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PEDAGOGICAL ASPECTS OF IMPLEMENTING GAMIFICATION IN SECONDARY EDUCATION

Abstract

This paper looks at the role of games in teaching grammar to teenagers. The goal is to find out how students feel about gamification in educational settings and investigate how it affects grammatical abilities when used in grammar instruction. Gamification is using games for a specific purpose, such as teaching grammar to pupils. It goes beyond simply employing games for this reason. 10th grade were chosen as the participants of this research. There were two groups: experimental and controlled. The present study was built on three experimental stages: pre-test, interventions, and post-test with a questionnaire. During the pre-experimental stage, both groups were conducted a pre-test which contained 20 multiple-choice questions. Students' achievements in both groups were similar to each other. Then, students from the experimental group were taught grammar by using three games. By the end, two groups had post-tests and a questionnaire was taken from the experimental group. With the help of pre-test and post-test, the differences were defined. Students from the experimental group showed higher results compared to the control group. The data analyses, based on a questionnaire, prove that learners from the experimental group had positive perceptions about the games. Furthermore, fun and enjoyment make students stay motivated to learn new grammar.

Keywords: grammar skills, gamification, games, learners' perception, teenagers, classroom

Introduction. While teaching English to school learners, it is essential to grab students' attention so that they can engage in the learning process (Pirozhkova, 2014; Ebadi et al., 2024). Engaging students in the teaching process can be challenging, but various methods can make it more interesting. Internet resources offer a plethora of activities, methods, and games, complemented by books and studies. Game-based learning, or gamification, is considered highly effective (Zhang & Hasim 2023). However, it's crucial to understand that gamification involves more than just implementing games; it requires a specific educational purpose. Grammar, particularly for teenagers aged 14 to 18, can be tedious to learn. While some teachers use games, they're often not chosen appropriately for students' levels and interests. This study examines the use of gamification in grammar instruction to evaluate its effects on student performance and

suggests possible advantages for straying from conventional teaching strategies.

Games are vital to the educational process because they keep students interested and inspired throughout the course. Because typical teaching methods, particularly when it comes to grammar, can be tedious and cause students to lose focus and concentration. Therefore, knowing some ways of implication games in teaching grammar can increase students' motivation and achievement in the learning process (Al-Kkhafai, 2022; Okumuş Dağdeler, 2023; Helvich et al., 2024).

Gamification, while not new in the 21st century, is often misapplied in educational contexts. Proper implementation requires understanding its purpose in learning and teaching. Gamification, according to Kapp (2012), is the use of game mechanics and thinking for problem-solving, learning, engagement, and motivation. Unlike broad

games, gamification specifically targets the learning process. Kiryakova et al. (2014) describe it as incorporating game elements into non-game activities. Maloney (2019) supports this by noting gamification enhances engagement, language skills, critical thinking, and problem-solving. Effective gamification

meets students' psychological needs, fostering motivation and reducing anxiety, ultimately enriching the educational experience. The table below shows the illustration by Flores (2015) about the most important game elements and their definitions.

Table 1. *Definition of game elements*

Points	Numeric accumulation is based on certain activities.
Badges	Visual representation of achievements for the use shown online.
Leaderboards	How the players are ranked based on success.
Progress bars/Progression	Shows the status of a player.
Performance Graph	Shows player performance.
Quests	Some of the tasks players have to fulfil in a game.
Levels	A section or part of the game.
Avatars	Visual representation of a player or alter ego.
Social elements	Relationships with other users through the game.
Reward/reward system	System to motivate players that accomplish a quest.

Game components in education have been divided into two categories by researchers: self-elements and social elements. According to Huang & Soman (2013), self-elements that encourage self-competition and accomplishment are things like points, badges, levels, and time constraints. Social elements, like leaderboards, foster interactive competition and cooperation among students. Cheong et al. (2014) found these elements enhance social interaction, engagement, and feedback, aligning well with social constructivism. Kiryakova et al. (2014) emphasized the careful selection of game elements based on educational goals to avoid hindering the learning process.

De Freitas (2006) categorized games used in technology-based classrooms into four distinct types. The first category, educational games, refers to video or computer games designed to achieve specific learning objectives. The second category, online games, utilizes technologies such as Flash and Java to provide interactive and engaging experiences. Serious games, the third category, are primarily intended for educational purposes, often focusing on teaching or skill development. Lastly, simulations are computer-based models that replicate real-world situations,

allowing learners to explore and understand complex scenarios in a controlled environment.

Musilova (2010) categorised language skill games into cooperative, communication, competitive, and code-control types, each targeting specific language skills. De Freitas (2006) offered a four-dimensional framework for selecting educational games, stressing context, representation mode, academic approach, and learner specifics. Proper selection and implementation of games are crucial for enhancing learning outcomes and aligning with educational goals.

Huang & Soman (2013) outlined five steps for applying gamification in education, emphasizing outcome definition. Flores (2015) supported this, showing its enhancement of L2 learning. Studies focus more on productive skills, neglecting grammar, vocabulary, and pronunciation. Caganaga & Yıltanlılar (2015) emphasized games as educational tools that break monotony and add fun. Freitas (2006) stressed context, duration, technical support, and community in game-based learning. Gamification effectively engages students and enhances skills when properly used. Identifying aims and student needs is crucial. Rafiq et al. (2019) found gamified grammar training

enjoyable and motivating. Furdu et al. (2017) highlighted benefits like increased motivation and personalised learning. Motivation, sustained through feedback and active involvement, is crucial (Kapp, 2012).

Games have been found to reduce language learning anxiety, lowering fear of poor evaluation, and enhancing engagement (Yolageldili & Arıkan, 2011; Caganaga & Yıltañlılar, 2015). Considering learning styles is crucial for selecting appropriate games, although not all games fit every style (Caganaga & Yıltañlılar, 2015). However, gamification also has drawbacks, including mandatory play and inappropriate leaderboard use, which can increase anxiety and lower motivation (Furdu et al., 2017; Stojković & Jerotijević, 2011).

Games must match students' levels, ages, interests, and learning styles. Teachers should carefully select and vary games to maintain engagement and achieve educational purposes. De Freitas (2006) called for more research on effective game-based learning, although existing studies offer some guidance.

Materials and methods. The methodology section presents a structured and detailed approach to investigating the effectiveness of gamification in grammar instruction. The study employed a mixed-method design, incorporating both quantitative and qualitative data collection methods. Teacher interviews provided initial insights into student profiles, while an experiment compared an experimental group using gamification techniques with a control group following the standard curriculum. Quantitative data were gathered through tests and questionnaires, and qualitative data were collected through observations during lessons.

The research was conducted in three stages. During the pre-experimental stage, teacher interviews identified students' learning styles and existing grammar knowledge, and a pre-test with 20 multiple-choice questions established baseline knowledge for both groups. The experimental stage involved the experimental group participating in gamified grammar lessons using games like Tic-tac-toe, Kahoot,

and Hot Potato, with sessions held twice weekly for 15–25 minutes and tailored to student needs. The control group continued with traditional lessons. Finally, the post-experimental stage included a post-test with identical content to evaluate learning outcomes and a questionnaire to assess the experimental group's attitudes toward gamified instruction.

The study involved 39 10th-grade students aged 16–17, divided into an experimental group of 20 students and a control group of 19 students. Classes were held three times per week, with adjustments for gamification sessions. Data collection instruments included interviews focusing on learning styles and prior exposure to language games, as well as pre- and post-tests with 20 multiple-choice questions on grammar topics like tenses, gerunds, and infinitives. The games utilized included Tic-tac-toe for sentence formation, Kahoot for interactive mobile assessments, and Hot Potato for kinesthetic engagement and quick thinking. A questionnaire with six Likert-scale statements measured students' attitudes toward gamified lessons.

The methodology was informed by established research. Kapp (2012) described gamification as applying game mechanics to enhance learning and motivation, while Flores (2015) emphasized the motivational benefits of elements like points and leaderboards. De Freitas (2006) highlighted the importance of aligning games with educational objectives and learner needs, and Huang and Soman (2013) outlined effective gamification strategies. Additionally, Musilová (2010) categorized grammar games for targeted language skills.

This comprehensive methodology enabled the exploration of gamification's impact on student engagement, motivation, and grammar learning outcomes, providing valuable insights into its practical applications and challenges.

Results. This research aims to assess gamification's influence on grammar skills in teaching and gauge learners' perceptions. It encompasses three stages: pre-experiment, experiment, and post-experiment, addressing two key questions: 1) How does teaching grammar through games impact student

achievement? 2) What perceptions do students hold regarding gamification?

The pre-experimental stage was before the teaching process in which we conducted interviews with teachers to find out background information about students. Following this, a pre-test was conducted among students of the experimental and controlled groups to see the final result along with the post-test.

The interview served as the initial step in gathering additional information about the students. Two teachers from both the experimental and controlled groups participated, providing insights into the learning styles of the experimental group students. The interview, conducted in a dialogue format, included two questions: 1) What are the students' learning styles? and 2) Do students have experience with language games? Teachers identified students' learning styles as primarily competitive, interpersonal, dynamic, visual, and active, favouring group activities and kinesthetic exercises. However, they lacked experience with grammar-focused games, with only occasional exposure to vocabulary or communication activities. Despite being in the 10th grade, students' teenage nature emphasizes the importance of incorporating language games into the educational process.

Once the result of the interview was collected, we started conducting a pre-test which consisted of 20 multiple-choice questions about grammar. The topic of questions was related to grammar which would be presented further. They were the review of tenses, gerunds, and infinitives. The results of the experimental and controlled groups are given below.

The experimental group in which there were 20 students in general, completed the pre-test. The tests were given at the beginning of the lesson and took 10-15 min to finish. Students had to write their names and grades, however, in this research paper, their confidentiality was kept. Therefore, we used codes for participants, such as number, and their group (experimental and controlled). E stands for experimental, C stands for control, and P means participant.

According to the results of the pre-test, 10 students got three out of five-point-evaluation. The next five students got four points, while three students received the lowest mark of two. Furthermore, only two students achieved the highest mark of five points. In general, almost 65% of students achieved lower grades, meanwhile, students who showed brilliant results were just over 10%. The results of all participants are illustrated in the table below:

Table 2. *The results of the pre-test in the experimental group*

Participants	Results of pre-test (max 20)	Grade out of 5	Participants	Results of pre-test (max 20)	Grade out of 5
1PE	14	4	11PE	10	3
2PE	13	4	12PE	9	3
3PE	4	2	13PE	13	4
4PE	18	5	14PE	8	3
5PE	10	3	15PE	7	3
6PE	8	3	16PE	8	3
7PE	10	3	17PE	4	2
8PE	19	5	18PE	9	3
9PE	5	2	19PE	10	3
10PE	14	4	20PE	14	4

Regarding the controlled group, overall, 19 students participated in this stage. The test was also conducted at the beginning of a lesson with the same topic as it was in the experimental group. Students spent approximately 15-20 min to complete the test as well. For the sake

of students' confidentiality, we presented their codes instead of their names as can be seen in the table below.

The results of the controlled group indicate that only one student achieved the highest mark, while two students got the lowest grade.

In terms of others, seven students scored four points, and the rest nine students achieved three points. Similar to the experimental group,

58% of participants scored the lowest grade, however, only 5% could reach the highest point.

Table 3. *The results of the pre-test in the controlled group*

Participants	Results of pre-test (max 20)	Grade out of 5	Participants	Results of pre-test (max 20)	Grade out of 5
1PE	18	5	11PE	8	3
2PE	10	3	12PE	10	3
3PE	13	4	13PE	9	3
4PE	13	4	14PE	2	2
5PE	7	3	15PE	12	4
6PE	4	2	16PE	11	4
7PE	9	3	17PE	6	3
8PE	15	4	18PE	15	4
9PE	8	3	19PE	7	3
10PE	12	4			

By looking at the table below, we can see that there was a slight difference between the two groups. The results indicated that there were not many students who reached the highest marks, but both groups had a lot of number of low grades. In both groups, the number of higher grades did not reach over 40%, which means

that the majority of students might not know the topic. Concerning the content of a grammar test, gerund and infinitive was a new topic for them. Nevertheless, the questions about the review of tenses were those topics that they already passed. The results of both groups are presented in the table below:

Table 4. *The overall result of the pre-test in both the experimental and controlled group*

Scores (max 20)	Grades (max 5)	Experimental group (20)	Controlled group (19)
16-20	5	2	1
11-15	4	5	7
6-10	3	10	9
1-5	2	3	2

As we expected the result of the pre-test was almost similar in both groups. Nearly, almost all the lower and higher grades' percentages were similar. Few students reached the highest mark, meanwhile, approximately two-thirds scored the lowest grades. It can be concluded that the reason for lower grades is that students were not aware of the topic of the test or they had a misunderstanding about past topics.

The experimental stage was conducted to see three interventions. These interventions happened to the experimental group, however, the control group passed lessons without them. These interventions were in the form of games, which were selected before the teaching process.

Even though more games tended to take place in the classroom, however only three of them were used in practice. In this stage, the main tools were intervention and observation. Games for the classroom were derived from the study of Ardoiz Garcia (2017). They were "Tic-tac-toe", "Kahoot" and "Hot Potato". After each of these games, students were given points according to their correct responses and badges. This chapter describes how students felt and behaved during these three interventions from the teacher's observation.

The Tic-tac-toe game took place in the classroom after introducing the grammar for controlled practice. Students in two groups had

to look at the board, put X or O in a grid, and make sentences out of the words given. The result of observation from the teacher's side indicated that students were a bit confused as it was their first time experiencing this kind of activity. Moreover, students felt a bit anxious and hesitant in their answers, however, after they got used to this game. One of the possible reasons for feeling hesitant is that the game was for controlled practice, after introducing and completing some individual exercises. As it was focused, more on accuracy students might feel anxious to some extent. Still, the game was interesting and engaging for them. The next time, this game was conducted for the second time, but it included pictures instead of keywords. Students had to do the same task by looking at the pictures and describing what was happening. This time the game was more interesting and easier for them compared to the first version. Because it gave students freedom and imagination, also they already got used to this type of game.

In general, "Tic-tac-toe" was challenging for the first time, but after some modification and changes, students were engaged in the learning process. Besides, the fact that they worked in teams gave them a feeling of confidence as well as competitiveness.

The Kahoot game was used as a game for a cool down at the end of a lesson. It was also interesting and engaging for students because of the usage of devices. However, due to problems with internet connection students had to play in pairs. This game was also conducted two times with different types of questions concerning gerund and infinitive. The type of questions were usually multiple-choice questions. The fact that Kahoot uses mobile phones as well as interesting interfaces grabbed students' attention and involved them in the learning process. Moreover, after playing this game, the teacher and students worked on mistakes and discussed them. If this kind of test was in the form of a standard worksheet test, students wouldn't be as engaged in this game as it was with Kahoot. As a result, it can be concluded that this game is best to use as an assessment or evaluation tool in a playful environment.

The Hot Potato game is a mingling activity in which students go around the classroom passing the ball to each other while music is playing. When the music stops, the students who are holding a ball at this moment look at the board and do the task in a given time. There were different types of questions concerning the review of tenses, gerunds, or infinitives. The game itself was conducted in the middle or at the end of a lesson and took about 15-20 min. As this game required physical and kinaesthetic styles, it was very amusing but at the same time great tool to involve students in the learning process. Sometimes a student who was holding a ball did not know the answer, and at this moment they were given a chance for other students to help. Thus, the atmosphere was more friendly and playful so that students did not feel nervous or hesitant. The teacher, in turn, tried to control the situation in the classroom, because some students avoided balls at all or did not move. Therefore, interference from the teacher's side was useful in some circumstances. Even though this game was held only once, students were very interested in the process and motivated to participate.

Generally speaking, students were engaged in these games even though at first it was a bit challenging for them to complete. On the other hand, the teacher managed the classroom so that students were in flow and were not interrupted by other things. Moreover, the teacher tried to hold a friendly and playful atmosphere as it helped them to feel more relaxed instead of nervous or anxious.

The post-experimental stage aimed at discovering whether interventions had an impact on students' achievement or not. Moreover, the purpose was to find out what kind of differences in the results of both tests showed. During the post-experimental stage, students had to complete a post-test and questionnaire. The post-test was administered to both groups, and the questions were identical to those from the pre-test. However, only students in the experimental group were asked to complete the questionnaire.

Following interventions, we administered a post-test to the experimental and control

groups. There were 20 multiple-choice inquiries about grammar in the pre-test; the questions, the setting, and the time were all the same. However, this time all the content of this test was covered during the teaching period. They were the review of tenses, gerunds, and infinitives. The results of the experimental and controlled groups are given below.

All 20 students from the experimental group participated in the post-test as well and it was held at the beginning of a lesson for about 10-

15 min. Even though some students missed classes during interventions, all of the students participated in both pre and post-tests.

The results of the post-test in the experimental group indicated that three students got five out of five, 11 students received four points, four students received three points and only two students got two points. In general, about 70% of students achieved good results, while the rest 30% received lower grades. The results of all participants are given in the table below:

Table 5. *The results of the post-test in the experimental group*

Participants	Results of post-test (max 20)	Grade out of 5	Participants	Results of post-test (max 20)	Grade out of 5
1PE	15	4	11PE	13	4
2PE	15	4	12PE	11	4
3PE	4	2	13PE	14	4
4PE	19	5	14PE	12	4
5PE	12	4	15PE	8	3
6PE	9	3	16PE	8	3
7PE	14	4	17PE	3	2
8PE	19	5	18PE	11	4
9PE	9	3	19PE	15	4
10PE	18	5	20PE	14	4

Concerning the controlled group, all 19 students took part in the post-test, which was conducted at the beginning of a lesson for about 15-20 minutes. The post-test was held in experimental and controlled groups, and the questions were the same as in the pre-test.

The table below illustrates the results of the post-test in controlled groups. As we can see,

only one student could achieve the highest mark, six students received four points, 10 students got three points and two students scored two points out of five. Overall, the percentage of those who achieved good marks was just above 35%, however, the remaining 65% received lower grades.

Table 6. *The results of the post-test in the controlled group*

Participants	Results of post-test (max 20)	Grade out of 5	Participants	Results of post-test (max 20)	Grade out of 5
1PE	18	5	11PE	8	3
2PE	10	3	12PE	10	3
3PE	13	4	13PE	9	3
4PE	13	4	14PE	2	2
5PE	7	3	15PE	12	4
6PE	4	2	16PE	9	3
7PE	9	3	17PE	6	3
8PE	15	4	18PE	15	4
9PE	8	3	19PE	7	3
10PE	12	4			

In the table below in which the results of both experimental and controlled groups are compared, we can see the difference between them. After interventions had happened, students in the experimental group improved and many students reached higher results than it was before. The majority of students, who received three points at the beginning of an

experiment, reached four points in the post-test. However, the result of the control group did not change compared to the pre-test. The results of both tests pre- and post-tests in the controlled group remained almost the same. The table below shows the overall number of students who received particular points:

Table 7. *The overall result of the post-test in both the experimental and controlled group*

Scores (max 20)	Grades (max 5)	Experimental group (20)	Controlled group (19)
16-20	5	3	1
11-15	4	11	6
6-10	3	4	10
1-5	2	2	2

Broadly speaking, the results of the post-test in experimental and controlled groups showed a difference in the number of students. More students in the experimental group improved their marks from lower grades to higher. Also, these students felt and behaved more confident than it was. Nevertheless, the results of the control group did not change a lot compared to the results of the pre-test.

Along with the post-test for the experimental group, a questionnaire about students' attitudes towards games was conducted. It consisted of six statements and aimed at discovering twenty students' perceptions of using games in learning grammar. The questionnaire was held in a classroom immediately after a post-test. It was in the form of a Likert scale, which includes five options to choose from as an answer. They are: "strongly disagree", "disagree", "neutral", "agree" and "strongly agree", which were calculated from one to five respectively. The results of this questionnaire were interpreted by using Standard deviation to see the overall answers of students.

The graph below illustrates how 10 students agreed, 4 strongly agreed, 5 remained neutral, and 1 disagreed with the first statement, «Language game encourages me to learn the English language». Since 3.85 is near to «Agree» according to the standard deviation, we may conclude that most students concur with this statement.

Concerning the second statement, "It is easier to understand concepts in grammar with language games", eight students answered "Agree", six students chose "Strongly agree", three students chose "Neutral", two students answered "Disagree" and only one student chose "Strongly disagree". The overall Standard deviation is 3.8, which means that most of the students agree with the statement.

In the third statement "I am more confident in learning English with the help of language games", eight students chose "Neutral", seven students agreed, two students strongly agreed, but one student disagreed, and two students strongly disagreed. The Standard deviation is calculated at 3.3, which means many students remain neutral on this question.

The next fourth statement "Language games provide me with a positive learning experience" in which a Standard deviation showed 3.7. Because many students, in particular, 11 students agreed, two students strongly agreed, however, six students were not sure, and one student disagreed.

The fifth statement "I prefer learning with language games rather than the traditional method" received the highest Standard deviation of 3.95, which means that the majority of students almost strongly agree. Because the number of students who chose "Agree" and "Strongly agree" were the same. Seven students answered each "Agree" and "Disagree",

furthermore, four students chose “Neutral”, and two students chose “Disagree”.

The last statement “Teachers should use language games more often in teaching the English language” also reached the highest Standard deviation. The results showed 3.95, which means that most of the students strongly agree with this statement. The exact number revealed that nine students strongly agreed, four students agreed, meanwhile, five students chose the “Neutral” position, and one student answered for each of the remaining options.

In general, this questionnaire aimed at finding out what students think about using games in

the classroom and how they accept them. The students of the experimental group completed this questionnaire since they were taught through games. Overall, students perceived gamification positively, and they would like to have more games in the classroom, especially when it comes to grammar. Moreover, the majority of students prefer games more than traditional methods, nevertheless, they still do not feel confident while playing games due to lack of experience. To conclude we can state that games help students to understand grammar concepts better because they feel a positive learning experience and motivation.

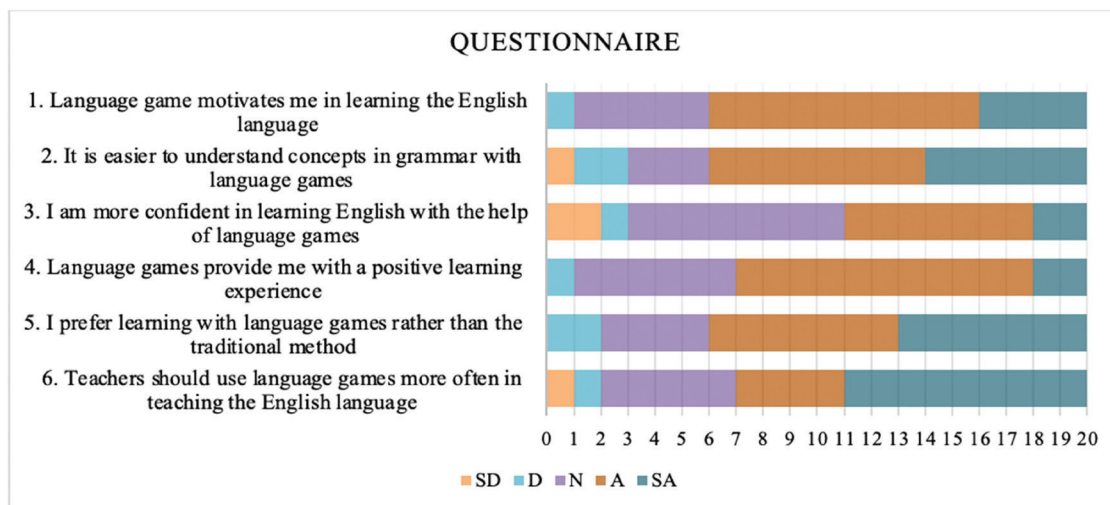


Figure 1: The Results of a Questionnaire

Discussion. The discussion underscores the comprehensive approach and significant findings of the study on gamification in grammar learning. During the pre-experimental stage, the pre-test revealed similar grammar proficiency levels between the experimental and control groups, establishing a baseline for comparison. Teacher interviews highlighted students’ diverse learning styles, such as competitive and visual preferences, while also noting their unfamiliarity with grammar-focused games. This stage laid a solid foundation for assessing the impact of gamification.

In the experimental stage, various gamification tools were utilized. Tic-tac-toe evolved from initial hesitation to enjoyment as students appreciated its visual and creative aspects. Kahoot increased engagement through

interactive quizzes, although technical issues occasionally disrupted its effectiveness. Hot Potato fostered collaboration and participation, creating a playful and relaxed atmosphere conducive to learning. Observations showed that gamification improved motivation, reduced anxiety, and boosted confidence, transforming grammar learning into a more engaging experience.

The post-experimental stage revealed significant performance improvements. The experimental group achieved a 70% increase in grammar proficiency, significantly outperforming the control group. Student feedback was overwhelmingly positive, with many appreciating gamification’s ability to simplify grammar concepts and make learning enjoyable. However, initial anxiety highlighted the importance of

introducing games in a low-stress environment to maximize their effectiveness.

Key insights from the study emphasized gamification's role in improving achievement, increasing engagement, and fostering positive perceptions of learning. Students valued the interactive nature of the games, although technical and adaptive challenges underscored areas for refinement. Recommendations for educators include selecting games aligned with students' unique learning preferences, fostering a supportive environment to reduce stress, and proactively addressing technical issues to ensure seamless implementation.

The study highlights the transformative potential of gamification in grammar education, demonstrating its ability to enhance achievement, motivation, and enjoyment. Future research could explore its broader applications in language learning and develop strategies to address its challenges. These findings offer actionable insights for educators aiming to integrate gamification into their teaching practices, emphasizing its capacity to create a dynamic and effective learning environment.

Conclusion. Gamification offers an effective strategy for making grammar lessons more engaging and enjoyable. Games in this context are not merely for entertainment but are designed with clear educational goals in mind. As Kapp (2012) highlights, gamification integrates game mechanics and elements to address challenges and improve learning outcomes, motivation, and engagement. This study examines the impact of gamification on grammar skills while exploring students' perceptions of its effectiveness within a Kazakhstani high school setting.

The findings align with prior research, such as studies by Flores (2015) and Huang and Soman (2013), which emphasize gamification's ability to enhance engagement and language acquisition by meeting psychological needs and fostering a motivating, low-pressure learning environment. Key insights from this study include:

Improved student performance: The experimental group showed significant gains in grammar proficiency compared to the control group. Approximately 70% of the experimental group achieved higher grades, in contrast to only

37% in the control group. These results support Furdu et al.'s (2017) assertion that gamified learning improves academic success.

Enhanced motivation and engagement: Gamification increased participation and enthusiasm, with activities like Kahoot and Hot Potato sparking interest. These findings are consistent with Musilová's (2010) conclusion that interactive games promote engagement through movement, collaboration, and healthy competition.

Positive perceptions: Most students in the experimental group reported that gamified grammar lessons were both enjoyable and effective. This observation aligns with Rafiq et al. (2019) and Yolageldili & Arıkan (2011), who note that games create a supportive environment that reduces anxiety and encourages active learning.

Despite these benefits, challenges were also noted, such as technical issues with internet-based games and initial reluctance among students unfamiliar with gamified instruction. These challenges underscore the importance of thorough preparation and fostering a supportive, low-stress classroom environment to maximize gamification's potential.

Educators can enhance the impact of gamification by carefully selecting games that align with learning objectives and cater to students' preferences, as emphasized by De Freitas (2006). Creating supportive environments that reduce anxiety and foster constructive competition, as recommended by Huang and Soman (2013), further strengthens the effectiveness of this approach. Additionally, gathering student feedback can help refine and improve game-based learning activities to better meet learners' needs.

Future research could expand the scope of this study by examining gamification's application to other language skills, such as vocabulary acquisition or listening comprehension, and by addressing technical challenges associated with technology-based gamification.

In conclusion, gamification offers a transformative method for teaching grammar. When thoughtfully implemented, it not only enhances academic achievement but also makes

learning an engaging and dynamic process. As more educators adopt gamified strategies, the potential to revolutionize traditional teaching methods and inspire students is likely to grow, paving the way for innovative educational practices.

References

- Ardoiz Garcia, L. (2017). Gamification in English teaching in primary education (PhD dissertation). University of Valladolid, Spain.
- Caganaga, C. K., & Yiltanlilar, A. (2015). The Role of Using Games in ELT: Teenagers. *International Journal of Innovative Education Research*, 3, 15-25.
- Cheong, C., Filippou, J., & Cheong, F. (2014). Towards the gamification of learning: Investigating student perceptions of game elements. *Journal of Information Systems Education*, 25(3), 233. <https://jise.org/volume25/n3/JISEv25n3p233.html>
- De Freitas, S. (2006). Learning in immersive worlds: A review of game-based learning. https://researchportal.murdoch.edu.au/esploro/fulltext/report/Learning-in-immersive-worlds-A-review/991005543282807891?repId=12136048170007891&mId=13136880950007891&institution=61MUN_INST
- Ebadi, S., Aliabadi, R. B., & Ajabshir, Z. F. (2024). EFL teachers' engagement-promoting strategies in online gamification: an ecological systems theory (EST) perspective. *Current Psychology*, 1-16. <https://link.springer.com/article/10.1007/s12144-024-06143-w>
- English Tests Online. (n.d.). Retrieved from <https://www.englishtestsonline.com/>
- Flores, J. F. F. (2015). Using gamification to enhance second language learning. *Digital Education Review*, (27), 32-54. <https://dialnet.unirioja.es/servlet/articulo?codigo=5495904>
- Furdu, I., Tomozei, C., & Kose, U. (2017). Pros and cons of gamification and gaming in the classroom. *arXiv preprint arXiv:1708.09337*. <https://arxiv.org/abs/1708.09337>
- Helvich, J., Novak, L., Mikoska, P., Hubalovsky, S., & Juklova, K. (2024). English teachers' gamification satisfaction and perception scale (ETGSPS) development and validation. *Education and Information Technologies*, 1-30. <https://link.springer.com/article/10.1007/s10639-024-13001-6>
- Huang, W. H. Y., & Soman, D. (2013). Gamification of education. *Report Series: Behavioural Economics in Action*, 29(4), 37.
- Kapp, K. M. (2012). *The gamification of learning and instruction: Game-based methods and strategies for training and education*. Pfeiffer.
- Kiryakova, G., Angelova, N., & Yordanova, L. (2014). Gamification in education. In *Proceedings of 9th international Balkan education and science conference*, 1, 679-684. <https://www.academia.edu/download/53993982/293-Kiryakova.pdf>
- Maloney, S. (2019). Gamification in English language teaching: More than a child's play. *English for ASIA*.
- Musilová, L. (2010). Grammar games in ELT. *Bachelor Thesis, Masaryk University, Brno*. https://is.muni.cz/th/ceizl/BP_Grammar_Games_in_ELT.pdf
- Okumuş Dağdelen, K. (2023). A systematic review of Mobile-Assisted Vocabulary Learning research. *Smart Learning Environments*, 10(1), 19. <https://link.springer.com/article/10.1186/s40561-023-00235-z>
- Rafiq, K. R. M., Hashim, H., Yunus, M. M., & Pazilah, F. N. (2019). Gamified learning to teach ESL grammar: students' perspective. *Religación: Revista de Ciencias Sociales y Humanidades*, 4(18), 181-186. <https://dialnet.unirioja.es/servlet/articulo?codigo=8274143>
- Stojković, M. K., & Jerotijević, D. M. (2011). Reasons for using or avoiding games in an EFL classroom. In *1st International Conference on Foreign Language Teaching and Applied Linguistics* (pp. 5-7). <https://eprints.ibu.edu.ba/items/show/2853>
- Yolageldili, G., & Arikan, A. (2011). Effectiveness of using games in teaching grammar to young learners. *Online Submission*, 10(1), 219-229. <https://eric.ed.gov/?id=ED527862>
- Zhang, S., & Hasim, Z. (2023). Gamification in EFL/ESL instruction: A systematic review of empirical research. *Frontiers in Psychology*, 13, 1030790. <https://www.frontiersin.org/articles/10.3389/fpsyg.2022.1030790/full>
- Al-Kkhafai, M. A. KH. (2022). *Kontekstual'nyy podkhod k prepodavaniyu grammatiki angliyskogo yazyka v Irakskoy nachal'noy shkole: magisterskaya dissertatsiya* (Master's thesis, b. i.). [in Russian]
- Pirozhkova, A. O. (2014). Obucheniye angliyskomu yazyku mladshikh shkol'nikov s uchetom ikh psikhologicheskikh osobennostey. *Problemy sovremennogo pedagogicheskogo obrazovaniya*, (44-1), 199-207. [in Russian].