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THE EFFECT OF PROJECT BASED LEARNING (PJBL) WITH ASSISTED YOUTUBE MEDIA ON STUDENTS' EBILITY IN SPEAKING SKILL AT GRADE XII OF SMA SWASTA DAERAH AIR JOMAN IN 2023-2024 ACADEMIC YEAR

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Abstract

This research aims to the effect of project-based learning with the help of YouTube videos as media on students speaking ability procedure text. This research is qualitative research. The population in this research all class XII students' SMA Swasta Daerah Air Joman total of sample 50 students. Namely class as an experimental class 25 students and another class as a control class 25 students with the sampling technique carried out randomly. There are significant differences in students speaking using project-based learning and without project-based learning of grade XII at SMA Swasta Daerah Air Joman in 2023/2024 Academic Year". The results obtained are T test> T-table (0,05) with df 48. T-test 17,4 > df 2,01. This means, there is a significant difference in the value of the results student learning between classes that apply the project-based learning and those that do not apply the project-based learning. So, the project-based learning is effective and significant on the speaking ability procedure text.

Keywords: Project Based Learning, Procedure Text, Speaking Ability

INTRODUCTION

English is one of the most widely used international languages for social communication, which is used by many people worldwide. According to (Lidiana et al., n.d.) the four skills of speaking, writing, reading, and listening are necessary for learning English as a foreign language. Based on the observation research when taught a speaking in Senior High School, the often found some problems towards students. The students problems frequently found: first, they still had poor vocabulary. Second, they were not interested in the material about English that was given. Third, they rarely practiced speaking. The next, they were afraid try to speak English. In order the problems, there are many techniques that can be applied including a Project-Based Learning (PjBL), because many research findings say that this technique is effective to be used in teaching speaking. Using Project-Based Learning (PjBL) in teaching speaking is one of the ways to build the students' interest, motivation and fluency in speaking English by creating interaction in the class and ordering students. According to (Haslinda et al., 2021) Project-Based Learning (PjBL) is very important in teaching speaking because it gives students an opportunity to practice communicating through YouTube as media. Project-based learning model is a learning model that makes students the subject or center of learning, emphasizing the learning process which has an end result in the form of a product. This means that students are given the freedom to determine their own

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learning activities, work on learning projects collaboratively until results are obtained in the form of a product.

METHOD

This research was conducted in SMA Swasta Daerah Air Joman. This school is located on Jl. Pasar XII Air Joman, Binjai Serbangan, Kec. Air Joman, Asahan, North Sumatra. This research is included in the quantitative research. The main characteristic is that the samples used in the experimental and control groups were taken randomly from a certain population. This research used a class XII population of 50. Population is the total number of research objects. Population is also defined as a group of people, objects, or things that are the source of sampling, a group that meets the requirements of the research problem. This research uses the PjBL strategy with the help of YouTube videos as media. Here, the research to describe the effect of project-based learning with the help of YouTube videos on class XII students. This research design is pre-test and post-test, this research design is called pre-test and post-test design.

Sample

The sample is a subgroup of the target population (Creswell, 2012). The sampling technique used is simple random sampling, according to Sugiono (2016: 120), it is said to be simple (simple) because taking sample members from the population is done randomly without regard to the strata in that population. Of the three classes, researchers took only two classes, namely one class as an experimental class and another class as a control class with the sampling technique carried out randomly based on the following steps: Made a roll of paper that said experimental and control, the rest of the roll without information. Instructed students to take one person one roll of paper at random. Those who get a roll with information then they are the sample in this study which was taught the Project-Based Learning (PjBL) learning model for the experimental class and teacher centers for the control class.

Table 1. The Students' Sample

No	Students	Group
1	25	Experimental Group
2	25	Control Group

Test

The tests used in this research were essay tests. According to (Arikunto 2010: 53), a test is a tool or process used to determine or quantify something in a given situation using established methods and regulations. The test employed in this study is the outcome of examining the formative data that was collected. Essay tests was used in this study to gather data. There are two versions of this test: the pre-test and

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The post-test. Students were required to develop a text procedure as part of the pre-test. Prior to receiving treatment, students' abilities were assessed using the pre-test. In addition, a post-test was administered to assess the students' speaking proficiency following their use of the PjBL learning model. Students who use the project-based learning (PJBL) model will be more engaged and imaginative.

This research gives learners the opportunity to create a learning group with five friends, then they are again given the opportunity to determine what topic they will choose about creating procedure text. After they determine the topic, they will be directed to bring the equipment and materials that they will create with their group, then present it by speaking with the group.

RESULTS AND DISCUSSION

This research was conducted on March 2023. The data were collected by giving test. In this research, the sample was divided into 50 students the data the effect of project-based learning with the help of YouTube videos as media on students speaking ability procedure text. In this research, the sample was divided into 2 groups' namely experimental group and control group. Each group was given the same test.

The data of the research was purposed to find out the significant effect of project-based learning with the help of YouTube videos as media on students speaking ability procedure text. The research was conducted at the twelve grade of SMA SWASTA DAERAH Air Joman. The sample was consist of 25 students as control group and consist of 25 students as experimental group.

Table 2. The Score of Pre-Test and Post-Test of Control Group

NO	Students' Initial	Score of Pre-Test (X)	Score of Post-Test (Y)	Y-X
1	AP	36	48	16
2	AR	40	44	8
3	AW	40	48	8
4	DA	36	44	12
5	DJP	36	48	16
6	EA	32	40	12
7	KM	36	48	12
8	MIA	32	40	8
9	MR	32	44	12
10	MRS	40	48	8
11	MRH	32	36	4
12	MSS	40	48	8
13	NPS	36	40	12
14	NTA	40	48	8
15	PA	32	36	4

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16	PP	40	48	8
17	RAH	36	40	8
18	RCA	36	40	4
19	RW	36	40	4
20	SFI	40	48	8
21	SS	40	48	8
22	TMF	40	48	8
23	VPA	36	40	4
24	WA	40	48	8
25	WS	36	40	4
Total		**920**	**1100**	**212**
Mean		**36.8**	**44**	**8.48**

Based on the table above, it can be seen that the Pre-Test score in the Experimental group was the highest with a score of 48 and the lowest values with a score of 32.

From the data above, it can be seen that highest and lowest values in the Pre-Test are:

a. Students who got 40 score was 10 students, they are AR, AW, MRS, MSS, NTA, PP, SFI, SS, TMF, WA.
b. Students who got 36 score was 10 students, they are AP, DA, DJP, KM, NPS, RAH, RCA, RW, VPA, WS.
c. Students who got 32 score was 5 students, they are FA, MIA, MR, MRH, PA.

From the data above, it shown that the highest and the lowest score in Post- Test was:

a. Students who got 48 score was 12 students, they are AP, AW, DJP, KM, MRS, MSS, NTA, PP, SFI, SS, TMF, WA.
b. Students who got 44 score was 3 students, they are AR, DA, MR.
c. Students who got 40 score was 8 students, they are EA, MIA, NPS, RAH, RCA, RW, VPA, WS.
d. Students who got 36 score was 2 students, they are MRH, PA

Table 3. The Score of Pre-Test and Post-Test of Experimental Group

NO	Students' Initial	Score of Pre-Test (X)	Score of Post-Test (Y)	Y-X
1	AK	36	68	32
2	ARS	28	64	36
3	AS	40	76	36
4	CM	32	56	24
5	DSM	28	68	40
6	ES	32	64	32

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7	FF	36	68	32
8	FFH	36	72	36
9	FP	32	64	32
10	HKM	40	72	32
11	HPT	36	68	32
12	ISS	40	76	36
13	JPS	36	68	32
14	LS	28	56	28
15	MAS	40	76	36
16	MDM	36	68	32
17	MP	40	72	32
18	NDM	28	64	36
19	RM	36	72	36
20	SK	32	68	36
21	SS	40	72	32
22	WA	40	76	40
23	WRA	32	64	32
24	ZCL	40	76	36
25	ZM	36	72	36
Total		**880**	**1720**	**844**
Mean		**35.2**	**68.8**	**33.76**

Based on the table above, it can be seen that the Pre-Test score in the Experimental group was the highest with a score of 76 and the lowest values with a score of 28.

From the data above, it can be seen that highest and lowest values in the Pre-Test are:

a. Students who got 40 score was 8 students, they are AS , HKM, ISS, MAS, MP, SS, WA, ZCL.
b. Students who got 36 score was 8 students, they are AK, FF, FFH, HPT, JPS, MDM, RM, ZM.
c. Students who got 32 score was 5 students, they are CM, ES, FP, SK, WRA.
d. Students who got 28 score was 4 students, they are AKS, SDM, LS, NDM.

From the data above, it shown that the highest and the lowest scorein Post- Test was:

a. Students who got 76 score was 5 students, they are AS, ISS, MAS, ZCL.
b. Students who got 72 score was 6 students, they are FFH, HKM, MP, RM, SS, ZM.
c. Students who got 68 score was 7 students, they are AK, DSM, FF, HPT, JPS, MDM, SK.
d. Students who got 64 score was 5 students, they are ARS, ES, FP, MDM, WRA.
e. Students who got 56 score was 2 students, they are CM, LS.

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Table 4. The Mean Standard Deviation Calculation Experimental Group

NO	Students 'Initial	Score (X)	X^2	Da (X-Mx)	Da^2
1	AK	68	4624	-0.8	0.64
2	ARS	64	4096	-4.8	23.04
3	AS	76	5776	7.2	51.84
4	CM	56	3136	-12.8	163.84
5	DSM	68	4624	-0.8	0.64
6	ES	64	4096	-4.8	23.04
7	FF	68	4624	-0.8	0.64
8	FFH	72	5184	3.2	10.24
9	FP	64	4096	-4.8	23.04
10	HKM	72	5184	3.2	10.24
11	HPT	68	4624	-0.8	0.64
12	ISS	76	5776	7.2	51.84
13	JPS	68	4624	-0.8	0.64
14	LS	56	3136	-12.8	163.84
15	MAS	76	5776	7.2	51.84
16	MDM	68	4624	-0.8	0.64
17	MP	72	5184	3.2	10.24
18	NDM	64	4096	-4.8	23.04
19	RM	72	5184	3.2	10.24
20	SK	68	4624	-0.8	0.64
21	SS	72	5184	3.2	10.24
22	WA	76	5776	7.2	51.84
23	WRA	64	4096	-4.8	23.04
24	ZCL	76	5776	7.2	51.84
25	ZM	72	5184	3.2	10.24
	∑	**1720**	**119.104**	**0**	**768**
	Mean = 68.8				
	∑ X^2 = 119.104				

Table 5. The Mean Standard Deviation Calculation Control Group

NO	Students 'Initial	Score (Y)	Y^2	Db (Y-MY)	Db^2
1	AP	48	2304	4	16
2	AR	44	1936	0	0
3	AW	48	2304	4	16
4	DA	44	1936	0	0
5	DJP	48	2304	4	16
6	EA	40	1600	-4	16
7	KM	48	2304	4	16
8	MIA	40	1600	-4	16

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9	MR	44	1936	0	0
10	MRS	48	2304	4	16
11	MRH	36	1296	-8	64
12	MSS	48	2304	4	16
13	NPS	40	1600	-4	16
14	NTA	48	2304	4	16
15	PA	36	1296	-8	64
16	PP	48	2304	4	16
17	RAH	40	1600	-4	16
18	RCA	40	1600	-4	16
19	RW	40	1600	-4	16
20	SFI	48	2304	4	16
21	SS	48	2304	4	16
22	TMF	48	2304	4	16
23	VPA	40	1600	-4	16
24	WA	48	2304	4	16
25	WS	40	1600	-4	16
	$\sum$	**1100**	**48848**	**0**	**448**
	Mean = 44				
	$\sum Y^2$ = 48848				

Table 6. The Data for Finding Product Moment Colleration

NO	Students' Initial	X_1	X_1^2	X_2	X_2^2	Y (X_1+X_2)	X_1Y	X_2Y	Y^2
1	AK	36	1296	36	1296	72	2592	2592	5184
2	ARS	28	784	40	1600	68	1904	2720	4624
3	AS	40	1600	40	1600	80	3200	3200	6400
4	CM	32	1024	36	1296	68	2176	2448	4624
5	DSM	28	784	36	1296	64	1792	2304	4096
6	ES	32	1024	32	1024	64	2048	2048	4096
7	FF	36	1296	36	1296	72	2592	2592	5184
8	FFH	36	1296	32	1024	68	2448	2176	4624
9	FP	32	1024	32	1024	64	2048	2048	4096
10	HKM	40	1600	40	1600	80	3200	3200	6400
11	HPT	36	1296	32	1024	68	2448	2176	4624
12	ISS	40	1600	40	1600	80	3200	3200	6400
13	JPS	36	1296	36	1296	72	2592	2592	5184
14	LS	28	784	40	1600	68	1904	2720	4624
15	MAS	40	1600	32	1024	72	2880	2304	5184
16	MDM	36	1296	40	1600	76	2736	3040	5776
17	MP	40	1600	36	1296	76	3040	2736	5776
18	NDM	28	784	36	1296	64	1792	2304	4096
19	RM	36	1296	36	1296	72	2592	2592	5184

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20	SK	32	1024	40	1600	72	2304	2880	5184
21	SS	40	1600	40	1600	80	3200	3200	6400
22	WA	40	1600	40	1600	80	3200	3200	6400
23	WRA	32	1024	36	1296	68	2176	2448	4624
24	ZCL	40	1600	40	1600	80	3200	3200	6400
25	ZM	36	1296	36	1296	72	2592	2592	5184
	∑	**880**	**31424**	**920**	**34000**	**1800**	**63856**	**66512**	**130368**

X_1 = The Score of Experimental Group Test

X_2 = The Score of Control Group Test

Analyzing the Data by Using T-Test Formula

From table 4.xx through 4.xxx can be analyzed that

1. The highest and the lowest score of the pre-test control group were 40 and 32 score, while the highest and the lowest score of the post-test control group were 48 and 36 score, so it was higher than in pre-test.
2. The highest and the lowest score of the pre-test experimental group were 40 and 28 score, while the highest and the lowest score of the post-test experimental group were 76 and 56 score, so it was higher than in pre-test.
3. The total score of pre-test experimental group is 880 and in pre-test of control group is 920. So the total score of pre-test of control group is higher than the pre-test of experimental group.
4. The total score of post-tests of experimental group is 1720 and in post-test of control group is 1100 So the total score of post-tests of experimental group is higher than the post-test of control.

The data was analyzed by t-test, finally the significant of the sum, the t-test and t-table would be compared with the degree of freedom (df) of the test, the test as follow:

$$t = \frac{M_x - M_y x^2}{\sqrt{\left(\frac{Da^2 + Db^2}{N_x + N_{y-2}}\right)\left(\frac{1}{N_x} + \frac{1}{N_y}\right)}}$$

Where:

Mx = Mean of experimental group

My = Mean of control group

Da = The standard deviation score of experimental group

Db^2 = The standard deviation score of control group

Nx = The total number sample of experimental group

Ny = The total number sample control group

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Have known that:

Mx: 68.8

My: 44

Da²: 768

Db: 448

N: 25

N: 25

So, that formula is used to analyze the data which is shown below:

$$t = \frac{68{,}8 - 44}{\sqrt{\left(\frac{768 + 448}{25 + 25 - 2}\right)\left(\frac{1}{25} + \frac{1}{25}\right)}}$$

$$t = \frac{24{,}8}{\sqrt{\left(\frac{216}{48}\right)\left(\frac{2}{25}\right)}}$$

$$t = \frac{24{,}8}{\sqrt{(25{,}33)\,(0{,}08)}}$$

$$t = \frac{24{,}8}{\sqrt{2{,}0264}}$$

$$t = \frac{24{,}8}{1{,}42}$$

$$t = 17{,}4$$

So, t-test or t- $_{counting}$ = 17,4

To know degree of freedom (df) is used the formula :

$N_1 + N_2 - 2$

Df = 25-25-2

Df = 48...?

Df is shown in the list of t-table out df is:

So Distribution of table 48 = 2.01

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The Hypothesis Testing

The hypothesis testing is, the basic criteria for drawing the mathematical predictions about situation. It is basically concentrates particular result about a particular situation. After analyzing the data into T-test, the calculation of the score by using t- test for degree of freedom (df) 48 at level significance 0,05 where the T-test critical value is 2,01. The result of computing the T-test shown that T-test is higher than T-table- or it can be seen that T-test> T-table with a significant value of 0.05 and df is 48, with a t-table value of 2.01.

So, this research had been successfully, Ha is accepted and it revealed that hypothesis using project-based learning in speaking procedure text is affective because using project-based learning.

Discussion

This research was conducted to determine the effect of project-based learning in students speaking Skill between the experimental class and the control class in class XII English learning material on procedure text.

As for things examined in this study is about students' writing ability. The form of the instrument used in testing students' writing skills in the form of an essay test Prior to use, this instrument was first questioned tested by content validity. With matter meet these criteria, can be used as an instrument in research after test items, all items meet the criteria as valid and reliable instrument. After that, research was carried out using the picture sequences strategy then the results of research can be known. Research result it is known that the average learning outcomes of students who apply the project-based learning is 68,8. While the average yield student learning in classes that de not apply the project-based learning, namely 44. The average value of learning outcomes proves that in classes that apply the project-based learning more high level of the class that does not apply project-based learning.

From the statistical measurement above shown that Ho (Null Hypothesis) is not accepted or rejected; Ha (Alternative Hypothesis) is accepted, because value of leant is higher than of t-table it means:

1. "There is significant in students speaking procedure text using project-based learning between pre-test and post-test in class XII " Research result it is known that the average learning outcomes of experimental class, from score pre-test and post-test. Score Pre-test students who apply the project-based learning is 35,2. While the score post-test who apply the project-based learning students is 68,8.
2. "There are significant differences in students speaking using project-based learning and without project-based learning of grade XII at SMA Swasta Daerah Air Joman in 2023/2024 Academic Year". The results obtained are T test> T-table (0,05) with df 48. T-test 17,4 > df 2,01. This means, there is a significant difference in the value of the results student learning between classes that apply the project-based learning and those that do not apply the project-based

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learning. So, the project-based learning is effective and significant on the abilityto write English procedure text material.

CONCLUSION

There are significant differences in students speaking using project-based learning and without project-based learning of grade XII at SMA Swasta Daerah Air Joman in 2023/2024 Academic Year". The results obtained are T test> T-table (0,05) with df 48. T-test 17,4 > df 2,01. This means, there is a significant difference in the value of the results student learning between classes that apply the project-based learning and those that do not apply the project-based learning. So, the project-based learning is effective and significant on the speaking ability English procedure text material.

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