

The Effect of Teacher-Made Vocabulary Exercises in Instagram Stories on Students' Vocabulary Achievement

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ABSTRACT

This research aimed to test whether or not teacher-made vocabulary exercises in Instagram stories have a significant positive effect on students' vocabulary achievement. Therefore, a quasi-experimental research design was applied. The researcher conducted this study on March - April 2023 and involved 48 students as the sample participants. They were divided into two groups, experimental and control groups. During the first and the second meetings, both of the groups did vocabulary exercises that given by the researcher. Each exercise required the students to find the English meaning of certain words. However, one thing that made them different was the treatment. In learning vocabulary, teacher-made Instagram stories were used as the treatment for the experimental group, while the control group did the vocabulary exercises by using regular paper. After that, all groups did a post-test in the form of multiple-choice. Based on the post-test result, the experimental group gained a mean score of 61.25 and 76.87 for the control group. Then, the researcher used SPSS to analyze the data by employing an independent sample t-test to make a valid conclusion. The result showed that the value of Sig. 2-tailed was lower than 0.05 ($0.001 < 0.05$), indicating a significant difference in mean score between the experimental and control group. However, the t value was negative (-3.476). It means that there is no significant positive effect of using teacher-made vocabulary exercises in Instagram stories on students' vocabulary achievement. Therefore, the findings of this research can be possibly used as a gap for the future researcher in conducting the newest study.

Keywords: Instagram stories, vocabulary achievement, TELL

INTRODUCTION

Instagram is a global communication platform used by many people. Napoleon (2022) reports that in Indonesia, Instagram has 50.5% of users, and most of them are senior high school students. It is because of some attractive features provided by Instagram, one of them is Instagram stories (Auly et al., 2021). According to Newberry (2023), Instagram stories become the most used feature on a daily basis. People are amazed at the elements served inside the Instagram stories, such as filters, polling, Q&A, quizzes, or MCQs (multiple choice questions) that are automatically updated and upgraded. Since the students are engaged in using Instagram stories, Resyadi (2020) argues that it might be brilliant if they are used as an educational tool, especially in learning English. However, the students may face challenges

or barriers in learning English if they do not have good vocabulary achievement. They cannot read, write, listen, or even speak in English (Wero et al., 2021). It is also in line with Wilkins (as cited in Alqallaf et al., 2022) that “Without grammar, very little can be conveyed. Without vocabulary, nothing can be conveyed”. Therefore, to overcome that problem, the researcher focused on how Instagram stories make students can memorize the word and understand its meaning so that their vocabulary achievement becomes better.

There are several previous studies in accordance with Instagram and vocabulary. Iswar (2021) states that Instagram story can become a tool to improve students’ English skills. However, he found out that the students had less motivation and seemed to have vocabulary lacking. It unfortunately happened because the students did not know the meaning of certain vocabulary provided in Instagram stories and were not willing to answer the teacher’s questions so that the situation of the class became uncoordinated. As a result, only 56.66% of the students got good score. It indicated that he needed to conduct the second cycle since the researcher’s target was 60% of the students had to achieve good score. Then, before doing the second cycle, he tried to find some solutions to recover those problems by allowing the students to bring and use their dictionary to find the meaning of certain words. Then, in the second cycle, he found out that students had higher motivation in answering the questions provided in the Instagram story.

Ramdhany (2017) reveals in her thesis that Instagram can increase the students’ interest in learning vocabulary. This conclusion was based on the questionnaires distributed by the researcher to the 85 participants. The results showed that students’ interests in learning vocabulary through Instagram is considered high. It can be seen from the mean score that is 74.6 which was got from the mean score of each questionnaire divided by 20 from the total questions. By referring to the final result, the researcher stated that using Instagram is an effective way to learn vocabulary.

Habibah et al., (2021) state that all content uploaded on Instagram can give lots of benefits in helping students learn vocabulary. This research was conducted by using a quantitative method in IAIN Palu for the third-semester students. They got the data by doing a survey addressed to 35 participants. The survey consisted of several questions, and the students had to answer them after they had had a treatment of using Instagram on their vocabulary. They analyzed the result through SPSS and found out that there is an effect of using Instagram in learning English vocabulary, shown by 62.48% of the mean score percentage. Furthermore, the researcher also concluded that Instagram can be considered as a tool that can attract students to learn vocabulary. It is also stated that Instagram can be beneficial for the teachers to apply in the classroom since it can engage students’ participation in learning vocabulary by using its features.

However, those studies have differences. The first study focused on how Instagram can help students improve all skills in English. The second study was conducted to determine in what way and which part of Instagram can interest students in learning vocabulary. The third study focused on the benefits of educational content uploaded on Instagram for vocabulary teaching and learning. Regarding those studies, the use of Instagram stories has not been explored by another researcher, moreover in dealing with vocabulary achievement. Therefore, to fill the gap, this research was conducted to know the significant positive effect of using teacher-made vocabulary exercises in Instagram stories on students’ vocabulary achievement.

METHOD

This study was conducted on 11th-grade students of a senior high school located in Jember, East Java. This school applied the Revised Curriculum of 2013, where the teacher should conduct the English teaching and learning process twice a week. In this case, the researcher entered the school on 8th March 2023 to have a consultation with the English teacher for the 11th grade. However, the researcher started the research on 13th March 2023 and ended on 6th April 2023. The table below shows the detail of the research procedures done by the researcher.

TABLE 1. Research Schedules

Time	Week	Schedules
March	Week 1	-
	Week 2	Having a consultation with the English teacher of 11th grade
	Week 3	Conducting a homogeneity test to choose sample participants
		Calculating and analyzing the students' scores in homogeneity test
		Choosing the sample participants by using cluster random sampling
Week 4	Preparing materials for teaching and learning process	
April	Week 5	First meeting in control and experimental classes
	Week 1	-
	Week 2	Second meeting in control and experimental classes Tryout test Post test

In order to know the effect of teacher-made vocabulary exercises in Instagram stories on students' vocabulary achievement, a quasi-experimental research design was applied (White and Sabarwal, 2014). The researcher needed two classes to be compared: experimental and control classes. In choosing those two classes, the researcher employed a homogeneity test and used cluster sampling in which the participants are selected as a cluster or group, not as individuals (Ary et al., 2010). The result of the homogeneity test was calculated using SPSS and revealed that the significant value of the mean score for each class was higher than 0.05 ($0.292 > 0.05$), indicating that all clusters met a particular classification or were categorized as homogeneous. This situation allowed the researcher randomly chose the two classes as the sample participants.

TABLE 2. The Result of Homogeneity Test in Choosing Sample Participants

		Test of Homogeneity of Variances			
		Levene Statistic	df1	df2	Sig.
Homogeneity Test Results	Based on Mean	1,221	7	235	,292
	Based on Median	,980	7	235	,446
	Based on Median and with adjusted df	,980	7	223,989	,446
	Based on trimmed mean	1,197	7	235	,305

As a result, there were 24 students in both experimental and control classes who involved and participated in the whole research. Then, all of 48 students helped the researcher in gaining the data by doing a post-test. Here, the researcher collected the students' score and analyzed them using a software program called SPSS Statistics 25 and obtained an independent sample t-test (Gerald, 2018) to know the effect of teacher-made vocabulary exercises in Instagram stories on students' vocabulary achievement. However, the researcher needed to check validity and reliability of the questions before creating a post-test.

TRYOUT TEST

A tryout test is organized by the researcher to check if the whole items that will be included in a post-test are categorized as valid and reliable (Hughes, 2003). There were 40 questions distributed to 55 students from two different classes who did not belong to the sample participants. The researcher gave them 30 minutes to finish the test. Then, the researcher managed the students' answers and inputted them in ANATEST v.4 to know the validity, reliability, and difficulty level of the test.

Then the results showed that the test validity was 0.80 and was considered as high. ANATEST also reported that from 40 items, only 34 items were appropriate for the post-test. The test is also highly reliable, gaining a score of 0.89. Since the researcher planned to create a post-test with proper item distribution, the researcher tried to make a post-test by inserting 15% of easy items, 70% of medium ones, and 15% of hard questions for the post-test (Arifin as cited in Lumbanraja, 2016). In the end, the researcher decided only to use 20 items to be included in a post-test.

TABLE 4. Item Validity

Validity	Total Item	Item's Number
Very Significant	22 Items	1, 5, 6, 7, 8, 9, 10, 11, 16, 19, 21, 22, 23, 26, 27, 28, 29, 31, 32, 33, 36, 39
Significant	12 Items	2, 3, 4, 12, 15, 18, 24, 25, 30, 35, 38, 40
Not Significant	6 Items	13, 14, 17, 20, 34, 37

TABLE 5. Difficulties Level of Items

Criteria	Total Item	Item's Number
Very Easy	5 Items	1, 5, 8, 10, 24
Easy	9 items	2, 3, 13, 15, 21, 29, 30, 38, 39
Medium	22 items	6, 7, 9, 11, 12, 14, 16, 17, 19, 20, 22, 23, 24, 26, 27, 28, 31, 32, 33, 36, 37, 40
Hard	4 items	4, 18, 34, 35
Very Hard	-	-

TREATMENT PROCEDURES

In this current research, the teacher used the most suitable element of an Instagram story, MCQs, and uploaded it to the public. Furthermore, the teacher personally created a story for the students to learn vocabulary by having some steps as the following.

1. Open Instagram account and click Instagram story

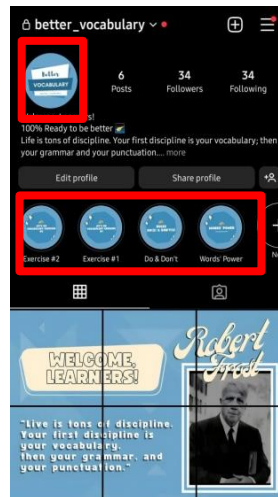


FIGURE 1. Instagram Story

2. Open the gallery and select one of the pictures. Here, the researcher decide which picture to add to the story. However, putting an irrelevant picture was not allowed because it could distract the students from understanding and memorizing particular vocabulary.

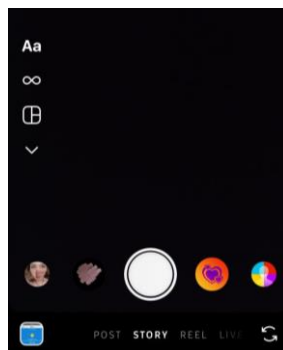


FIGURE 2. Instagram's Gallery

3. Drop MCQs feature and type question in the top column, and the possible answer in the option A, B, C, or D. The researcher could change the color by clicking the icon color to make the MCQs look more engaging. Then, clicked done and upload.

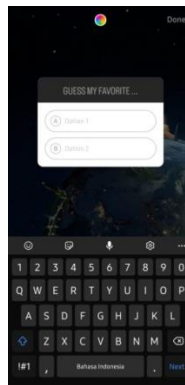


FIGURE 3. MCQs Feature

4. After the story is 100% uploaded, it will be able to be seen by the students.



FIGURE 4. Teacher-Made Instagram Story

5. After that, students chose one of the four possible answers about the meaning of vocabulary itself. The green checklist symbolizes the correct answer. Meanwhile, the wrong answer will be in a red cross. Students had only one chance to answer each question. The teacher gave 20 minutes for students to do the exercise. If the students think the first question is difficult to answer, they can skip it and continue to the next question. The students can recheck their work and return to the previous question if there is still enough time.

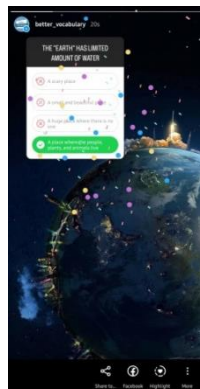


FIGURE 5. The Wrong and Correct Answer

6. At last, the researcher monitored the exercise by viewing the quiz results that automatically provide by the Instagram story. The teacher knew the students' progress in answering the questions. This quiz results provided the list of students' names/usernames, and how many students answer A, B, C, or D. It definitely helped the teacher keep the track of students' scores. This quiz results can be seen only by the teacher.

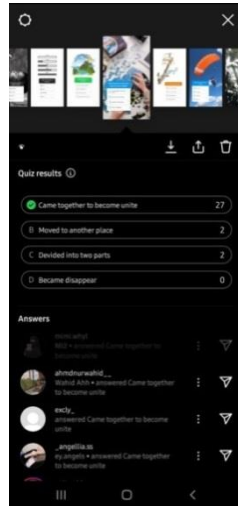


FIGURE 7. The Result of Students' Answers

FINDINGS AND DISCUSSION

This section presents the research findings and discussions. These following points contain some explanation about the results of post-test, normality test, homogeneity test, independent sample t-test, and further explanation of the result.

POST TEST

Post-test was conducted by the researcher at the end of the study. All questions provided in a post-test are taken from the tryout test by considering the validity, reliability, level of difficulties, and item distribution. Furthermore, there were only 20 questions included in a post-test, as shown in the table below.

TABLE 6. Final Items in Post Test

Validity	Level of Difficulties	Percentage of Item Distribution	Total Item	Item's Number
Valid	Easy	15%	3 items	2, 21, 29
Valid	Medium	70%	14 Items	6, 9, 11, 16, 19, 22, 23, 24, 26, 27, 28, 31, 32, 33
Valid	Hard	15%	3 Items	4, 18, 35

Those 20 items were distributed to the experimental and control classes on the same day. The experimental class did the post-test first, followed by the control class. The researcher gave 20 minutes for them to do the test. During the post-test, the researcher walked around to ensure students worked individually. When the time was up, the researcher collected and scored the students' worksheets. Then, the researcher manually calculated the result to know the mean score in each class. The mean score of the experimental group was 61.25, and the control group was 76.87. It can be stated that the students' mean score in the control class was higher than the experimental class ($61.25 < 76.87$). However, the researcher needed to analyze the data to make an accurate conclusion for answering the research question.

TEST OF NORMALITY AND HOMOGENEITY

Normality and homogeneity tests become the major requirements that should be done by the researcher before employing an independent sample t-test. The researcher needed to ensure that the students' scores in a post-test had normal distribution and that all sample participants were homogeneous. The researcher inputted the data into SPSS, and the results are statistically shown that the normality test in both two classes is higher than 0,05. ($0.13 > 0.05$ and $0.209 > 0.05$), indicating that the data is normally distributed. Then for the homogeneity test, the result showed that the significant variance value was more than 0.05 ($0.065 > 0.05$), indicating the students in both classes are homogeneous.

TABLE 7. The Result of Normality Test

		Tests of Normality					
		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Group	Statistic	df	Sig.	Statistic	df	Sig.
Vocabulary Results	Experimental Group	,154	24	,146	,936	24	,130
	Control Group	,136	24	,200*	,945	24	,209

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

TABLE 8. The Result of Homogeneity Test

		Test of Homogeneity of Variance			
		Levene Statistic	df1	df2	Sig.
Vocabulary Results	Based on Mean	3,566	1	46	,065
	Based on Median	3,153	1	46	,082
	Based on Median and with adjusted df	3,153	1	45,791	,082
	Based on trimmed mean	3,438	1	46	,070

INDEPENDENT SAMPLE T-TEST

After doing the normality and homogeneity test, the researcher continued to use an independent sample t-test (Gerald, 2018) assisted by SPSS statistics 25 to know the effect of teacher-made vocabulary exercises in Instagram stories on students' vocabulary achievement. The output of an independent sample t-test presented that the value of Sig. (2-tailed) for both classes are less than 0.05 ($0.001 < 0.05$), indicating a significant difference in the mean score of the experimental and control groups. However, the t-value was negative (-3.476). Then, the researcher concluded that using teacher-made vocabulary exercises in Instagram stories had no significant positive effect on students' vocabulary achievement.

TABLE 9. The Result of Independent Sample T-Test

		Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means						95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	Lower	Upper	
Vocabulary Results	Equal variances assumed	3,566	,065	-3,476	46	,001	-15,625	4,495	-24,673	-6,577	
	Equal variances not assumed			-3,476	42,355	,001	-15,625	4,495	-24,694	-6,556	

After knowing the result of the independent sample t-test, the researcher explored more the final result and found some reasons why the use of teacher-made vocabulary exercises in Instagram stories on students' vocabulary achievement did not have any significant positive effect on students' vocabulary achievement.

Unlike previous studies, in this research, the use of Instagram stories did not affect students' vocabulary achievement. During the teaching and learning process, the experimental group participated more than the control group. The researcher felt a different atmosphere between them, especially while doing the vocabulary exercises. The experimental group was likely to be highly motivated, while the control group said they were bored doing the regular vocabulary exercise. Therefore, the researcher initially believed that using teacher-made Instagram stories would have a significant positive effect on students' vocabulary achievement unless the results of the students' post-test revealed that the students in the control class achieved higher mean scores than those in the experimental class.

In addition, the researcher found some reasons to support the research findings. Firstly, experimental group students had high motivation to do vocabulary exercises by implementing Instagram stories. It was proven by their attitude toward the teaching and learning process. They enjoyed, were happy, and delighted. They also found interest in using Instagram to learn and memorize vocabulary. However, they seemed to need more self-confidence in answering the questions. Even though there was a picture that could be used as a clue to choose the correct answer, they felt hesitant and worried. It is in line with the previous research, which mentioned that there is no significant effect of vocabulary learning motivation and self-confidence on students' vocabulary achievement (Li, 2021).

Secondly, Aloraini (2018) demonstrates that learning vocabulary through Instagram posts had a small effect on students' vocabulary achievement. One of the reasons was the less feedback received by the students after doing the task. It also happened in this research where Instagram stories did not significantly affect students' vocabulary achievement. Therefore, the researcher agreed that the students should obtain more feedback regarding their work. That feedback can become a reference or evaluation in the next assignment. In doing so, the students will learn by referring to their experiences and trying to fix their problems independently.

Thirdly, Martarini et al., (2021) researched the effectiveness of using Instagram as a medium in learning English. They said using Instagram is an effective way to improve the students' ability to understand the text. However, not all of the students got a high score. It is similar to this current research, where some students got a satisfying score, and others needed to do remedial test. It made the researcher think that it is essential for the teacher to give the treatment as much as it is required. More treatment will help the teacher generate a positive output on students' vocabulary achievement.

Furthermore, the researcher could not control some extraneous variables during the research. This research was conducted during the Ramadhan period (March 8th – Apr 6th). Hence, the school cut the time for teaching and learning activities from 90 to 60 minutes. Because of the deduction time, the researcher felt rushed and should do the teaching and learning process faster than what was arranged in the lesson plan. It also gives the students limited time to absorb the knowledge and information delivered by the teacher. Moreover, the students hurried to finish the exercises, and unfortunately, they submitted the work without double check their answers. Second, the crowded situation caused by other students outside the classroom distracted the students' attention in the teaching and learning process. The researcher argued that this kind of situation bothered students' attention and made classroom settings less conducive.

To sum up the result and discussion above, the researcher believed that everything happened inside the classroom and also the extraneous variables might be the reasons why there is no significant positive effect of using teacher-made vocabulary exercises on students' vocabulary achievement.

CONCLUSION

Based on the research findings, the researcher can conclude that the use of teacher-made vocabulary exercises in Instagram stories did not have a significant positive effect on students' vocabulary achievement. Somethings such as (1) students' vocabulary learning motivation; (2) teacher's feedback; (3) students' ability; and (4) extraneous variables, in this case was the reduction of time in the teaching and learning process during Ramadhan could

ruin the learning activity because everything needs to become faster. At the end, this teaching strategy seemed less suitable if applied in the Ramadhan period and became the limitation of this research. In the future, the teacher can still use teacher-made Instagram stories as an educational tool, but by applying the new strategy in teaching vocabulary that is corresponding to be used in a short time.

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