THE EFFECTIVENESS OF FLIPPED CLASSROOM MODEL BY USING GOOGLE CLASSROOM APPLICATION TO INCREASE STUDENTS' LISTENING SKILL

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ARTICLE INFO	ABSTRACT
	The purpose of this study was to find out whether the Flipped Classroom model with the Google Classroom application increase student learning outcomes in listening skills at SMKN 6 Bone. This study used a quasi-experimental method with a nonequivalent control group designed and applied in two classes with two different learning models. Experimental classes with the Flipped Classroom model using the Google Classroom application and control classes with the Teacher Centered Learning model. The population of this study was 114 students of class X of SMKN 6 Bone, while the sample consisted of 60 students from the initial three classes who were given pretests to determine which classes had balanced abilities to be used as experimental classes and control classes. The research process is carried out with the following procedures: giving pretest, applying treatment, and giving posttest. From the results of the posttest descriptive analysis, it is known that there are significant differences between the control class and the experimental class. This is evident from the from posttest result with p-value 0.03 (sig. <0.05). In addition, based on inferential gain analysis, it is known that p-value = 0.02 which means there are significant differences from the results of the pretest and posttest. So, it was concluded that the use of the Flipped Classroom model with Google Classroom application is effective to increase students' listening skills. *This is an open access article under the CC BY-SA license.*

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INTRODUCTION

The rapid development of information and communication technology has a major influence on the development of the learning process in the world of education. This indirectly requires teachers to be more creative and innovative in teaching in order to adjust

to the needs of today's students. In addition to ever-changing and evolving technologies, how effective learning processes are for students also changes over time. In the learning process there are many factors that can effect the achievement of learning goals. One of the factors that play an important role is the model or learning technique. The selection of learning models should be appropriate for the creation of an effective learning process. If the selected learning model does not suit the needs of students, it could be that the benefits obtained by students while studying will be less than optimal. For this reason, students need a pedagogical learning model as well as an instructional strategy.

Pedagogy not only covers the teaching approach and relationships between students and teachers but also includes and informs educational theory, personal learning styles, assessments, and relationships inside and outside the classroom (Waring et al, 2015). Based on this understanding, Flipped Classroom seems to be used as one of the pedagogical learning model. Flipped Classroom is a form of blended learning in which students learn new materials at home and what was once homework is now done in the classroom with teacher guidance and interaction with students, rather than teaching. Students work will be discussed and presented (Walsh & Nwosisi, 2016).

The essence of this learning model is to reverse the process of delivering material. The process of delivering material by teachers is usually done at face-to-face in the classroom. But for this learning model, the material will be delivered before the schedule of the subjects. The Flipped Classroom learning model aims to streamline time so that teachers will find it easier to explore the material with students rather than just is cussing the material one by one. In this learning model, the teacher will prepare teaching materials for students to be studied first. The teaching material in question can be an audio, video, Power Point, and other sources. Given the rapid development of technology today, teachers can use one of the many technologies available to provide and access teaching materials. One application that can be used as a container so that students can easily access teaching materials is Google Classroom. Google Classroom can be said to be one of the best online platforms in education that is easily accessible, through a computer, laptop, or mobile phone. The combination of the Flipped Classroom learning model and the Google Classroom application illustrates that learning can be done in two ways: physically in the classroom and learning outside the classroom. The features available in Google Classroom are perfect if integrated in learning activities through the Flipped Classroom learning model (Hariri & Said, 2020).

The use of the Flipped Classroom learning model with the Google Classroom application can be used to measure students' learning outcomes. Such as reading, writing, listening, speaking and others. This study will focus on how students' outcomes in listening skills after using the Flipped Classroom learning model with the Google Classroom application at the Vocational High School level. The location of this research will be located at SMKN 6 Bone.

RESEARCH METHOD

The study used quasi experimental research with the nonequivalent control group research design. According to Hastjarjo (2019), quasi-experimental are experiments that do not place the subject, either into an experimental group or a random control group. The first step taken by the researcher is took three classes as samples then provide a pretest for each class. The reason why researcher took this step is because quasi experimental was a non-rigid method of looking at the group. In principle, this method is a method that states that both groups must have balance or similarity so that the lesson method used can validly find pure results. According to Jhangiani et al (2015), the nonequivalent control group can take steps to ensure that the selected group has almost the same similarities.

In addition, in scientific work conducted by Setia (2014) it also showed that after being given pretests to both groups, t-tests would also be performed. It is quite possible to choose more than one class in this study to see which group test results can be compared based on pretest results. Conclusion, it can be said that it is no problem to take more than one group because if there is a difference that is very far from the pretest results, it can take other groups again so that the results obtained become purer. The research instrument is a written test of the student's pretest and posttest scores. The results of the study were obtained by analyzing the results of student tests with One Way ANOVA through SPSS application. According to Libraries (2022), One Way ANOVA (Analysis of Variance) is a way of comparing two or more independent groups to prove statistically that the population differs significantly.

RESULT AND DISCUSSION
Result
The Result of Pretest Score

Table 1.One Way Anova Test Of Pretest Result

ANOVA					
PRETEST					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	15791.675	2	7895.838	95.705	.000
Within Groups	5362.604	65	82.502		
Total	21154.279	67			

After the ANOVA test is carried out, it was found that the calculated F value is 95.705 and the p-value is 0.000, which means it lower than 0.05 (sig. <0.05), it can be concluded that there was a significant difference from the pretest results of the three groups. Next step, researcher took Post-Hoc Test to know which group which has significant differences.

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Table 2 post hoc test of pretest result

							95% Confidence Interval	

Multiple Comparisons

Dependent Variable: PRETEST

	(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
LSD	OTKP	TKJ	-1.141	2.771	.682	-6.67	4.39
		TKR	31.035*	2.655	.000	25.73	36.34
	TKJ	OTKP	1.141	2.771	.682	-4.39	6.67
		TKR	32.175*	2.689	.000	26.81	37.54
	TKR	OTKP	-31.035*	2.655	.000	-36.34	-25.73
		TKJ	-32.175*	2.689	.000	-37.54	-26.81
Tamhane	OTKP	TKJ	-1.141	2.439	.954	-7.22	4.94
		TKR	31.035*	2.652	.000	24.44	37.63
	TKJ	OTKP	1.141	2.439	.954	-4.94	7.22
		TKR	32.175*	2.850	.000	25.10	39.25
	TKR	OTKP	-31.035*	2.652	.000	-37.63	-24.44
		TKJ	-32.175*	2.850	.000	-39.25	-25.10

The table above is a further test after the ANOVA test, after showing the results that there are significant differences from the pretest results. From the table was found that class X TKJ and X OTKP are homogeneous. It can conclude from the table that for comparison between class X OTKP and X TKJ has a p-value of 0.682 which is higher than 0.05 (sig. > 0.05). For comparison the pretest value of class X OTKP and X TKJ is 0.000 which is lower than 0.05 (sig. <0.05). In class X TKJ with X TKR has the same p-value 0.000 which is lower than 0.005 (sig. < 0.05). Therefore, it can conclude that the p-value of class X TKR has a far difference from class X OTKP and X TKJ. From these results, the researcher decided to establish class X OTKP as the control class and X TKJ as the experimental class.

The Result of Posttest Score

Table 3 ANOVA Test of posttest score

ANOVA

POSTTEST

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	507.431	1	507.431	10.080	.003
Within Groups	2064.011	41	50.342		

Total	2571.442	42			

In the ANOVA test from posttest result in table above, it was found that the calculated F value is 10,080 and the p-value is 0.03 which is smaller than 0.05 (sig. < 0.05). Then it can be concluded that the posttest results of class X OTKP and X TKJ have very significant differences.

Table 4 Anova Test of Gain Score

ANOVA					
Gain					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.184	1	.184	10.784	.002
Within Groups	.699	41	.017		
Total	.883	42			

At the end, an inferential gain test or hypothesis test is performed. Based on the test results, it was found that calculated F value is 10.784 and the p-value was 0.002 which is smaller than 0.05 (sig. < 0.05). From statistical calculations and descriptions, it can be concluded that the gains from the control class and the experimental class have significant differences. So, it can be said that the speed in increase learning outcomes in the experimental class is faster than the control class. In more detail, significant differences can be seen through the following chart:
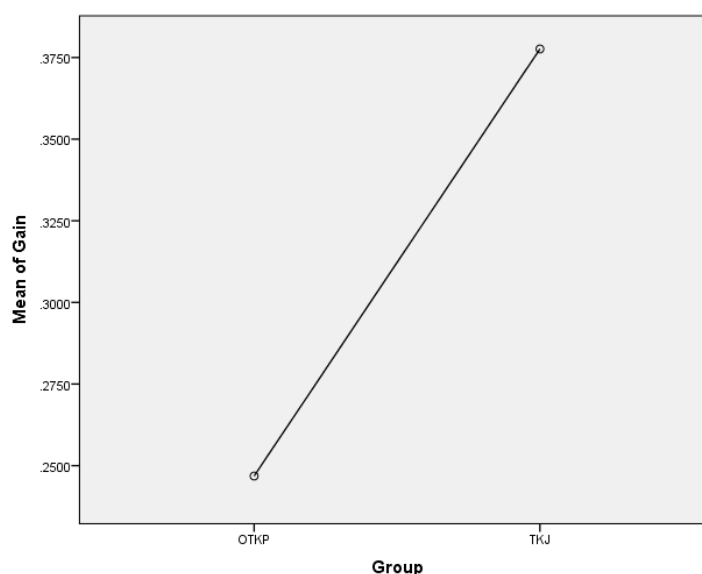

Figure 1 Mean Plots Of Gain Score

From the mean plots above, visually it can be seen that the gain results from control class and experimental class have significant differences. The gain of experimental class appears to be more effective than the gain of control class.

Discussion

So, it can be said that the speed in increase learning outcomes in the experimental class is faster than the control class. Through these results, the theory of Jhonson (2013), which says that Flipped Classroom as a strategy that educators can provide by minimizing the amount of direct instruction in their teaching practice while maximizing interaction with each other is proven to apply. Not only that, the theory that the use of Google Classroom in the teaching and learning process as an alternative to help teachers in managing, measuring, and enriching the learning experience of students and teacher in increase student learning outcomes according to those quoted from Google of Education is proven to be correct and in accordance with the results of the study. In addition, the theory presented by Hariri & Said (2020), about the features available in the Google Classroom application that are very suitable if integrated in learning activities through Flipped Classroom is also proven to be true.

CONCLUSION

Based on the findings and discussions in the previous chapter, it can be concluded that in the teaching and learning process the selection of learning models plays an important role in achieving the goals to be achieved. Based on the results of this study, it was also concluded that the application of the Flipped Classroom model by using Google Classroom application has proven effective in improving student learning outcomes, especially listening skills. This can be seen from the results of the study which explains that the control class and the experimental class have the same initial ability, judging from the mean pretest value of each class through the One Way ANOVA test.

At the end, after the application of treatment and posttest administration, it was seen that the experimental class had a better speed in increasing their listening ability compared to the control class. This is evidenced by the mean value and the p-value which have significant differences. Not only that, the decision was also made based on the results of the gain analysis between the two classes which also showed a p-value smaller than 0.05. Therefore, it was concluded that the Flipped Classroom model by using Google Classroom application has proven effective in increase student listening skills.

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