# EFFECTS OF GAMIFIED LEARNING ACTIVITIES ON STUDENTS' VOCABULARY RETENTION 

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#### Abstract

To find out how gamified learning tasks affected students' ability to remember words, this study used a quasiexperimental design. Respondents were 45 Magaud National High School students in the 2022-2023 school year. Gamified Learning Activities (GLA) are updates to different word games that are based on ideas of second language learning, cooperative learning, and collaborative learning. It looks into how gamified learning tasks affect students' ability to remember words. Aims to improve learning and long-term memory of new words by adding game features to educational settings. By integrating these exercises into your teaching repertoire, you may convert vocabulary acquisition from a monotonous exercise to a thrilling expedition for your pupils. Utilizing gamified learning exercises provides a stimulating alternative, converting the process of vocabulary acquisition into a thrilling and captivating endeavor. The study looks into different aspects of gamification, including what motivates people to play, how engaging games are, and how well different types of games help people learn new words. To find out if gamified learning tasks help junior high school students remember English words better, this experiment is using a T-test. The results of the language pre-test showed that the level of performance was suitable. The post-test, on the other hand, showed that the student had improved greatly. Therefore, the results showed that the vocabulary training worked. Differences in mean scores between the pre-test and post-test strongly suggest that the students learned what the teacher told them.


Keyword: - Gamified Learning Activities Junior High School, vocabulary, and vocabulary retention.

## 1. The Problem and its Background

Playing games is a fun way to get people involved, help them learn, and solve problems. Games could be used by teachers in the classroom to get students to use the language instead of just learning its rules. Games are a great way to keep toddlers interested, teach them to work together, and spark their creativity when they use words. People who are learning often do fun and interesting things in their spare time and set big goals for themselves. It is necessary to be able to speak the chosen language in order to participate. As an extra way to keep students interested in their studies, games can be used, and teachers can use them to create real-life settings where the language is used.
There was a study in 2012 by Al-Sharafat and Abu-Seileek [1] from Jordan that looked at how fifth-grade children learning English could use web-based games. The reading and writing skills of the experimental group were much
better than those of the control group, who got standard training. The experimental group also had better word memory. Some of the things that were in the online games were memorization, word searches, context, and finding synonyms and antonyms. Taheri (2014) [2] did a study in Iran that looked at how learning through video games affects word learning. The study looked at 32 female elementary school kids. The experimental group, which learned through games, was more motivated, engaged, and able to remember words than the control group, according to the results.
In Manila, Philippines, Samortin (2020) [3] did a study to find out how gamified learning tasks affected the ability of junior high school students to remember English words. The busy group did worse than the control group. The results showed that the word training program, which had tasks that were like games, worked.
The research shows that playing games might help people remember words better. A teacher at Magaud National High School says that students need to be able to remember language better and be helped to remember what words mean and how they are used. In any case, kids need help to improve their speech memory. Teachers need to interact with their students and come up with good ways for them to keep up their language skills. Learning through games can help you learn things that are useful in real life. In this case, the researcher wants to find out if games like puzzleology, fun games, and memory games can help students remember what they have learned.

## 2. Review of Related Literature

The succeeding related literatures and studies believed to support the findings of this study.
2.1 Game-based learning. Game is a competitive activity, whether it's mental or physical, that follows the rules and has people directly competing against each other. It has become much more famous recently, but there is still some disagreement about how well it works as a learning help. Twenty-first-century teachers say that game-based learning is the best way to help students learn English because it helps them remember things. In addition, it encourages kids to keep going even when things get hard, which builds their confidence and sense of accomplishment. (Calderon,2007). Games are used as a way to teach ideas and improve learning results. This is called game-based learning (GBL). Students and teachers work together to make the game experience better and more varied. Students must consistently and repeatedly practice a wide range of words in order to learn the English language.
2.2 Improving the learning and understanding of words. Having a large vocabulary is important for learning a language because it helps people build a mental library of words that they can quickly use to describe their thoughts or ideas (Buenano et al., 2022).
As a result, grade school students should put a lot of effort into learning new words since this is a key part of learning a second language. Games as part of the methods for learning a language. Games have become a part of the school education over the years. As an extracurricular activity, games should only be thought of when the teacher and students have more important things to do. Hazar (2020) [4] felt that games could be a great way to get kids involved in the learning process. Classic games like chess, shogi, and checkers have been used for a long time to help people improve their attention, critical skills, strategic thought, and leadership (Sousa \& Rocha, 2019) [5].
2.3 Game-based learning is a way to teach that uses games to help students learn. Kids are supposed to learn and get help by doing things over and over, failing, and reaching their goals in a way that is fun, important, and has a purpose. According to White and McCoy (2019) [6], most game-based learning methods can be used in school because students are motivated to reach a goal, pick out tasks that are important to their studies, and see how their choices affect the game.
Additionally, language learners showed a greater desire to master new languages. In addition, Razali et al. (2017) did a unique practice for learning words that was based on games. During their lessons, the students learned how to play the card game "GOT IT!" The phrase "GOT IT!" stands for Group-oriented Thematic Interactive Technique. The students could be seen playing card games with great enthusiasm while recording words at the same time. Learning a language might be fun and happen by accident. "GOT IT!" saying out loud in a classroom setting has been shown to help students remember new words and phrases.
In addition to traditional card games, digital games have become a lot more common in the last few decades. According to Wu et al. (2020) [7], digital games are computer-made games that can be played on a variety of devices. These include digital board games, video games, internet games, and mobile games. A new and innovative way to get people to read is through digital games. Different kinds of digital games offer different ways to learn a language, which helps you pick up new words and remember them for a long time. This is because playing digital games helps you learn and remember new words. Digital games do this because they offer a calm environment,
boost attention and participation, and promote purposeful, self-directed learning over chance learning. People may be interested in games because they offer engaging experiences that encourage interaction and critical thinking. Games may also have interesting stories that encourage new ideas and active participation. Using game-based learning methods might help kids in elementary school learn new words.
2.4 Language is taught and learned takes work. Therefore, Bakhsh (2016)says that grammar is the most important and basic part of learning any language, not just English. Word choice is an important part of being able to communicate clearly. Good language is necessary for good conversation with others. Clearly, ABC is a lot harder than teaching language. English language teachers need help giving primary school students the right vocabulary, even though they use a lot of different teaching methods to help students learn vocabulary (Yunus et al., 2020). Researchers Elmahdi and Hezam (2020) [8] found that language trainees often say they forget new words and phrases very quickly. In their long-term memory, they have trouble keeping new things in and finding them again. Not having enough exposure to a second language makes it harder to naturally pick up new words, and organized teaching in school is the main way to learn words (Elmahdi \& Hezam, 2020). Because of this, students need help remembering the exact words they have learned. Also, English language is taught and learned in Malaysia from Primary 1 to Primary 6.
2.5 Getting new words without meaning to. Academic language is important in many areas of study, but it is sometimes forgotten. Through middle school and beyond, kids need to be able to understand and use academic language correctly. Acquiring knowledge happens through hearing and, more importantly, reading (Nation, 2001) [9]. Adding a tough reading program to the ELL curriculum might help students learn important academic words. To achieve a lot of success, this school tries to offer a number of opportunities for silent learning. By using clues from the environment, ELLs can figure out what new words mean. Students will get another chance to learn the vocabulary when they do lengthy reading. This will help them understand word meanings more deeply and accurately and improve their vocabulary learning (Soltani, 2011) [10].
2.6 Choosing to Learn New Words. Some people who are against casual learning for second language knowledge say that it takes more time to learn all the words you need to do well in school (Richards, 2010) [11]. Another thing that studies have shown is that only people who are very good at reading can figure out what something written means (Booth, 2014) [12].
Nonetheless, English Language Learners (ELLs) need help getting and learning the meaning when they come across more new words than familiar ones in a written piece. Studies on chance language learning have mixed results and can only sometimes tell us how many times we need to see new words in a certain situation (Rieder, 2005; Simmons \& Kameenui, 2012) [13].
Academic terms can be taught and understood clearly and directly through games. Using games to learn is a new idea in the field of second language acquisition, and there is a lot to learn from looking at how games are used in many school settings. From a postmodern point of view, which says that language and meaning are products of social relations (Knight, 2006), this study looks at how game-based learning can be used. Knight said this is one of the most important ideas in postmodern education. It is the job of schools to make the kind of social setting that supports constructivism.
2.7 Importance to grow your thinking knowledge. Getting a large vocabulary is an important part of learning and understanding a second language (Schmitt 2008) [14]. An expert in words says that there is a strong statistical link between a person's language understanding and their ability to understand, as well as a strong link between the two and school success (Varlas, 2012) [15].
A study by Silverman (2005) [16] found that English Language Learners (ELLs) start school with a smaller vocabulary than their peers. This gap stays the same even as the difficulty of the texts rises year after year. The researcher was most interested in English Language Learners (ELLs) in kindergarten. The fact that these kids had trouble understanding language shows how important it is for ELLs to start learning words early in school. Rather than learning words in a roundabout way or by heart, English Language Learners (ELLs) do better when they are taught language in a clear and focused way that emphasizes their ability to understand and think about ideas from different points of view. This way of teaching works well with younger students, and more research at higher school levels could add to what is already known.
O'Hara and Pritchard (2008) [17] also said that increasing academic language is a key part of helping English Language Learner (ELL) kids in middle school get better at reading. At this point, learning to read and write is much harder. Not only does it include reading, writing, speaking, and hearing, but it also includes being able to think
critically, use logic, and use technology well. Researchers looked at how using hypermedia projects made by students could help students learn academic words better. These projects combined traditional flashcard and explanation methods with visual and graphic elements, which led to a higher level of learning that used technology. Researchers found that letting students choose their path when using hypermedia technology made them more motivated by letting them learn at their own pace, lowering their frustration when they ran into new academic vocabulary, and making it easier for them to make connections between what they already knew and what they were learning (O'Hara \& Pritchard, 2008).
2.8 The traditional way to learn new words. In traditional teaching methods, the teacher is seen as the main source of knowledge and is responsible for teaching new things to the students, who do nothing but listen and take it in. Scrivener (2005) says that the jug and cup model is the standard way to teach. This way of thinking sees the teacher as someone who knows a lot and shares that knowledge with the students, who are seen as people who can learn new things. Being in the classroom and paying close attention is often enough to make sure that learning happens (Boumová, 2008) [18]. After getting clear instructions, the next step is to practice and review the material over and over again. Many people rely on exact translations from their mother language because they value remembering more than understanding what is being said in the context.
Also, traditional ways of teaching put more emphasis on written language than on using words in all four areas of language: speaking, reading, writing, and listening (Bromley, 2007). Making a list of words, looking them up in a dictionary, copying the definitions, and using the new words in lines are all traditional ways to learn academic vocabulary (Bromley, 2007) [19].
2.9 Getting better at language through games. Language learning and using are two sides of the same coin. Realworld experience is the only way to become an expert on a subject. Games are a great way to learn a language, and Tuan and Doan (2010) [20] say that they should be used at every stage of the learning process. As well as being fun, games can be a useful part of any language program because they give students clear goals to reach and clear steps to follow. An advocate of using games to learn languages, Reinders (2012) wrote and contributed to a book about this topic. A study by Reinders (2012) and 18 other experts looked into the teaching possibilities and benefits of using games to learn a language. When students play video games, they have to connect with the language, their peers, and the material they are learning. According to Levine (2006), games are more important than books, movies, and songs because they force students to make choices, which is an important part of learning.
In 2009, Marzano argued that games should be used to teach specific words. In Marzano's (2009) [21] study, a group of 24 elementary school teachers who used the six-step word training method did really well. According to Marzano (2009), it made a big difference when kids took part in tasks that tested their language in a safe way. This modern method also gives students a safe place to do tasks and tests about word meanings, grammar, writing, word variations, phrase structure, assumed meanings, and word pairs (Boumová, 2008). A well-informed teacher and researcher, Ragatz (2015) [22], says that a classroom should be an active learning space that encourages students to show up and spend time there. Teachers should make classes that inspire their students to do well in this setting. He saw that kids were very good at learning through movies and quick responses. These days, kids learn in a lot of different ways thanks to technology.

## 3. RESULTS

Many details about the study are in this section. The results are clear and everything goes as expected. The initial knowledge and information were utilized to calculate and rate the outcomes. The youngsters' pre-test scores indicate word recall.

### 3.1 Word recall level of the students before the test.

Table 1. These are the students' pre-test results, which show how well they remembered words.

Table 1
Word recall Level of the Students before the test

| No. of <br> Students | Valid | Missin <br> g | Mean | Standard <br> deviation | Minimu <br> m | Maximu <br> m | Class <br> Proficiency | Competency <br> level |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 45 | 45 | 0 | 27.444 | 7.073 | 12.000 | 39.000 | $55 \%$ | Satisfactory <br> performance |

The graph above shows how well the students remembered the words from the practice test. The average score is 27.444 , and $55 \%$ of the students in the class got it right, so the work was good. DepEd standard D.O. No. 8, Series of 2015 says that $69 \%$ of the skills tested show mastery, which is very close to mastery level. In terms of level of performance, this is the same as good performance [D.O. No. 8, Series of 2015]. It looks like the kids did well on the tests, which means they learned the things their teacher taught them. But they still need to do even better in school so that they get an "outstanding" grade.

### 3.2 Word recall level of the students after the test.

Table 2 shows how well the students remembered the words they had learned on the posttest.

Table 2
Word recall level of the students after the test

| No. of <br> Students | Valid | Missin <br> g | Mean | Standar <br> d <br> deviatio <br> n | Minimu <br> m | Maximu <br> m | Class <br> Proficiency | Competency level |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 45 | 45 | 0 | 36.644 | 3.156 | 29.000 | 40.000 | $73 \%$ | Outstanding <br> performance |

Table 2 shows how well the students remembered the words they had learned on the test after the lesson. The mean score is 36.644 , and $73 \%$ of the kids are doing well in school. Mastery Level: This person has earned the mastery level because they got $92 \%$ of the skills right. Based on the 2015 D.O. number 8 series, the class does very well at the success level. Things are going pretty well for the kids because they keep getting better.

### 3.3 Differences in the average scores between the pre-test and post-test that are statistically significant.

The posttest scores of the students in the experimental group were compared to those of the students in the control group. The results are shown in Table 3.

Table 3
Differences in the average scores between the pre-test and post-test that are statistically significant.

Paired Samples T-Test

| Measure 1 | Measure 2 | t | df | p |
| :--- | :--- | :---: | :--- | :--- |
| PRETEST | POSTTEST | -11.851 | 44 | $<.001$ |

Table 3 shows how the test and control groups fared on the new test. The mean scores before and after the exam differ greatly. These pairings demonstrate this: A t-test compares similar groups' means. The initial test. Find the tvalue with two degrees of freedom. Someone wrote "p." The first review 44. Test score afterward: -11.851. Very little. Interesting to see how well youngsters recall words in Table 3. A rigorous investigation looked for statistically significant differences between pre- and post-intervention exams. Whether the t-test matters is unclear. As seen, the samples before and after the test varied greatly. The youngsters performed differently on the first and second
assessments (p-value.001, below 0.05). That proves the null hypothesis is false. Game-based learning improved youngsters' academic performance. The pre-test reveals that teachers' sessions helped pupils gain crucial skills.

## 4. CONCLUSIONS

The posttest results of the students showed an improvement in their ability to retain language. Research has shown that including gamified learning activities is a successful method for improving learners' ability to remember English vocabulary. This approach is captivating and dynamic, enhancing motivation, fostering active involvement, and facilitating a more profound comprehension of a foreign language. By incorporating competition, rewards, and quick feedback into the process of acquiring and retaining language skills, the efficiency of learning is improved, leading to the creation of gamified learning activities.
Game-based learning tactics improve student engagement by encouraging active learning and reducing stress levels. Consequently, the students acquired knowledge at their own pace by engaging in educational activities that integrated gaming aspects. The evidence clearly showed a significant improvement in the students' ability to retain language skills as a result of participating in game-based activities. As a result, there was a significant improvement in their posttest scores compared to their pretest scores, indicating exceptional accomplishment.

## 5. ACKNOWLEDGEMENT

The writer expresses his sincere and profound gratitude to people who were part in the realization of this endeavor. Almighty God, for the gift of knowledge, wisdom, blessings. His inspiration guides the writer to continuously move on despite the many difficulties he encountered. His family and loved ones for being supportive and caring all throughout the writing process; Dr. Roel P. Villocino, dean of graduate school, for the kindness and continual support; Dr. Elizabeth D. Dioso, thesis adviser, for the unfailing help, efforts and expertise she shared for the improvement and development of the study; Dr. Romulo G. Doronio and Prof. Delfin J. Enargan, panel of examiners, for all the corrections, suggestions, and comments in making a quality thesis; All his students in Magaud National High School, for their support and cooperation during the conduct of the study; Friends, relatives, and all those who even in their silent ways helped in the realization of the study, the researcher is deeply indebted. Thank you so much!

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