

# The Influence of the Project Based Learning Model on Learning Outcomes PPKN On Fourth Grade Students

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## ABSTRACT

This research aim For know The Influence of the Project Based Learning Model on Learning Outcomes PPKN On Students of Class IV of UPTD SD Negeri 122350 Pematangsiantar. Research design implemented is Pre-Experimental Designs method is appropriate with limitations amount samples to be researched. This research will was held at the UPTD of State Elementary School 122350 Pematangsiantar. The time study implemented in the even semester May of the Year Academic Year 2023/2024. Based on results research and discussion that has been put forward can taken conclusion that from pretest results, obtained the average value is 46.35 which is classified as in category low. While average value of results Study posttest students, namely 85.52, which indicates that results after given treatment increase with such a range big. From the average pretest and posttest scores there are difference of 39.17 and based on hypothesis test results with level significant = 0.05 and *t*table of 2.034, *t* hitung of 14.737. With thus *t* hitung > *t*table 14.737 > 2.034, then can concluded that there is the influence of the Project Based Learning Model on results learning PPKN for students Class IV of UPTD SD Negeri 122350 Pematangsiantar. Maka based on Hypothesis Test Results  $H_0$  is rejected and  $H_a$  accepted which indicates that existence the influence of the Project Based Learning Model is significant to results learning PPKN for students Class IV of UPTD SD Negeri 122350 Pematangsiantar.

**Keywords:** Model, Project Based Learning, Learning Outcomes, PPKN



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## INTRODUCTION

Education is business aware For prepare participant educate through activity guidance, teaching, and or exercise for its role in the future come. According to Mulyasa (Simbolon & Koeswanti, 2020) states that education is means For prepare source Power man current and future generations (Thomas, 2020). In principle education held as a process of acculturation and empowerment participant ongoing education lifetime life with give exemplary, building will, and encourage creativity participant educate in the learning process. Therefore that, education called as a systematic, gradual, and continuous process that is faithful moment happen developments new For increase quality its implementation (Kubilinskiene, 2020).

In Law No. 20 2003 regarding National Education System, states that Education is business conscious and planned For realize atmosphere learning and learning process so that participants educate in a way active develop potential himself For own strength religious spirituality, control self, personality, intelligence, morals noble, and required skills himself, society, nation, and state (Pan et al., 2021). Based on Constitution said, then objective from education in Indonesia is For realize atmosphere learning and process learning active so that participants educate can develop the potential that owned. The goals of education the achieved by the organizer education with refers to the curriculum (Marini et al., 2025).

Curriculum is important things for education. Education without curriculum only A plan, then learning and teaching No can walk in a way effective and efficient. Curriculum is a set plans and arrangements about objectives, content, and materials lesson as well as the method used as guidelines organization activity education as reference in carry out education (Sinta et al., 2024). The curriculum also becomes runway for development teaching materials, compilation material learning, as well as evaluation and measurement results Study student (Doyan et al., 2025).

One of policy government is change the 2013 curriculum becomes curriculum independence. Since In 2022, education in Indonesia has experience change curriculum from The 2013 Curriculum ( Kurtilas ) became Independent Curriculum. Changes curriculum independent is development more carry on from 2013 curriculum, which uses One approach learning that is approach scientific For all eye lessons. Based on matter said, the government designing curriculum independent as as innovation new in the world of education so that all potential owned participant educate can visible and can implemented in life daily (Sari, 2018).

In addition, after existence The Independent Curriculum is also available change structure eye lessons. At the level Elementary School, one of the Name eye Citizenship Education lessons change become Pancasila Education (Warr & West, 2020). The subject of Pancasila Education is learning For build character participant educate so that own mark synchronous attitude with implementation the principles of Pancasila. In the learning process, Pancasila Education becomes one of the receptacle former character participant educate based competence 21st century (Kurniasih et al., 2023).

In the learning process teaching teachers must selecting and using appropriate learning models with the material to be taught. With using a learning model would be very helpful in increase creativity students, in particular in PPKN learning. Benefits of using learning models among them is For guidelines in designing learning, as a medium for develop curriculum, reference in choose material lessons, as well as can help evaluation of the learning process (Almazroui, 2023a). Learning model is a related process with activity learning, which is in it presenting the learning process with method convey material learning in educational programs. With using the right learning model, students can understand existing topics in class and improve his creativity. Can known that the teacher holds a very important role in the learning process, where the learning process is the core of the entire educational process (Capraro et al., 2013).

One of the learning models used in curriculum independent is a Learning Model *Project Based Learning*. In the curriculum independent learning, *Project Based Learning Model* also called the Learning Model Based Project, meaning in learning This teacher gives task to students whose results Finally can create something challenge For encourage desire high tofu (Wulandari et al., 2024). During the observation in activity following PPL ( Practical Practice) Experience Field ) can observed that occurred in class IV UPTD of Public Elementary School 122350 Pematangsiantar PPKN learning in the curriculum independent Already including good, but Still not enough effective in using learning models so that participant educate not enough active in the learning process that causes results Study student not enough maximum. The learning that is carried out moment This only need activity educator so that participant educate feel bored in learning. Students just sit down for listen and do assignments that focus on the book. At the end learning, students No capable conclude content material learning the (Sitompul et al., 2024).

The low results Study student caused by Because lack of implementing the appropriate learning model so that Still there is students whose grades under Criteria Minimum Completion (KKM), students not enough active or not enough involved For follow construct in every activity Study teaching. Therefore that, it is necessary used a model that can put participant educate as learning subjects ( actors ) and educators only play a role as facilitator in the learning process (Ratu et al., 2021). One of them with apply *Project Based Learning Model*. *Project Based Learning Model* can activate and awaken participant educate that become participant educate must own creativity and results work Good in a way individual and group. *Project Based Learning Model* learning started from problem real things that are around participant educate and must completed through Work creative and meaningful (Biazus & Mahtari, 2022).

This has a big impact on the results Study low and unachieved students reach results Criteria Minimum Completion Criteria (KKM). The criteria are: minimum completion (KKM) that must be achieved in eye PPKN lessons, namely (70). In research This will do study to student class IV. With amount student class IV as many as 34 students.

**Table 1. Data on the Results of the Daily PPKN Test for Grade IV Students of the UPTD of SD Negeri 122350 Pematangsiantar for the 2023/2024 Academic Year**

NO	Amount Student	Minimum Competency (KKM)	Completeness	Percentage
1	11 Students	>70	Completed	32.3%
2	23 Students	<70	Not Completed	67.7%
	34 Students		Completed	100%

Based on table on show that of 34 students only 11 students got it mark above KKM and 23 students who have not reach the KKM. From this data Still Lots students who have not complete in learning (Alfaro et al., 2023). For overcome problem the so required innovations new in activity learning, such as with using a learning model For increase results Study students (Majid & Iram, 2021). Learning model is a series activity learning that must be implemented by teachers and students so that the objectives learning can achieved in a way effective and efficient as well as can utilized together For reach results Study for student (Simatupang & Yusuf, 2024).

One of the learning models the is a *Project Based Learning* Model. According to Samanthis (Safitri et al., 2024) *Project Based Learning Model* is a learning model give chance to the teacher to manage class with involving activity project. Where the teacher plays a role as facilitator for students can find answer from question guiding. In the learning model based project this, students capable explore material with use Lots meaningful way for They (Hindun et al., 2024). Students are also accustomed to work same. Recording mark done with measure, observe and evaluate all over results learning, ongoing processes and activeness student That alone, so that source Study can expanded in a way significant (Eliyasni et al., 2019).

Based on background back above so writer interested For study greater understanding deep with Title : The Influence of *the Project Based Learning* Model On Learning Outcomes PPKN On Students of Class IV of UPTD SD Negeri 122350 Pematangsiantar.

## METHOD

The type of research conducted by the researcher was experimental research with a quantitative approach. Sugiyono (Putri et al., 2022) explains that the experimental research method can be defined as a research method used to determine the effect of certain treatments on others under controlled conditions. The research design used was a pre-experimental design, in accordance with the limited number of samples to be studied.

The research design used is a one-group pretest-posttest design. This design only involves one class, namely the experiment that begins with a pretest before being given treatment and then a posttest after being given treatment using the *Project Based Learning* model. This research will be conducted at the UPTD of SD Negeri 122350 Pematangsiantar. The research time is carried out in the even semester in May of the 2023/2024 Academic Year (Lee et al., 2020).

Population is the entire research subject. According to Sugiyono (Abdurrahman & Mahmudah, 2023) population is a generalization area consisting of objects or subjects that have certain qualities and characteristics determined by the researcher to be studied and then conclusions drawn. In this study, the population is all fourth grade students of UPTD SD Negeri 122350 Pematangsiantar.

The research sample is determined by the researcher before conducting the study. According to Sugiyono (Sukmawati et al., 2023) a sample is a portion of the population and its characteristics. If the population is large, it is impossible for the researcher to study everything in the population. The conclusions learned from the sample can be applied to the population (Sutjiati & Rasiban, 2017).

In this study, the researcher chose to use total sampling as a sampling technique. Total sampling is a sampling technique where the sample size is equal to the population. The reason for using total sampling is because the population size is less than 100. Therefore, the sample size in this study was 34 people within a

month. Therefore, the sample in this study were fourth-grade students of the UPTD SD Negeri 122350 Pematangsiantar (Takeda, 2016).

Data analysis is a technique that involves processing data collected in a study to produce research results. According to Sugiyono (Purwanti et al., 2022) data analysis is the process of systematically searching for and organizing data obtained from interviews, field notes, and other materials so that it can be easily understood and the findings can be communicated to others.

## RESULTS AND DISCUSSION

### Description of Research Results

This research is a pre-experiment with use One group pretest posttest design conducted in class IV at UPTD SD Negeri 122350 Pematangsiantar with amount participant educate as many as 34 people. The questions given at the time do study has been tested for validity moreover previously in grade IV at a different school namely at the UPTD of State Elementary School 124388 Pematangsiantar with amount participant educate 20 people. After validation question done so to be continued with implementation research in class IV at UPTD SD Negeri 122350 Pematangsiantar on the subject PPKN lessons with material " Building team and manage mutual cooperation for reach objective together in accordance with the specified target ", the first conducted in research This is administering a pretest to participant educate to be able to know results Study participant educate before done the *project based learning* model, then done learning in the eyes PPKN lessons in learning 1 with using a *project based learning* model after done learning Then posttest was conducted, the aim was For know results Study participant educate after given treatment (Darby et al., 2023).

### Instrument Trial Results

Researcher conduct a trial on the question instrument in class IV UPTD SD Negeri 124388 Pematangsiantar, on May 7, 2024. Where students were given a trial test as many as 20 students. Trial done For know validity and reliability and level test difficulty and power different question.

### Validity Test Results

Validity is something the size that shows levels validity an instrument. For validity done using Ms. Excel 2010, item question is said to be valid if mark  $r_{hitung} > r_{tabel}$  with level significance of 5% or 0.05. In determining  $r_{tabel}$  can seen in the r product moment table. Based on the above can seen that grains questions that have valid value exists as many as 25 grains question namely ( question 1, question 2, question 3, question 4, question 6, question 7, question 9, question 10, question 11, question 12, question 13, question 15, question 16, question 17, question 18, question 19, question 20, question 21, question 22, question 24, question 25, question 26, question 27, question 28 and question 30). While the invalid ones are 5 items question namely ( question 5, question 8, question 14, question 23 and question 29). For valid questions can used For test furthermore (Joshi et al., 2020).

After conducting the Question Validity Test in further data collection reliability testing was carried out question For measure to what extent the instruments in the research This can trusted For used as tool data collection if the instrument Good (Damayanti et al., 2023).

Level test analysis difficulties grains question used For test questions and answers test from aspect the difficulty so that can obtained which questions are included category difficult, medium and easy. Based on table show that 30 grains questions that were tested classified as in category difficult as many as 4 questions namely ( question 1, question 2, question 10, and question 21), items question with category currently as many as 16 grains question namely ( question 4, question 5, question 7, question 8, question 9, question 11, question 12, question 14, question 15, question 16, question 17, question 18, question 19, question 20, question 22, question 24, and question 25) and items question with level difficulties easy as many as 5 grains question namely ( question 3, question 6, question 13, question 19, and question 23).

Distinguishing power question is ability question For differentiate between group student own mark high and low. For count Power differentiator, then test grouped become two that is group above and group

down. Power test differentiator in research This aim For know grains questions that have classification Power differentiator questions that are less, sufficient, good, and very good.

Based on table 4.4 power differentiator question on there are 6 grains categorized questions Bad namely ( question 1, question 3, question 13, question 19, question 20, and question 24) are categorized Enough as many as 10 grains question namely ( question 2, question 6, question 7, question 10, question 16, question 17, question 18, question 21, question 23, and question 25) are categorized Good as many as 9 grains question namely ( question 4, question 5, question 8, question 9, question 11, question 12, question 14, question 15, and question 22) (Biasutti & EL-Deghaidy, 2015).

### Data Analysis Results

Learning outcomes student can seen when Already do test question shaped choice multiple. In this study done 2 test namely pretest and posttest in form question choice multiple totaling 25 grains questions. The pretest was carried out before given treatment and Posttest after given treatment with a *project-based learning* model. Completeness results Study student assessed based on KKM ( Criteria) Minimum Completion ) is 70. Below This is the data from the pretest and posttest results in class IV UPTD of Public Elementary School 122350 Pematangsiantar.

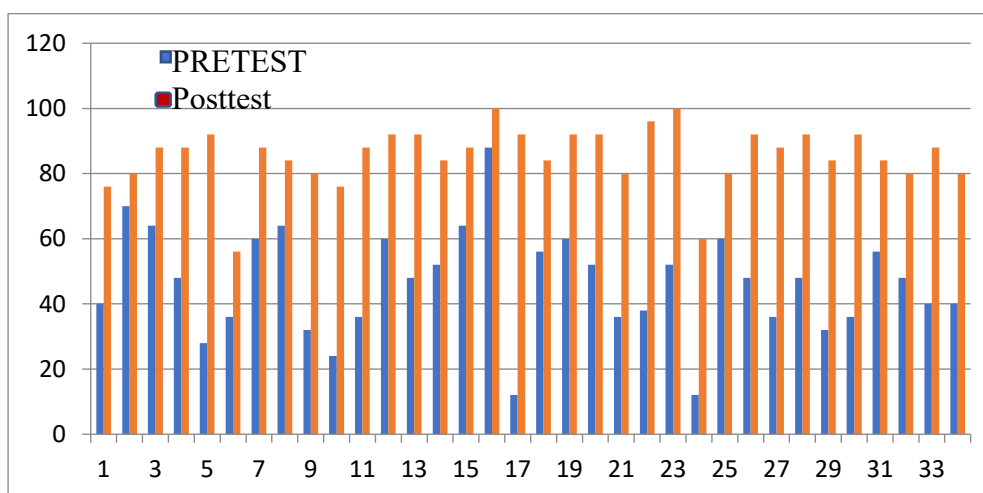


Figure 1. Comparison Diagram of Pretest and Posttest Scores

Based on the comparison diagram mark *pretest* and *posttest* above, there are that amount students who pass the KKM ( Criteria) Minimum Completion ) on the pretest score, namely 1 student who did not pass the KKM ( Criteria Minimum Completion ) on the value *pretest* as many as 33 students. Meanwhile Amount students who pass the KKM on the score *posttest* as many as 32 students and did not pass the KKM in terms of grades *posttest* as many as 2 students.

### Prerequisite Test Analysis

Prerequisite Test analysis dear used in study This is the data normality test, data homogeneity test, hypothesis test namely the t-test. The following prerequisite test results analysis.

### Normality Test Results

Normality test entered For know what data is used distributed or no. In the Normality Test This use SPSS 21 program assistance with the Kolmogorov-Smimov program.

Table 1. Normality Test Results

Tests of Normality						
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	.099	34	.200 <sup>*</sup>	.974	34	.584
Posttest	.164	34	.021	.869	34	.001

Based on the table above can known that sample of 34 students, sig shows mark *pretest* on normality test which is 0.200. While the value *posttest* normality test which is 0.021. Based on results obtained so can concluded that the *pretest* and *posttest* data used normally distributed because results significance obtained > 0.05.

### Homogeneity Test Results

After it is known level data normality, then furthermore homogeneity test was carried out. Homogeneity test used For know whether a number of variants data population is The same or No with comparing sig on Levene's statistic with 0.05 (sig > 0.05) Results of homogeneity test can seen in the table following :

Table 2. Homogeneity Test

Levene Statistics	df1	df2	Sig.
.656	5	25	.660

Based on homogeneity test results in the table on can known significance of 0.660. Because the significance is > 0.05 then can concluded that mark *pretest* and *posttest* have variants The same.

### Hypothesis Test Results

Hypothesis testing is method taking decisions based on from data analysis. In research This use test sample for evaluate the influence of *the project-based learning* model to results learning in the eyes students' civics lessons class IV, can seen from table following :

Table 3. Hypothesis Testing

Pair	Differences	Mean	Standard Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
1	Posttest - Pretest	39,176	15,501	2,658	33,768	44,585	14,737	33	.000

Based on table on presented  $t_{hitung} = 14,737$  with rate significant (2 Tailed) 0.000 probability significant < 0.05.  $t_{hitung} > t_{tabel} = 14,737 > 2.034$  then  $H_0$  rejected and  $H_a$  accepted. Explanation This show that there is the influence of *the project-based learning* model to results Study student Class IV in PPKN learning at SD Negeri 122350 Pematangsiantar.

### Discussion of Research Results

This research conducted at the UPTD of State Elementary School 122350 Pematangsiantar For know the influence of *the project-based learning* model to results learning in the eyes PPKN lessons in grade IV. Before carry out research, researcher conduct instrument testing to different schools namely UPTD SD Negeri

124388 Pematangsiantar in class IV (Irdalisa; et al., 2024). Trial the implemented use For determine amount question of the 30 questions that will be tested in form choice multiple namely There are 25 questions included in valid category, 5 invalid questions. 25 questions were declared valid which will later will used at the time *pretest* and *posttest* in class study (Shin, 2018).

In the research process, first of all researchers give test initial (*pretest*) to student before given treatment use learning through a *project based learning* model and providing test end (*posttest*) after given treatment. Highest value students at the time of the *pretest* was 88 and the score lowest is 12 (Guo et al., 2020). Where 32 students Still below KKM, things This caused by Because student Not yet fully understand material, and less active moment learning took place. After being given a *pretest*, the researcher teach with using a *project-based learning* model (Ai et al., 2020). Researchers moreover formerly explain material PPKN learning Chapter 5 Mutual Cooperation Lifestyle, Learning Material : Building team and manage mutual cooperation for reach objective together in accordance with the specified target (Agus Susanta, Edi Susanto, Rusdi, 2020). Then share student into 6 groups, each group consists of of 5 students. In the learning model this is each group will given task project in the form of clipping. After finishing do task project so student will presenting results project about mutual cooperation (Emilia, 2025).

During learning ongoing, students seen active and enthusiastic For study (Almazroui, 2023b). After two meetings, the researcher give test final ( *posttest* ) for see results finally. Obtained average value of 85.52, where mark highest is 100 and the value lowest is 56 (Vogler et al., 2018). Based on results data analysis and testing hypothesis the average *pretest* score was 46.35 and the average *posttest* score was 85.52, the value  $t_{hitung} > t_{tabel}$  ( 14,737 > 2.034) so that  $H_0$  is rejected and  $H_a$  is accepted It means there is significant influence *project based learning* model of learning results learning PPKN for students Class IV of UPTD SD Negeri 122350 Pematangsiantar.

## CONCLUSION

Based on results research and discussion that has been put forward can taken conclusion that from results *pretest*, obtained the average value is 46.35 which is classified as in category low. While average value of results Study student *posttest*, namely 85.52, which indicates that results after given treatment increase with such a range big. From the average value *pretest* and *posttest* are available difference of 39.17 and based on hypothesis test results with level significant = 0.05 and  $t_{tabel}$  of 2.034,  $t_{hitung}$  amounting to 14,737. With thus  $t_{hitung} > t_{tabel}$  14,737 > 2.034, then can concluded that there is the influence of the *Project Based Learning* Model to results learning PPKN for students Class IV of UPTD SD Negeri 122350 Pematangsiantar.

So based on Hypothesis Test Results  $H_0$  rejected and  $H_a$  accepted which indicates that existence the influence of the *Project Based Learning* Model is significant to results learning PPKN for students Class IV of UPTD SD Negeri 122350 Pematangsiantar.

## Suggestion

Based on results study so writer give some suggestions include for: School should more notice results Study students to be able to increase quality education especially at the UPTD of State Elementary School 122350 Pematangsiantar. It is hoped that to teachers can using the *project based learning* model during the learning process Because after done research by researchers, learning models *project-based learning* This can increase results Study students. For researchers expected can developing a *project based learning* model with apply other materials for know Is it suitable for other materials ? with use of the *project based learning* model said. In order to researchers can more develop as well as strengthening the *project based learning* model so that obtained information more wide and teachers are interested For using a *project based learning* model

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