesi et al. (2023), mastering grammar is a tough obstacle in language learning and instruction. Ismaylova (2023) emphasize grammar as an important concern in second and foreign language education when it comes to teaching and learning a new language. According to Enesi et al. (2023), the importance of grammar in English learning rests in its function in equipping learners with the necessary abilities for generating coherent sentences and successfully expressing views. When going into the grammatical framework, students frequently focus entirely on producing a phrase that follows grammar rules, ignoring its underlying meaning (Ilyasova et al., 2022). However, Ahmad et al. (2017) emphasize that failing to understand grammatical rules will prohibit people from successfully and accurately expressing their views and feelings. Given that understanding grammar is required for students to achieve competency in reading, writing, speaking, and listening, obtaining a full understanding of grammar improves students' capacity to communicate with better accuracy (Jannah et al., 2017; Redjeki & Muhajir, 2021). In conclusion, understanding grammar is critical in English education because it provides students with the necessary frameworks for coherent language expression and helps them overcome hurdles in language learning and instruction. It is also significance goes beyond simple regulation compliance because it greatly adds to efficient communication by reducing potential misconceptions. As Ahmad et al. (2022) pointed out, ignoring grammar

acquisition can impair learners capacity to express themselves accurately. Overall, learners must have a thorough comprehension of grammar, which serves as a requirement for the development of reading, writing, speaking, and listening ability, ultimately improving communication accuracy.

Ilyasova et al. (2022) points out that teaching grammar as a foreign language poses a variety of obstacle since the intricate and diverse character of English grammar frequently instils dread in students, increasing concern about earning poor scores despite knowing the correct answer. Students despise grammar learning, associating the term with discomfort and boredom also, grammar learning often perceived as uninteresting is shaped by a negative perception of its dullness and lack of engaging teaching methods (S. Ahmad et al., 2022; Jannah et al., 2017). Based on preliminary questionnaire confirm that most students often struggle with understanding grammar, especially in constructing sentences. While many prefer learning from books, some also use the internet as an additional learning resource. Evaluation of the current teaching methods indicates that some students find it difficult, suggesting a need for review and possible adjustments in the teaching approach. Student motivation for learning grammar is not always high, and suggestions such as using online games or songs reflect their desire for more engaging and interactive methods. Although some students occasionally do grammar exercises outside of class, there is potential to increase student engagement in these activities. The presence of a comfortable environment for asking questions to the teacher and recognition that interactive activities in grammar learning are enjoyable provide a good foundation for creating a supportive and engaging learning environment. These conclusions provide valuable insights for educators to identify areas for improvement and develop more effective learning strategies to meet students' needs in grammar learning. As a result, as highlighted by Ahmad et al. (2022), many views, tactics, and teaching methodologies have emerged for EFL teachers to choose based on their students' requirements and the classroom situation. In response to these difficulties with grammar acquisition, an increasing number of educators have attempted to build technology-based programs that supplement textbook use (Ardi & Rianita, 2022; Rahman, 2023; Tamayo et al., 2023; Turula, 2021; Waluyo et al., 2023). The goal is to create an engaging, dynamic and fun learning environment Gamification in the classroom, for example, will motivate students and speed up their understanding of grammar (Del & Farias Espinoza, 2023; Deterding,

2012; Rumangkit & Larasati, 2023). Some gamification applications that are often used are Quizzz and Kahoot (Hardianti, 2024).

In conclusion, effectively teaching English grammar necessitates the use of engaging strategies. Therefore, this study seeks to investigate the implementation of gamification within an academic context, with a specific focus on its efficacy in enhancing students' mastery of grammar. Numerous research endeavors have explored the integration of gamification to enhance grammar skills, consistently demonstrating its positive impact on student engagement, motivation, and overall learning achievements. Similarly, our present investigation aims to harness the potential of gamification to optimize the acquisition of grammar skills. While previous studies have predominantly centered on college-level students, as indicated in a systematic review by Vrcelj et al. (2023), there remains a noticeable gap in the comprehensive examination of gamification outcomes within primary and secondary school settings. In contrast, our current research endeavors to distinguish itself by actively involving middle school students as participants. To fill the aim of this study, the researcher formulated one research questions below :

How does the implementation of gamification improve the students' grammar mastery?

Previous Related Study

Several studies have explored the use of gamification in grammar improvement. Rahman (2023) conducted research on gamification in grammar development, finding that gamification had a beneficial effect on students' grammar mastery and subsequent development in English language skills among students at University Malaysia Sabah. Furthermore, Oraif et al. (2022) investigated the learning experiences of university students in the Kingdom of Saudi Arabia (KSA) by comparing the efficacy of gamified and non-gamified approaches to English grammar training.

Ardi et al. (2022) study, which involved 22 English major students and one lecturer, demonstrated the effectiveness of gamification in raising student engagement in EFL grammar by emphasizing advantages such as goal-setting, enhanced focus, excitement, experiential learning, collaboration, and gratification of competitive drives. Additionally,

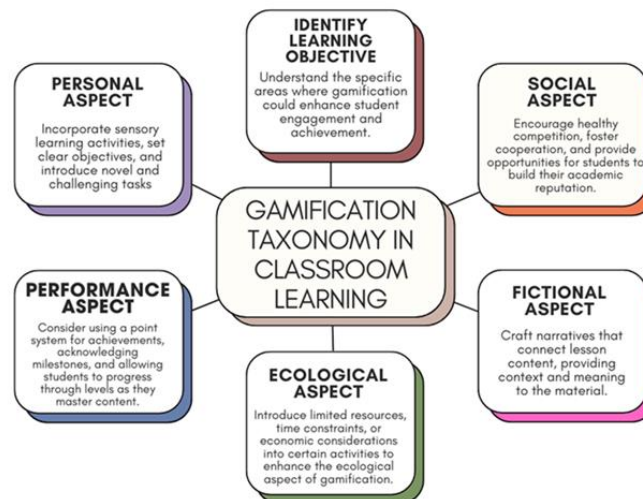
Jannah et al. (2017) found that gamification in higher education grammar instruction capable students to focus work with peers easily, and satisfied with the result.

Ultimately, gamification has been the subject of numerous research studies in examining improving grammar and has proven the effect on student motivation, engagement, and learning outcomes. In similar vein, the goal of this present study is to use gamification to optimize grammar mastery. As noted in systematic review by Vrcelj et al. (2023), most prior research has concentrated on college students which is clear that gamification in primary and secondary school settings still need to be well examined. In contrast, present study including middle school students as participants.

Conceptual Framework

The gamification taxonomy developed by Toda et al. (2019) serves as the conceptual framework for this research, which seeks to optimize the target level of grammar mastery. This framework outlines how each aspect and element of gamification contributes to a comprehensive learning experience. The present studies will investigate the integration of educational technology tools or platforms that support gamification features, highlighting those platforms with built-in gamification aspects can make implementation easier. The emphasis is on explicit identification of the relationships between these components and how they impact student learning outcomes, engagement, motivation, and achievement.

Figure 1 Conceptual Framework



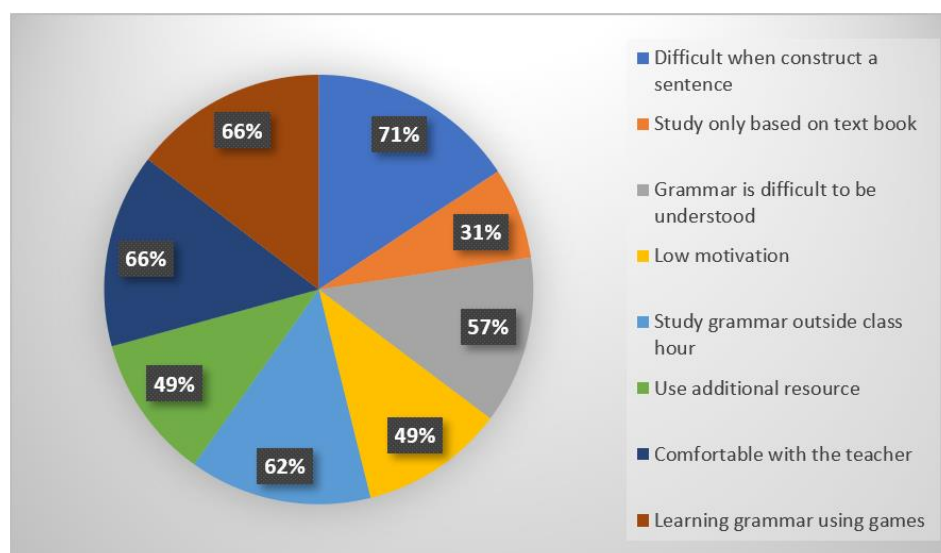
RESEARCH METHODS

This research will use action research, which refers to a comparative investigation of the impact of diverse social acts and subsequent analysis to assist social change (Acharya & Kumar Mohantriy, 2019). According to Burns (2009), action research in education is deeply rooted in the ideals of ‘reflective practice’ and ‘teacher as researcher’. It entails an intentional and methodical investigation of one’s teaching situation, with the goal of encouraging self – reflection and critical evaluation. Action research encourages educators to identify areas for improvement by advocating for deliberate interventions based on systematically acquired evidence rather than personal beliefs. Action research also allow to upgrades anchored in trustworthy data by empowering instructors as investigators in their classroom settings, aiming for favorable breakthroughs in educational techniques. Consequently, Kemmis & McTaggart’s (1988) Action Research (AR) methodology will be utilized for this current study

HASIL DAN PEMBAHASAN

This present study utilized action research as a data collection method, which obliges researcher to applied four cycle of action research by Kemmis & McTaggart (1988) the four step are include a plan, action, observation and reflection. Nevertheless, before conduct action research in class the researcher needs to do preliminary observation as a preparatory to find out the challenges students face when studying grammar in class.

Figure 2. Preliminary Observation



However, the findings show that the majority of students, demonstrates numerous obstacles and issues linked to learning grammar. For the majority of responders, creating sentences in English is the most challenging activity, according to the largest group (71%). Furthermore, grammar itself is difficult for 57% of respondents to understand. A lower percentage, 31%, concentrate only on textbooks when studying grammar, suggesting a possible resource deficiency. Of the respondents, 49% are concerned about their low motivation, and an equal number use supplementary resources to support their study. Remarkably, 66% of students study grammar outside of the classroom, indicating a dedication to advancing their knowledge. The fact that 62% of respondents said they felt at ease with their teacher is another noteworthy result that may have a good impact on their educational experience. Additionally, 66% of the respondents believe that playing games to learn grammar is good, indicating that gamification might be a successful tactic in grammar instruction. Overall, the graphic highlights the challenges associated with learning grammar, highlighting sentence formation challenges as well as the benefits of additional resources and interesting teaching strategies like games.

Figure 3. Pre and Post - Test Result

	Descriptive Statistics					
	N Statistic	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Error	Std. Deviation Statistic
Pre-Test	35	.00	100.00	69.1429	4.71670	27.90440
Post- test 1	35	.00	100.00	62.2857	5.48620	32.45682
Post- test 2	35	.00	100.00	71.7143	5.46164	32.31151
Post- test 3	35	.00	100.00	78.2857	4.89359	28.95084
Post- test 4	35	.00	100.00	79.7143	4.51860	26.73241
Valid N (listwise)	35					

Descriptive statistics were used to process the data for the four cycles. Students who used gamification in their grammar learning were given access to the pre- and post-test results from all four cycles. The data table shows the descriptive statistics for a series of tests that 35 individuals completed. The tests progress from a pre-test to four post-tests. The pre-tests initial mean score was 69.14, with a standard deviation of 27.90, indicating somewhat erratic results. Following this, the average score on post-test 1 dropped to 62.29, which is an approximate 10% drop from the pre-test. The standard deviation of 32.46 indicates that this test was the most variable out of all the tests. On the other hand,

the average score increased to 71.71 in post-test 2, which represents a recovery of around 15% from post-test 1 and a slight improvement of 3.7% over the pre-test. The average score improved to 78.29 in post-test 3, indicating significant improvement. This showed a decrease in variability, with a standard deviation of 28.95, an increase of almost 22% over post-Test 1 and 13.2% over the pre-test. With an average score of 79.71, post-test 4 proved to be the most successful overall, showing increases of 15.2% and 27.9% over pre-test and post-test 3. With a standard deviation of 26.73 for the final evaluation, it showed the least fluctuation, indicating that the participants' performance was more consistent. In conclusion, the use of gamification in grammar learning led to notable improvements in students' performance over the four cycles. The pre-test had a high variability mean score of 69.14 at first. The outcomes of the successive tests stabilize even though a substantial decrease in post-test 1. However, when it comes to post-test four, the average score had reached 79.71%, revealing the highest performance level with minimal variability. These findings signifying that gamification successfully improved students' grammar mastery, leading to more stable and refined.

Discussion

This thesis has demonstrated the significant impact of gamified instructional approaches on grammar learning, specifically focusing on the Present Simple Tense. At the outset, 18% of students struggled with grammar, and 15% found existing teaching methods challenging or moderately effective. However, by implementing tools like Kahoot! and a Bamboozle, students showed remarkable improvements in engagement, comprehension of grammar principles, and literacy skills. Each cycle saw a progressive increase in post-test scores, with notable gains seen from Post-Test 1 (62.28%) to Post-Test 4 (79.71%). These findings demonstrate how gamification improves students' ability to form sentences and correctly apply grammar rules.

This present study covered the several holes in the research concerning grammar mastery. First, it contributes to the existing research by studying gamification, specifically focusing on its use in teaching grammar. However, this topic has served less attention than other educational fields. Secondly, it revealed how gamification helps solve problems commonly found in traditional grammar teaching strategy, such students

disengagement and lack of enthusiasm. This study introduces a new way to improve secondary education learning by combining interactive and game-based activities.

In spite of its positive contributions, the present study has some limitations. To illustrate there were technical issues from cycle one until cycle three which is the time management become worst because the not on time activities to wait student slow access. Also, some students were bored with repetitive exercise using Kahoot! Because each cycle meeting, students' do post-test too in Kahoot! Which is make them slowly not interest anymore. Therefore, it raised a question about how effective gamification implementation can be in the long term. However, the present study only focused on educational field and grammar mastery, which might mean the outcomes can't be utilized to other situations.

In the final analysis, the present study provides strong evidences that gamification implementation is competently for teaching grammar. Moreover, teachers can enhance student engagement, comprehension, and application of grammatical rules using tools such as Kahoot! And bamboozle, which augment learning outcomes. This study paves the way for future research and the utilization of gamification in secondary education. It signifying how gamification improved grammar mastery and promotes critical thinking, problem-solving, and teamwork among students.

CONCLUSION

At last, this current research thoroughly studied how gamification strategy can improve learning grammar, specifically focusing on the present simple tense. The result pointing to using Kahoot! And bamboozle noteworthy grow student interest, comprehend of grammar, and overall reading and writing ability. Furthermore, gamification boosted student motivation, engagement, and skills to remember or applying grammar rules, which helps with common problems in teaching grammar, such when students lose interest or finds it difficult to use the rules.

The study found that using gamification strategies like interactive games and game-based quizzes can makes learning grammar more enjoyable for students, and students participate more actively. Students also gave positive feedback about how much they liked gamification activities and how helpful they were, revealing that students can improve their grammar and construct a sentence. Furthermore, students also feel more confident and

comfortable because less intense when learning grammar and make it look more easier to understand. Also, this investigation showed that using gamification led to better test scores after the study, which indicating students got better at grammar.

Furthermore, this study is based on modern education theories, especially those advocating student-centered and active learning methods. Additionally, gamification encourages student involvement, collaborative learning, and instant feedback, all of which are important for teaching grammar effectively and align with these theories. By applying these theoretical frameworks in practice, this research contributes to understanding the potential benefits of gamification in grammar mastery. It adds to the developing knowledge regarding innovative teaching method in secondary school.

The next study may focus on various approaches to enhance understanding and utilization of gamification in grammar mastery. First, it would be helpful to determine whether gamification is still valid in diverse areas of grammar by looking at its efficacy over a broader range of grammar concepts and themes, such as more complex tenses, sentence structures, and parts of speech. Suppose longitudinal studies are carried out to monitor the effects of gamified approaches on grammar acquisition over an extended period. In that case, it will be possible to determine whether gains in comprehension and engagement are maintained.

Examining the potential of novel technologies and platforms, such as virtual reality (VR), augmented reality (AR), and artificial intelligence (AI) apps, for gamification in grammar teaching may improve student engagement and academic results. It is crucial to investigate how teacher preparation and continuous professional development may maximize gamification in the classroom and provide educators with the necessary training and support to deploy gamified techniques successfully. Finally, investigating the efficacy of gamification for students with a range of learning requirements, such as English language learners or those with learning disabilities, may shed light on how gamification might be modified to help all students effectively. These study directions would help improve student learning outcomes and refine the use of gamification in grammar instruction.

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