

## Survey Implementation Curriculum 2013 in Sports and Health Physical Education Lessons at State Vocational School in District Sampang

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### Abstract

*This study aims to describe the implementation of PBL, PjBL, DL learning models and learning outcomes in PJOK subjects. This research was carried out in 3 schools that implemented the 2013 Curriculum with a research sample of 3 teachers and 283 students at State Vocational Schools throughout Sampang District. This research is a quantitative research with a survey design, the research sampling technique uses random sampling. The instruments used in this study were questionnaires, interview guidelines, observation sheets and cognitive tests. Data analysis used one way annova analysis and multiple linear regression through SPSS version 15. The results showed that the implementation of PBL learning for students in State Vocational High Schools in Sampang District was included in the good category with an average score of 100.8, the percentage was 69.52%; the implementation of PjBL learning for students in State Vocational High Schools throughout Sampang District is included in the good category with an average score of 96.13, the percentage is 66.30%; The implementation of DL learning for students at State Vocational Schools throughout Sampang District is included in the good category with an average score of 26.75, a percentage of 76.43%, and through multiple linear regression tests it can be concluded that the PBL, PjBL, and DL learning models of State Vocational High School students throughout -Sampang District is proven to affect learning outcomes with a contribution of 25%;  $R^2 = 0.250$ ;  $F_{table}(3.279) = 26.37$ ;  $p < 0.01$ . The conclusion is that data analysis of PJOK learning outcomes at State Vocational Schools in Sampang District using the PBL, PjBL, and DL learning models can improve student learning outcomes, as evidenced by the average PJOK score of 80, the interval score of ability to work on PTS questions for State Vocational High School students throughout -Sampang District is in the interval of 70 to 80; and completeness of classical learning outcomes above 80%. The results of the regression test also found that the PBL learning model ( $\beta = 0.389$ ;  $p < 0.01$ ) had a stronger effect on learning outcomes than the PjBL learning model ( $\beta = 0.229$ ;  $p < 0.01$ ) while the DL learning model had no significant effect on learning outcomes.*

### Keywords

PBL learning; PjBL learning; DL learning; PJOK learning outcomes



## I. Introduction

The Indonesian nation must be able and strive to improve human resources if it wants to compete with neighboring countries, especially in the field of education. The better the resources owned by the Indonesian people, the welfare that will be obtained. One way to improve human resources is to improve the quality of education. This is stated in the Law of the Republic of Indonesia No. 20 of 2003 which is contained in Article 1

paragraph 1 concerning the National Education System "Education is a conscious effort made in a planned manner in creating a learning atmosphere in order to create students actively develop their potential to have religious spiritual knowledge, self-development, personality, intelligence, noble character, and skills for himself. With quality education will produce quality human beings. The government through the Ministry of Education and Culture seeks to improve the quality of education. One of the most important components, namely the quality of education, is the curriculum. In the curriculum there are goals that have been planned to be achieved in learning activities, how to convey them and carry out evaluations or assessments.

Whereas, according to (Hidayat 2013) suggests that the 2013 Curriculum is a curriculum that emphasizes the attitudes and behavior of students, in essence this curriculum wants Indonesian people who have noble character according to their religion and are good at acting and thinking. According to (Kemendikbud 2012), the basis for perfecting the 2013 curriculum, 2013 curriculum development is one strategy to improve graduate competency standards (SKL), where the orientation of this curriculum is to balance attitudes, knowledge, and skills. The 2013 curriculum was developed based on juridical provisions that require the development of a new curriculum, philosophical foundations and empirical foundations. In the Regulation of the Minister of Education and Culture of the Republic of Indonesia No. 70 of 2013, it is explained that the rationalization of 2013 curriculum development includes external challenges, internal challenges that exist in society, to improve mindsets, strengthen 2013 curriculum governance.

One of the problems in implementing the 2013 curriculum in SMK is the weak implementation of learning that is able to develop students' thinking skills (Susanto 2013). Based on the results of observations made on 26 to 27 April 2021, in class X at State Vocational Schools throughout the Sampang District, it was shown that during the learning carried out by the Physical Education and Health (PJOK) teacher, the basic competence (KD) of athletic material was In short distance running, the teacher only provides material related to memorization, related to sprint numbers, sprint techniques, and closed questions such as mention, explain, show. These questions tend to make students less able to practice higher order thinking skills in analyzing, evaluating, and creating information and metacognitive knowledge. In addition, the results of the Odd PAS results for the 2021/2022 academic year on PJOK subjects at State Vocational Schools throughout the District are Sampang as follows:

**Table 1.** Results of Odd PAS scores for the academic year 2021/2022:

No.	School Name	Total students	Number of Students > SKM	Percentage	Number of Students < SKM	Percentage
1.	SMK Negeri 1 Sampang	353 Students	178 Students	51%	175 Students	49%
2.	SMK Negeri 2 Sampang	264 Students	152 Students	58%	112 Students	42%
3.	SMK Negeri 3 Sampang	78 Students	23 Students	29%	55 Students	71%

Source: Eraport of State Vocational Schools in Sampang District 2021

The reality on the ground shows that the achievement of student competencies whose values are above or equal to the Minimum Completeness Score (SKM) set in each education unit refers to the Graduation Competency Standard (SKL) which is 75, and

Nationally the Director General of Primary and Secondary Education is set at 65. The learning mastery of students in PJOK lessons at State Vocational Schools throughout the Sampang District is still low. It is said to be low because the number of students whose PAS scores are Odd for the 2021/2022 academic year who achieve SKM <80%. According to Trianto in (Royani 2017) said that the final score is categorized as good if the results of the students' scores reach classical completeness 85% of the number of students in the class.

To improve students' thinking skills to the level (HOTS) of Higher Order Thinking Skills, teachers are required to be more creative in creating and choosing models or learning strategies that are student-centred and create a supportive learning atmosphere, as well as a number of factors that can facilitate students. The ideal learning model to develop higher-order thinking skills is the model contained in the 2013 curriculum, namely by carrying out learning activities using a scientific approach. Improving HOTS thinking skills is not only centered on students, but is also influenced by the teacher's understanding of learning strategies in the classroom (Yusmanto 2017). In addition, (Kamin 2015) stated that HOTS should be an integral part of teaching and learning, thinking skills lessons should be part of curriculum. Therefore, the key to successful learning carried out by teachers is a strategy to connect students' thinking skills during classroom learning (Noor 2019). Therefore, teachers must have sufficient skills and understanding regarding how to develop these thinking skills, in order to be able to design appropriate strategies to familiarize students with HOTS thinking. HOTS can be achieved when students actively understand, and integrate knowledge with their everyday experiences (Anderson & Krathwohl 2015). In line with this (Deluca 2016) states that to develop HOTS thinking skills students must first understand factual, conceptual, procedural, and metacognitive knowledge in applying their knowledge to learning by doing and then reflecting on the process that produces a solution.

According to Astuti et al (2019) Education is an obligation of every human being that must be pursued to hold responsibilities and try to produce progress in knowledge and experience for the lives of every individual. Education is one of the efforts to improve the ability of human intelligence, thus he is able to improve the quality of his life (Saleh and Mujahiddin, 2020). Education is expected to be able to answer all the challenges of the times and be able to foster national generations, so that people become reliable and of high quality, with strong characteristics, clear identities and able to deal with current and future problems (Azhar, 2018).

In the 2013 curriculum, there are several learning models recommended by the Ministry of Education and Culture in schools, including the Problem Based Learning (PBL) learning model, Discovery Learning (DL), and Project Based Learning (PjBL). PBL is a learning model which at the time of learning always emphasizes on providing real problems that exist in the community, to be solved by students using independent investigations in order to hone thinking skills, students' creativity in finding solutions or problem solving. PBL learning can be given to students independently or in groups systematically so that students can hone, empower, and improve students' thinking skills on an ongoing basis. In this case, a problem-oriented or problem-based learning model that is carried out individually or in groups that is applied to students can train the students' thinking skills themselves during classroom learning, so that they can provide meaningful, relevant, and effective learning. contextual (Ariyanti 2018).

The learning model PjBL that focuses primarily on the concepts and principles of a discipline, to involve students in problem solving, and assignments in the form of portfolios or others, to provide opportunities for students to work independently which can

produce products that are in the form of works that have value and are realistic. In contrast to conventional learning models which are generally characterized by short-duration, isolated classroom practices, and teacher-centered learning activities, the PjBL model emphasizes learning activities that are relatively long-lasting, holistic-interdisciplinary, student-centered, and integrated with practices and issues. real world issues (Ngalimun 2012).

The learning model DL is a learning model designed to develop students' active learning methods by finding their own, with teacher guidance during learning so that it will produce knowledge that is embedded in memory, and will not be easily forgotten by students. According to Balim, DL is a learning method that encourages students to arrive at a conclusion based on their own activities and observations. Agreeing with the above, Prasad stated that DL learning is considered to be used effectively to increase stimulation and maintain interest in exact subjects, furthermore such an approach can encourage creativity and authenticity of students where it is most important to get a student success in the future. come in exact lessons. With DL learning, students can learn to think analytically and try to solve problems or problems faced by students (Wicaksana et al., 2016).

The results of the study which say that the PBL model has a very positive influence in improving students' critical thinking (Phasa 2020), the DL learning model can have a positive influence on improving students' critical thinking skills in social studies learning at the elementary level (Anugraheni 2020), the model PjBL can improve HOTS thinking skills (Fitri et al., 2018). Of the three learning models, PBL, PjBL, and DL both have something in common including having positive values, being able to develop or improve students' critical thinking skills. The benefits of the research that will be carried out are to improve the quality of learning in the classroom, student learning achievement, and develop teacher skills in applying learning models oriented to the HOTS thinking ability by providing stimulus to students to be able to find information independently, then linked to real life in the surrounding environment so that it can be more easily understood by students. So that it can encourage the curiosity and activeness of students to develop critical and analogical thinking skills. So that makes learning meaningful. It is very necessary to do research on the application of PBL, PjBL, and DL models in the 2013 curriculum at State Vocational Schools in Sampang District, especially for PJOK subjects.

## **II. Research Method**

This research is a quantitative research with descriptive survey research method. According to (Sugiono 2017), the survey method is used to obtain data from certain populations that are natural, but researchers collect data by distributing questionnaires where researchers do not provide treatment as in the experiment. This research was conducted by examining the application of PBL, PjBL, and DL learning models in the 2013 curriculum at State Vocational Schools throughout Sampang District for the 2021/2022 academic year.

The population in this study were students of class X SMK Negeri in Sampang District, which amounted to 695 students. Determination of the number of samples using the Slovin formula with an error rate of 5% which produces a total sample of 283 from a population of 695. The technique used in sampling is purposive sampling is a sampling technique that has known characteristics based on the characteristics, characteristics of the population (Max 2018). In this case, the researchers took samples from PJOK teachers in State Vocational High Schools in Sampang District, and class X students in State Vocational High Schools in Sampang District. In this study, there are two kinds of

variables, namely the independent variable implementation of the PBL, PjBL, DL learning models, and the dependent variable, namely PJOK learning outcomes.

Data collection methods used in this study were interviews, questionnaires and knowledge tests. Interviews were used as supporting data for researchers given to PJOK teachers. In this study, the questionnaire consisted of a number of statements that had to be answered by respondents to determine the application of the PBL, PjBL, and DL models in State Vocational Schools throughout Sampang District. The questionnaire was prepared after determining the indicators formulated in the trial questionnaire grid on the application of the PBL, PjBL, and DL learning models. The questionnaire used a Likert Scale in this study from gradations ranging from questions related to positive things to negative. The alternative answers were very often a score of 5, often a score of 4, sometimes a score of 3, rarely a score of 2, and never a score of 1 (Sari 2020).

Before the research instrument was distributed to respondents, the instrument was first tested by 2 expert validators (expert judgment) to determine the feasibility of the instrument. After validating the results, there were several instruments that were declared feasible, not feasible, and revised. The results of the validation became the basis for the research to revise the instrument according to the advice of the expert validator. The researcher then carried out construct validity by giving questionnaires and multiple choice questions to the respondents. The number of respondents used in the test of construct validity is about 65 people. The validity test was carried out using the IBM 15 statistical tool by looking at the Corrected Item-Total Correlation (correlation of items with total items). As for the data after testing and its validity, it is known that the statement items are valid or invalid by comparing  $r_{count}$  with  $r_{tabel}$  using Product Moment with  $= 0.05$   $r_{count} \geq r_{tabel}$  can be said to be valid and vice versa if the value  $r_{count} \leq r_{tabel}$  can be said to be invalid.

To test the reliability of the research instrument, it was carried out using the Cronbach's Alpha test. According to Adamson & Prion in (Yusuf 2018), reliability testing with the Cronbach's Alpha test is carried out for instruments that have correct answers, such as instruments in the form of questionnaires and questions. According to Ghozali in (Yusuf 2018), the instrument is said to be reliable if the reliability coefficient of Cronbach's Alpha  $r_i > 0.60$ . Streiner in (Yusuf 2018), states the reliability coefficient of Cronbach's Alpha  $r_i < 0.90$ . If the reliability coefficient of Cronbach's Alpha  $r_i < 0.60$ , the conclusion is that the statement must be corrected or discarded, has a low correlation.

## 2.1 Questionnaire Data

After the questionnaire data is valid and reliable, it will be analyzed using descriptive statistical analysis and analysis prerequisite tests. The analysis prerequisite test includes normality and homogeneity tests. Normality test is used to determine whether the data obtained is normally distributed or not. In this study, the normality test was carried out by means of the Kolmogorov Smirnov test with the criteria that if probability (sig)  $> (0.05)$  then  $H_0$  was accepted (Maksum 2018). Furthermore, homogeneity test, homogeneity test in this study aims to determine the questionnaire data and PTS results have the same variance or not. Data analysis that will be used is Levene statistics. The test criteria are if the probability (sig)  $> (0.05)$  then  $H_0$  is accepted and the One way Annova test can be done (Maksum 2018). Conducted to test the average effect of an experiment using one factor, in which the factor has three or more groups. The criteria used in this test is if the probability (sig)  $> (0.05)$  then  $H_0$  is accepted.



## 2.2 PJOK Learning Outcomes

This study Normality testing in aims to determine whether the questionnaire data and the multiple choice item instrument came from a normal population or not. The analysis used is Kolmogorov Smirnov with the criteria that if probability (sig) > (0.05) then  $H_0$  is accepted (Maksum 2018). The linearity test in this study aims to determine whether the data has a linear distribution of data. This test is carried out mainly on regression analysis, in the linearity test the following provisions apply: if the F value is not significant or > 0.05, then the relationship between variables is declared linear, the opposite applies if the F price is significant or < 0.05 (Maksum 2018). The multicollinearity test in this study aims to determine whether the multiple linear model has correlation or multiple linear regression in PBL, PjBL, and DL learning on PJOK learning outcomes. This test was conducted to determine multicollinearity or not. In the multicollinearity test by looking at if the VIF value is < 10 and or the Tolerance value is > 0.01, it can be concluded firmly that there is no multicollinearity problem (Sugiono 2017). The multicollinearity test in this study aims to see if the errors in the data have the same variance or not. Before performing multiple linear regression, you must do a hesteroscedasticity test because good data is data that does not experience hesteroscedasticity. The basis for decision making in the Heteroscedasticity test using the Park test is as follows: If the value of Sig. > 0.05, then the conclusion is that there are no symptoms of Heteroscedasticity in the regression model. Conversely, if the value of Sig. < 0.05, then the conclusion is that there are symptoms of Heteroscedasticity in the regression model (Sugiono 2017). After the data obtained have met the requirements of normality, linearity, multicorrelation, and heteroscedasticity, it means that the data that we get we do a multiple linear regression test. The basis for making multiple linear test decisions applies the value of Sig. < 0.01 (Sugiono 2017).

## III. Results and Discussion

The findings in this study were obtained in the form of quantitative data and qualitative data. Quantitative data in the form of data collected from questionnaires and student PTS results. Qualitative data in the form of interviews and observations during the activity.

### 3.1 Result

#### a. Implementation of PBL learning model

The questionnaire in this study was given to students with the aim of knowing the response of students to the application of PBL learning during PJOK learning at school. This questionnaire was filled out by 283 students from State Vocational Schools in Sampang District. The results of the student questionnaires obtained can be grouped based on categories, namely the categories of SMKN A, SMKN B, and SMKN C. The purpose of categorizing each school is to find out how to apply learning using the PBL model in State Vocational Schools throughout Sampang District, can be seen in the table below:

**Table 2.** Results of student questionnaires based on school grade

Research area	school	score	Average	Percent %	Category
State Vocational High School in Sampang District	SMKN A	10.657	102	71	Good
	SMKN B	10.253	102	70	Good
	SMKN C	7.618	98	67	Good

Source: primary data 2022

The results of the student questionnaire regarding the application of the PBL learning model showed the highest average results from the SMKN A category and the lowest average scores in the SMKN C category schools.

#### **b. Implementation of PjBL model learning**

The questionnaire in this study has the aim of knowing the responses of students after the implementation of PjBL learning models in PJOK lessons at school. The results of the student questionnaires obtained are grouped by school category, based on the categories that have been made, can be seen in the table below:

**Table 3.** Results of student questionnaires based on school grade

Research Area	School	Score	Average	Percent %	Category
State Vocational High School in Sampang District	SMKN A	10.206	98.13	68%	Good
	SMKN B	9.665	95.69	66%	Good
	SMKN C	7.336	94.05	65%	pretty good

Source: primary data 2022

The results of the questionnaires that have been filled out by students related to the implementation of PjBL learning models show the average results from schools with the highest SMKN A category and the lowest average scores in the SMKN C category.

#### **c. Implementation of DL model learning**

Questionnaires in this study were given to students aiming to determine student responses to the application of DL model learning during PJOK learning at school, based on the categorization that has been made, it can be seen in the table below:

**Table 4.** Results of student questionnaires based on school grade

Research Area	School	Score	Average	Percent %	Category
State Vocational High School in Sampang District	SMKN A	2820	27,11	77	Good
	SMKN B	2734	27,06	77	Good
	SMKN C	2016	25,84	74	pretty good

Source: primary data2022

The results of the student questionnaire regarding the application of the DL learning model show the highest average results from the SMKN A and B categories and the lowest average score in the lowest SMKN C category.

#### **d. PJOK Learning Outcomes Category**

Data on PJOK learning outcomes of students obtained through PTS even in the 2021/2022 school year at State Vocational Schools throughout Sampang District after learning using the PBL, PjBL and DL models. Thus, it can be seen that the learning achievement of students from three State Vocational Schools throughout the Sampang District is in the Good Enough category, and the learning achievement of students or the proportion of achievement is > 80 (82%).

### 3.2 Discussion

Hypothesis testing of the data from the questionnaire and the results of PTS students of State Vocational Schools in Sampang District which was carried out using the normality test and homogeneity test, then the One Way Anova test was carried out.

#### a. Application of PBL learning model

The results of the normality test of the PBL questionnaire for students at State Vocational Schools in Sampang District showed a probability value of  $0.398 > 0.05$ ;  $0.402 > 0.05$ ;  $0.537 > 0.05$ . These results indicate that from 3 categories of SMK A, B, and C the null hypothesis is accepted. Based on the Levene statistic test, it was obtained 3,036 with a sig value. 0.060 homogeneity test results indicate a probability value  $> (0.05)$ , then this indicates that the null hypothesis is accepted. The results of the one way ANOVA test get a probability value of  $\text{sig} < 0.05$ , this indicates that the null hypothesis is rejected. Thus, it can be concluded that the PBL questionnaire data for students in the categories of SMKN A, SMKN B and SMKN C shows a significant difference in average so that it can be said that there is a difference in the average value of the PBL questionnaire for students in State Vocational Schools in Sampang District because all of them are significant. at 0.048.

#### b. Application of PjBL learning model

The results of the normality test of the PjBL questionnaire for students at State Vocational Schools in Sampang District showed a probability value of  $0.850 > 0.05$ ;  $0.800 > 0.05$ ;  $0.986 > 0.05$ . These results indicate that from 3 categories of SMK A, B, and C the null hypothesis is accepted. Based on the Levene statistic test, it was obtained 0.459 with a sig value. 0.633 homogeneity test results indicate that the probability value  $> (0.05)$ , then this indicates that the null hypothesis is accepted. The results of the one way ANOVA test get a probability value of  $\text{sig} > 0.05$ , this indicates that the null hypothesis value is accepted. Thus, it can be concluded that the PjBL questionnaire data for students in the categories of SMKN A, SMKN B and SMKN C did not show a significant difference in average so that it can be said that there was no difference in the average value of the PjBL questionnaire for students in State Vocational Schools in Sampang District because all significant at 0.112.

#### c. Application of learning model DL

The results of the normality test of the DL questionnaire for students at State Vocational Schools in Sampang District showed a probability value,  $0.092 > 0.05$ ;  $0.057 > 0.05$ ;  $0.511 > 0.05$ . These results indicate that from 3 categories of SMK A, B, and C the null hypothesis is accepted. Based on the Levene statistic test, it was obtained 0.386 with a sig value. 0.680 homogeneity test results indicate that the probability value  $> (0.05)$ , then this indicates that the null hypothesis is accepted. The results of the one way ANOVA test get a probability value of  $\text{sig} < 0.05$ , this indicates that the null hypothesis is rejected. Thus it can be concluded that the DL questionnaire data for students in the categories of SMKN A, SMKN B and SMKN C shows a significant difference in average so that it can be said that there is a difference in the average value of the DL questionnaire for students in State Vocational Schools in Sampang District because all of them are significant. at 0.039.



#### d. The learning outcomes of students in PJOK subjects at State Vocational Schools in Sampang District

The results of the normality test obtained the Asymp value. Sig. (2-tailed) unstandardized residual data is  $0.538 > 0.05$ . It is concluded that the data X1, X2, X3 and Y in the regression are declared normally distributed. The results of the linearity test obtained that PBL learning data with a value of F (deviation from linearity) was 0.997 at a significance of 0.526 which means it is not significant, PjBL learning has an F price (deviation from linearity) of 1.506 at a significance of 0.424 which means it is not significant, and DL learning has an F price (deviation from linearity). linearity) of 1.008 at a significance of 0.451 which means that it is not significant. So it can be concluded that between PBL (X1), PjBL (X2), and DL (X3) with Learning Outcomes (Y) has a linear relationship and the regression test can be continued. Linear regression test results, pay attention to the value of VIF and Tolerance. These three are strong indications that are often used by researchers to conclude the phenomenon of intercorrelation of independent variables. If the VIF value is less than 10 and or the Tolerance value is more than 0.01, it can be concluded firmly that there is no multicollinearity problem. The results of SPSS calculations show that the values of X1, X2 and X3 have a tolerance of  $0.836 > 0.01$  and a VIF value of  $1.063 < 10$ . The conclusion from this SPSS multicollinearity data analysis is that there is no multicollinearity problem, so the test results are said to be reliable or reliable.

Thus the regression test can be continued. The results of decision making in the Heteroscedasticity test using the Park test are as follows: If the significant value (sig.)  $> 0.05$ , then the conclusion is that there are no Heteroscedasticity symptoms in the regression model, on the other hand, if the significant value (sig.)  $< 0.05$ , then the conclusion is that heteroscedasticity occurs in the regression model. After the park test, the PBL variable (X1) has a significant value of 0.921 (Sig.)  $> 0.05$ , the PjBL variable (X2) has a significant value of 0.644 (Sig.)  $> 0.05$ , the DL variable (X3) has a 0.855 significant value (Sig.)  $> 0.05$ , then the conclusion is that there is no heteroscedasticity symptom in the regression model used.

After testing the classical assumptions, it is possible to test the hypothesis of student learning outcomes. With the help of the SPSS 15 program, the results of the multiple linear regression test are obtained in the table below:

**Table 5.** The results of multiple linear regression test  
ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6112,415	3	2037,472	30,949	,000 <sup>a</sup>
	Residual	18367,585	279	65,834		
	Total	24480,000	282			

a. Predictors: (Constant), Model Pembelajaran Discovery Learning, Model Pembelajaran Project Based Learning, Model Pembelajaran Problem Based Learning

b. Dependent Variable: Hasil Belajar

In table 5, the results of the decision making in the multiple linear test show sig. the effect of PBL, PjBL, and DL learning models on learning outcomes. Applicable value of sig.  $> 0.01$ . This means that there is an influence of the PBL, PjBL, and DL learning models in the 2013 Curriculum on the value of PJOK subjects in State Vocational Schools throughout Sampang District.

In accordance with the results of the hypothesis test proposed by the researcher. Based on the results of the One way ANOVA test, then the following hypothesis testing is carried out:

1. H<sub>o</sub>: There is no effect of PBL, BjBL, and DL learning models on students' PJOK learning outcomes.
2. H<sub>a</sub>: There is an effect of PBL, PjBL, and DL learning models on students' PJOK learning outcomes.

Description: Sig. = 5%,

Criteria area:

H<sub>o</sub>: rejected if Probability value (Sig) < 0.05

H<sub>a</sub>: accepted if Probability value (Sig) > 0.05

Test Statistics: probability value (Sig) = 0.000

Conclusion: Because P Value (sig.) = 0.000 < 0.05, then H<sub>o</sub> is rejected and H<sub>a</sub> is accepted. So, through multiple linear regression, it can be concluded that the PBL, PjBL, and DL learning models for students at State Vocational Schools in Sampang District are proven to be very significant. affect learning outcomes with a contribution of 25%;  $R^2 = 0.250$ ;  $F_{table}(3.279) = 26.37$ ;  $p < 0.01$ . The results of the regression test also found that the PBL learning model ( $\beta = 0.389$ ;  $p < 0.01$ ) had a stronger effect on learning outcomes than the PjBL learning model ( $\beta = 0.229$ ;  $p < 0.01$ ) while the DL learning model had no significant effect. . on learning outcomes.

#### IV. Conclusion

Based on the results of research and data analysis that has been carried out, it can be concluded that the implementation of PBL learning for students in State Vocational Schools throughout Sampang District is included in the good category with an average score of 100.8, and a percentage of 69.52%; the implementation of PjBL learning for students in the State Vocational Schools in Sampang District is included in the good category with an average score of 96.13, and a percentage of 66.30%; and the implementation of DL learning for students in the State Vocational Schools in Sampang District is included in the good category with an average score of 26.75, and a percentage of 76.43%. Based on the results of data analysis and discussion in the previous chapter, it can be concluded that the learning outcomes of PJOK at State Vocational Schools in Sampang District using the PBL, PjBL, and DL learning models can improve student learning outcomes, as evidenced by the average PJOK score of 80, the score interval the ability to work on PTS questions for students at State Vocational Schools in Sampang District is at an interval of 70 to 80; and completeness of classical learning outcomes above 80%. The results of the regression test also found that the PBL learning model ( $\beta = 0.389$ ;  $p < 0.01$ ) had a stronger effect on learning outcomes than the PjBL learning model ( $\beta = 0.229$ ;  $p < 0.01$ ) while the DL learning model had no significant effect. . on learning outcomes.

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