

## FLIPPED CLASSROOM LEARNING MODEL ON PJOK LEARNING OUTCOMES VIEWED FROM LEARNING MOTIVATION

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**Abstract.** The application of learning models that are not in accordance with environmental conditions is one of the factors for students not being able to observe the material properly in the learning process in class, thus making low student learning outcomes. The purpose of this study is to determine the improvement of PJOK learning outcomes through a learning model. This research is a pseudo-experiment and archetype of 2x2 factorial design. The sampling technique used purposive sampling of 76 students. Data analysis with pre-test post-test control group design (gain score). Test the prerequisites of analysis through normality and homogeneous tests. The results of the descriptive analysis showed that students who followed the Flipped Classroom learning model had a pre-test score of 41.32 with a poor category and a post-test score of 77.11 with a very good category, while students who followed the STAD learning model had a pre-test score of 24.87 with a less good category and a post-test score 63.55 in the good category. It was concluded that the Flipped Classroom learning model is more effective than the STAD learning model.

**Keywords:** Flipped classroom, Learning outcomes, PJOK

### I. INTRODUCTION

Assessment is an activity based on the relationships involved in the flow of information between teachers and students. A teacher is an educator who has the skills to manage study activities commensurate with his profession and is a guide who directs students to understand the construction of broader and more detailed insights, while students are a group of people who seek knowledge and receive what is needed. lesson. Students, educators/teachers, study objectives, topic materials, study references, media, and evaluation as benchmarks for determining the results of an assessment process are components that must be considered in carrying out assessment activities.

In the current era, an effective assessment reference is one that is able to provide students with a lot of freedom to continue to contribute to the assessment process. The teacher's position is as a facilitator and will help students if they experience problems that the students cannot bear. This assessment reference is good because it is able to create a conducive atmosphere between teachers and students during activities related to the assessment process. The position of the assessment reference in the assessment activity is very important, therefore teachers must pay attention and choose the assessment reference carefully before including it in the assessment process. As a result, a teacher applies pedagogical skills effectively to achieve learning gains from the assessment process. Research media refers to information technology such as computers, smartphones, and other similar devices used besides the internet.

Learning motivation that comes from within students to understand the material provided by the teacher fills an

important position in achieving the study objectives. Motivation to learn is an individual's willingness or influence in pursuing something. Therefore, teachers devote sufficient attention to providing student learning motivation; whether students are motivated to study well or poorly depends on internal and external elements. Therefore, before passing on the construction of ideas, research educators understand the level of student motivation in educational skills with the aim that the data material understood can be generally accepted by students.

As reference material for teachers to continue preparing for the next meeting or presenting new material to students, learning gains are very useful in the assessment process. Thus, a variable that frames the degree of schooling that needs special attention is the choice of preparation model commensurate with the material provided. Student learning outcomes can be increased by choosing appropriate assessment references and involving students in assessment activities.

Utilization of rapidly developing innovations is followed by supervision of recipients and good direction in coordinating positive use. Observations and unstructured interviews with a PJOK teacher at SMP N 5 Abang, I Made Yoga Setiawan, S.Pd., on July 7 2022, obtained the following conclusion: that the learning gains achieved by students have decreased, because students are not ideally using cellphones. In looking for materials while studying, students continue to access a lot of virtual entertainment and web-based games during school breaks, which results in no learning gains made by students in PJOK subjects that were possible in the last lesson. In the semester evaluations that have been completed,

there are still many students who are below normal or KKM. In the PJOK assessment, the minimum standard score is 70 to achieve fulfillment, the final number of students depends on their PAT achievement in class VIII A with 36 students completing 9 people (25%), VIII B the number of students is 36 people. 7 students (20%) completed, 35 students from VIII C completed 11 (31%), and 36 students from VIII D completed 10 (28%). The assessment reference used by educators ideally has not provided space for students to convey skills and has not implemented the flipped classroom assessment reference as an advancement in education. The teacher also said that students' motivation has been lacking in carrying out the assessment. Assets other than subject readings and worksheets, as well as many more students who often forget the school assignments that have been given by educators.

Remembering the previous study regarding the reference for the Flipped Classroom study in the review entitled Flipped Classroom Study Framework Plan Utilizing GOOGLE LMS Study Room for ASY-SYADZILI IT Vocational School Students for PJOK Subjects (Mubrok Ahmad, 2022) with the consequences of post-preliminary field exploration of the effects implemented on 26 class students X Ash-Syadzili IT High School encompasses a very strong output, which is to obtain students who complete KKM, which is 100 percent. The refinement of the assessment framework plan based on the flipped classroom using the Google Study Hall LMS media at SMA IT Asy-Syadzili was effectively carried out in developing skills and enabling positive reactions from both educators and students. Then, Yahya (2021) implied that the flipped classroom assessment reference was able to increase physical education students' learning gains in didactic athletic methods courses based on research findings and discussions. Apart from that, research from Wiku (2020) in his review entitled Flipped Classroom Learning Configuration Utilizing a Guarantee Model explains that the consequences of reviewing exam subjects imply that all students (100 percent) have the option to complete the KKM (Least Dominance Measure). / Rule of Least Authority. As a result, it can be concluded that PJOK is able to gain great benefits from developing a flipped classroom-based assessment design. According to research by Aridhotul Haqiyah et al., al. 2021) the flipped study hall model is coordinated with web-based study stages and biomechanical research records to continue to develop pencak silat learning outcomes during the coronavirus pandemic with research results. The consequences of the investigation imply that the flipped study hall model coordinated with the internet study stage jointly influences the continued development of pencak silat learning acquisition ( $P < 0.05$ ). Apart from that, the best method for increasing pencak silat learning gains is a flipped classroom that is integrated with an online assessment platform and biomechanical analysis videos.

As a preferred answer to the problem previously explained. Able to encourage educators to develop creative educational skills to be able to work together to develop students' abilities to utilize innovation and continue to develop student learning outcomes. An educator's effort is to choose an assessment

reference that combines these things with the teacher carrying out an assessment reference that upholds the objectives and study materials that have been determined. Indrawati (2011:16) explains that teachers are able to apply appropriate assessment reference treatments to determine the strategies, techniques and assessment media needed in the assessment process. The choice of answers to problems that will be implemented during the skill development period is desired to be able to create energy and animation in students, so that it can have an impact on learning outcomes. The STAD reference and the flipped classroom assessment reference can both be used to increase motivation and learning outcomes in the PJOK assessment process. These two assessment models were chosen because they wanted to be able to improve each student's construction of the material. Students are able to actively learn. The Flipped Study Hall study reference is a regular study reference with alternating requests, where materials are mostly exchanged in class and assignments or school assignments are given for school work. Students can study at home, and assignments and evaluations are completed in class on the specified day and time. Worth Usmadi & Ergusni (2019).

STAD is a useful assessment procedure, it is an assessment movement carried out by students in groups, to understand an unbiased scheduled assessment, the easiest and most enjoyable STAD reference, where each group has heterogeneous scholastic abilities, so that in one group one can students with high capacity, two students with medium capacity, and one student with low capacity. Considering the consequences of this picture and the side effects of previous tests that imply improvement through assessment with reference to the Flipped Classroom assessment. Next, experts need to know the variations between the Flipped Classroom assessment reference and the STAD reference in terms of learning motivation and learning achievement with the title "The Influence of the Flipped Classroom assessment reference and Student Teams Adviciement Division (STAD) on the PJOK Assessment of Free Linkage Dangers on the Level of Learning Motivation of Class VIII Students SMP N 5 Abang Karangasem".

## II. RESEARCH METHODS

### 1. Data Collection Method

The variety of information in this research was raised through the mentoring stages: (1) administering learning motivation trials to students in sample classes to find out the classification of learning motivation (2) conducting educational skills (exams) and (3) giving posttests to students in all subsequent sample classes directs the investigation by applying tests of learning acquisition and learning motivation

### 2. Data Analysis Method

The data obtained is tested first, before hypothesis testing is carried out. This first test was carried out to determine whether the data collected could be assessed using statistical metrics or not. The previous tests were (1) Normality Test, (2) Variant Homogeneity Test, and (3) Hypothesis Test.

### a. Test Requirements

#### 1) Test the Normality of Data Distribution

The data distribution normality test ensures that the sample truly comes from a normally distributed population, allowing hypothesis testing to be carried out. SPSS version 16 can be used to carry out normality tests based on the Komogrov-Smimov Test (Syafri, 2020). If the level of significance found continues to be from 0.05, the data is normally distributed; otherwise, the data is not normally distributed.

#### 2) Test Homogeneity of Variance

The homogeneity of variance test between groups is used to determine whether a group (categorical data) has the same variance among its members (Syafri, 2020). Tests of homogeneity of variance between groups are also applied to check whether the variations seen in hypothesis testing are caused by group variations. Applying Levene's Test of Equality of Error Variance (Candiasa, 2021), value the homogeneity of variance between groups. If the significance level achieved continues to be 0.05, the sample variance is the same (homogeneous), otherwise the sample variance is not the same (not homogeneous).

### b. Test Hypothesis

After completing the prerequisite hypothesis test, the process continues with a two-way ANOVA hypothesis test. This technique is used to refine ideas discovered through research. When it comes to data, the following should be considered:

1) H0: There is no difference in learning outcomes on the dangers of promiscuity between students who follow the flipped classroom learning model and students who follow the STAD learning model on the dangers of promiscuity material for class VIII SMP Ni 5 Abang.

H1: There are differences in learning outcomes regarding the dangers of promiscuity between students who take part in flipped classroom learning and participants who follow the STAD learning model on the material on the dangers of promiscuity in class VIII SMP N 5 Abang.

1) H0: There is no difference in students who follow the flipped classroom learning model and the STAD learning model in the high learning motivation category.

H1: There are differences in students who take part in the flipped classroom learning and the STAD learning model in the high learning motivation category.

2. H0: There is no difference in students who follow the flipped classroom learning model and the TAD learning model in the low learning motivation category.

H1: There are differences in students who follow the flipped classroom learning model and the STAD learning model in the low learning motivation category.

By applying the t-test and significant threshold = 0.05, accept H0 if  $t_{count} \leq t_{table}$  and reject H0 if  $t_{count} > t_{table}$ . In addition, the SPSS for Windows program was used to assess the hypotheses in this study. In this research, the hypothesis is verified by applying a two-way ANOVA analysis test, namely covariance analysis which continuously involves one dependent variable and a covariate variable. The method

above is used to compare several data sets, all of which are ratios or intervals.

## III. RESULTS AND DISCUSSION

### Research Results

#### 1. Description of Research Data

This research was carried out in class VIII of SMP Negeri 5 Abang in the 2022/2023 academic year, with classes VIII A and VIII B as the experimental group and classes VIII C and VIII D as the control group. The experimental group in this study received treatment in the form of a Flipped Classroom assessment reference, while the control group received treatment in the form of a STAD reference. From March 7 to May 5 2023, both groups received treatment. The research project was carried out in nine meetings, the first meeting carried out a learning motivation test to determine high and low learning motivation groups, the second meeting carried out an initial test (pretest), the third meeting to the eighth meeting carried out treatment eight times. in each group, and the ninth meeting carried out a final test (posttest) on PJOK learning outcomes regarding the dangers of promiscuity. The PJOK post test learning gains regarding the risks of promiscuity were then assessed using SPSS 26.0 for Windows.

Table 1 implies the value of PJOK learning gains on the dangers of promiscuity in both the control group and the experimental group.

Table. 1 Summary of Data on PJOK Learning Acquisition Dangerous Materials from Promiscuit

Descriptive Statistics			
Variable	The number of students	Mean	Std. Deviation
Experimental group	38	0,62	0,10
Control group	38	0,52	0,09

The average value of the experimental group was 0.62 based on data from the control and experimental groups, while the average value of the control group was 0.52. The standard deviation for the experimental group is 0.10, but the standard deviation for the control group is 0.09. In addition to a summary of data analysis of PJOK learning gains due to promiscuity, the gain histogram in this study reveals the variance in the average gain of the experimental and control groups. Statistics 1 and 2 illustrate this.

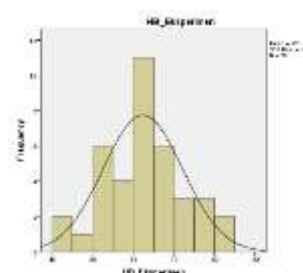


Fig. 1 Histogram of Experimental Group Learning Gain Data (Accompanied by Normal Curve)

Based on Figure 1, the histogram in the experimental group enabled an average gain of 0.62 with a total of 38 students.

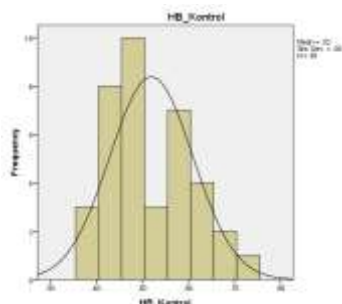


FiG. 2 Histogram of Control Group Learning Acquisition Data (Accompanied by Normal Curve)

Based on Figure 2, the histogram in the control group enabled an average gain of 0.52 with a total of 38 students.

## 2. Classic Assumption Test

The classical assumption test is carried out before evaluating the hypothesis in the form of a preliminary test of the data distribution in the form of a normality test of data distribution and a homogeneity of variance test. The following is the assessment of the normality of data distribution and the homogeneity of variance in learning outcomes regarding risk of promiscuity.

### a. Data Distribution Normality Test

PJOK's learning outcomes assess data on the risk of promiscuity and undergo a normality test to ensure that the data distribution is normal. Testing the fairness of the use of information is carried out by collecting views about the study reference, study motivation, and the relationship between the study reference and the study motivation. Applying SPSS 26.0 for Windows and Shapiro-Wilk statistics, a significance level of 0.05 was imposed to test the normality of data distribution. The measurable speculations attempted in the reasonableness test are as follows. H0: information dissemination is usually widespread. Ha: appropriation of information is not circulated regularly. The testing standard used is to accept H0 by assuming that likelihood esteem (p) > 0.05 and reject H0 by assuming likelihood esteem (p) < 0.05.

Table 2 .Obtained Data Distribution Normality Test

Gorup of Data		Shapiro-Wilk			$\alpha$	Information
		Statistic	df	Sig.		
Gain score normalized learning outcomes	A1	0,976	38	0,577	0,05	Normal
	A2	0,961	38	0,208	0,05	Normal
	B1	0,954	38	0,125	0,05	Normal
	B2	0,956	38	0,145	0,05	Normal
	A1B1	0,930	19	0,171	0,05	Normal
	A1B2	0,958	19	0,543	0,05	Normal

$$H_1(1) : [\mu_1 Y] \neq [\mu_2 Y]$$

A2B1	0,950	19	0,401	0,05	Normal
A2B2	0,940	19	0,269	0,05	Normal

Table 2 implies that for all groups of data checked for normality, the probability (p) value of the Kolmogorov-Smirnov statistic continues to be greater than 0.05, implying that H0 can be accepted. This implies that the distribution of PJOK learning acquisition data regarding the dangers of promiscuity is normally distributed in each data group.

### b. Homogeneity of Variance Test

Grouping of assessment references, learning motivation, and the relationship between assessment references and learning motivation is used to carry out a homogeneity of variance test. The homogeneity of variance test between groups was carried out by applying Levene's Test of Equality Error Variance applying the SPSS 26.0 for Windows application with a significance of 0.05. The statistical hypothesis tested in the homogeneity test is as follows.

H0: the variance of each group is the same (homogeneous).

Ha: the variance in each group is not the same (variance is not homogeneous).

Accept H0 if the probability value (p) continues to be 0.05 and reject H0 if the probability value (p)

less than 0.05. Table 4.3 displays the results of homogeneity of variance from testing.

Table 3. Results of the Homogeneity of Variance Test

Nu	Normalized Gain Score Data Group	Levene Statistic	Sig.	$\alpha$	Conclusion
1.	PJOK learning outcomes between learning models	0,019	0,890	0,05	Homo-gen
2.	PJOK learning outcomes between learning motivation	2,343	0,130	0,05	Homo-gen
3.	PJOK learning outcomes between learning models and learning motivation	1,848	0,146	0,05	Homo-gen

Based on Table 3, the experimental consequences of homogeneity of fluctuations for collection assessment reference, assessment motivation, and the relationship between assessment reference and assessment motivation imply the possibility of esteem (p) in Levene's measurement(p) > 0.05 with the aim that H0 is recognized. This implies that each group has a homogeneous variance

## 3. Hypothesis Testing

### a. Testing Hypotheses H1 and H2

Testing the first and second hypotheses applies two-way ANOVA.

Based on the results of the two-way ANOVA, the results of the first and second hypothesis tests are described as follows.

#### 1) Test Hypothesis 1

The main speculation raised in this review is that there are variations in the results of the PJOK assessment due to the risk of carelessness between students who follow the Flipped Classroom assessment reference and students who follow the



STAD reference. Therefore, speculation can actually be described as follows.

There is no difference in PJOK learning outcomes regarding the dangers of promiscuity between students who follow the Flipped Classroom learning model and students who follow the STAD learning model.

$H_0(1): [\mu_1 Y] = [\mu_2 Y]$ : There are differences in PJOK learning outcomes regarding the dangers of promiscuity between students who follow the Flipped Classroom learning model and students who follow the STAD learning model.

The speculation that will be tried to measure is  $H_0$ . The opposition model is  $H_0$  assuming the level of importance for the F measurement is below 0.05. Considering the two-way ANOVA outline introduced in Table 4.4, the F measurement value is 36.473 with an importance level of 0.000 below 0.05, so  $H_0$  is rejected. In this way, it is possible to vary the results of the PJOK assessment based on the risk of carelessness between students who follow the Flipped Classroom assessment reference and students who follow the STAD reference.

## 2) Test Hypothesis 2

The second hypothesis of this research is that PJOK learning gains on the dangers of promiscuity in class VIII students at SMP N 5 Abang are influenced by assessment references and learning motivation. Therefore, speculation can actually be described as follows.

$H_0(2)$ : Interaction  $A \times B = 0$ : there is no interaction between learning model and learning motivation on PJOK learning outcomes regarding the dangers of promiscuity for class VIII students at SMP N 5 Abang.

$H_a(2)$ : Interaction  $A \times B \neq 0$ : there is an interaction between the learning model and learning motivation on PJOK learning outcomes regarding the dangers of promiscuity in class VIII students at SMP N 5 Abang.

The speculation that will be tried in earnest is  $H_0$ . The opposition model is  $H_0$  assuming the level of importance for the F measurement is below 0.05. Based on the two-way ANOVA overview introduced in Table 4.4, the F measurement value is 4.690 with an importance level of 0.034 which is below 0.05, so  $H_0$  is rejected. In this way, it is possible to link the assessment reference and learning motivation to PJOK learning achievement to the risk of carelessness in class VIII students at SMP N 5 Abang.

## 4. Testing Hypothesis H3

The third speculation that has been put forward in the hypothetical analysis explains that there can be variations in the results of the PJOK assessment due to the risk of free association of students who follow the Flipped Study Hall assessment reference and the STAD reference in the classification of high learning motivation. Speculation testing applies the t test, namely the Free Sample t Test with the help of SPSS 26.0 for Windows. The factual speculations attempted in the speculation test are as follows.

$H_0(3): [\mu_{A1B1} Y] = [\mu_{A2B1} Y]$ : There is no difference in PJOK learning outcomes regarding the dangers of promiscuity for students who follow the Flipped Classroom learning model and the STAD learning model in the high learning motivation category.

$H_a(3): [\mu_{A1B1} Y] \neq [\mu_{A2B1} Y]$ : There are differences in PJOK learning outcomes regarding the dangers of promiscuity for students who follow the Flipped Classroom learning model and the STAD learning model in the high learning motivation category.

The testing capability used is to reject  $H_0$  if the probability value ( $p$ ) < 0.05 and accept  $H_0$  if the probability value ( $p$ ) > 0.05. The results of the analysis using the t test are shown in Table 4.

Table 4. Independent-Samples t Test Analysis Results for Students Who Have High Learning Motivation

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
the value of learning outcomes	Equal Variances Assumed	4,221	0,047	5,504	36	0,000	0,142	0,026
	Equal Variances Not Assumed			5,504	31,506	0,000	0,142	0,026

Based on table 4, it is possible that the likelihood esteem ( $p$ ) of the t test on the equivalent variation is estimated at 0.000. Likelihood esteem ( $p$ ) < 0.05, then  $H_0$  is rejected. This implies that there can be variations in PJOK assessment results depending on the risk of free association of students who follow the Flipped Study Hall assessment benchmark and the STAD assessment benchmark in the high assessment motivation classification. Judging from the average contrast value of 0.142, it can be seen very well that the learning gains from normal CHD to risk of carelessness in the experimental group continue to be prominent compared to the benchmark group. Thus, it can be interpreted that the PJOK learning gain on the risk of delinquency for students who have high learning motivation who are given the Flipped Classroom assessment reference treatment continues to be higher than students who are given the STAD reference treatment.

## 5. Testing Hypothesis H4

The fourth speculation that has been put forward in the hypothetical review explains that there can be variations in the results of the PJOK assessment due to the risk of promiscuity among students who follow the Flipped Study hall assessment reference and the STAD reference in low learning motivation classes. Speculation testing applies the t test, namely the Free Sample t Test with the help of SPSS 26.0 for Windows. The factual speculations attempted in the speculation test are as follows.

$H_0(4): [\mu_{A1B2} Y] = [\mu_{A2B2} Y]$ : There is no difference in learning outcomes for PJOK material the dangers of free association of students who

follow the model Flipped Classroom learning and learning models STAD is in the low learning motivation category.

$H_2(4) : [\mu_{A1B2Y}] \neq [\mu_{A2B2Y}]$ : There are differences in PJOK learning outcomes regarding the dangers of promiscuity for students who follow the Flipped Classroom learning model and the STAD learning model in the low learning motivation category.

The testing capability used is to reject  $H_0$  if the probability value ( $p$ ) < 0.05 and accept  $H_0$  if the probability value ( $p$ ) > 0.05. The results of the analysis using the t test appear in Table 5.

Table 5. Independent-Samples t Test Analysis Results for Students Who Have Low Learning Motivation

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
The value of learning outcomes	Equal variances assumed	0,476	0,493	2,903	36	0,006	0,067	0,023
	Equal variances not assumed			2,903	35,697	0,006	0,067	0,023

Based on Table 5, it is possible that the probability value ( $p$ ) from the t test on equivalent fluctuations is estimated at 0.006. Likelihood esteem ( $p$ ) < 0.05, then  $H_0$  is rejected. This implies that it is possible to vary the results of the PJOK assessment based on the risk of promiscuity among students who follow the Flipped Classroom assessment reference and the STAD reference in low learning motivation classes. Judging from the mean contrast value of 0.067, it tends to be seen that normal PJOK learning gains on the risk of carelessness in the experimental group continue to stand out compared to the benchmark group. As a result, the Flipped Classroom assessment reference continues to have a greater impact on the PJOK learning outcomes of students with low learning motivation regarding the dangers of promiscuity compared to the STAD reference.

## Discussion

### 1. Variations in PJOK Learning Gains between Students Who Followed the Flipped Classroom Assessment Reference and Students Who Followed the STAD Reference

For the next gap, the investigation obtained by examining 2-way changes was tracked, the value of  $F = 4.690$  with an importance level of 0.034 was below 0.05 ( $p < 0.05$ ). Therefore, the null hypothesis ( $H_0$ ) which states that assessment references and learning motivation are not related to the acquisition of PJOK free association learning is rejected. In this way, there is a link between assessment references and learning motivation in PJOK learning achievement and the risk of carelessness.

The progress of educational skills that will be carried out by an instructor cannot be separated from the student's genuine willingness to learn. Being able to excite one student is not the same as motivating another; there are students with

strong enthusiasm for learning and students with low enthusiasm for learning (Filgona et al., 2020). As a result, students in topics with high priority contrast boost their learning motivation levels, which influences the learning gains obtained. A learner cannot learn and, as a result, cannot obtain the greatest learning results if he or she does not have the desire to learn because one is never completely satisfied.

The influence of learning motivation can be said to influence the level of student learning achievement. Assuming that what students want with a strong learning drive, their achievement will be high. Students, on the other hand, lose out when their motivation is poor, as is their success. Each assessment reference in the Flipped Classroom study reference and STAD reference provides strategies to assist students in capturing the content offered by the instructor. The difference between this study reference and the Flipped Classroom study reference is the introduction of the material and the distribution of time; in the Flipped Classroom learning reference, the material is displayed outside the learning room with the teacher sending a video related to the material, while in the STAD reference, the material is introduced in class. This finding is consistent with Andriani's (2021) previous test findings, which showed that there was a relationship between reverse classroom teacher assessment references and learning motivation on learning gains. This condition means that if these two assessment references are used on students who have high learning motivation, their learning achievement will increase.

Abeysekera and Dawson (2015) found that flipped homeroom instructors could increase students' motivation and insight. According to Halili and Zainuddin (2015), when the homeroom teacher goes around the male students remain enthusiastic and confident when studying the material in class because it has been arranged by watching recordings before entering class, practicing in the male class, then continuing to stick to the students and not being looked after by them. educators because educators only act as facilitators.

### 2. The Relationship Between Assessment References and Learning Motivation on PJOK Learning Gains

For the second gap, the results of the analysis using 2-way analysis of variance were able to show that the  $F$  value = 4.690 with a significance level of 0.034 was smaller than 0.05 ( $p < 0.05$ ). Therefore, the null hypothesis ( $H_0$ ) which explains that there is no relationship between the assessment reference and learning motivation on the learning achievement of PJOK regarding the dangers of promiscuity is rejected. So, there can be a relationship between assessment references and learning motivation on the acquisition of PJOK learning regarding the dangers of promiscuity.

The success of an assessment process that will be carried out by a teacher cannot be separated from the elements of the student's own learning motivation. The learning motivation between one student and another is different, there are students who have high learning motivation and there are also students who have low learning motivation (Filgona et al., 2020). Thus, the level of learning motivation possessed by students in a subject must have variations that can influence

the learning gains achieved. Without motivation to learn, a student is unable to learn and ultimately cannot achieve maximum learning gains because humans are creatures who never feel one hundred percent satisfied.

In terms of learning, motivation can be defined as anything that influences a student's level of achievement. It is hoped that children who are highly motivated to learn will do well. Students with poor motivation, on the other hand, will achieve little. Each assessment reference in the flipped classroom review reference and STAD reference provides a method to help students understand the content presented by the teacher. The difference between this assessment reference and the flipped classroom learning reference is in the presentation of material and time allocation, with the flipped classroom learning reference presenting material outside of class with the teacher sending videos of related material, and the STAD reference presenting material in class.

This finding is similar to Andriani's (2021) previous research findings, which showed that there was an interaction between flipped classroom review references and learning motivation on learning outcomes. This condition shows that the application of these two assessment references to students who have strong learning motivation will produce good learning results. According to Abeysekera and Dawson (2015), the flipped classroom can increase student motivation and cognition. According to Halili and Zainuddin (2015), in a flipped classroom, male students remain motivated and confident when discussing topics in class because they have prepared themselves by watching videos before entering class. Because the teacher only functions as a facilitator.

#### 4. Implications

In its implementation, the use of the Flipped Classroom assessment reference is very effective in achieving assessment targets, because the emphasis is on the skills that develop from the Flipped Classroom assessment reference carried out on students. In the Flipped Classroom assessment reference, students concentrate on the study material via video at home or before entering class; while in-class exercises will involve other things like group conversations and questions and answers with each other.

Likewise, the Flipped Classroom assessment reference is also able to ensure students continue to be dynamic in their educational skills. However, barriers were experienced during the assessment in exploratory meetings and in benchmark groups. The obstacle is limited time in treating the Flipped Study Hall assessment reference. This is because as educators we often manage situations where students do not always understand the material provided, so it takes a lot of time to improve students' construction. The follow-up is that although often pressed for time, exams are able to fully control educational proficiency.

#### IV. CONCLUSION

The findings of this research are based on the data analysis and discussion obtained, as follows. PJOK learning gains due to free association are different between students who apply

the Flipped Classroom assessment reference and students who apply the STAD reference. In class VIII students at SMP N 5 Abang, the relationship between STAD and learning motivation and PJOK learning acquisition due to promiscuity can be seen. In the high learning motivation group, students who applied Flipped Classroom and the STAD reference had different PJOK learning gains regarding the dangers of promiscuity.

#### V. REFERENCES

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