

CHAPTER IV

FINDING AND DISCUSSION

The results of data analysis are presented in this chapter together with the main conclusions regarding the goals of the study. This part attempts to methodically outline the justification for the research questions throughout the investigation's early phases. Finally, using a mix method design, the researcher described the entire study.

A. FINDING

1. The Use Game-based Learning for Students' Reading Comprehension

a. Test (Pre-test and Post-test)

1) Experimental Class

Descriptive statistics were used to analyze the students' reading comprehension scores in the experimental class before and after being taught with game-based learning. By comparing the minimum, maximum, and mean scores of the pre-test and post-test.

**Table 4.1 Mean Reading Comprehension in
Experimental Class**

Variable	Minimum Score	Maximum Score	Mean Score
Pre-test Reading	10	65	33.21
Post-test Reading	40	95	75.28

In the experimental class, students' reading comprehension scores showed a notable improvement after the use of game-based learning. The pre-test reading scores ranged from 10 to 65, with a mean score of 33.21. After receiving treatment through game-based learning, the post-test scores increased significantly to a range of 40 to 95, with an average score of 75.28. This significant increase demonstrates that game-based learning had a positive effect on enhancing students' reading comprehension abilities in the experimental class.

2) Control Class

In the control class, descriptive statistics were also applied to assess students' reading comprehension scores before and after conventional teaching. The comparison of pre-test and post-test scores provided insight into the

students' improvement without the use of game-based learning.

**Table 4.2 Mean Reading Comprehension
in Control Class**

Variable	Minimum Score	Maximum Score	Mean Score
Pre-test Reading	10	65	35.75
Post-test Reading	50	90	69.43

In the control class, where conventional learning methods were applied, students also showed an improvement in reading comprehension scores, although the increase was relatively moderate. The pre-test reading scores ranged from 10 to 65, with an average score of 35.75. After participating in the conventional learning process, the post-test scores increased to a range of 50 to 90, with a mean score of 69.43. While there was progress in the control class, the gain in reading comprehension was not as significant as that in the experimental class using game-based learning.

b. Normality Test

A normality test was conducted to determine whether the data in both the experimental and control classes followed a normal distribution. The Kolmogorov-Smirnov test was applied to assess the normality of the reading comprehension test scores. The results of the test are presented in the following table:

Tabel 4.3 Normality Test

Group/Variable	N	Statistic	Sig. (p-value)	Description
Pre-test Reading Experiment	53	0.161	0.002	Not Normal
Post-test Reading Experiment	53	0.139	0.012	Not Normal
Pre-test Reading Control	53	0.105	0.200*	Normal
Post-test Reading Control	53	0.152	0.004	Not Normal

Based on the results of the Kolmogorov-Smirnov normality test, it was found that most of the reading comprehension scores in both the experimental and control classes did not meet the assumption of normality. In the experimental class, the pre-test reading scores obtained a significance value of 0.002 and the post-test scores a value of 0.012, both of which are below 0.05. This indicates that the distribution of reading comprehension scores in the experimental class was not normal. In the control class, the

pre-test reading scores showed a significance value of 0.200, which is greater than 0.05, meaning the data were normally distributed. However, the post-test reading scores yielded a significance value of 0.004, which is lower than 0.05, indicating a non-normal distribution after the post-test. In conclusion, only the pre-test scores of the control class were normally distributed, while the rest of the reading comprehension data in both groups were not normally distributed. Therefore, it was necessary to use non-parametric statistical tests for further analysis of the reading comprehension scores.

c. Homogeneity of Variance Test

A homogeneity test was conducted to determine whether the variance between the experimental and control groups was equal before and after the treatment. The Levene's Test for Equality of Variances was applied to the reading comprehension scores. The results of the test are displayed in the following table:

Tabel 4.4 Homogeneity of Variance Test

Variable	Levene Statistic	df1	df2	Sig. (p-value)	Description
Pretest Reading	0.325	1	106	0.570	Homogeneous
Posttest Reading	0.238	1	106	0.626	Homogeneous

Based on the results of the homogeneity test using Levene's Test, it was found that the significance value for the pre-test reading comprehension scores was 0.570, and for the post-test scores it was 0.626. Both significance values are greater than 0.05, which indicates that the data variances between the experimental and control groups were homogeneous for both the pre-test and post-test reading scores. This means there was no significant difference in variance between the two groups in terms of reading comprehension scores before and after the treatment. Therefore, the assumption of homogeneity was fulfilled for this variable, and it allowed the researcher to proceed with further comparative tests between the two groups without concern for unequal variances.

d. Hypothesis Testing

A hypothesis test was conducted to determine whether there were significant differences in reading comprehension scores between the experimental and control groups both before and after the treatment. The Independent Samples T-Test was employed for this purpose. The results of the test are presented in the table below:

Tabel 4.5 Hypothesis Testing

Variable	Sig. (2-tailed)	Description
Pretest Reading	0.255	Not significant
Posttest Reading	0.006	Significant

The results of the Independent Samples T-Test revealed that the pre-test reading comprehension scores between the experimental and control groups had a significance value of 0.255, which is higher than 0.05. This indicates that there was no significant difference in reading comprehension ability between the two groups before the treatment was given. In other words, both groups started with relatively equal reading comprehension levels.

However, after the treatment was administered, the post-test reading comprehension scores obtained a significance

value of 0.006, which is lower than 0.05. This result indicates that there was a statistically significant difference in reading comprehension performance between the experimental group and the control group after the treatment. It can therefore be concluded that the use game-based learning medium had a significant positive effect on improving students' reading comprehension skills in the experimental class when compared to those in the control class, who received conventional instruction.

2. Finding Students' Grammar Test (Pre-test and Post-test)

a. Test (Pre-test and Post-test)

1) Experimental Class

Descriptive statistics were used to analyze the students' grammar scores in the experimental class before and after being taught with game-based learning. By comparing the minimum, maximum, and mean scores of the pre-test and post-test.

**Table 4.6 Mean Students' Grammar
in Experimental Class**

Variable	Minimum Score	Maximum Score	Mean Score
Pre-test Grammar	15	55	33.21
Post-test Grammar	45	95	72.64

Similar to reading comprehension, the grammar scores in the experimental class also experienced a substantial improvement following the implementation of game-based learning. The pre-test grammar scores varied from 15 to 55, with a mean score of 33.21. After the learning process that involved game-based learning, the post-test grammar scores increased significantly, ranging from 45 to 95, with an average score of 72.64. These results indicate that the integration of game-based learning in grammar instruction positively impacted students' mastery of grammar in the experimental class.

2) Control Class

In the control class, descriptive statistics were also applied to assess students' grammar scores before and after conventional teaching. The comparison of pre-test and post-test scores provided insight into the students' improvement without the use of game-based learning.

Table 4.7 Mean Student Grammar in Control Class

Variable	Minimum Score	Maximum Score	Mean Score
Pre-test Grammar	15	50	33.91
Post-test Grammar	50	85	69.43

The grammar scores in the control class also indicated an increase, although the improvement was comparatively smaller than in the experimental class. The pre-test grammar scores ranged from 15 to 50, with an average score of 33.91. After undergoing conventional grammar instruction, the post-test grammar scores increased to a range of 50 to 85, with a mean score of 69.43. This suggests that while students in the control class improved their grammar skills, the increase was less pronounced compared to students in the experimental class who used game-based learning.

b. Normality Test

A normality test was conducted to determine whether the grammar test scores in both the experimental and control classes were normally distributed. The Kolmogorov-Smirnov test was applied to the data, and the results are presented in the table below:

Tabel 4.8 Normality Test

Group/Variable	N	Statistic	Sig. (p-value)	Description
Pre-test Grammar Experiment	53	0.142	0.010	Not Normal
Post-test Grammar Experiment	53	0.131	0.024	Not Normal
Pre-test Grammar Control	53	0.127	0.033	Not Normal
Post-test Grammar Control	53	0.159	0.002	Not Normal

Based on the results of the Kolmogorov-Smirnov normality test, it was found that all grammar test scores in both the experimental and control classes did not meet the assumption of normality. In the experimental class, the pre-test grammar scores had a significance value of 0.010, and the post-test grammar scores had a value of 0.024, both of which were below 0.05. These results indicate that the grammar scores in the experimental class were not normally distributed. Therefore, it can be concluded that all grammar test data in both groups were not normally distributed. As a result, non-parametric statistical tests such as the Mann-Whitney U Test and Wilcoxon Signed-Rank Test were recommended for further analysis of the grammar test scores.

c. Homogeneity of Variance Test

A homogeneity test was conducted to examine whether the grammar scores in both the experimental and control classes had equal variances. The Levene's Test for Equality of Variances was employed, and the results are shown in the following table:

Tabel 4.9 Homogeneity of Variance Test

Variable	Levene Statistic	df1	df2	Sig. (p-value)	Description
Pretest Grammar	0.579	1	106	0.449	Homogeneous
Posttest Grammar	0.379	1	106	0.540	Homogeneous

The results of the Levene's Test indicated that the significance value for the pre-test grammar scores was 0.449, and for the post-test grammar scores it was 0.540. Both values were greater than 0.05, which confirms that the variances of the grammar scores in the experimental and control groups were homogeneous at both the pre-test and post-test stages. Since the assumption of homogeneity was met, it allowed the researcher to proceed with appropriate comparative analyses for the grammar scores between the two groups without concern for unequal variances.

d. Hypothesis Testing

A hypothesis test was carried out to determine whether there was a significant difference in grammar scores between the experimental and control classes both before and after the treatment. The Independent Samples T-Test was applied, and the results are presented in the following table:

Tabel 4.10 Hypothesis Testing

Variable	Sig. (2-tailed)	Description
Pretest Grammar	0.687	Not significant
Posttest Grammar	0.032	Significant

The results of the Independent Samples T-Test revealed that the pre-test grammar scores between the experimental and control groups had a significance value of 0.687, which is higher than 0.05. This indicates that there was no significant difference in grammar ability between the two groups before the treatment, meaning both groups started with relatively equal grammar skills.

However, after the treatment, the post-test grammar scores produced a significance value of 0.032, which is lower than 0.05. This result indicates a statistically significant

difference in grammar performance between the experimental group and the control group after the treatment.

3. Perception and Challenge students' using Game-based Learning

In addition to quantitative data, this study also collected interview data to explore their perceptions and challenges when using Game Based Learning. The interview data were analyzed using NVivo 12 Pro, a qualitative data analysis software that helps organize, categorize, and code textual data systematically. The researcher imported the interview transcripts into NVivo, then created specific nodes based on the research questions, including students' perceptions and students' challenges.

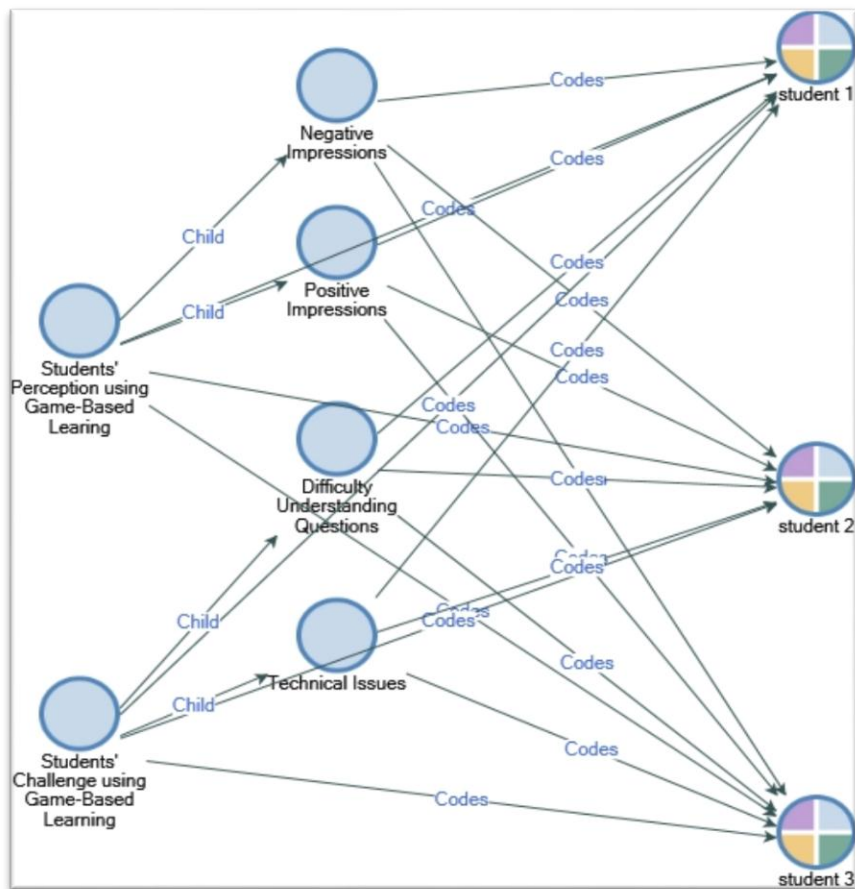


Figure 4.1 Project Map

Under the students' perceptions category, the data were further classified into sub-categories such as *Positive Impression* and *Negative Impression*. Meanwhile, the students' challenges category was divided into sub-categories like *Technical Issues* and *Difficulties in Understanding Questions*. NVivo's coding process made it easier to group similar responses and identify patterns within the data.

The results of this analysis are presented in the form of tables and figures generated by NVivo 12 Pro, which display the frequency and examples of students' responses in each category. These findings provide a deeper understanding of the students' experiences and opinions during the implementation of the learning media in this study.



Figure 4.2 Word Cloud of Students' Perceptions and Challenges in Using Game-Based Learning

That displays a word cloud generated from the students' interview responses regarding their perceptions and challenges in using game-based learning for English lessons. The most frequently mentioned words are displayed in larger font sizes.

Terms such as learning, game, based, reading, grammar, comprehension, motivated, and questions appear prominently, indicating that students often referred to these aspects when describing their experiences.

The visualization shows that students frequently associated game-based learning with motivation, enjoyment, and improved understanding of reading texts and grammar rules. Additionally, terms like difficulties, internet, instructions, and confusion appear as well, reflecting some of the challenges they encountered, such as unstable connections and difficulties in understanding English instructions within the games. This word cloud serves to visually highlight the key themes and concerns expressed by students throughout the data collection process.

a. Student Perception in Using Game Based Learning

Based on the interview results, most students stated that using game-based learning media such as *Blooket* and *Magic School* made the learning process more interesting, enjoyable, and motivating. The following images show examples of the media used by students and teachers during the English lessons.

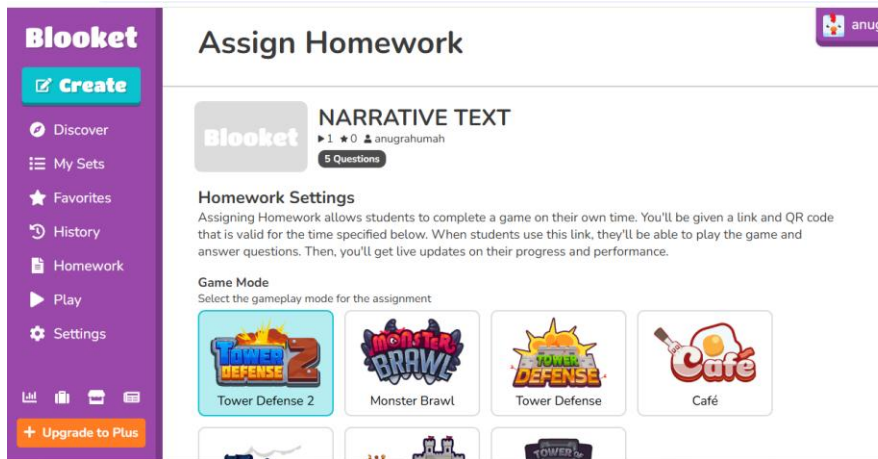


Figure 4.3 The Main Interface of the *Blooket* Application

That shows the interface of the *Blooket* application, which was used in grammar and reading comprehension lessons. This platform presents questions in an interactive game format with various modes such as *Gold Quest*, *Factory*, and *Tower Defense*, which successfully increased students' motivation and enthusiasm in participating in the learning activities.

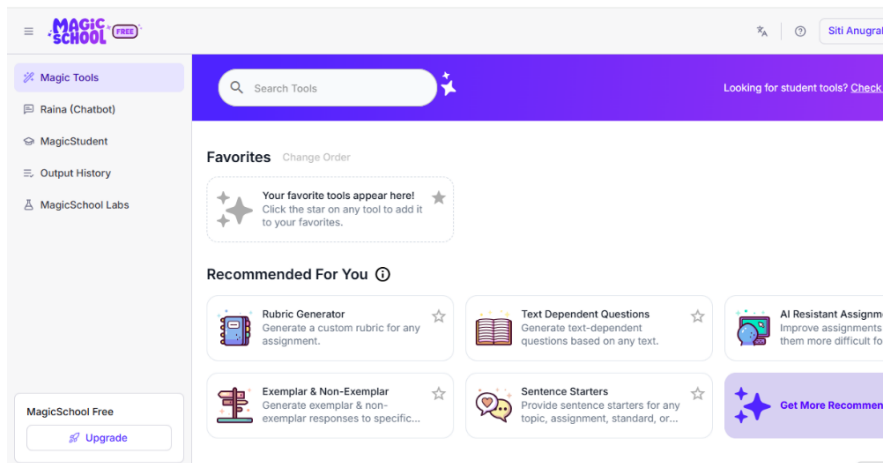


Figure 4.4 The Display of *Magic School* Application for Creating Learning Materials

That presents the interface of the *Magic School* application, which was used by the teacher to create interactive questions and game-based assignments for students. This platform made it easier for the teacher to design quizzes, manage learning materials, and assign interactive tasks that supported students' engagement during English lessons.

Based on the interviews conducted with three students from the eighth grade, it was found that students generally perceptions towards the use of game-based learning platforms in English lessons.

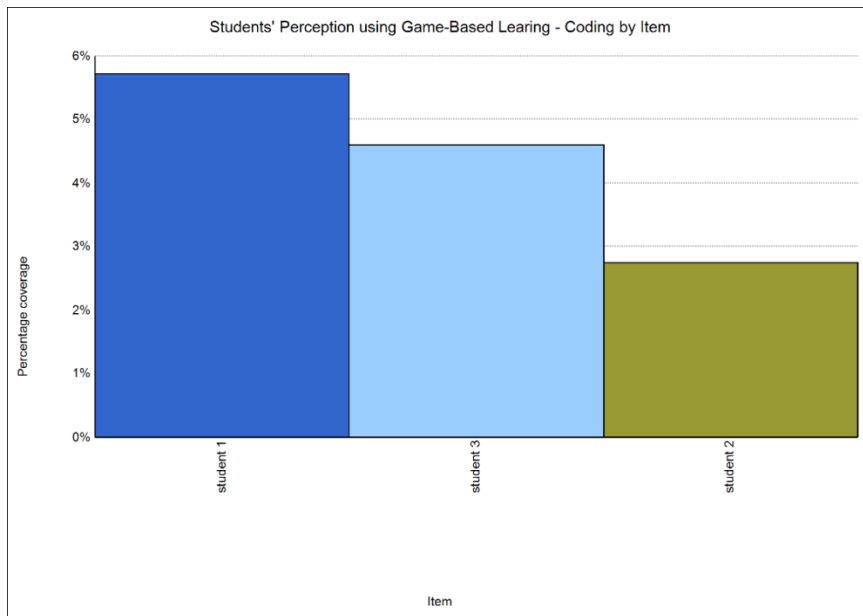


Figure 4.5 Students' Perception using Game-Based Learning

The figure above presents students' perceptions of using Game-Based Learning during English lessons. It shows that Student 1 expressed the highest percentage coverage at approximately 5.7%, indicating the most active and positive feedback regarding the benefits of game-based activities in supporting their learning, making lessons fun and not boring. These results indicate that perception students in game-based learning has a significant positive impression. Then, the interview shows that the perception. Student 1 mentioned,

“The first time I used a game like game-based learning in English class, I was really happy, Ma’am. Usually, learning English means reading books or doing exercises, so when we used a game, it felt different fun and not boring”. AD1

This response indicates that the implementation of game-based learning created a fresh and enjoyable atmosphere for students in the classroom. Traditional English learning activities, such as reading and doing exercises, were perceived as monotonous by students. However, the use of games introduced a new learning experience that was both engaging and entertaining. The student’s statement reflects a sense of enthusiasm and increased motivation when learning is combined with enjoyable activities, which supports the idea that game-based learning can positively influence students’ attitudes toward English lessons.

However meanwhile, indicate that perception students in game-based learning result that game-based learning quite helpful for reading comprehension and grammar. Then, the interview show that the perception. Student 1 mentioned,

“It was quite helpful, actually. For example, when I played game based learning with questions about tenses, it helped me remember the difference between present and past tense better because the questions in the game showed examples of sentences right away, so it was easier to understand.” AD4

This statement demonstrates that game-based learning was perceived as an effective tool for improving students' understanding of grammar, particularly in differentiating between tenses. The immediate presentation of sentence examples in the game format helped the student grasp grammar rules more clearly and quickly compared to traditional learning methods. The interactive nature of game-based activities, where students encounter practical examples in a fun and engaging way, appeared to reinforce their comprehension of English grammar concepts. This finding supports the view that game-based learning can enhance students' understanding by offering contextualized and instant feedback through in-game questions and examples.

Student 3 followed with a percentage coverage of around 4.6%, also providing favorable perceptions, though slightly less than Student 1. These result indicates the positive feedback regarding the perception of game-based activities in supporting their learning, making lessons relaxed. Then, the interview show that the perception. Student 3 mentioned, "Yes, because it creates a more relaxed learning environment while still allowing students

to acquire knowledge effectively” AK1. This answer highlights that game-based learning not only provides enjoyment but also contributes to creating a more comfortable and less stressful classroom atmosphere.

The student felt that the relaxed setting fostered by game-based activities did not compromise the learning process. Instead, it helped maintain students’ focus while making the lessons more enjoyable. This suggests that incorporating games into the teaching of English can reduce students’ anxiety, encourage active participation, and improve their overall learning experience. The finding reinforces the idea that a positive and supportive classroom environment plays an important role in enhancing students’ motivation and academic performance.

However meanwhile, indicate that perception students in game-based learning, that result game-based learning make a better understanding for understand the question about reading comprehension and grammar in narrative text. Then, the interview show that the perception. Student 3 mentioned, “Yes, I gained a better understanding of past tense and verb 2 while playing *Blooket*, as those types of questions appeared frequently”

AK4. This response shows that the repeated exposure to specific grammar items, such as past tense and verb forms, within game-based learning activities like *Blooket*, significantly supported the student's understanding.

The frequent appearance of similar question types allowed students to practice and reinforce their knowledge continuously in a fun and interactive way. This finding suggests that game-based platforms with repeated and varied question formats can enhance grammar mastery by offering students multiple opportunities for practice and immediate feedback. It also indicates that such an approach helps learners grasp grammatical concepts more easily compared to conventional learning methods.

Meanwhile, Student 2 recorded the lowest percentage coverage at about 3.1%, suggesting fewer comments or a more neutral perception compared to the other students. Overall, the results suggest that most students had positive experiences with Game-Based Learning, with variations in enthusiasm and engagement levels reflected in the coverage percentages. Then, the interview show that the perception. Student 2 mentioned,

“At first, I was a bit confused because I had never played a game like that before. But after a while, it turned out to be fun because I could play together with my friends”. HAD1

This response indicates that although the student initially felt unfamiliar and somewhat confused when introduced to game-based learning, those feelings gradually shifted into enjoyment as the activity progressed. The opportunity to play collaboratively with classmates contributed to a positive and enjoyable learning experience. This suggests that while some students may require time to adjust to new learning methods, game-based learning can eventually foster engagement, enjoyment, and a sense of community in the classroom. It highlights the potential of game-based activities not only to improve academic outcomes but also to support students’ social interaction and classroom atmosphere.

However meanwhile, indicate that perception students in game-based learning, result that game-based learning helped memorize new words. Then, the interview show that the perception. Student 2 mentioned, “Yes, when I played games about vocabulary, it helped me memorize new words as they frequently appeared during the game.” HAD4. This response

indicates that game-based learning provided valuable support in vocabulary acquisition.

The frequent repetition of new words within the game environment helped reinforce students' memory and understanding. The interactive and engaging nature of the games allowed students to encounter vocabulary items repeatedly in a fun context, which contributed to better retention compared to conventional memorization techniques. This finding suggests that game-based learning, particularly with vocabulary focused activities, can be an effective tool for improving students' vocabulary mastery through enjoyable, repeated exposure.

1) Positive Impression

To explain the students' perceptions in the Positive Impression category, the following picture presents the results of students' responses. This section highlights students' positive feelings and experiences while using the learning media during the study.

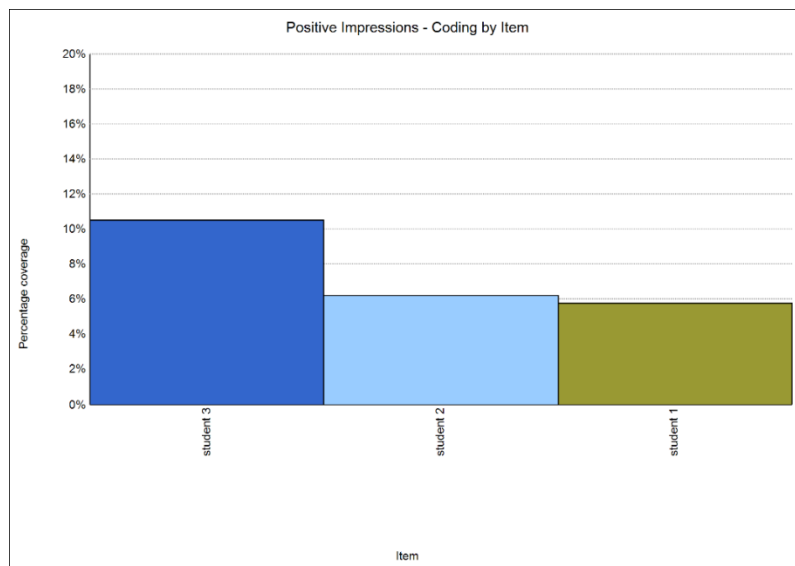


Figure 4.6 Positive Impressions

The figure above illustrates the percentage coverage of students' positive impressions toward the use of Game-Based Learning, coded by individual responses. It can be observed that Student 3 recorded the highest percentage coverage at approximately 10.5%, indicating that this student expressed the most positive comments and favorable impressions about their experience using game-based tools in the learning process. Then, the interview show that the perception. Student 3 mentioned, "I felt more motivated because of the competitive aspect". AK3. This response highlights that the competitive element within game-based learning activities played an important role in increasing students' motivation.

The presence of competition, whether in the form of points, leader boards, or challenges against peers, made students feel more driven to actively participate and perform well. This finding suggests that incorporating competitive features in learning activities can stimulate students' enthusiasm, enhance their engagement, and make the learning process more dynamic. It also implies that healthy competition in educational games can serve as an effective motivational tool, especially in language learning contexts that sometimes feel monotonous through conventional methods.

However meanwhile, indicate that positive impression students in game-based learning, that result game-based learning make a words easier to remember. Then, the interview show that the perception. Student 3 mentioned, "I believe so, especially when the questions are presented in a quiz format, as it makes them easier to remember" AK2. This response shows that the quiz format within game-based learning was particularly effective in increasing students' interest and aiding memory retention.

The student emphasized that presenting learning materials in the form of quizzes made the content more engaging and easier to remember than conventional methods like lectures or written exercises. The interactive and fast-paced nature of quizzes encourages active participation and provides immediate feedback, which helps reinforce learning. This finding indicates that integrating quiz-based games in English lessons can make grammar and reading comprehension activities more appealing and effective for students.

Student 2 followed with a percentage of around 6.1%. This pattern suggests that although all students generally had positive impressions of Game-Based Learning, the degree of enthusiasm and satisfaction varied. Then, the interview show that the perception. Student 2 mentioned, “I feel more motivated because it feels like playing a game, so I always want to win” HAD3. This answer shows that the game-like atmosphere created through game-based learning successfully triggers students’ intrinsic motivation.

The sense of play and competition encourages students to participate more actively in learning activities. The student's desire to win reflects how gamification elements such as challenges, leaderboards, and scores can positively influence students' enthusiasm and commitment to engage with the lesson materials. This finding supports the idea that game-based learning not only enhances motivation but also creates a more dynamic and enjoyable classroom environment, making students more eager to focus and perform well.

However meanwhile, indicate that positive impression students in game-based learning, that result game-based learning make learning less boring. Then, the interview show that the perception. Student 2 mentioned,

“Yes, it makes learning less boring. Typically, we only write and listen to the teacher, but with this, the atmosphere becomes more lively and engaging.” HAD2

This statement highlights that game-based learning helps create a more dynamic and interactive classroom environment compared to conventional methods. The student emphasized that traditional lessons often involve passive activities such as writing and listening, which can lead to

boredom and reduced motivation. In contrast, game-based activities introduced excitement and active participation, making the learning process more engaging and enjoyable. This finding suggests that incorporating games into reading comprehension and grammar lessons can improve the classroom atmosphere, increase student involvement, and make learning experiences more memorable.

Student 1 contributed the least at 5.7%. This pattern suggests that although all students generally had positive impressions of Game-Based Learning, the degree of enthusiasm and satisfaction varied. Then, the interview show that the perception. Student 1 mentioned,

“Yes, I do feel more motivated. It’s like there’s a desire to win and get the highest score. So, I pay more attention to the questions, hoping to answer them all correctly and get a reward or a good ranking.” AD3

This response confirms that game-based learning increases students’ motivation by offering incentives such as points, rankings, and rewards. The competitive atmosphere created through these features encourages students to concentrate more and actively engage in the learning process. The student's desire to achieve a high score and be

recognized for their performance drives them to pay closer attention to the material, which contributes to better understanding and retention. This finding demonstrates that the gamification of learning activities can foster a sense of challenge and excitement, leading to increased focus, enthusiasm, and participation in the classroom.

However meanwhile, indicate that positive impression students in game-based learning, that result game-based learning make learning more interesting. Then, the interview show that the perception. Student 1 mentioned,

“In my opinion, yes, it makes learning more interesting. But when using a game, it feels like playing while learning. There are points, challenges, and sometimes we even compete with friends, so it makes us more excited.” AD2

This response highlights that game-based learning successfully increased students’ engagement and interest in lessons that are often considered tedious. The student pointed out that conventional activities such as reading texts and memorizing grammar rules tend to be monotonous and demotivating. However, integrating games into the learning process transformed the classroom atmosphere by providing elements of play, competition, and challenges. Features like

points and peer competition not only added excitement but also encouraged active participation, making the learning experience more dynamic and enjoyable. This finding indicates that game-based learning can serve as an effective strategy to enhance students' motivation and involvement in mastering reading comprehension and grammar skills.

2) Negative Impression

To describe the students' perceptions in the Negative Impression category, the following picture presents the results of students' responses. This part shows the challenges, difficulties, and negative feelings experienced by students while using the learning media during the study.

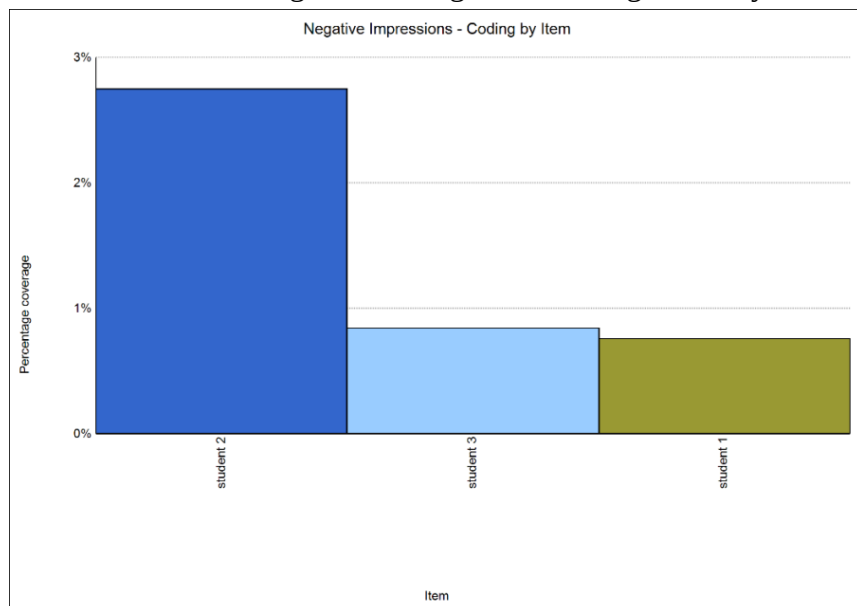


Figure 4.7 Negative Impressions

The figure above presents the percentage coverage of students' negative impressions toward the use of Game-Based Learning, coded by individual responses. It shows that Student 2 expressed the highest percentage of negative impressions at around 2.7%, indicating this student faced more challenges or expressed more dissatisfaction with aspects of the learning process compared to others. Then, the interview show that the perception. Student 2 mentioned, "At first, I was a bit confused" HAD1. This statement indicates that not all students immediately felt comfortable when first introduced to game-based learning.

The feeling of confusion likely stemmed from the unfamiliar format and the new classroom dynamics created by integrating digital games into the learning process. However, based on other responses, many students eventually adapted and found the activity enjoyable. This finding suggests that while game-based learning offers many benefits, teachers should be mindful of the students' initial adjustment period and provide clear instructions and guidance to help them navigate the new method confidently.

Meanwhile, Student 3 contributed approximately 0.8%. Indicate that negative impression students in game-based learning, the result students don't understand the meaning of the word in the question. Then, the interview show that the perception. Student 3 mentioned, "Sometimes I don't understand the meaning of the words in the question" AK6. This response highlights one of the challenges students face when participating in game-based learning activities limited vocabulary knowledge.

The student's difficulty in understanding the meaning of certain words within the game questions could hinder their ability to answer correctly and fully engage with the activity. This finding suggests that while game-based learning is generally effective in increasing motivation and participation, it also requires careful consideration of students' vocabulary levels. Teachers may need to provide pre-game vocabulary reviews or glossaries to support students' comprehension and ensure that all participants can follow the activities smoothly.

Student 1 had the least negative impressions at about 0.7%. Indicate that negative impression students in game-based learning, the result game-based learning make boring and sleepy. Then, the interview show that the perception. Student 3 mentioned, “Because if it’s just reading texts or memorizing grammar, it can get boring and make you sleepy” AD2. This response reflects the student's perception that conventional learning methods, such as reading texts and memorizing grammar rules, tend to be monotonous and unengaging.

The student implied that game-based learning offers a refreshing alternative that can break the routine of passive learning activities. This finding reinforces the idea that integrating interactive and game-based elements into English lessons can increase students’ attention, reduce boredom, and maintain their enthusiasm for learning particularly in subjects that are often considered tedious when delivered through traditional methods.

Although negative perceptions were present among all students, their proportion was relatively low overall,

especially when compared to the positive impressions chart. This suggests that while some difficulties and criticisms existed, the overall sentiment toward Game-Based Learning was predominantly favorable.

b. Student Challenge in Using Game Based Learning

Based on the interviews conducted with three students from the eighth grade, it was found that students generally challenge towards the use of game-based learning platforms in English lessons.

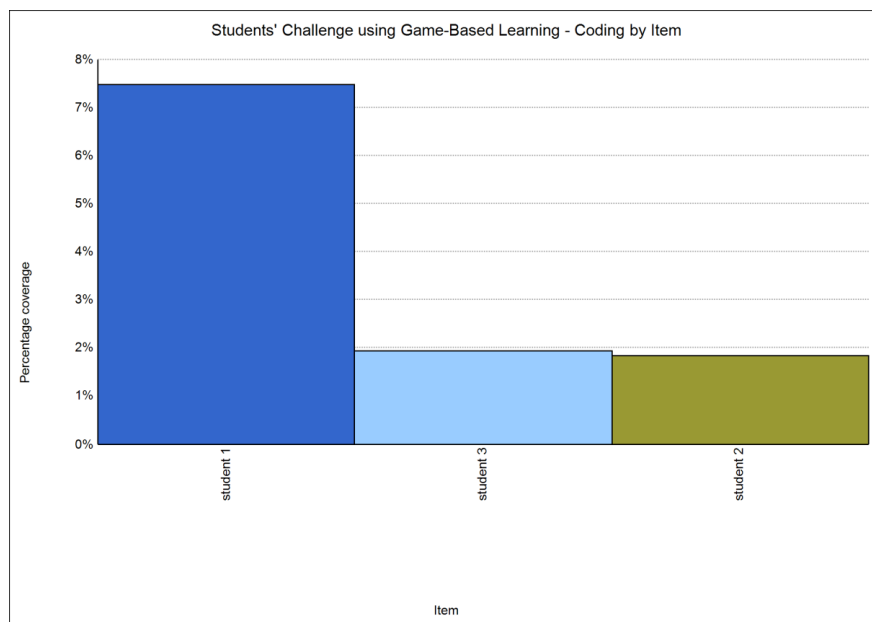


Figure 4.8 Students' Challenge using Game-Based Learning

Based on the coding analysis of students' challenges in using Game-Based Learning, the results revealed varying experiences among the participants. As illustrated in the figure, Student 1 recorded the highest percentage coverage at approximately 7.5%, indicating that this student encountered more frequent and diverse difficulties during the learning process. These challenges included issues such as limited time to answer questions, unstable internet connections, and confusion with game instructions. Then, the interview show that challenge. Student 1 mentioned,

“Yes, I have experienced that. There was a time when I was playing *Blooket* at home and the internet connection lagged, causing me to be disconnected from the game. Additionally, when all the instructions are written in English, I sometimes feel confused about what the tasks are asking me to do” AD7

This response highlights two key challenges faced by students when participating in game-based learning activities. First, technical issues such as unstable internet connections can disrupt the learning experience, especially when activities are conducted outside the classroom or rely heavily on online platforms. Second, language barriers in understanding game instructions written entirely in English can cause confusion and affect students' ability to participate effectively. This finding suggests that while game-based

learning offers engaging opportunities, teachers need to anticipate and address potential technical and language-related obstacles by providing clear, bilingual instructions and ensuring students have reliable access to the necessary technology.

Meanwhile, Student 3 and Student 2 each showed a lower percentage coverage of around 2%, suggesting that they experienced fewer obstacles when using platforms like *Blooket*. This finding implies that while challenges existed for all students, the degree and type of difficulties differed. Then, the interview show that challenge. Student 2 mentioned,

“I have experienced this before. My internet connection was suddenly disconnected while playing *Blooket* at home, which made me unable to answer the final question”. HAD7

This response highlights one of the common technical obstacles encountered by students during game-based learning activities unstable internet connectivity. Disruptions like this can interrupt students’ participation, hinder their performance, and reduce their overall learning experience. Particularly for online games like *Blooket*, which require continuous internet access, connection problems at home can prevent students from completing tasks and

maintaining engagement. This finding indicates the importance of considering students' internet access and providing alternative solutions or flexible options to accommodate those who experience technical difficulties.

1) Technical Issues

To describe the challenges faced by students related to technical problems, the following table presents the results of students' responses

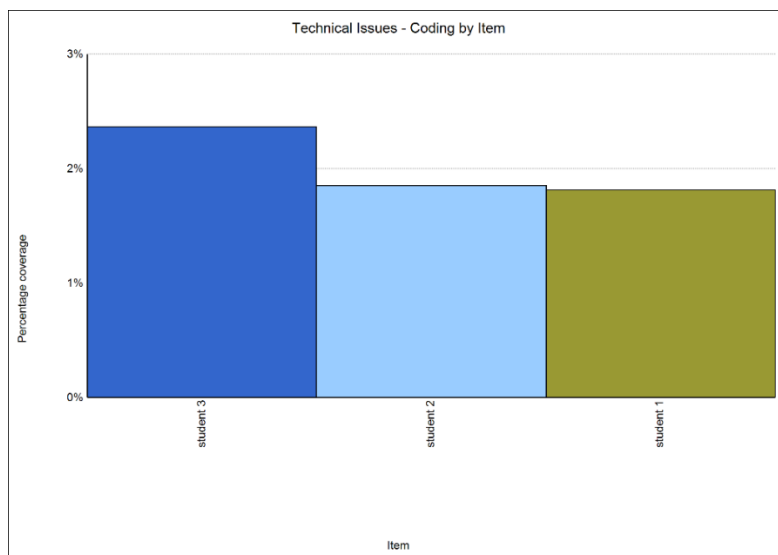


Figure 4.9 Technical Issues

The analysis of technical issues encountered by students during the use of Game-Based Learning is presented in the figure above. The results indicate that Student 3 experienced

the highest percentage coverage at approximately 2.4%, suggesting that this participant frequently mentioned technical problems, such as unstable internet connections or difficulties understanding the platform's features. Then, the interview show that the challenge. Student 3 mentioned, "I once experienced confusion because I did not understand how to play *Blooket* in Factory mode" AK7. This response highlights a challenge related to students' unfamiliarity with specific game modes and their instructions within the game-based learning platform.

The student's confusion in understanding how to navigate and play *Factory mode* in *Blooket* suggests that clear and accessible guidance is essential, especially when introducing new or varied game formats. This finding implies that teachers need to allocate time for explaining game mechanics and ensuring that students fully understand how to operate the games before starting, to prevent confusion and maximize the learning benefits of the activity.

Student 2 followed closely with a percentage coverage of around 2%. Indicate that technical issues students in game-based learning, the internet connection disconnected.

Then, the interview show that the perception. Student 2 mentioned, “I have experienced this before. My internet connection was suddenly disconnected while playing *Blooket* at home” HAD7. This response highlights a technical issue commonly encountered by students during game-based learning activities, particularly when conducted outside the classroom setting.

The unstable internet connection disrupted the student’s ability to participate in the game, which could negatively affect their learning experience and performance. This finding suggests that teachers need to be mindful of students’ internet access, especially for take-home activities involving online platforms like *Blooket*. It also indicates the importance of providing flexible options, clear instructions for reconnecting, or alternative offline tasks for students facing technical difficulties.

Student 1 recorded a slightly lower percentage, at approximately 1.9%. These findings reveal that although technical issues were faced by all students, the degree varied slightly. Then, the interview show that the challenge. Student 1 mentioned,

“Yes, I have experienced that. There was a time when I was playing *Blooket* at home and the internet connection lagged, causing me to be disconnected from the game” AD7.

This statement reflects a technical difficulty that often occurs when students participate in online game-based learning activities from home. Internet lag and disconnections not only disrupt the game but also impact students' learning continuity and their chances of fully engaging with the activity. This finding suggests that while game-based learning offers engaging experiences, it also requires stable technical infrastructure to function effectively. Teachers need to anticipate such challenges and consider providing alternative solutions or adjusting the activity format for students who encounter internet connectivity issues.

This result highlights the importance of ensuring stable internet access and providing clear technical guidance when implementing game-based learning tools like *Blooket* in both classroom and home environments.

2) Difficulty Understanding Questions

To describe the challenges faced by students in understanding the questions, the following table presents the results of students' responses

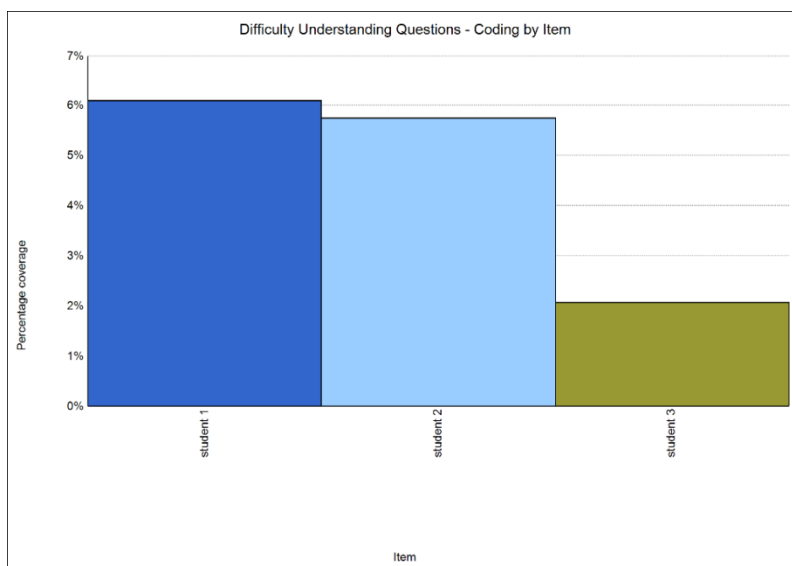


Figure 4.10 Difficulty Understanding Questions

The findings on students' difficulty in understanding questions during Game-Based Learning are illustrated in the figure above. The chart shows that Student 1 experienced the highest percentage coverage at approximately 6.1%, indicating frequent mentions of difficulties in comprehending the English instructions or vocabulary used in the questions. Then, the interview show that the challenge. Student 1 mentioned,

“One of the challenges I experienced was when the English questions were quite long, while the time limit was short, making it difficult to read and understand all the questions in time” AD6

This response reveals a challenge related to the time pressure within game-based learning activities, especially when dealing with lengthy English questions. The student experienced difficulty comprehending and answering questions within the limited time provided by the game. This suggests that while time limits in games are designed to increase excitement and competitiveness, they can also create obstacles for students with varying reading speeds and comprehension abilities. This finding implies that teachers should carefully adjust time allocations and question lengths to match students' language proficiency levels or consider offering a practice round to familiarize students with the question format before the actual game begins.

Student 2 closely followed with a percentage coverage of around 5.8%, also expressing similar challenges in understanding the meaning of certain words and the instructions provided during the games. Then, the interview show that the challenge. Student 2 mentioned, “Yes, when I played games about vocabulary, it helped me memorize new words as they frequently appeared during the game.” HAD4.

This response indicates that game-based learning not only supports students' comprehension of reading texts and grammar rules but also effectively aids vocabulary acquisition.

The frequent repetition of new words within game-based activities reinforces memory retention in a way that is enjoyable and engaging. The student's statement suggests that seeing vocabulary items repeatedly while playing helped improve their familiarity and recall of new words. This finding highlights that game-based learning, through its interactive and repetitive nature, is a valuable tool for enhancing students' vocabulary mastery alongside other language skills.

Meanwhile, Student 3 showed the lowest percentage coverage at about 2%. Indicate that difficulty understanding question students in game-based learning is don't understand the meaning of question. Then, the interview show that the challenge. Student 3 mentioned, "Sometimes I don't understand the meaning of the words in the question, so I have to guess" AK6. This response highlights a language-

related challenge faced by students when participating in game-based learning activities.

Limited vocabulary knowledge made it difficult for the student to comprehend some of the questions, leading them to rely on guessing rather than fully understanding the task. This finding suggests that although game-based learning is engaging, it still requires careful consideration of students' language proficiency. Teachers might need to provide pre-teaching of key vocabulary or offer translation aids for more difficult words to ensure that the learning objectives of the game-based activity are effectively achieved without leaving students confused.

This result highlights that most students, especially Student 1 and Student 2, faced significant comprehension barriers, which affected their performance during the game-based learning activities. It emphasizes the importance of providing clear, accessible instructions and vocabulary scaffolding when implementing English language game-based learning in the classroom.

B. Discussion

Based on the results of the research conducted on eighth-grade students at SMPN 1 Petir, it was found that the use of game-based learning media had a significant influence on improving students' reading comprehension and grammar in narrative texts.

1. Game-Based Learning effective in improving students' reading comprehension in narrative texts

The findings of this study showed that the use of Game-Based Learning through *Blooket* effectively improved students' reading comprehension in narrative texts. As indicated in the descriptive statistics, there was a significant increase in the experimental group's post-test reading comprehension scores compared to their pre-test, with the improvement exceeding that of the control class. This result aligns with the explanation of Game-Based Learning, which emphasized that game-based activities create engaging, interactive environments that increase student motivation and help maintain concentration during complex literacy tasks¹.

This finding is also in accordance with the theory of Reading Comprehension proposed by Pang et al.², which defines reading

¹ May.

² Pang, Bernhardt, muaka Angaluki. Kamil, and L, XVIII.

comprehension as a process involving both perception and thinking, requiring grammatical knowledge, vocabulary mastery, and prior knowledge to construct meaning from a text. In this study, integrating reading comprehension tasks into interactive game formats enabled students to actively apply these reading skills in an enjoyable and less stressful environment, making it easier for them to focus on meaning-making while managing their cognitive load.

Moreover, according to Pang et al.³, narrative texts are particularly effective for developing students' reading comprehension because they immerse readers in structured sequences of events, characters, and moral values. The narrative texts used in this study, when paired with competitive game-based tasks, increased students' interest and made them feel more personally involved in the storyline and outcomes, thereby enhancing their comprehension and engagement. This supports the argument in Prayogi's⁴ research that narrative texts not only develop students' linguistic competence but also their cultural awareness and moral reasoning, especially when delivered through interactive, student-centered methods like Game-Based Learning.

³ Pang, Bernhardt, muaka Angaluki, Kamil, and L, xviii.

⁴ Prayogi and Prihatin.

2. Game-Based Learning effective in improving students' mastery of grammar in narrative texts.

Based on the quantitative findings of this study, it was revealed that the use of Game-Based Learning, particularly through the *Blooket* and *Magic School* platform, significantly improved students' grammar mastery in narrative texts. This is shown by the increase in the mean post-test score of the experimental class and control class the result of the *Mann-Whitney U* Test also confirmed a significant difference between both groups. This indicates that students taught through game-based activities outperformed those who received conventional teaching.

These results support the theoretical framework of Game-Based Learning involves creating enjoyable, engaging activities that guide learners toward specific learning outcomes while maintaining student motivation through the use of interactive, fantasy-based, and competitive elements⁵. The findings of this research reinforce the argument that students learn better through active, interactive experiences that allow them to practice directly rather than through passive, lecture-based instruction.

⁵ Ghazy and others.

Additionally, this result also corresponds with Wahyu' research, which stated that narrative texts, when combined with meaningful and enjoyable learning activities, can develop not only linguistic competence but also students' motivation and comprehension skills⁶. The students' improved grammar mastery in narrative texts in this study affirms the effectiveness of integrating digital game-based activities into narrative text instruction.

In terms of grammar mastery, these results are also strongly supported by the importance of grammar in language learning as outlined by Harmer and Ur⁷. As explained there, grammar is essential for accuracy and clarity in both written and spoken language. The students' improved grammar performance after game-based practice in this study illustrates the practical benefit of combining grammar instruction with interactive media.

Specifically, the improvement in students' mastery of tenses including past simple, past continuous, past perfect, and past perfect

⁶ Wahyu Indah Mala Rohmana and Kharisma Rizki Amalia, 'Exploring the Use of Narrative Text in Teaching Reading Comprehension in Efl Classroom', *Integrated Science and Religious Moderation in New-Paradigm in Contemporary Education*, 7 (2022), pp. 488–96 <<http://repository.uin-malang.ac.id/15807/7/15807.pdf>>.

⁷ Harmer.

continuous tenses also aligns with the theories described by Azar⁸ and Murphy⁹. The explanations in your theoretical foundation detail how these tenses function to describe sequences of past actions, ongoing activities in the past, and durations of actions before specific moments in time. The game-based grammar tasks provided contextualized, repetitive, and interactive practice of these structures, enabling students to internalize them more effectively, as suggested by both Azar and Murphy.

In conclusion, *Blooket* is an effective strategy for improving grammar mastery in narrative texts, enhancing student motivation, and providing a more engaging, interactive classroom environment. This study strengthens the theoretical claims about the pedagogical value of integrating games into language education, particularly for the mastery of essential grammatical structures in English narrative texts.

3. Students' perceptions and challenges in using Game-Based Learning.

This study explored students' perceptions and challenges in using game-based learning platforms, specifically *Blooket* and

⁸ Azar.

⁹ Gunderson, D'Silva, and Odo.

Magic School, during English lessons. Respondent of interview is experimental students who has result post-test low, middle, and high score. The results reveal varied student experiences in response to game-based learning, reflecting both the benefits and limitations of integrating digital games into language instruction. Overall, the findings indicate that while most students responded positively, several challenges emerged, which should be addressed to maximize the effectiveness of this instructional approach.

The interview findings indicate that the majority of students held favorable perceptions towards game-based learning. Most participants agreed that platforms like *Blooket* and *Magic School* made learning more enjoyable, engaging, and motivating compared to conventional methods. These findings align with the theory of intrinsic motivation in educational psychology, which posits that incorporating play and competition into learning activities enhances students' enthusiasm and participation¹⁰.

In terms of positive impressions, students reported that game-based learning increased motivation, supported vocabulary retention,

¹⁰ Richard M. Ryan and Edward L. Deci, 'Intrinsic and Extrinsic Motivation from a Self-Determination Theory Perspective: Definitions, Theory, Practices, and Future Directions', *Contemporary Educational Psychology*, 61.April (2020), p. 101860, doi:10.1016/j.cedpsych.2020.101860.

and made grammar concepts, such as tenses and verb forms, easier to understand. These experiences are consistent with Hwang, which found that educational games improve students' engagement, memory retention, and comprehension through repeated, contextualized exposure¹¹. Furthermore, the presence of leaderboards and point-based challenges encouraged active participation, with students striving to achieve higher scores and outperform their peers.

Despite the overwhelmingly positive feedback, a few negative impressions and difficulties were also identified. These challenges suggest that although game-based learning can enhance motivation, it requires careful scaffolding and support. According to Egbert & Neville, students' unfamiliarity with digital tools and language limitations can hinder their full engagement if not addressed with preparatory activities and explicit instructions¹².

The most frequently reported challenge was related to technical issues, particularly unstable internet connections and confusion with

¹¹ Gyeongcheol Cho and others, 'Cutoff Criteria for Overall Model Fit Indexes in Generalized Structured Component Analysis', *Journal of Marketing Analytics*, 8.4 (2020), pp. 189–202, doi:10.1057/s41270-020-00089-1.

¹² Asma Shehzad, 'A Case Study of English Language Learning in a Mobile Game-Assisted Environment During the Covid-19 Lockdown', *University of Chitral Journal of Linguistics and Literature*, 5.II (2021), pp. 184–98, doi:10.33195/jll.v5iii.338.

game instructions. These findings correspond with the challenges highlighted in Chee et al., who emphasized that technical infrastructure and clear operational guidance are essential for the successful implementation of online learning games. Teachers should anticipate such issues by providing offline alternatives, troubleshooting support, and clear, bilingual instructions when necessary.

Another significant difficulty students encountered was understanding the meaning of English questions within the games, especially under time constraints. These obstacles highlight the importance of considering students' language proficiency when designing game-based activities. As suggested by Nation, pre-teaching key vocabulary and offering accessible glossaries can help students overcome comprehension barriers and improve their performance in language-based games¹³.

In conclusion, the qualitative findings demonstrate that game-based learning offers valuable benefits for increasing students' motivation, engagement, and language comprehension. Nevertheless, technical problems, initial confusion, and

¹³ J Newton and I.S.P. Nation, *Teaching ESL EFL Listening and Speaking (Esl & Applied Linguistics Professional)* (Routledge, 2009).

comprehension difficulties pose challenges that need to be addressed. Teachers are encouraged to provide adequate technical support, explicit instructions, and vocabulary scaffolding when implementing platforms like *Blooket* and *Magic School*. By anticipating and managing these obstacles, educators can enhance the effectiveness of game-based learning and create more inclusive, dynamic, and enjoyable English lessons for all students.