The effect of youtube on students' vocabulary achievement At the eleventh grade of sma swasta teladan pematangsiantar

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Abstrak

Penelitian ini bertujuan untuk menemukan efek YouTube terhadap prestasi kosakata siswa di kelas sebelas SMA Swasta Teladan Pematangsiantar tahun ajaran 2022/2023. Adapun metode penelitian ialah kuantitatif (eksperimen semu), yang terdidi dari dua kelas, yakni eksperimen dan kontrol. Populasi penelitian merupakan pelajar kelas XI SMA Swasta Teladan Pematangsiantar berjumlah 224 pelajar. Adapun sampel dalam penelitian dipilih dengan teknik *purposive sampling*, yaitu kelas XI MIPA 2 (eskperimen) dan XI MIPA 3 (kontrol). Peneliti menggunakan rumus t-uji untuk menganalisis data kemudian menentukan apakah YouTube berpengaruh pada pencapaian kosakata siswa. Hasil penelitian menunjukkan bahwa rata-rata pre-test di eksperimen ialah 57,125 dan rata-rata post test ialah 83,5. Sedangkan di kelas kontrol, rata-rata pre-test ilah 60,125 dan rata-rata post-test ialah 74. Setelah dihitung rata-rata dari kedua kelas dan kemudian dihitung menggunakan rumus t-uji hasilnya adalah t-uji lebih tinggi dari t-tabel dengan taraf signifikansi 5% (4,52 >1,665). Jadi, dapat disimpulkan bahwa YouTube berpengaruh terhadap pencapaian kosa kata para siswa.
Kata Kunci: *YouTube; Pencapaian; Kosa Kata*

Abstract

This research aims to find effect of YouTube learners' vocabulary achievement in eleventh grade of SMA Swasta Teladan Pematangsiantar in 2022/2023 school year. Research method is quantitative (quasi experiment), which is boarded from two classes, experiment and control. Research population is XI graders of SMA Swasta Teladan Pematangsiantar, with total 224 students. Sample is chosen by purposive sampling technique, namely class XI MIPA 2 (experiment) and XI MIPA 3 (control). Researchers use t-test formula to analyze data then determine whether YouTube affects learners' vocabulary achievement. Results shows that pre-test mean in experiment is 57,125 and post test average is 83.5. Whereas in control, pre-test mean is 60,125 and post-test mean is 74. After calculating mean of both classes, researchers calculated them by using t-test formula, which result is t-test is better than t-table with 5% significance level (4.52 > 1,665). Therefore, YouTube has a significant affect to learners' vocabulary achievement.
Keywords: *YouTube; vocabulary; achievement*

INTRODUCTION

Language is a tool that humans use to express their feeling or provide information. Language can be in the form of words or movements. There are many languages in the world, each country has a national language that is different from other countries. Crystal (2003: 20) states "a language can be made the official language of a country, to be used as a medium of communication in such domains as government, the law courts, the media, and the educational system". English is one of international language, which used to communicate with others. In Indonesia, English has been studied since we were in kindergarten, elementary, junior high, senior high level, also college level. In English, there are 4 capabilities, which are crucial to master English. Those are "listening speaking, reading, and writing". Those are connected one to another that are separated to 2 ways, receptive/passive and productive/active. Passive including listening with reading, whereas active includes of speaking with writing. Vocabulary is an important component of mastery of the four skills above. Without having an adequate vocabulary, people will find it difficult to learn a foreign language.

Khan (2015, p.46) mentions "learning a foreign language is an integrated process that the learner should study the four basic skills: listening, speaking, reading, and writing". Learning vocabulary, especially in writing, is important component that learners ought to master, if they do not have a lot of vocabulary, then students will have difficulty in writing. In learning vocabulary, there are severeal difficulties that learners found. First, they have difficulty interpreting phrases. Second, students have difficulty differentiating regular and irregular verbs, and the third is students have difficulty interpreting words that are written and pronounced the same and other problems. Alqahtani (2015) states "the acquisition of an adequate vocabulary is essential for successful foreign language use, because without an extensive vocabulary, a language learner will be unable to use the structures and functions".

Regarding to experience of the researchers teaching at SMA Swasta Teladan Pematangsiantar during program of practicing teaching, researchers found several problems that learners face in vocabulary. First, students are not able to write vocabulary in word classes, especially nouns and verbs. The second is students are not confident in speaking English because they are afraid of being mispronounced the vocabulary and being ridiculed. The last is uninterested in studying English subject then way teacher taught them. The assumption that causes the vocabulary problems above is the use of inappropriate media is used by the teacher. Teachers use conventional media in teaching vocabulary. The teacher only asks students to write the vocabulary and memorize it at home without knowing whether the students understand or not. Media like this will make students bored quickly and not interested in learning vocabulary. However, the teacher is a figure who plays an important role in directing students to be enthusiastic about learning. When the teacher uses the right media students will easily understand the vocabulary.

"Teachers have an essential duty to create and maintain an exciting situation by providing media that is able to increase students' motivation, such as technology, as an English learning media" (Solikhah, 2020). To overcome problems above, the media of YouTube is effective to use. According to Nurhayat (2019), YouTube is effective to educate vocabulary. Research outcomes performed that usage of YouTube is effective to teach vocabulary for learners so that they can master English vocabulary.

In addition, Belinda (2018) states that from the result of the research conducted "the use of offline YouTube videos in teaching English, particularly vocabulary had a positive impact on the students". Students were energetic in following topics, felt relaxed, also enjoyed studying, which were

not bored, then were eager to study English. According to Ismawati (2011), the result of the study also concluded that using YouTube videos to teach vocabulary can help students' vocabulary grow. The students found it simple to discover the meaning of some vocabulary that they had not previously encountered. In this research, the researchers will use channel YouTube "joesin translation" which explain about English lesson.

METHOD

Research method is quantitative (quasi experiment), which is boarded from two classes, experiment and control. Gay (2012: 624) states "a quasi-experimental design in which all groups receive all treatments, each group receives the treatments in a different order, the number of groups equals the number of treatments, and all groups are tested after each treatment". This research is an experimental study that will be used to see the effect that occurs when a class uses YouTube media to learn vocabulary, especially nouns and verbs, with a comparison class using conventional media. Quasi experiment intends on determining whether an intervention has effect on participants. Common aim of quasi experiment is for investigating the "cause-effect" connection. This allows for a better knowledge related on features and exercises.

This research will be conducted at SMA Swasta Teladan Pematangsiantar, Jl. Singosari no. 3, in the new academic year, the 2022/2023 school year, which is planned on September 2022. The population is learners of eleventh graders of SMA Swasta Teladan Pematangsiantar academic year 2022/2023. The eleventh-grade students consisted of 6 classes. The total number of students are 244 students.

Table 1. Research Population.

NO	XI MIPA	X1 SOCIAL
1	42	31
2	40	31
3	40	-
4	40	-
Total	224	

In this research, the sampling technique that will be used is the purposive sampling technique. Gay (2012) stated that purposive sampling involves selecting a sample the researchers believe to be representative of a given population. Therefore, sample is chosen by purposive sampling, namely class XI MIPA 2 and XI MIPA 3. Researchers collected data a pre-test, treatment, then post test. Researchers used formula test, including gathering students tests scores both experimental and control. Post test were given to measure whether media used had effect or not. In comparing scores, researchers used t-test statistical calculation. Researchers also used t-test formula in determining whether YouTube affects learners' vocabulary achievement.

FINDINGS AND DISCUSSION

Scores of experimental and control are available and may be seen from this following table.

Table 2. Data Analysis on Experimental Class.

No	Student's Initial Name	Pre-Test	Post-Test	d	d2
1	AIS	75	85	10	100
2	ART	55	80	25	625
3	AS	85	65	-20	400
4	AR	45	70	25	625
5	BAS	40	80	40	1600
6	DR	55	95	40	1600
7	DBN	60	95	35	1225
8	DAP	55	80	25	625
9	DOS	75	80	5	25
10	DPS	55	85	30	900
11	EDND	50	80	30	900
12	EL	55	85	30	900
13	ECS	50	80	30	900
14	EDHH	60	80	20	400
15	FAMS	45	80	35	1225
16	FA	60	85	25	625
17	FJVTW	50	80	30	900
18	GRP	55	90	35	1225
19	GAS	55	80	25	625
20	IIS	45	85	40	1600
21	JSS	85	85	0	0
22	JAPS	60	85	25	625
23	MNP	55	85	30	900
24	NJP	50	80	30	900
25	NAGS	45	80	35	1225
26	NRS	45	85	40	1600
27	NS	50	95	45	2025
28	NL	75	70	-5	25
29	RVH	70	85	15	225
30	RS	50	85	35	1225
31	RS	60	90	30	900
32	RKN	65	80	15	225
33	SAN	50	90	40	1600
34	SLH	70	95	25	625
35	VRTPM	50	85	35	1225
36	WW	60	85	25	625
37	YA	60	80	20	400
38	YATP	55	90	35	1225
39	MCMT	50	80	30	900
40	RS	55	90	35	1225

	N=40	2.285	3340	Σd= 1055	Σd2=34725

From these data, researchers found :

1. Na = 40

2. Ma = 26,37

3. da² = 6899,375

Table 3. Data Analysis on Control Class.

No	Students' Initial Name	Pre-Test	Post-Test	d	d2
1	AA	70	80	10	100
2	ARA	50	80	30	900
3	ATS	70	75	5	25
4	BTD	65	70	5	25
5	COP	45	65	20	400
6	DPS	65	70	5	25
7	DYS	40	65	25	625
8	DHN	50	80	30	900
9	DMS	70	75	5	25
10	EKS	60	85	25	625
11	ERT	75	75	0	0
12	ETD	55	75	20	400
13	FSP	55	60	5	25
14	FW	60	85	25	625
15	GEN	50	70	20	400
16	GS	65	75	10	100
17	G	55	80	25	625
18	HWS	70	80	10	100
19	JPP	55	60	5	25
20	JPS	60	75	15	225
21	JHS	70	90	20	400
22	LN	75	60	-15	225
23	MMM	60	70	10	100
24	MAS	60	70	10	100
25	MPSM	40	60	20	400
26	NCS	60	80	20	400
27	NA	65	60	-5	25
28	RP	60	70	10	100
29	RAS	70	75	5	25
30	RRAH	40	85	45	2025
31	RHN	60	75	15	225
32	RS	30	55	25	625
33	RDS	60	75	15	225
34	RH	60	70	10	100

35	RDMDH	75	85	10	100
36	SRAP	60	65	5	25
37	TW	65	80	15	225
38	VMS	80	85	5	25
39	YOG	55	90	35	1225
40	ASS	75	80	5	25
N=40		**Σ2.405**	**Σ= 2.960**	**Σ d=555**	**Σd2= 12775**

From these data, researchers found :

1. Na = 40
2. Mb = 13,87
3. db² = 5.074,375

To find out t-test, the calculation is as follows:

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

$$t = \frac{26,37 - 13,87}{\sqrt{\left[\frac{6899,375 + 5074,375}{[40+40]-2}\right]\left[\frac{1}{40} + \frac{1}{40}\right]}}$$

$$t = \frac{12,5}{\sqrt{\left[\frac{11973,75}{78}\right]\left[\frac{2}{40}\right]}}$$

$$t = \frac{12,5}{\sqrt{[153,50][0,05]}}$$

$$t = \frac{12,5}{\sqrt{7,67}}$$

$$t = \frac{12,5}{2,76}$$

$$t = 4,52$$

Refer to data analysis of research, researchers found that media YouTube has effect to students' vocabulary achievement. Research findings are listed below:

1. Mean score in experimental class from pre-test to post-test were 57,125 and 83,5.
2. Experimental lowest pre-test score was 40 and highest was 85.
3. Experimental lowest post-test score was 65 and highest was 95.
4. Total mean variable from experimental (Ma) was 26,37
5. Standar deviation from experimental (da2) was 6.899,375
6. Mean score in control class from pre-test to post-test were 60,125 and 74.
7. Control lowest pre-test score was 30 and highest was 80.
8. Control lowest post-test score was 60 and highest was 90.
9. Total mean variable from control (Mb) was 13,87
10. Standard deviation from control (db2) was 5.074,375
11. Degree of freedom (df) is 78 and t-table (level of significant 5%) for 2 tailed test is 1,665.
12. Testing hypothesis shows that t-test (4,52) is higher than t-table (1,665) at 5% of level significance.

Alternative Hypothesis (Ha) is accepted and Null Hypothesis (Ho) is rejected.

From result of research, researchers found that studentswere able to use vocabulary in correct word classes especially nouns and verbs by using YouTube. It can be proven from results of post-test obtained by experimental class which is higher than post-test results in the control class. From the results of the post-test scores of students collected by researchers in the experimental class showed that the lowest score was 65 (AS) and the highest score was 95 (DR), (DBN) and (NS). Meanwhile, based on the post-test scores of students that the researchers collected in the control class, the lowest scores were 60 (FSP), (JPP) (MPSM) and (NA) and the highest scores were 90 (JHS) and (YOG). It can be concluded, the scores of students in the experimental class got higher scores than the scores of students in the control class. It can be seen that the highest score in the experimental class is 95 and the highest score in the control class is 90.

Looking at the data analysis result, the researchers present the data discussion given to the students. Students in both the experimental and control groups lacked knowledge of vocabulary nouns and verbs. Based on the pre-test, the mean score in the experimental class was 57,125. Based on the results of the post-test, the students' achievement increased with a mean score of 83,5 after they were taught using YouTube media. In the control group, the pre-test mean score was 60,125, and the post-test mean score was 74. It means that the YouTube media had a significant impact than the conventional media. This difference is demonstrated using t-test analysis, where the value 4,52 is greater than the t-table value 1,665 at the = 0,05 level of significance. Finally, the result of ttest > ttable, it indicates that null hypothesis (H0) is rejected and alternative hypothesis (Ha) is received.

The result above is relevant to the research conducted by Belinda (2018) stated that the use of offline YouTube videos in teaching English, particularly vocabulary, had a positive impact on the students. The students were enthusiastic to follow the materials, felt relaxed and enjoyed the learning process, were not bored and were interested in learning English. Ismawati (2011) also had relevant result that using YouTube videos to teach vocabulary can help students expand their vocabulary. The results of the test scores show that the mean of the pretest scores is 42.64. It improves to 56.17 in pre-test and increases to 74.78 in post-test

CONCLUSION

Based on the findings, the researchers conclude that Using YouTube media is effective in helping student vocabulary achievement. YouTube is one of the best media in teaching vocabulary. Students who learn through YouTube become more interested in learning, become less sleepy, and more enthusiastic about learning, especially in vocabulary. As a result, it is possible to conclude that YouTube has an effect in helping students' vocabulary achievement at the eleventh grade of SMA Swasta Teladan Pematangsiantar

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