Jurnal Pendidikan dan Konseling
Volume 4 Nomor 5 Tahun 2022
E-ISSN: 2685-936X dan P-ISSN: 2685-9351
Universitas Pahlawan Tuanku Tambusai

The Effect Of Using Tiktok Application On Students' Vocabulary Mastery At SMA Negeri 3 Pematangsiantar

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Abstrak

Tujuan dari penelitian ini adalah untuk mengetahui pengaruh penerapan aplikasi TikTok dalam pembelajaran kosakata. Penelitian ini menggunakan penelitian kuantitatif, yaitu metode eksperimen semu. Data dari penelitian ini dikumpulkan dan diperoleh melalui tes dan observasi. Subyek penelitian ini adalah X-IPA dengan sampel X-IPA 8 sebagai kelompok eksperimen dan X-IPA 5 sebagai kelompok kontrol yang berjumlah 74 siswa yang dipilih dengan teknik random. Tes dilakukan dengan pre-test dan post test, kemudian observasi dengan mengamati dan mencatat sampel. Hasil penelitian menunjukkan bahwa penggunaan aplikasi TikTok berpengaruh signifikan terhadap penguasaan kosakata siswa. Hal ini terlihat dari beberapa fakta, seperti 1) Rerata post test eksperimen setelah perlakuan adalah 83,03, sedangkan kontrol adalah 58,92, 2) Standar deviasi post test eksperimen setelah perlakuan adalah 9036,97, sedangkan kontrol adalah 2772,76, 3) T-hitung setelah perlakuan adalah 5,81, sedangkan t-tabel pada taraf 0,05 adalah 1,666. Jadi 5,81 > 1,666). Penelitian ini menunjukkan bahwa aplikasi TikTok memiliki pengaruh yang baik terhadap pembelajaran kosakata.
Kata Kunci : Aplikasi Tiktok, Penguasaan Kosakata Siswa, Media Pembelajaran

Abstract

The purpose of this study is to find out effect of applying TikTok application in vocabulary learning. This uses quantitative study, which is quasi-experimental method. Data from this study are collected and obtained through test and observation. The subjects of this study are X-IPA with samples X-IPA 8 as experimental group and X-IPA 5 as control group, totaling 74 students who were selected by random technique. Tests are conducted by pre-test and post test, then observation by observing and recording sample. The result of study shows that using TikTok application significantly affect students' vocabulary mastery. This can be seen from some facts, such as 1) Mean post test of experimental after treatment is 83,03, while control is 58,92, 2) Standard deviation post-test of experimental after treatment is 9036,97, while control is 2772,76, 3) T-count after treatment is 5,81, meanwhile t-table at level 0,05 is 1,666. Thus 5,81 > 1,666). This study shows that TikTok application have good influence on vocabulary learning.
Keywords : *Tiktok Application, Students' Vocabulary Mastery, Learning Media*

INTRODUCTION

English is one of the foreign languages that is used universally. Desriana & Budiningsih (2018) stated that speaking about foreign languages means knowing and understanding foreign cultures. Additionally, in understanding language, you need to learn sentence structure and sentence writing, because language cannot be separated from culture. In contrast to being tool for fostering interpersonal relationships, exchanging information, and appreciating the aesthetics of language in

English culture, English serves as a means of communication in order to access information.

Vocabulary is a collection of words or parts of particular language. A sentence will be well formed if someone has mastery vocabulary. The wealth of vocabulary owned by students are generally considered a reflection of intelligence. In the current era of information technology, the terms online and offline learning have become common learning patterns. Daring is an acronym for "in the network," which is a replacement for the term "online," which we frequently use in reference to internet technology.

Especially in Indonesia, English has been a compulsory subject for senior high schools for decades. English is one of the subjects that is used as a benchmark for high school students. Five communication elements that make up the learning process are teachers (communicators), learning resources, learning media, students (communicants), and learning objectives (Angraini et al, 2021).

The teaching and learning process is impossible without learning media; at the very least, it needs one medium to deliver teaching materials (Puspitarini & Hanif, 2019). Doyle & Lindquist (2018) mention that categorizing and labeling are necessary for vocabulary acquisition. When children first learns word, they might be referring to traits of the thing that word stands for. Teaching vocabulary includes teaching of meaning, morphology, and sound. The first component of sound is pronunciation, so students must correctly read the phonetic symbol.

The availability of an information center can be accessed anywhere and anytime and contains anything we want to know and internet also allows the formation of multimedia communication network that is so extensive throughout the world, it would be a shame if it is not utilized/unable to use it. There is internet technology available as a multipurpose media. Interpersonal communication is possible when using the internet (e-mail and chat). Internet is also able to be presented in real time audio-visual as in the conventional method with teleconference application (Saryoko, 2012). Social media is media whose content created and distributed through social interaction. Social media is an application that allows users to interact and provide feedback with fellow users; create, edit and share information in various forms (Syrdal & Briggs, 2018).

TikTok app was released in September 2016. Users of the app can make their own videos. TikTok became the most downloaded app during the first quarter (Q1) 2018 with 45.8 million downloads. Teachers and students use organized teaching materials in learning. Without learning media, the teaching and learning process cannot call for at least one medium for delivering instructional materials (Widodo, 2018). On July 3, 2018, TikTok's application was blocked globaly, then on August 1, 2018, TikTok was blocked in Indonesia. The Ministry of Communication and Information has been keeping an eye on this application for a month and has discovered that there were numerous reports that criticize it. The total number of incoming reports of July was 2,853. There are a lot of negative content, especially for children, Rudiantara said. However, on August 2018, TikTok application can once again be downloaded due to various factors and new laws.

As a learning media, video must suitable to the steps to deliver the materials . The steps for making TikTok videos as learning media are:

1. Opening.
   The presenter will greet audience who watch the video before discussing the learning material.
2. Contents.
   The presenter will present the vocabulary learning material.
3. Closing.
   In the closing section, the presenter will close the video by suggesting the viewer to ask questions. Questions can be listed in the comments column, so that questions can be discussed in the next video content.

Since the online learning system was implemented, usage of social media has become a trend for students. Currently, 10th grade students at SMA Negeri 3 Pematangsiantar use social media because it makes it simple for students to communicate with others locally and globaly without having physically interact. TikTok application is one of the applications/social media that is very popular. TikTok is an application that displays moving images (visual videos) that can be made by TikTok users themselves. Almost students use TikTok application every day, so this application sometimes becomes obstacle in online learning.

METHOD

This study uses quantitative requiring author to explain how variables affect other variables (Creswell, 2012: 13). This type is quasi-experimental, in which variables do not allow for full control. It is valued even though true experiments are preferred because they enable scientists to draw valid conclusions even when complete control is not feasible. Initially both were given pretest (Y1). The difference is that one group is given treatment (X), while the other is not treated but is made as control group. After the treatment completed, both groups received post test (Y2). The experimental class received treatment of group investigation (X) type of cooperative learning model. The control class received conventional learning treatment.

Table 1. Research Method Design.

Group	Pretest	Independent Variable	Posttest
Exp. Y1	O1	Y2	
Control	Y1	O2	Y2

Y1 : Pre-test
Y2 : Post-test
O1 : Using TikTok
O2 : Ordinary learning method

Population of this study are all 10th grade students of SMA Negeri 3 Pematangsiantar, totaling 437 students. The experiment group is X IPA 8 and control group is X IPA 5. So samples in this study are 74 students. Author uses two variables, namely independent variable (TikTok Application) and dependent variable (vocabulary mastery). This study will be conducted in Class X IPA 5 and X IPA 8 SMA Negeri 3 Pematangsiantar. Data collection techniques are test and observation. Validity testing aims to see the level of constraints or validity (accuracy) of a measuring instrument. The formula is as follows:

$$r = \frac{n\sum xy - \left(\sum x\right)\left(\sum y\right)}{\sqrt{\left[n\sum x^2 - \left(\sum x\right)^2\right]\left[n\sum y^2 - \left(\sum y\right)^2\right]}}$$

To determine the reliability of the test, author uses reliability analysis with formula:

$$r_{11} = \frac{2.r_b}{1 + r_b}$$

To determine the t-count with Arikunto (2006: 311) formula:

$$t = \frac{M_a - M_b}{\sqrt{\left[\frac{da^2 + db^2}{[Na + Nb] - 2}\right]\left[\frac{1}{Na} + \frac{1}{Nb}\right]}}$$

FINDING AND DISCUSSION

The data of pre-test and post-test of experimental and control class are available and may be seen from this table.

Table 2. Data Analysis on Experimental Class.

NO	Initial's Name	EXPERIMENTAL CLASS			
		Pre-Test (d_1)	Post-Test (d_2)	d_1^2	d_2^2
1	AS	72	92	5184	8464
2	AS	72	84	5184	7056
3	AP	80	96	6400	9216
4	APSS	54	64	2916	4096
5	AS	72	84	5184	7056
6	CP	92	92	8464	8464
7	DS	76	84	5776	7056
8	EG	68	84	4624	7056
9	FS	16	92	256	8464
10	GP	88	84	7744	7056
11	JP	36	56	1296	3136
12	JS	60	92	3600	8464
13	JO	24	44	576	1936
14	KM	60	84	3600	7056
15	KS	76	84	5776	7056
16	KS	68	96	4624	9216
17	LA	68	92	4624	8464
18	LRS	48	52	2304	2704
19	MR	36	40	1296	1600
20	MP	80	92	6400	8464
21	MG	80	84	6400	7056
22	MBDS	80	88	6400	7744
23	NH	60	92	3600	8464
24	NM	60	96	3600	9216
25	RP	60	84	3600	7056
26	RS	48	96	2304	9216
27	RS	60	92	3600	8464
28	SM	32	92	1024	8464
29	SP	88	92	7744	8464
30	SS	64	92	4096	8464
31	TS	72	84	5184	7056
32	TD	80	100	6400	10000
33	VS	40	44	1600	1936
34	WS	48	84	2304	7056
35	YS	76	80	5776	6400
36	YB	54	96	2916	9216

37	YP	24	88	576	7744
∑		2272	3072	152952	264096

$\sum \boldsymbol{d_1}$ = 2272
$\sum \boldsymbol{d_2}$ = 3072
$\sum \boldsymbol{d_1}^2$ = 152952
$\sum \boldsymbol{d_2}^2$ = 264096

From these data can be obtained :

Pre-test

1. Ma $= \frac{\sum d}{Na}$ = 2272/37 = 61,41
2. $da^2 = \sum d^2 - \left(\frac{(\sum d)^2}{na}\right) = 152952 - \left(\frac{(2272)^2}{37}\right)$ = 13438,92

Post Test

1. Ma $= \frac{\sum d}{Na}$ = 3072/37 = 83,03
2. $da^2 = \sum d^2 - \left(\frac{(\sum d)^2}{na}\right) = 24096 - \left(\frac{(3072)^2}{37}\right)$ =9036,97

Table 3. Data Analysis on Control Class.

NO	Initial's Name	CONTROL CLASS			
		Pre-Test (d_1)	Post-Test (d_2)	d_1^2	d_2^2
1	ARS	40	56	1600	3136
2	AFS	36	60	1296	3600
3	ASR	40	52	1600	2704
4	ATF	64	72	4096	5184
5	ASSM	68	72	4624	5184
6	AWAS	76	56	5776	3136
7	ABS	44	60	1936	3600
8	ARS	44	60	1936	3600
9	ARY	36	48	1296	2304
10	CFO	36	40	1296	1600
11	CFYH	52	48	2704	2304
12	DAUS	80	64	6400	4096
13	EP	8	56	64	3136
14	FR	36	72	1296	5184
15	FPW	36	60	1296	3600
16	FPM	40	60	1600	3600
17	FT	28	52	784	2704
18	GND	76	60	5776	3600
19	HTLG	44	52	1936	2704
20	JA	72	68	5184	4624
21	JLS	20	56	400	3136

22	KJLS	76	64	5776	4096
23	MAES	76	64	5776	4096
24	MH	32	40	1024	1600
25	NS	32	60	1024	3600
26	PRN	36	64	1296	4096
27	RP	56	56	3136	3136
28	RPP	32	40	1024	1600
29	SBS	36	60	1296	3600
30	SZRD	44	64	1936	4096
31	TAS	56	56	3136	3136
32	TS	60	64	3600	4096
33	WA	24	56	576	3136
34	YSS	40	64	1600	4096
35	ZMH	40	60	1600	3600
36	RS	72	80	5184	6400
37	AS	37	64	1369	4096
$\sum$		1725	2180	92249	131216

$\sum \boldsymbol{d_1}$ = 1725
$\sum \boldsymbol{d_2}$ = 2180
$\sum \boldsymbol{d_1}^{\boldsymbol{2}}$ = 92249
$\sum \boldsymbol{d_2}^{\boldsymbol{2}}$ = 131216

From the above data can be obtained:

Pre-test

1. Ma $= \frac{\sum d}{Na}$ = 3072/37 = 83,03

2. $da^2 = \sum d^2 - \left(\frac{(\sum d)^2}{na}\right) = 92249 - \left(\frac{(1725)^2}{37}\right)$ =9036,97 = 11826,70

Post Test

1. Ma $= \frac{\sum d}{Na}$ = 2180/37 = 58,92

2. $da^2 = \sum d^2 - \left(\frac{(\sum d)^2}{na}\right) = 13216 - \left(\frac{(2180)^2}{37}\right)$ = 2272,76

To find out difference between post test of experimental class after treatment with control class, the calculation is as follows:

$$\boldsymbol{t = t = \frac{Ma - Mb}{\sqrt{\left(\frac{da^2 + db^2}{[N_a + N_b] - 2}\right)\left(\frac{1}{N_a} + \frac{1}{N_b}\right)}}}$$

$$t = \frac{83,03 - 58,92}{\sqrt{\left(\frac{9036,97+2772,76}{37+37-2}\right)\left(\frac{1}{37}+\frac{1}{37}\right)}}$$

$$t = \frac{24,11}{\sqrt{17,2531}}$$

$$t = \frac{24,11}{4,1537}$$

t = 5,81

The author found that using TikTok application significantly affect students' vocabulary mastery. This can be seen from some facts below :

1. Mean post-test of experimental group after treatment is 83,03, while control group is 58,92.
2. Standard deviation post-test of experimental group after treatment is 15,84, while control group is 8,78.
3. T-count after treatment is 5,81. T-table at level 0,05 is 1,666. Thus, 5,81 > 1,666. Therefore H0 is accepted and H1 is rejected.

The purpose of this study was to find out effect of TikTok application in vocabulary learning. To find out the effect, author gave pre-test with post-test to see if there was effect in experimental class after being given treatment. Students who were taught with TikTok application get better grades than students who were taught with conventional learning. After analyzing the data, author finds out that TikTok application is effective in vocabulary learning. The weakness when implementing vocabulary learning through TikTok application is happening in creating video content, while strength when using TikTok application as a learning media is that with videos that have been shared, students can learn more often without coercion and author can see clearly how many students are active in classroom through comments on videos.

CONCLUSION

After learning vocabulary by using TikTok application for experimental class, it shows that TikTok application is effective to be applied in teaching English and affected students' scores, especially in vocabulary mastery. In learning vocabulary, TikTok application helped students to memorize vocabulary more easily. From the calculation results, t-count < t-table at level = 0,05 (5,81 > 1,666. Therefore H0 was accepted and H1 was rejected. Thus, there is positive and significant effect on experimental class, or in other words there is significant influence on the use of Tiktok application on vocabulary mastery in class X SMA Negeri 3 Pematangsiantar. The use of TikTok application can minimize students' difficulties in memorizing vocabulary. In conclusion, using TikTok application is effective in learning vocabulary.

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