

## The Development of A Project Based Learning (PJBL) Models To Build An Attitude of Obedience To The traffic Rules Of two Wheeled Vehicles For Junior High School Students

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**Abstract:** This study aims to produce a product in the form of a Project Based Learning model to build a compliant attitude to traffic regulations. The study subjects were taken as many as 42 students consisting of 9 limited test students in small groups, 15 students were limited to large groups and 18 students were field tested. Data collection techniques in the form of questionnaires, interviews and tests. Furthermore, it was analyzed using tests of effectiveness, efficiency and attractiveness. The results of the effectiveness data analysis showed that N-Gain in the field test was effective because of  $0.78 \geq 0.70$ . Thus based on the calculation of the average N-Gain normalized to 0.78% with high qualifications so that the use of the Project Based Learning model to build students' obedience towards traffic regulations proved effective. The results of the efficiency data analysis with the calculation obtained the value of ratio 1 with high classification, so that the use of project based learning model to build students' obedience towards traffic regulations proved efficiency because  $1 > 0.5$ . The results of the data analysis are interesting that the use of project based learning model for students' obedience to traffic rules has proven attractive because it obtained a percentage of 83.3% with an interesting classification.

**Keywords:** Project Based Learning, Obedience, Traffic Regulations.

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### I. Preliminary

Students as the subject of learning Pancasila and Citizenship Education are specifically designed to develop individual potential to become Indonesian citizens who are noble, intelligent and responsible. Theoretically Citizenship Education is designed in a confluent and integrated manner between the cognitive, affective and psychomotor dimensions in the context of the substance of ideas, values, concepts, moral Pancasila, democratic citizenship and defense of the state. While in pragmatic Civic Education is designed by giving emphasis to the content that contains content values in daily behavior (Budimansyah, 2009: 38). The subject of Pancasila and Citizenship Education is a subject that focuses on the formation of citizens who are able to understand and implement their rights and obligations to become intelligent, skilled and characterized Indonesian citizens mandated by Pancasila and the 1945 Constitution. This is in accordance with Education subject objectives mentioned in the standard contents of the subjects of Pancasila and Citizenship Education In accordance with Government Regulation No. 32 of 2013 explanation of article 77 J paragraph (1) affirmed that citizenship education is intended to shape students into human beings who have a sense of nationality and love of the homeland in the context of the value and morality of Pancasila, awareness constitutes the Constitution of the Republic of Indonesia 1945, the value and spirit of Bhinneka Tunggal Ika, and the commitment of the Unitary State of the Republic of Indonesia. The purpose of the PPKn subject is to develop the potential of students in all dimensions of citizenship, namely:

1. citizenship attitude including determination, commitment, and civic responsibility (civic confidence, civic committment, and civic responsibility);
2. knowledge of citizenship (civic knowledge);
3. citizenship skills including skills and civic participation (civic competence and civic responsibility).

The scope of Citizenship Education which is realized into the competency standards of the Citizenship Education subject in junior high schools is contained in the 2013 Citizenship Education Curriculum 1 grade 1 semester which shows a positive attitude towards the prevailing norms in the life of society, nation and state, Basic Competencies (KD) are 3.2 Understanding the norms that apply in social life to realize justice. Indicator of this material in 3.2.3 Shows behavior according to the norm, then the book of Citizenship Education 2013 Curriculum for the first semester of the eighth grade which is about the values of Pancasila as the Foundation of

the State and Life View, Basic Competencies (KD) are 2.1 Developing attitudes that reflect noble values Pancasila as the basis of the nation and the view of the nation's life.

This material communicator is contained in 2.1.1 Caring behavior as a manifestation of the position and function of Pancasila for the nation and State of Indonesia, as well as the Pancasila KTSP Education book for the first semester of class XI, namely the defense of the State contained in the RI Law No. 3 of 2002 concerning National Defense regulated in Article 9 paragraph (2) which reads "The participation of citizens in efforts to defend the State, one of which is organized through Education Citizenship that must have an attitude value, especially in the attitude of obeying the applicable traffic rules ", Competency Standards (SK) is 3. Showing Participation in the State Defense Business, Basic Competence (KD) is 3.2 Identifying forms of State defense business.

Based on the pre-survey activities carried out by researchers in Abung Selatan, 1 Junior High School, Kotabumi 7 Junior High School and Kotabumi 10 Junior High School, the students' understanding of the rules of norms, then the values of Pancasila as the State and the defense of the State are still very minimal due to the lack of concern of students towards the environment both at school and in the community, this can be seen from the behavior of students who do not obey the norms prevailing in the community where as students do not reflect the values of Pancasila and the attitude of defending the State, wrong the other is by not complying with legal norms. From the survey, researchers found that the number of students who did not comply with the rules of legal norms included violations of students against traffic rules where students who were not sufficiently aged 17 years were allowed to bring vehicles to school, especially two-wheeled vehicles.

Of the number of students in Abung Selatan 1 Junior High School around 20%, then at Kotabumi 7 Junior High School around 40% and in Kotabumi 10 Junior High School around 25% of students intentionally brought two wheeled vehicles to school on the grounds that they were far away, not there are public transportations that pass through their homes and some say that they deliberately bring vehicles to school because parents are permitted. The following is a table of pre-survey results that researchers have conducted on students who have violated traffic rules due to carrying two-wheeled vehicles that do not have the proper completeness:

**Table 1.1 : Students who bring two wheeled vehicles to school in Abung Selatan 1 Junior High School**

Class	Number of Students Who Carry Two-Wheeled Vehicles	Incomplete vehicles		
		Rearview mirror	Not wearing a helmet	Exhaust Sounds Are Changed
VII	10 student	5	10	5
VIII	15 student	5	15	2
XI	35 student	15	35	10

Source: Abung Selatan 1 Junior High School Office, 2017

From the table above, it can be analyzed that the number of students of Abung Selatan 1 Junior High School who brought two wheeled vehicles to school was 60 students, where class VII carrying 10 wheeled vehicles numbered 10 students carrying incomplete vehicles such as not installing the rearview mirror 5 students, who did not wear helmets amounted to 10 students, while the exhaust sounds were changed by 5 students. For the eighth grade students carrying two wheeled vehicles, there were 15 students who did not have a rearview mirror for 5 students, who did not wear helmets 15 students, and the exhaust sound was changed to 2 students. While in class IX carrying two-wheeled vehicles amounted to 35 students where the students did not complete the vehicles used such as 15 non-installed rearview mirror students, who did not wear helmets 35 students and the modified exhaust sound totaling 10 students. So it can be concluded that from the number of students as many as 700 students, about 20% of students of South Abung 1 State Junior High School who bring two-wheeled vehicles to school by not completing the vehicle and have violated traffic rules due to all students carrying two-wheeled vehicles going to school did not wear a helmet at all when driving the vehicle on the highway.

**Table 1.2 : Students who bring two wheeled vehicles to school in Kotabumi 7 Junior High School**

Class	Number of Students Who Carry Two-Wheeled Vehicles	Incomplete vehicles		
		Rearview mirror	Not wearing a helmet	Exhaust Sounds Are Changed
VII	15 student	10	5	-
VIII	20 student	5	2	-
XI	40 student	5	5	-

Source: Kotabumi 7 Junior High School Office, 2017

From the table above, it can be analyzed that the number of students of Kotabumi 7 Junior High School who bring two wheeled vehicles to school is 75 students where class VII carries two wheeled vehicles totaling 15 students carrying incomplete vehicles such as not installing 10 mirrors. students, who do not wear helmets amounted to 5 students, while the modified exhaust noise does not exist.

For the eighth grade students who brought two-wheeled vehicles, there were 20 students who did not install the rearview mirror 5 students, who did not wear 2 students' helmets, and there was no change in the exhaust sound. While in class IX carrying two-wheeled vehicles amounted to 40 students where the students did not complete the vehicles used such as 5 non-installed rearview mirror students, who did not wear 5 students' helmets and no modified exhaust sound. So it can be concluded that from the number of students as many as 850 students, about 40% of students of Kotabumi 7 Junior High School who brought two wheeled vehicles to school by not completing the vehicle and had violated the traffic regulations because some students carrying two-wheeled vehicles were not wearing a helmet when and not installing the rearview mirror when riding on the highway.

**Table 1.3:** Students who bring two wheeled vehicles to school in Kotabumi 10 Junior High School

Class	Number of Students Who Carry Two-Wheeled Vehicles	Incomplete vehicles		
		Rearview mirror	Not wearing a helmet	Exhaust Sounds Are Changed
VII	10 student	2	-	-
VIII	5 student	-	-	-
XI	30 student	2	-	-

Source: Kotabumi 10 Junior High School Office, 2017

From the table above it can be analyzed that the number of students in Kotabumi 10 Junior High School carrying two-wheeled vehicles to school totaled 45 students where class VII carrying 10-wheeled vehicles numbered 10 students carrying incomplete vehicles such as not installing 2 mirrors. students, who do not wear helmets do not exist, while the modified exhaust sound does not exist. For students in class VIII who bring two-wheeled vehicles, there are 5 students who do not have a rear-view mirror, who do not wear a helmet do not exist, and no exhaust sound is changed.

While in class IX carrying two-wheeled vehicles amounted to 30 students where the students did not complete the vehicles used such as 2 non-installed rearview mirrors, none of which used a helmet and no modified exhaust sound. So it can be concluded that from the number of students as many as 750 students, about 25% of the students of Kotabumi 10 Junior High School who brought two-wheeled vehicles to school but from that number only a few students did not complete the vehicle and only a few students were violating traffic regulations because some students who bring two-wheeled vehicles adhere to the traffic rules by wearing a helmet, then put on the rearview mirror and do not change the exhaust sound that is irritating other road users even though the students actually do not have a Driving License (SIM) due to age which is not enough. It can be seen that one of the reasons that is not appropriate is the parents of students who allow their children to use two-wheeled vehicles on the highway while in the Republic of Indonesia Law No. 22 of 2009 concerning traffic regulations it is stated that children who are not 17 years old are unfit to carry two-wheeled vehicles on the highway, as well as RI Transportation Minister's Regulation No PM 26 of 2015 concerning Standards for Road Traffic and Transportation Safety Article 77 paragraph 1 states that Everyone driving a Motorized Vehicle on the Road is required to have a "Driving License according with the type of Motorized Vehicle being driven ", this proves that Abung Selatan 1 Junior High School students, Kotabumi 7 Junior High School students, and Kotabumi 10 Junior High School students have violated traffic rules. The large number of students at Abung Selatan 1 Junior High School students, Kotabumi 7 Junior High School students, and Kotabumi 10 Junior High School students who ride motorbikes to school indicates that they are not yet aware of compliance with traffic regulations.

This is an indication that the unsuccessful subjects of Pancasila and Citizenship Education in shaping students to become law-abiding citizens by applying Pancasila values and participating in state defense efforts. Thus the role of PPKN teachers is still questionable, which is related to their duties and responsibilities in providing learning about legal norms, the values of Pancasila and the defense of the State. Where an educator has a unity of roles and functions that cannot be separated, namely educating, guiding, teaching and training (Suparlan 2006: 29). Educating related to moral and personality, guiding related to norms and rules, teaching related to teaching materials in the form of science and technology, and training related to skills or life skills (Suparlan, 2006: 31). The role and function of educators must be used as their work habits. (Djohar, 2006: 10).

PPKn teachers occupy a very important role in the formation of the attitudes and character of students both inside and outside the school environment. Minister of National Education Regulation No. 16 of 2007

concerning Academic Qualification Standards and Teacher Competence states that the competencies that must be possessed by a Civic Education teacher are as follows:

1. Understanding the material, structure, concepts and mindset of science that supports Citizenship Education subjects.
2. Understanding the substance of Citizenship Education which includes knowledge of citizenship (civic knowledge), the value and attitude of citizenship (civic disposition), and citizenship skills (civic skills).
3. Demonstrate the benefits of citizenship education subjects.

After the PPKn teacher masters these competencies, it is expected to be able to form ideal students and have a strong mentality, so that they can overcome the problems that will be faced. However, if you look at the conditions of Abung Selatan 1 Junior High School students, Kotabumi 7 Junior High School students, and Kotabumi 10 Junior High School students who are still violating many traffic rules, the role of Civics Education teachers in increasing traffic law awareness on Public Middle School 1 students Abung Selatan 1 Junior High School, Kotabumi 7 Junior High School students, and Kotabumi 10 Junior High School are still questionable.

Based on the above opinion it can be concluded that the application of project-based learning (PjBL) in PPKn subjects is able to encourage students to be more active in learning. This can be seen how students are able to give results authentically when the teacher as a facilitator involves students in solving problems, making decisions, conducting investigative activities, and giving students the opportunity to present the results that students do.

Project-based learning model (PjBL) in learning PPKn, is expected to help students to have skills in learning and make students more active in solving project problems with tangible product results. Thus, researchers expect that students can understand if using a two-wheeled vehicle on the road does not complete security for themselves, it can violate traffic rules and can cause undesirable things. Therefore, researchers want to do further research to be able to find out the behavior of students in driving two-wheeled vehicles on the highway by linking PPKn lessons in daily life therefore researchers took the title of the study entitled "Development of Project Based Learning Learning Models ( PjBL) To Build Obedience to Two-Wheeled Vehicle Traffic Regulations Abung Selatan 1 Junior High School, Kotabumi 7 Junior High School students, and Kotabumi 10 Junior High School.

## **II. Research Methods**

The approach in this study is descriptive research with a qualitative approach. This descriptive research method is intended to explore and clarify a phenomenon or social reality by describing the number of variables related to the problem being studied (Sanapiah Faisal, 2003: 22). This study aims to analyze the obedience attitudes of students in traffic education. Thus what is observed is the process of learning directly into the field using a project-based learning model. Therefore, this approach is expected to be able to obtain a deep understanding of the importance of the adherence of students to traffic regulations. This research is a research development or development research. The product to be developed is a project-based learning model. (project based learning) along with learning support tools which include Learning Implementation Plans (RPP), Student Activity Sheets (LKPD) for even seventh grade junior high school students using the steps in the development research. The study was conducted in Abung Selatan 1 Junior High School, at Kotabumi 7 Junior High School, 10 Kotabumi Junior High School. The research subjects in this study were students of class VII 2017/2018 Academic Year. A trial was conducted to obtain data as a basis for revising the product.

In this step the product is then validated by several experts, including material and design experts. After that the trial was limited to small groups and large groups. The small group test was applied to students in class VII of Abung Selatan 1 Junior High School, Kotabumi 7 Junior High School, and Kotabumi 10 Junior High School representing each group by choosing 3 people in each class so that there were 9 people. Small group test aims to determine the effectiveness, efficiency and attractiveness of project based learning learning models. Initial products that have been tested by small groups are tested again through large group tests. Large group test aims to determine the effectiveness, efficiency and attractiveness of project based learning learning models. The purpose is the same as the purpose of small group testing, but different in the number of subjects used. Subjects in the large group test were 5 students consisting of 15 schools. The field test was applied to students of class VII of ` Abung Selatan 1 Junior High School totaling 18 students, Kotabumi 7 Junior High School amounting to 18 students, and Kotabumi 10 Junior High School totaling 18 students. The experimental design used in the field test and the small group and large group test was One-Group Pretest-Posttest Design, which consisted of an experimental group without any control class (Sugiyono, 2011:74). This design compares the value of the pretest (the test before using the project based learning model) with the posttest value (the test after using the project based learning model). After passing the field test step, the main product was perfected so that an effective, efficient and interesting project-based learning model was produced in its use in the learning process. In addition to the main products, a supporting product is also produced in the form of RPP that uses a project-based learning model in the implementation of its learning.

Data collection techniques in this study include several forms of data collection. In this case the researcher uses data collection methods as follows: 1. Observation: Data that has been collected is processed and analyzed descriptively and qualitatively, which presents the data in detail and performs theoretical interpretations so that it can obtain a description of an adequate explanation and conclusion. 2. Questionnaire: The questionnaire aims to find out the condition / data of self, experience, knowledge of attitudes and opinions. Questionnaire is given to educators and students to obtain needs analysis data in the preliminary stage. 3. Documentation: Documentation is usually used to obtain information in the form of various records in the form of books, photos, videos, and other notes that are reviewed so that the data obtained can be justified.

### III. Research Results And Discussion

Based on preliminary observations made by researchers it is known that students of class VII SMP do not comply with the rules of legal norms due to lack of awareness of students in complying with traffic regulations where students who are not sufficiently aged 17 years are allowed to bring vehicles to school, especially two-wheeled vehicles. Students intentionally bring two-wheeled vehicles to school on the grounds that they live far away, there are no public transportations that pass through their homes and some say they deliberately bring vehicles to school because parents are permitted. This is an indication that the ignorance of students is one of the factors that have not succeeded in the subjects of Pancasila and Citizenship Education in shaping students to become law-abiding citizens by applying Pancasila values and participating in state defense efforts. Thus the role of PPKn teachers is still questionable, which is related to the duties and responsibilities in providing learning, especially related to legal norms, the values of Pancasila and the defense of the State.

Learning can be said to be successful if the goals that have been set can be achieved well, therefore PPKn learning activities will succeed, if the goals of learning PPKn are well achieved. So that the teaching objectives can be achieved well, it requires the right teaching model for the purpose of learning PPKn, one of which is to build students' obedience towards traffic rules. One model that can be applied to support learning is the Project Based Learning Learning Model. Project Based Learning Learning Model is the use of projects in the teaching and learning process, with the aim of deepening learning, where participants are not using investigative questions and also technologies that are relevant to their lives. Project-based learning is a comprehensive perspective focusing on teaching by involving students in the investigation of a problem. In this framework, students pursue solutions to problems that are not simple by asking questions and refining them, debating opinions, making predictions, designing plans or experiments, collecting and analyzing data, drawing conclusions, communicating their ideas and findings to others, submitting new questions, and creating artifacts ". The learning is in accordance with the objectives in learning PPKn to build students' obedience towards traffic rules. So that based on that planting, obedience can be applied using a project-based learning model.

From the observations made by researchers on what factors make students do not have a obedient attitude to traffic rules, among others, is the lack of training provided by the police to students so that students do not understand how to drive a two-wheeled vehicle on the highway properly , in the learning process students do not get guidance from the BK teacher about the dangers if two-wheeled vehicles do not have complete safety and the most important factor is the lack of attention of parents to students where the role of parents is very important to maintain the safety of students in driving a wheeled vehicle two on the highway. In addition to observations and interviews that have been carried out by researchers, it was also done filling out a scale questionnaire of obedient attitudes towards traffic regulations conducted by students. The results of the calculation are as follows:

**Table 4.1** Preliminary Assessment of the Attitudes of Obedience to Traffic Regulations for Students

No.	School Name	Assessment of Obedient Attitude Scale
1.	Abung Selatan 1 Junior High School	50% of students answered agree, 32.9% of students answered disagree and 12.6% of students answered disagree
2.	Kotabumi 7 Junior High School	66.7% of students answered agree, 27.8% of students answered less agree and 5.6% of students answered disagree
3.	Kotabumi 10 Junior High School	61.1% of students answered agree, 28.5% of students answered less agree and 9.2% of students answered disagree

Source: Primary Data Analysis

Based on the above table from the results of the assessment of the scale of obedience to traffic regulations, students get different assessments from each school, this can be seen when students from each school numbering 18 people fill out a questionnaire related to traffic regulations, it turns out from the results above it can be seen that Abung Selatan 1 Junior High School only 50% of students answered agreeing to better understand traffic regulations, while 32.9% of students still answered that they disagreed with the understanding of compliance with regulations traffic and 12.6% of students answered that they did not agree with the understanding of obeying traffic rules. Likewise with Kotabumi 7 High Junior School, students answered that

they agreed that only 66.7% would better understand compliance with traffic regulations, while 27.8% of students still answered that they did not agree with the understanding of compliance with traffic regulations and 5.6% students answered that they did not agree with the understanding of obeying traffic rules. And for Kotabumi 10 Junior High School the same thing is only 61.6% of students answered agreeing to better understand obedience to traffic regulations, while 28.5% of students still answered that they did not agree with the understanding of obeying traffic rules and 9, 2% of students answered that they did not agree with the understanding of obeying traffic rules. Therefore, based on the description above it can be concluded that students from each school have not yet understood the importance of students' obedience to traffic regulations. Thus, the role of the teacher is very important to help students so that students are more caring and careful when driving two-wheeled vehicles on the highway.

For that, the realization of learning outcomes will always be related to learning evaluation activities so that learning evaluation techniques and procedures are needed that can change attitudes and behavior optimally so that the learning of project based learning in PPKn subjects can be linked to social life.

**Limited Test Results**

Limited trials were conducted on small groups and large groups to obtain and find out learning outcomes with the Project Based Learning learning model. Small group trials were conducted with the research subjects of class VII junior high school students totaling 9 people. Whereas in large group trials conducted with research subjects of class VII junior high school students amounted to 15 people. Learning outcomes can be seen from the pretest and posttest scores, the values before and after using the Project Based Learning learning model. In addition, this group test was conducted to see the suitability and ease of the Project Based Learning learning model to improve the learning outcomes of grade VII students after attending the learning process. The results of pretest and posttest learning in a limited trial of small groups and large groups obtained the following average values:

**Table 4.2** Value of Limited Test Learning Results

No.	Limited Test		Pretest Value	Posttest Value
1.	Small group	Average	54	89
		Top Rated	60	100
		Lowest Value	50	85
2.	Large Group	Average	58	91
		Top Rated	70	100
		Lowest Value	50	85

Source: Primary Data Analysis

Based on the table above the average score of the small group pretest was 54 and the average value of the small group posttest was 89. Then the mean score of the large group pretest was 58 and the posttest mean score for the large group was 91.

After limited testing of small groups and large groups, researchers conducted revisions to improve the learning model that has been used by completing existing deficiencies. Thus the assessment obtained from the limited test of small groups and large groups can be concluded that the project based learning model can improve the learning outcomes of class VII students. Subsequently field tests were carried out using the revised project based learning model.

**Field Results**

Field trials were carried out using a project based learning model to build students' obedience towards traffic rules in the learning process in one class that was chosen as the experimental class of Abung Selatan 1 Junior High School, Kotabumi 7 Junior High School students, and Kotabumi 10 Junior High School. Researchers evaluated it using questionnaires that had been made by researchers. This is intended to obtain inputs and corrections regarding the revised model after individual and small group tests.

The results of field tests conducted in the class VII Abung Selatan 1 Junior High School, Kotabumi 7 Junior High School students, and Kotabumi 10 Junior High School dle School are that according to students learning activities using a project based learning model can motivate students and increase students' knowledge to be obedient to traffic rules. Through video traffic violations played by the teacher, then students making a visit to the police station can show the importance of legal norms in realizing justice, especially to reduce the level of traffic violations. So that in general the use of project based learning models can motivate students to get used to being obedient as well as being very liked by students so that researchers can continue at the next stage.

The assessment of pretest and posttest learning outcomes in the field test can be seen in the table below:

**Table 4.3** Value of Learning Outcomes Field Test

No.	Limited Test	Pretest Value	Posttest Value
1.	Average	62	93
	Top Rated	70	100
	Lowest Value	50	85

Source: Primary Data Analysis

Based on the table above the average pretest score of 62 and the average posttest score of 93. The results of the field test showed that the project based learning model to build students' obedience towards traffic rules especially two-wheeled vehicles can motivate students to be creative and able increase students' understanding in real life and are very liked by students so that students can continue at the next stage.

The Effectiveness of Using Project Based Learning Learning Models To see the effectiveness of developing a project based learning model that is used, the product is tested for students. Subjects from each school for students were taken by two study groups, namely one experimental class which would be treated using a project based learning model and one class was a control class that was not treated or learned as usual. At the beginning of the learning, students are given pretest questions to measure the students' initial abilities and as a comparison before being given learning to find out the students' basic knowledge about material norms that apply in the community. After the treatment is complete, all respondents are given instruments in the form of posttest questions to find out how far the students knowing the material that has been given after using the project based learning model for the experimental class.

The effectiveness in this study is to refer to the achievement of the material received by students through the learning model provided and to assess the learning objectives to be achieved at the level of effectiveness of the use of project-based learning models in learning and achievement of learning outcomes. There are 4 important aspects that can be used to describe the effectiveness of learning, namely: (1) accuracy of mastery of behavior learned or often called error rate, (2) speed of performance, (3) level of learning transfer (4) retention rate. The effectiveness measured in this study is seen from normalized gain (n-Gain) between the experimental class and the control class. Learning is said to be effective if the average n-Gain experimental class is greater than the control class. N-Gain is obtained from the results of the pretest and posttest (overlapping data) of students in the field test. The following is the average n-Gain from the results of field tests as follows:

**Table 4.4** The Effectiveness of Using Project Based Learning Models to Build Attitudes to Obeying Traffic Regulations

No.	Sample	N-Gain	Classification	Level of Effectiveness
1.	Small Group Test	0,76	High	Effective
2.	Test for Large Groups	0,78	High	Effective
3.	Field Test	0,80	High	Effective
Average		0,78	High	Effective

Source: Primary Data Analysis

Based on the table above it is known that N-Gain in the small group test is effective because of  $0.76 \geq 0.70$ . N-Gain in the large group test was effective because  $0.78 \geq 0.70$ . N-Gain in the field test is effective because  $0.80 \geq 0.70$ . Thus it can be concluded based on the calculation of the normalized 0.78 N-Gain with high classification so that the use of project-based learning learning model to build obedient attitudes towards traffic rules for students of class VII junior high school proved effective.

While the comparison of N-Gain control class and experimental class can be seen in the table below:

**Table 4.5** N-Gain Preliminary and Final Assessment of Attitudes

Average value				n-Gain	
Control Class		Experiment Class			
Pretest	Posttest	Pretest	Posttest	Control Class	Experiment Class
37,9	41,8	61,7	92,8	3,9	31,1

Source: Primary Data Analysis

Efficiency of Using Project Based Learning Learning Models Measurement of the efficiency of the use of project based learning models is done by comparing the time required based on learning planning (time provided) with the time used in general learning. From the test results, the data provided is 2 x 45 minutes, and the time used by the students in this study is the average as in the following table:

**Table 4.6** Time Used in Learning

Indicator	Time Used	
	Class Treatment	Class that Does Not Get Treatment
Demonstrate behavior according to norms to realize justice	45 minutes	90 minutes
Total meeting	45 minutes	90 minutes

Source: Primary Data Analysis

For the treatment class, the calculation of the efficiency ratio for the treatment class is as follows.

$$\text{Efficiency} = 45/45 = 1.00$$

Whereas for classes that do not receive any treatment, the efficiency ratio is obtained:

$$\text{Efficiency} = 45/90 = 0.5$$

Based on the ratio values obtained above, it is found that the ratio value for treatment class 1, it shows that the efficiency is high. It can be concluded that the use of project based learning models can improve the efficiency of learning time. While for the class that is not treated the ratio is 0.5, meaning that learning as usual is also efficient, but the efficiency value is lower than the treatment class.

Interesting Use of Project Based Learning Learning Models Learning learning is measured by observing the students' tendency to keep learning where the quality of learning will influence it. The attraction in this study is the application of project based learning learning models favored by students and can increase students' motivation to learn. Assessment is carried out on the ease of use of the project based learning model and the attitude of students to learning by 83.3%. Based on the results of the study it is known that with the application of project based learning learning models on PPKn learning class VII even semester material norms that apply in the community so that students can familiarize themselves with compliance with norms, especially legal norms relating to students' obedience to traffic rules.

#### IV. Discussion

After knowing the conditions and potential proceed to planning. Planning is carried out to develop the initial product which starts from choosing the material form, making competency standards and basic competencies, then determining indicators of achievement of basic competencies, determining learning objectives, designing syllabus and RPP with the Project Based Learning learning model. After planning, the initial product is prepared and developed in the form of a book containing the introduction, theoretical basis and model of findings that are complemented from the planning, implementation and evaluation of Project Based Learning learning models. To find out the feasibility of the products developed, the experts validated the experts. material, and design experts. After validation by experts, the researchers obtained an assessment and made revisions according to suggestions and input from experts. The product was field tested with 18 participants. The final process is done by refining the product with the addition of a profile on the back cover of the product.

The results of the effectiveness data analysis showed that N-Gain in the field test was effective because  $0.78 \geq 0.70$ . Thus based on the calculation of the average N-Gain normalized to 0.78 with high qualifications so that the use of the Project Based Learning model to build students' obedience to traffic regulations proved effective. The results of the efficiency data analysis with the calculation obtained the value of ratio 1 with high classification, so the use of project based learning model to build students' obedience towards traffic rules proved efficiency because  $1 > 0.5$ .

The results of the data analysis are interesting that the use of project based learning model for the attitude of obedient learners to the rules and then proved to have interest because it obtained a percentage of 83.3% with an interesting classification.

The advantages of guided project based learning models based on field tests are 1). Able to increase students' learning motivation, 2). growing problem solving skills to increase 3). Can improve students' skills in managing various sources, 4). Learners are more active in learning, 5). Natural collaboration occurs between students, 6). Indirectly improve students' communication skills, 7). Train students in organizing a project, 8). Improve skills in time management, 9). Learning from Real Life Experiences, 10). And learning becomes fun.

Products developed by this development have advantages including:

1. The Project Based Learning model can increase the activeness of students in learning activities to solve a problem.
2. Project Based Learning models can indirectly improve students in communicating.
3. Project Based Learning learning models can train students to organize a project.
4. Project Based Learning learning models can improve time management skills.



5. Project Based Learning learning model is a real learning in life.

Product Weaknesses Development Results Products developed by this development have disadvantages including:

1. The Project Based Learning learning model requires a lot of time to solve problems.
2. The Project Based Learning model requires a lot of money.
3. Project Based Learning learning model requires a lot of equipment that must be provided.

#### **Research Limitations**

This research has limitations, namely:

1. Students are not familiar with learning using Project Based Learning, because students more often get learning with the teacher directly giving the material as a whole by not giving students the opportunity to learn to find their own references needed by giving a problem related to the world real.
2. Obstacles to implementation time are relatively lacking because the intensity of effective meetings in class is not too long.
3. Limited information sources such as library books, whereas varied information sources in the form of books are important supporting elements in the process of implementing project based learning. Besides that, the internet wifi network in schools cannot be optimized by students because of the inaccessibility of students' classes.
4. Limitations of the ability of students to observe and work systematically, structured and in carrying out presentations of observations in front of the class, so that the teacher must provide plenty of time in guiding and directing so that students can develop confidence.

#### **V. Conclusion**

The results of data analysis research and development of Project Based Learning Learning Model can be concluded that:

1. That affects students driving a motorcycle, which is divided into the conditions of Abung Selatan 1 Junior High School, Kotabumi 7 Junior High School, and Kotabumi 10 Junior High School students who ride motorbikes to school indicating that they have not obeyed traffic rules . This is an indication that the unsuccessful subjects of Pancasila and Citizenship Education in shaping students to become law-abiding citizens by applying Pancasila values and participating in state defense efforts. The role of the PPKn teacher is very important in this case because with the ignorance of the students the teacher can provide a solution so that students do not return to repeat traffic violations, such as teachers can invite the police to conduct socialization to students so that students can be given relevant knowledge with traffic regulations, both from safety when driving two-wheeled vehicles on the highway and what equipment may be used in driving a two-wheeled vehicle on the highway. Then the teacher can also invite students to visit the police to be given training on how to bring two-wheeled vehicles properly. Therefore, the school and the police must work together to help remind students to always be careful when driving two-wheeled vehicles when on the highway so as to reduce the risk of accidents on students.by utilizing by opening land for students who carry bicycles motorcycle.
2. The results of this study are products of the Development of Project Based Learning Learning Models that are arranged systematically: through planning, implementation, and evaluation.
3. Project Design Development Learning Model Project Based Learning facilitates students to improve the effectiveness of learning, make students creative and can solve a problem together. This is also seen from the pretest and posttest scores of students when given assignments. So that the product of developing Project Based Learning Learning Model is feasible to be used as the development of learning models in Abung Selatan 1 Junior High School, Kotabumi 7 Junior High School, and Kotabumi 10 Junior High School.
4. The results of the effectiveness data analysis show that N-Gain in the field test is effective because  $0.78 \geq 0.70$ . Thus based on the calculation of the average N-Gain normalized to 0.78 with high qualifications so that the use of the Project Based Learning model to build students' obedience to traffic regulations proved effective.
5. The results of the efficiency data analysis with the calculation obtained the value of ratio 1 with high classification, so that the use of project based learning model to build students' obedience towards traffic regulations proved to be efficient because of  $1 > 0.5$ .
6. The results of the data analysis are interesting that the use of project based learning model for students' obedience to traffic rules has proven attractive because it obtained a percentage of 83.3% with an interesting classification.

### **Bibliography**

- [1]. Al Rasyidin & Wahyudin Nur Nasution. 2011. *Teori Belajar dan pembelajaran*. Medan: Perdana Publishing.
- [2]. Amti, dkk. 2004. *Layanan bimbingan dan konseling kelompok*. Padang: Jurusan Bimbingan dan Konseling Fakultas Ilmu Pendidikan Universitas Negeri Padang.
- [3]. Anni, Catharina, Tri. 2004. *Psikologi Belajar*. Semarang: Unnes Press.
- [4]. Azwar, Saifuddin. 2005. *Realibilitas dan Validitas*. Yogyakarta: Pustaka Pelajar.
- [5]. Budimansyah, Dasim. 2009. *Paradigma Pembangunan Pendidikan Nasional: Konsep, Teori, dan Aplikasi*. Bandung: Widya Aksara Press.
- [6]. Departemen Pendidikan Nasional. Peraturan Pemerintah Republik Indonesia Nomor 19 tahun 2005 *tentang Standar Nasional pendidikan*, Jakarta: Departemen Pendidikan Nasional, 2005
- [7]. Djohar. 2006. *Peran dan Fungsi Guru*. Bandung: PT. Remaja Rosdakarya.
- [8]. Dwiyono, Agus. 2012. *Pendidikan Kewarganegaraan 3 SMP Kelas IX*. Jakarta: Perpustakaan Nasional.
- [9]. Hanafiah, Nanang dan Cucu Suhana. 2009. *Konsep Strategi Pembelajaran*. Bandung: PT. Refika Aditama.
- [10]. Hasnawati, Sri. 2015. *Pendekatan Contextual Teaching and Learning Hubungannya dengan Hasil Belajar*. Staf Pengajar FDDBS Universitas Negeri Yogyakarta.
- [11]. Hasyim, Adelina. 2016. *Metode Penelitian dan Pengembangan di Sekolah*. Yogyakarta: Media Akademi.
- [12]. Ibnu, Badar Trianto. 2014. *Mendesain Model Pembelajaran Inovatif, Progresif, Dan Kontekstual*. Jakarta: Kencana Prenamedia Group.
- [13]. Kaelan. 2004. *Pendidikan Pancasila*. Yogyakarta: Paradigma.
- [14]. Kardiman, Yuyus. 2016. *Pendidikan Pancasila dan Kewarganegaraan untuk SMP/MI Kelas VIII*. Jakarta: PT. Gelora Aksara Pertama.
- [15]. Lukman Surya Saputra, Aa Nurdiaman, dan Salikun. 2016. *Pendidikan Pancasila dan Kewarganegaraan*. Jakarta: Pusat Kurikulum dan Perbukuan, Balitbang, Kemdikbud.
- [16]. Moleong, Lexy J. 2006. *Metodologi Penelitian Kualitatif*. Bandung: Remaja Rosdakarya.
- [17]. Mulyasa, E. 2007. *Standar Kompetensi dan Sertifikasi Guru*. Bandung: PT. Remaja Rosdakarya
- [18]. Nasution. 1995. *Berbagai Pendekatan dalam proses belajar mengajar*. Jakarta: Bumi Aksara.
- [19]. Peraturan Menteri Perhubungan RI No PM 26 Tahun 2015 tentang Standar Keselamatan Lalu Lintas dan Angkutan Jalan Pasal 77 ayat 1. Jakarta
- [20]. Rais. 2010. *Project Based Learning: Inovasi Pembelajaran yang Berorientasi Soft Skills*. Surabaya: Unesa.
- [21]. Sagala, Syaiful. 2006. *Konsep dan makna pembelajaran*. Bandung: Alfabeta.
- [22]. Sanjaya, Wina. 2008. *Strategi Pembelajaran Berorientasi Standar Proses Pendidikan*. Jakarta: Kencana Perdana Media.
- [23]. Soerjono Soekanto. 1982. *Kesadaran Hukum & Kepatuhan Hukum*. Jakarta: Rajawali.
- [24]. Sugiyono. 2014. *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Bandung: Alfabeta.
- [25]. Suparlan. 2006. *Guru Sebagai Profesi*. Yogyakarta: Hikayat Publishing.
- [26]. Thomas, J.W., dkk. 1999. *Project Base Learning: A Handbook of Middle and High School Teacher*. Novato CA: The Buck Institute for Education.
- [27]. Trianto, Ibnu Badar. 2014. *Mendesain Model Pembelajaran Inovatif, Progresif dan Kontekstual*. Jakarta: Prenadamedia Group.
- [28]. Udin S. Winataputra, dkk. 2007. *Teori Belajar dan Pembelajaran*. Jakarta: Universitas Terbuka.
- [29]. Undang-Undang RI No. 20 Tahun 2003 tentang *Sistem Pendidikan Nasional*. 2008. Jakarta: TransMedia Pustaka.
- [30]. Undang-Undang RI No 22 Tahun 2009. *Modul Pembelajaran Lalu Lintas*. 2015.

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