

Applying GTM to Enhance Student's Vocabulary using Crossword Puzzle Game Mobile Application (Word Link)

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Abstract

Vocabulary is one aspect of the English language. The reason why students should have enough vocabulary as a basic requirement to master those four English skills; listening, speaking, reading, and writing. Vocabulary teaching has been incorporated into many of the teaching techniques developed to teach the English language, and it serves the same purposes as those methods. The Grammar Translation Method (GTM) is one of the methods that can be used by teachers in Indonesia. In addition, the researcher used the Word Link application as an example of a crossword puzzle game mobile application. The purpose of this research is to determine whether the Grammar Translation Method (GTM) using the Word Link application will enhance students' vocabulary. The pre-experimental group consisted of 25 students from Karya Utama elementary school grade 5. A pre-test was conducted at the beginning of the program, followed by a post-test at the end of the 32 hours meeting program. Meetings are held twice per week. Based on the research results, it showed that applying GTM using the Word Link application has a significant positive effect in improving students' vocabulary. It means that the Crossword puzzle provides a significant contribution in improving the students' vocabulary, and it is also suggested for teachers to use this method in the English teaching and learning process, especially for elementary school.

Keyword: Vocabulary, Grammar Translation Method, Crossword Puzzle Game

INTRODUCTION

English is becoming increasingly important in Indonesia, where it is used for a variety of purposes such as teaching, cultural exchange, and so on. English is one of the foreign languages taught in elementary, junior high, and senior high schools in Indonesia. For many years, the material of English has been emphasized in the structure of language, and students are expected to remember the pattern of tenses. It is too difficult for the students, and it causes them to be lazy in their efforts to learn English. Aside from the students' inability to communicate in English, this is due to their limited vocabulary. The reason why students should have enough vocabulary as a basic requirement to master those four English skills; listening, speaking, reading, and writing (Redman & Edwards, 2017).

Teachers must be aware of their students' current state. The method plays an important role in the teaching and learning process. There are several methods that can be used in the teaching and learning process (Brown, 2001). The Grammar Translation Method (GTM) is one of the methods that can be used by teachers in Indonesia. The Grammar Translation Method was intended to translate texts from the target language to their native language as well as texts from their native

language to the target language. Students were exposed to a wide range of language constructs, grammar codes, and bilingual word lists - lists of English words with their native language translations. The student's responsibility was to memorize all of this knowledge because it was essential for completing translation activities designed to enable them to practice using what they had learned, including new vocabulary.

Learners should engage in various task-based exercises in their classroom to learn and maintain new words, whether it is a guessing task, a describing exercise, or conversation-making. Vocabulary games are another type of activity that focuses on helping learners develop and use words in various ways by making the lessons more enjoyable. Therefore it is important to investigate whether students learn vocabulary effectively through games and how they learn it. Crossword puzzles can help students train their brains to remember new words (Sabiqoh, 2016). Furthermore, the students can learn English by working together to complete the crossword puzzle. Using words in conversation and doing crossword puzzles are two things that will help you enhance your vocabulary. Therefore, the researcher recommends using a crossword puzzle to teach vocabulary.

Cellphones are now extremely useful tools. Cellphones can be used for more than just communication; they can also be used for learning and playing games (Prensky, 2004, p. 1). There are many game applications that can be used to learn. Researchers chose the Word Link application because it is a creative crossword puzzle game application that can train students' brains to remember new words and help them improve their vocabulary.

Statement of the Problem

The purpose of this study was to determine whether the GTM learning approach using a crossword game application would increase students' vocabulary by asking questions, *"Is there any significant difference in the vocabulary of the students before and after applying GTM using Crossword Puzzle Game?"*

Significance of the Study

1. Theoretically, the researcher hopes that this research can be a reference for other researchers in their paper.
2. Methodologically, the researcher hopes that this research can give inspiration to the teacher in order to use the GTM and also the Crossword Puzzle Game application (Word Link), which is appropriate in the teaching learning process.
3. Practically, the researcher hopes that this research can be used by the teacher in selecting the technique to improve the student's vocabulary in the teaching learning process, and it can help the students to improve their vocabulary.

Hypothesis

Researchers hypothesize that teaching English by applying GTM using the Crossword Puzzle Game (Word Link) has a positive correlation with increasing students' vocabulary. It is hoped that the progress of the students being taught can show an increase in vocabulary through their scores on achievement tests.

Furthermore, the results of the study will be summarized in one of the following conclusions:

H₀: Formulate the null hypothesis (H₀): There is no significant difference in the vocabulary of students before and after the treatment.

H_a: The formulator's alternative hypothesis (H_a): There is a significant difference in the vocabulary of the students before and after the treatment

LITERATURE REVIEW

Vocabulary

Vocabulary is an important part of language teaching; without grammar, very little can be conveyed, and without vocabulary, nothing can be conveyed (Thornbury, 2002). A vocabulary is a set of words and phrases that are typically organized alphabetically. Vocabulary is critical because it can help students enjoy language classes. Students with a large vocabulary will have fewer problems than students with a limited vocabulary.

According to O'Dell, F., Read, J., & McCarthy, M. (2000), vocabulary is information that requires understanding the meanings of words; hence, the object of a vocabulary test is to determine whether learners can match each word with a synonym, a dictionary-tape description, or an equivalent word in their native language. To learn vocabulary automatically, we must first understand the meaning of the words and be able to use them in sentences.

Vocabulary learning is the process of learning to advance the meaning of words in the target language from the meanings of their nearest in the mother tongue (Gu, 2003). It also learns to make the best lexical choices for a given linguistic and situational context. Vocabulary is very useful in studying a language because it is a great ability or knowledge about a language's stock of words in alphabetical order. As a result, it must be well mastered by the students.

Grammar Translation Method

The Grammar Translation Method (GTM) is an applied linguistics foreign language teaching method that evolved from the classical (or "traditional") method of teaching Greek and Latin. As part of the procedure, students must memorize a variety of grammatical rules and exceptions, as well as a large vocabulary list. The ability to read literature written in the target language is a primary goal of teaching the target language using the Grammar Translation Method.

According to (Hartono, 2014), there are 9 main characters in GTM:

1. There is no constructive use of the target language in the classes, which are taught in the student's mother tongue.
2. The majority of the vocabulary is taught through lists of isolated words.
3. Grammar complexities are described in great depth.
4. The principles for connecting words together are included in grammar, and training generally focuses on word structure and inflection.
5. At a young age, children begin to read difficult classic works.
6. The content of texts that are viewed as grammatical exercises receives less attention.

7. The only drills are generally exercised in transforming disconnected sentences from the target language into the mother tongue.

8. Pronunciation is rarely, if ever, considered.

9. Precision takes precedence over fluency.

This approach will assist students in comprehending the text and understanding the grammatical rules of a language. This approach can also help students increase their vocabulary. It is critical for the student to learn the sentence pattern and vocabulary because this information is critical for passing the test, which is frequently grammar-oriented and reading comprehension-oriented. In order for students to understand the written target language, they must first master the grammar of the foreign language.

Crossword puzzle game

A crossword puzzle game is one in which words must be fitted across and downwards into spaces with numbers in a square diagram, with the words being discovered by solving clues. According to (Nurteteng & Nopitasari, 2019), crossword puzzle games can be an important tool in the students' vocabulary acquisition and provide a meaningful, inspiring, and calming environment in which the students can develop their vocabulary.

The crossword puzzle game can encourage students to study English and is appropriate for students of all levels. Azhar, Abdullah, Erliana, Nurdiawan, Dikananda, Rinaldi & Sudarsana (2019) state that enhancing the freshness of the mind from normal activities, filling or playing crossword puzzles may also add to our insight in many things, such as vocabulary, various key phrases, and popular words that we frequently find when filling out cross-breeding. The crossword puzzle game helps students learn vocabulary and spelling. It is anticipated that by using a crossword puzzle game, students can learn several new words and enjoy the word game while learning the vocabulary. Another advantage of using a crossword puzzle game is that it encourages students to look for new terms to expand their vocabulary and motivates them to learn more seriously.

The use of crossword puzzles in teaching vocabulary

The most popular word game is still the crossword puzzle. Its simplicity lies in the ease with which it can be built. The words are stacked vertically and horizontally. It is supported by Silberman (2009), who says that designing an exam on a crossword puzzle encourages learners to engage in direct interaction and participation. Individuals or groups can participate in crossword puzzle games.

According to Zaini, Munthe, and Aryani (2008), the following stages can be taken while developing a crossword puzzle:

1. Make a list of keywords, terms, and names that are relevant to the material.
2. Create a grid that can be filled with the words that have been chosen (as in crossword puzzles).
3. Make a series of questions, each of which leads to the next.
4. Individually or in a group, share this puzzle with the learner.
5. Work time should be limited.

6. Recognize and praise the team or individual who works the most quickly and accurately.

Pravita (2010) states that when learning English through Strategy, there are numerous steps that can be taken. The following are some examples of crossword puzzle games: Motivating Techniques: It is possible to undertake this stage of the Motivating Strategy by requesting students to say greetings in English as practice in Speaking. Provide motivation that is connected to the meeting's material issue. Presentation Techniques: The lecturers begin the class at this point and discuss the content in each meeting. Lecturers begin by delivering learning materials in a game-like format. Four language learning skills are also used by lecturers (Listening, Speaking, Reading, and Writing).

The teacher hands out a copy of the "crossword puzzle" and explains the regulations, which include the need for students to finish it as rapidly as possible. The student who completes the individual game first is the winner and receives a positive point from the teacher. The winner of a pair or group project is the pair or group that completes it first. The teacher will award prizes to all of the winners. This adds to the appeal of the game.

Word Link Application

Word Link is a crossword puzzle game with a special variation that will test your English knowledge. Players in Word Link are tasked with using letters to fill in the empty boxes at the top of the screen. The empty boxes must be filled with English words. The player can see some of the letters given by the game at the bottom. Players must now link these letters to form words by drawing a continuous line from the first to the last letter. For example, there are letters S, T, L, and A, so players can draw a line from the letter S to A, then to L, and to T to make the word SALT. This word will automatically appear at the top of the screen if the player has guessed it correctly. Each letter can only be used once but can still be used for subsequent words. So after finishing forming the word SALT, players can draw a line to form the next word, for example, LAST. Once all the words requested by the stage have been filled, the player will get a reward in the form of a diamond, and the game continues to the next stage.

Uniquely, if the player manages to find a word that is not referred to by the stage, he will get an extra reward in the form of an additional diamond. There is no such thing as a time limit, so players can casually think clearly. If you have trouble finding a word and really have given up, do not panic because Word Link also provides Hints, which can be used to open a letter on the screen. Of course, these hints are not free and must be paid for using diamonds.

The most fun thing about Word Link is the existence of mini-games that are even more challenging than the main game itself, one of which is Imagine Mode. In Imagine Mode, where each player completes a number of stages, players must compile an image from two existing images into a new image in a very limited time. Apart from Imagine Mode, there are also Find Mode, Mole Mode, Line Mode, Nail Mode, Tooth Mode, and Snake Mode, all of which are really fun to play.

METHODOLOGY

Research Design

This study used an experimental design in order to see whether applying GTM using the Crossword puzzle game app gives a significant positive effect in enhancing students' vocabulary.

Participants

The participants of the study were elementary school grade 5, and there were 10 students in total. Their ages range from 10 to 12 years old.

Instrument

The instruments used in this study were: Cellphone, Word Link, pre-test, and post-test.

1. Cellphone: used for downloading and playing the application.
2. Word Link Application: The application of Crossword Puzzle Game
3. Pre-test and Post-test: Pre-test is the test given prior to the treatment. Post-test is the test that was given after the treatment.

Data collection

The study was taken for 32 hours, starting from 2nd February 2021 to 5th May 2021. The first step in gathering the data, all the students took a pre-test. After that, the students played Word Link Application for one hour, and then they were taught using GTM. After the treatment was given, the post-test was administered to the students.

Pre and Post-test

1. Pre-test

The Pre-test was conducted on 2nd February 2021, and there were 25 students from elementary school grade 5th

2. Post-test

The Post-test was conducted on 5th May May 2021, and there were 25 students from elementary school grade 5th

3. The goal of the test was to measure the number of students' vocabulary before and after receiving the treatment.

Treatment of the Experimental

The technique of GTM using Word Link application:

1. The students played the application for one hour
2. The students write down the words have got from the application
3. The teacher provides the translation using the mother tongue
4. The teacher asked students to memorize the words and the translation.

RESULT AND DISCUSSION

The following are the discussion and analyses of the data obtained to answer the researcher question above.

Table 1.

No	Name	Pre-test	Post-test	Gain
1	Amel	40	84	0,73
2	Tasya	54	90	0,78
3	Nadila	60	98	0,95
4	Ainun	40	78	0,63
5	Tiara	30	88	0,83
6	Rahma	10	60	0,56
7	Tarisa	54	76	0,48
8	Anggia	18	70	0,63
9	Citra	34	72	0,58
10	Selfi	50	96	0,92
11	Dafa	30	84	0,77
12	Wahyu	32	82	0,74
13	Shifa	52	92	0,83
14	Fadil	46	78	0,59
15	Adel	14	68	0,63
16	Karisa	52	90	0,79
17	Titan	26	66	0,54
18	Kamila	38	72	0,55
19	Windia	36	78	0,66
20	Fikri	26	62	0,49
21	Arif	38	76	0,61
22	Dicka	30	78	0,69
23	Rehan	28	70	0,58
24	Safa	42	80	0,66
25	Reni	44	84	0,71
	AVERAGE	36,96	78,88	0,68

The experimental class consisting of 25 students using pre and post-test is **Moderate**. It means that the hypothesis of this research was approved that applying GTM using crossword puzzles can improve the student's vocabulary. The students participated actively during the teaching and learning process of vocabulary by using crossword puzzles because they were interested in the materials (Nurteteng & Nopitasari, 2019). This happens because students feel more comfortable and less intimidated when learning vocabulary through crossword puzzles.

The findings of this study backed up the theory, stating that one of the benefits of crossword puzzles is that they can stimulate and motivate students to use logic, reasoning, vocabulary, spelling, and organizational skills (Cheryl, 2012). While doing crossword puzzles, the students unconsciously learned how to spell the words. They could figure out how many letters the answer had by looking at the clues and empty boxes in crossword puzzles.

CONCLUSION

From this result, the researcher concludes that Applying GTM using Crossword Puzzle games has a significant positive effect in improving students' vocabulary. It means that the Crossword puzzle provides a significant contribution in improving the students' vocabulary. Finally, from some statements above, the researcher concludes that applying GTM using crossword puzzles is appropriate for students.

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REFERENCES

- Azhar, R., Abdullah, D., Erliana, C. I., Nurdiawan, O., Dikananda, A. R., Rinaldi, A. R., & Sudarsana, I. K. (2019). The Implementation of Backtracking Algorithm on Crossword Puzzle Games Based on Android. In *Journal of Physics: Conference Series* (Vol. 1363, No. 1, p. 012075). IOP Publishing.
- Brown, H. D. (2001). *Teaching by Principles: An Interactive Approach to Language Pedagogy, Second Edition*. New York: A Pearson Educational Company.
- Cheryl, S. (2012). English Puzzle. *The Asian EFL Journal*, 1-12.
- Gu, P. Y. (2003). Vocabulary learning in a second language: Person, task, context and strategies. *TESL-EJ*, 7(2), 1-25.
- Hartono, R. (2014). Application of grammar translation method (gtm) in translating narrative texts from English into Indonesian language. *ELTTLT Proceedings. UNNES*, 666-680.
- Nurteteng, N., & Nopitasari, D. (2019). The Use of Crossword Puzzle towards the Students Vocabulary. *INTERACTION: Jurnal Pendidikan Bahasa*, 6(1), 9-17.
- O'Dell, F., Read, J., & McCarthy, M. (2000). *Assessing vocabulary*. Cambridge university press.
- Prensky, M. (2004). What Can You Learn From A Cell Phone? – Almost Anything. *Journal of Online Education*, 1 (5).
- Redman, S., & Edwards, L. (2017). *English Vocabulary in use*. Cambridge University Press.
- Sabiqoh, N. (2016). Teaching Vocabulary By Using Crossword Puzzle At The Fifth Semester Of The Seventh Grade Students of MTS Ma'arif Nadatul Ulama Mataram. *A Thesis*.
- Silberman, M. L. (2009). Active Learning. *Bandung, Nusamedia*.
- Thornbury, S. (2002). *How to teach vocabulary*. Harlow: Longman.
- Zaini, H., Munthe, B., & Aryani, S. (2008). Active learning strategy. *Yogyakarta: PustakaInsanMadani*.