

ENHANCING VOCABULARY MASTERY THROUGH DIGITAL STORYTELLING: A PEDAGOGICAL APPROACH IN LANGUAGE EDUCATION

Nenden Sri Rahayu, S.S., M.Pd.

Nendensrirahayu1212@gmail.com

Ghina Halimatus Sya'diyah Ramdan

ghinahalimatus29@gmail.com

ABSTRACT

The paper entitled Enhancing Vocabulary Mastery through Digital Storytelling: A Pedagogical Approach in Language Education. This research focused on teaching vocabulary using digital storytelling. The subject of this research are the ninth grade students of SMPN 1 Cimaung. The population of this research is the IX-A grade of SMPN 1 Cimaung, with 34 students. In conducting this research, the researcher collected the data from the class that was carried out through pre-test, post-test, and questionnaire. The result showed that in significance degree of 0.05, the value comparison is $(3.180 > 2.045)$. It means that t_0 (t-observation) is higher than t_t (t-table). It could be said that t-test was higher than t-table. So, the null hypothesis (H_0) is rejected and alternative hypothesis (H_a) is accepted, stating that digital storytelling is effective for teaching vocabulary at the third grades students at SMPN 1 Cimaung. The result of questionnaire showed that most student agreed that using digital storytelling improve their vocabulary, and can make students be more active in class. In other words, they gave positive response, they enjoyed using digital storytelling to improve their vocabulary mastery.

Key Words: *Vocabulary, Digital Storytelling*

ABSTRACT

Makalah yang berjudul Meningkatkan Penguasaan Kosakata Melalui Digital Storytelling: Pendekatan Pedagogis dalam Pendidikan Bahasa. Penelitian ini berfokus pada pengajaran kosakata menggunakan digital storytelling. Subjek penelitian ini adalah siswa kelas sembilan SMPN 1 Cimaung. Populasi penelitian ini adalah siswa kelas IX-A SMPN 1 Cimaung yang berjumlah 34 siswa. Dalam melakukan penelitian ini, peneliti mengumpulkan data di kelas yang dilakukan melalui pre-test, post-test, dan angket. Hasil penelitian menunjukkan bahwa pada taraf signifikansi 0,05 nilai perbandingannya adalah $(3,180 > 2,045)$. Artinya t_0 (t-observasi) lebih tinggi dibandingkan t_t (t-tabel). Dapat dikatakan bahwa t-hitung lebih tinggi dibandingkan t-tabel. Jadi, hipotesis nol (H_0) ditolak dan hipotesis alternatif (H_a) diterima, yang menyatakan bahwa digital storytelling efektif untuk pengajaran kosakata pada siswa kelas tiga SMPN 1 Cimaung. Hasil kuesioner menunjukkan bahwa sebagian besar siswa setuju bahwa penggunaan cerita digital dapat meningkatkan kosakata mereka, dan dapat membuat siswa lebih aktif di kelas. Dengan kata lain, mereka memberikan respon yang positif, mereka menikmati penggunaan digital storytelling untuk meningkatkan penguasaan kosakata mereka.

Kata Kunci: Vocabulay, Digital Storytelling

INTRODUCTION

Language skills are very necessary when studying at school, for example English language skills. Schools can provide English learning with various methods so that learning can be fun and effective for students when studying in class. One of the most important English language aspects to be learned and routed is vocabulary. Vocabulary is the basic that can make a sentence. Vocabulary mastery stands as a foundational pillar for learners to achieve proficiency and fluency in their target language.

According to Hornby, (1995: 131) “vocabulary is the total number of words in a language; all the words known to a person or used in a particular book, subject, etc; a list of words with their meaning, especially one that accompanies a textbook.” It means, vocabulary learning is crucial in order to understand the language successfully.

Most students often feel bored if the teacher only explains the material. Especially in learning vocabulary, students find it difficult to pronounce vocabulary, lack self-confidence, and have difficulty translating. Based on the

issues above, teachers can use the media to attract students' attention when learning vocabulary. The researcher uses digital storytelling to teach vocabulary to resolve the issue above.

According to Sadik (2008), digital Storytelling is the modern expression of storytelling by using computer as tool to tell the stories and has taken many different forms, such as audio-visual (video) and audio recording. Many studies show that some applications of computer based on technology in the foreign language. Digital storytelling presents an interactive approach that appeals to diverse learning styles and cultivates deeper comprehension of vocabulary within meaningful contexts. By weaving vocabulary items into narratives enriched with visuals, audio, and interactive elements, digital storytelling harnesses the power of storytelling to contextualize vocabulary in authentic and memorable ways. Researcher chooses digital storytelling because it is an interactive and fun method in teaching that can be applied in the classroom. Observing the explanation above, the researcher is interested in conducting a study entitled *Enhancing Vocabulary Mastery Through Digital Storytelling: A Pedagogical Approach In Language Education*

RESEARCH PROBLEMS

Based on the background of the study, the researcher formulates these questions:

1. Is digital storytelling effective to enhance vocabulary mastery in the third grades students at SMPN 1 Cimaung?
2. What are the students response toward the use of digital storytelling to enhance their vocabulary mastery?

RESEARCH OBJECTIVES

Based on the research questions the aims of the research are down bellows:

1. To know the effectiveness of using digital storytelling to enhance vocabulary mastery in the third grades students at SMPN 1 Cimaung.
2. To know what the students' response toward the use of digital storytelling to enhance the vocabulary mastery in the third grades students at SMPN 1 Cimaung.

LITERARY REVIEW

1. Vocabulary

Vocabulary is the fundamental component required for learning a language, particularly for effective communication. It makes sense given the four language skills that call on word knowledge. Students who have an inadequate vocabulary will struggle to learn other abilities.

Rahayu and Farid (2017) stated that learning vocabulary seemed to be the simple thing, however, it is quite complicated. There are some obstacles such as the low motivation from the students, the monotonous methods in teaching vocabulary,

etc. Furthermore, teaching vocabulary is a crucial aspect and process of how the students know and understand the words and language, especially in English language. The teachers must be aware of the material that the students will learn and must prepare before teaching in the classroom by, among other things, understanding the material, selecting the media or technique that will be used to teach, and others in order to minimize the difficulties that the teachers face when teaching, particularly when teaching English vocabulary.

2. AudioVisual Media

According to Ismail (2006: 68) Audiovisual media is a great help in simulating and facilitating the learning of a foreign language. It can be simpler and more effective for students to learn English vocabulary when teachers use audiovisual materials in their lessons. When students use audiovisual materials to acquire vocabulary, they may see the object from the images (visual) and hear how to pronounce it from the sound (audio).

3. Digital Storytelling

Digital storytelling is the act of telling a story with the use of digital technology, and integrating digital storytelling into English as a foreign language classroom has given a positive impact and notable increase in motivation and engagement for students (Al-Amri, 2019). Digital fables, digital folklore, or digital fairytales are examples of this type of media.

Sadik (2008) says that the fact of Digital Storytelling offers many potential learning benefits, including increased student motivation, makes it an ideal strategy to consider utilizing for the telling of personal stories.

1. Digital storytelling helps many teachers who find it difficult to inspire students to learn English.
2. Research shows that students consider this method to be motivating and effective when learning in class.
3. Digital storytelling creates time for listening to meaningful stories.
4. Digital storytelling gives students the opportunity to digest information in a good way.
5. Digital storytelling teaches emotional rhetorical value, allowing students to explore new ways of thinking or acting.
6. This digital storytelling method allows students to share their learning with their friends.
7. Students benefit from creating digital stories that showcase their experiences and learning.

RESEARCH METHODOLOGY

RESEARCH DESIGN

This study uses a pre-experimental design, focused on teaching vocabulary using digital storytelling. The writer uses quantitative method to figure out whether using digital storytelling in teaching vocabulary at the third grade of SMPN 1 Cimaung.

Table 1 Experimental Class

Experimental Class		
O1	X	O2

Explanation:

O1 : Result of pre-test

X : Treatment that will be given in the class by using digital storytelling

O2 : Result of post-test

DATA ANALYSIS

THE DATA ANALYSIS OF TEST

The data obtained from the test will be processed using t-test for the result.

1. The formula of mean of the pre-test score:

$$\bar{X} = \frac{\sum X_1}{n}$$

\bar{X} = mean of sample

$\sum X_1$ = total number of all individual observation of X

n = total number of observations

2. The formula of mean of post-test score:

$$\bar{X} = \frac{\sum X_2}{n}$$

\bar{X} = mean of sample

$\sum X_2$ = total number of all individual observation of X

n = total number of observations

3. The formula for the Dependent t-Test, after entering the values obtained from pre-test and post-test:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{\sum D^2 - \frac{(\sum D)^2}{N}}{N(N-1)}}$$

Where:

\bar{x}_1 = the mean of the pre-test scores

\bar{x}_2 = the mean of the post-test scores

$\sum D^2$ = the sum of the squares of the differences between the pre-test scores and the post-test scores

$(\sum D)^2$ = the squares of the sum of the differences between the pre-test scores and the post-test scores.

N = the number of pairs of degree

DF = the degree of freedom

DF = N-1

THE DATA ANALYSIS OF QUESTIONNAIRE

This research uses close questionnaire. The questionnaire consists of 10 close questions. The data are interpreted based on the frequency of the students' answer. The formula is described as follow:

$$X = \frac{y}{z} \times 100$$

Where:

X = percentage (quality of the answer)

Y = given amount (total of the respondent answer)

Z = total amount (total of respondent)

100 = Constant

In collecting the data, the writer uses two instruments, there are test and questionnaire.

1. Test

This test is divided into two, namely:

a. Pre-test

The purpose of giving this test is to find out how skilled students are in their vocabulary skills.

b. Post-test

This test aims to measure students' vocabulary skills after being taught using digital storytelling.

2. Questionnaire

The form of the questionnaire given to students was in the form of responses related to the research title and totaling 10 questions because the research questionnaire was useful for gathering demographic information, public opinion, facts, and attitudes of respondents.

Findings and Discussion

The Pre-test

In this study the pre-test was conducted Tuesday 25th July 2023. The pre-test results are showed in the following table. It can be seen from the number of 34 students in class IX-A. Pre-test was conducted before the implantation of digital storytelling in order to know students' vocabulary before the treatment given. The

following is the students' score in pre-test being taught by using digital storytelling for the third grades students.

Table 1
The Pre-test Scores

Subject	Point "A" Score	Point "B" Score	Point "C" Score	Pre-test
Student 1	7	3	8	72
Student 2	8	4	6	72
Student 3	6	4	9	76
Student 4	5	3	5	52
Student 5	7	5	8	80
Student 6	7	3	5	60
Student 7	6	4	9	76
Student 8	5	3	7	60
Student 9	7	4	7	72
Student 10	8	4	8	80
Student 11	6	4	8	72
Student 12	6	3	6	60
Student 13	8	4	7	76
Student 14	7	2	7	64
Student 15	6	3	7	64
Student 16	6	4	8	72
Student 17	7	3	6	64
Student 18	8	3	7	72
Student 19	5	2	9	64
Student 20	6	4	8	72
Student 21	7	2	8	68
Student 22	6	4	8	72
Student 23	5	2	3	40
Student 24	5	3	7	60
Student 25	3	4	5	48
Student 26	7	3	8	72
Student 27	7	3	9	76
Student 28	6	4	9	76
Student 29	3	5	5	52
Student 30	5	4	3	48
Student 31	6	3	6	60
Student 32	4	4	6	56
Student 33	4	3	5	48
Student 34	6	3	6	60
Total				2216
Average				65.176

From the table above, it can be seen that two students got the highest score in pre-test (student 5 and student 10) which 80, and student got the lowest score (student 23) which was 40. The mean score was 65.176. The KKM score of English is 72. It means that students vocabulary was still low. Therefore, the treatment was given to teach vocabulary using digital storytelling.

The Post-test

After the treatment, a post-test was given on August 11st, 2023. This can be seen from the number of 34 grade IX-A. Post-test was conducted after the implementation of digital storytelling in order to see the improvement student in vocabulary. The following table is the result of post-test score after implementing digital storytelling in teaching vocabulary. The result is shown in the following table.

Table 2
The Post-test scores

Subject	Point “A” Score	Point “B” Score	Point “C” Score	Post-test
Student 1	6	4	9	76
Student 2	7	5	8	80
Student 3	5	5	8	76
Student 4	5	5	6	64
Student 5	7	4	10	84
Student 6	6	5	8	76
Student 7	7	4	9	80
Student 8	4	3	9	64
Student 9	6	4	9	76
Student 10	8	5	10	92
Student 11	9	4	6	76
Student 12	5	3	8	64
Student 13	7	4	7	72
Student 14	6	5	8	76
Student 15	6	4	9	76
Student 16	6	4	7	68
Student 17	6	3	9	72
Student 18	6	5	8	76
Student 19	5	4	10	76
Student 20	8	4	9	84
Student 21	6	2	7	60
Student 22	7	3	9	76
Student 23	7	3	7	68
Student 24	6	4	7	68

Student 25	6	4	8	72
Student 26	8	5	6	76
Student 27	8	4	8	80
Student 28	8	4	8	80
Student 29	4	4	7	60
Student 30	4	4	5	52
Student 31	7	4	10	84
Student 32	7	2	8	68
Student 33	2	2	10	56
Student 34	5	4	10	76
Total				2484
Average				73.05

From the table above, it can be seen that one student got the highest score in post-test (student 10) that was 92. And one student got the lowest score in post-test (student 30) that was 52. The mean of post-test score was 73.058. Thus, the writer computes the data in the data analysis.

The Data Analysis of The Pre-test and Post-test

Table 3
The D scores

Subject	Pre-test (X)	Post-test (Y)	D (X-Y)	D²
Student 1	72	76	-4	16
Student 2	72	80	-8	64
Student 3	76	76	0	0
Student 4	52	64	-12	144
Student 5	80	84	-4	16
Student 6	60	76	-16	256
Student 7	76	80	-4	16
Student 8	60	64	-4	16
Student 9	72	76	-4	16
Student 10	80	92	-12	144
Student 11	72	76	-4	16
Student 12	60	64	-4	16
Student 13	76	72	4	16
Student 14	64	76	-12	144
Student 15	64	76	-12	144
Student 16	72	68	4	16
Student 17	64	72	-8	64
Student 18	72	76	-4	16

Student 19	64	76	-12	144
Student 20	72	84	-12	144
Student 21	68	60	8	64
Student 22	72	76	-4	16
Student 23	40	68	-28	784
Student 24	60	68	-8	64
Student 25	48	72	-24	576
Student 26	72	76	-4	16
Student 27	76	80	-4	16
Student 28	76	80	-4	16
Student 29	52	60	-8	64
Student 30	48	52	-4	16
Student 31	60	84	-24	576
Student 32	56	68	-12	144
Student 33	48	56	-8	64
Student 34	60	76	-16	5184
N = 34	$\Sigma x = 2216$	$\Sigma y = 2484$	$\Sigma D = -268$	$\Sigma D^2 = 9008$

$$(\Sigma D)^2 = -268 = 71824$$

From the table above, it can be seen that:

$$N = 34$$

$$\Sigma X_1 = 2216$$

$$\Sigma X_2 = 2484$$

$$\Sigma D = -268$$

$$\Sigma D^2 = 9008$$

1. The mean score of pre-test is: 65.176

The mean score of post-test is: 73.05

2. Computing the degree of freedom $df = n-1$ $df = 34-1$ $df = 33$

3. Computing the dependent t test

$$\begin{aligned}
 \text{Finding } t &= \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{\Sigma D^2 - \frac{(\Sigma D)^2}{N}}{N(N-1)}}} \\
 &= \frac{65.176 - 73.058}{\sqrt{\frac{9008 - \frac{(-268)^2}{34}}{34(34-1)}}} \\
 &= \frac{68.676 - 73.970}{\sqrt{\frac{9008 - \frac{71824}{34}}{34(34-1)}}}
 \end{aligned}$$

$$\begin{aligned}
&= \frac{-7.882}{\sqrt{\frac{9008 - 2112.47}{34(33)}}} \\
&= \frac{-7.882}{\sqrt{\frac{6895.53}{1122}}} \\
&= \frac{-7.882}{\sqrt{6.145}} \\
&= \frac{-7.882}{2.478} = -3.180
\end{aligned}$$

4. Interpret the result if the computation

As the derived $t = 3.180$ does exceed the table critical value of $t = 2.045$, at $p .05$ with $df = 33$ ($3.180 > 2.045$), therefore H_0 is rejected and H_a is accepted, stating that digital storytelling is effective for teaching vocabulary at the third grades students at SMPN 1 Cimaung. This means there is a significant difference in students score before and after the treatment using digital storytelling. This also means that teaching vocabulary by using digital storytelling to the third grades students of junior high school Cimaung 1 is effective.

Discussion

The researcher analyzes of the pre-test and post-test data by using t-test formula. The pre-test data result showed from 34 students, one student obtained the higher pre-test score which is 80 and there is also one student received the lowest pre-test score that is 40, and the mean score was 65.176. From the post-test one student obtained the higher post-test score which is 92 and there is also one student received the lowest post-test score that is 52. And the mean of post-test score was 73.058

Based on the statistical calculation using T-test, the researcher gave interpretation. First, it was considered the $DF = N - 1$ with the $DF = (34 - 1 = 33)$. At the significance level of 0.05. By comparing the “t” that researcher has got in calculation t-count = (3.180) and the value of “t” on the t score table $t_{0.05} = (2.045)$, it is known that t-count is bigger than t-table = $3.180 > 2.045$. Because the t-count is bigger that t-table, and the null hypothesis (H_0) is rejected, while the alternative hypothesis (H_a) is accepted, stating that digital storytelling is effective for teaching vocabulary at the third grades students at SMPN 1 Cimaung. It means that there is significant difference of vocabulary achievement to third-grade of SMPN 1 Cimaung, and after using digital storytelling in teaching vocabulary. This shows that using digital storytelling to teach vocabulary is effective.

Conclusion

After completing the previous chapters. The researcher presents the conclusion after achieve the data in the research. The study focus on enhancing the

vocabulary mastery using digital storytelling. The aims of the research is to find out whether the use of storytelling effective to improve students' vocabulary achievement in the third-grade students of Junior High School 1 Cimaung and to find out the student' response in using digital storytelling. Class IX-A consists of 34 students chosen by the researcher as a sample.

All of the data were analyzed by using statistical analysis, the researcher finds some conclusion. Based on the analysis, it showed that the t count 3.180 was bigger than t table 2.045 lied on the significant level .05 with the DF = 33. It meant that the alterative hypothesis (Ha) that states there is significant difference of students' vocabulary achievement using digital storytelling was accepted. While the Alternative Hypothesis (Ha) was accepted and the Null Hypothesis (Ho) was rejected. So, there was any significant difference between students' vocabulary achievement before and after taught using digital storytelling.

Bibliography

- Al-Amri, H. M. (2019). Fostering Intrinsic Motivation and Willingness to Communicate in English as a Foreign Language Classrooms: The Case of Digital Storytelling. *Multi-Knowledge Electronic Comprehensive Journal for Education and Science Publications (MECSJ)*, 19, 1–17.
- Arikunto, Suharsimi. 2002. *Prosedur Penelitian Suatu Pendekatan*. Bandung: Rineka Cipta.
- Hornby, A. (1995). *Oxford Advanced Learners' Dictionary of Current English, Fifth Edition*. New York: Oxford University Press.
- Rahayu, N. S., & Farid, S. (2017). The Effectiveness of Hangman Game In Improving Students' Vocabulary Mastery at The Seventh Grade Students. *ELang| An English Language Education Journal*, 2(2). Retrieved from <https://ejournal.unibba.ac.id/index.php/elang/article/view/456/379>
- Robin, B. R. (2008). Digital storytelling: A powerful technology tool for the 21st century classroom. *Theory into practice*, 47(3), 220-228.
- Robin, B. (2017). The Power of Digital Storytelling to Support Teaching and Learning. *Jurnal Digital Education Review*. Vol 1 (30), 17-29.
- Sadik, A. (2008). Digital storytelling: A meaningful technology-integrated approach for engaged student learning. *Educational technology research and development*, 56, 487-506.