

# The Influence Of Project-Based Learning With Support Miniature Work Media On Activity And Learning Outcomes Students Of Grade Iv Muhammadiyah Elementary School 4 Surabaya

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**Abstract:** The study aims to determine the influence of the *Project Based Learning* for miniature work media on student activity and learning outcomes. The sample of this research is grade IV students in the elementary School of Muhammadiyah 4 Surabaya amounting to 38 students. This study was carried out in thematic learning on the ward subtheme where I lived semester II of lesson 2018/2019. This type of research is Pre-experimental design, with a quantitative approach, and the research design used is One Group Pretest-Posttest Design. The data collection techniques used are observations and tests. The research instruments used include an observation sheet of learning activity and a test sheet of students' learning outcomes. As for the data analysis techniques using statistical analysis and T-test test. The results showed that there was a significant influence from the PjBL learning model for the work of a miniature work media and student activity on the learning outcomes of Grade IV Elementary School Muhammadiyah 4 Surabaya which was demonstrated by the acquisition of Significance for the results of the pretests percentage of student activity with an average of 59.4, while the value of significance for the results of the percentage of posttest student activity with an average of 77.6. As for the learning outcomes, there is a significant influence on the use of model PjBL assisted miniature media work is indicated by Tcount 16.158 (df 30) > Ttable 2.011 (df 30) and the value of sig. (2-Failed)  $0.000 < 0.005$ . So,  $H_0$  is rejected and  $H_a$  is accepted, there was a difference in student learning outcomes before given treatment. Thus, the use of the PjBL model for miniature work media has been a positive influence on the activity and learning outcomes of grade IV students.

**Keywords:** *Project-Based Learning, Miniature Work Media, Activity, and Learning Outcomes*

## Introduction

Education is a process of learning knowledge, skills, and habits in which later knowledge, skills and habits that have been owned by students can be used for students themselves and the community around the students. Law No. 20 of 2003 on the national education system, article 1 states that education is a conscious and well-planned effort to create a learning atmosphere and learning process so that students actively develop their own potential To possess the spiritual power of religion, self-control, personality, intelligence, noble morality, as well as the necessary skills of himself, society, nation, and state.

Education can be obtained through formal education and non-formal education. Formal education can be done by students through educational institutions or educational foundations that have permission from the Education office. Nonformal education can be carried out by the institution or Education Foundation. The ordinary nonformal education we refer to as education that students from the environment around students in the form of education with parents, community education and so on. In non-formal education, there are no structured rules from the Education office or the central government, while informal education there is a structured rule of service that can be called by the curriculum.

According to the laws and regulations, Kemendikbud compiles, develops and establishes a curriculum that is prevailing in Indonesia at the time of curriculum 2013. With the new curriculum is expected problems that exist in education in Indonesia will be quickly resolved. The 2013 curriculum is a combination of the development of a pre-existing curriculum. The 2013 curriculum emphasizes the improvement of soft skills and hard skills that cover aspects of attitude, skills, and knowledge.

In the 2013 curriculum application, learning is in the integrative thematic in all subjects where all subjects are melted into one so there are no restrictions in each subject. In addition, learning is active in students, teachers are

no longer an informant but the teacher is more acting as a facilitator for the students. In the implementation of an integrative thematic 2013 curriculum, the activities undertaken by each student in the school are not separated from learning and learning activities.

Learning is a deliberate activity and is done by individuals in order to change self-ability (MKDP, 2011:124). Learning is a complex process that occurs in every person of his life (Arsyad, 2013:1). Learning is a complex student action or behavior, which is the process of acquiring something (science) from the surrounding environment called a learning process. The learning process is part of the learning system. While the learning system is an interfusion of human beings, facilities or equipment, and procedures that are interconnected in achieving a learning objective.

Learning is an effort made by a teacher or educator to teach students who learn (MKDP, 2011:128). Learning is a process of interaction between educators and students with students in order to acquire the new knowledge you want using a variety of media, methods, and learning resources that fit Need (Fadlillah, 2014:173). From two opinions it can be concluded that learning is a process by educators with learners to gain knowledge in learning activities.

Learning and learning cannot be separated from each other. In the learning process, there will be learning. Learning is an activity performed by the students, while learning is the process of learning itself. In the learning process, the teacher holds an important role in achieving learning and learning. In the learning and learning process, the teacher not only acts as a source of information but the teacher also serves as a facilitator.

The main task of a teacher in learning activities is to design students' activities or learning activities so that all the information in the learning process can be understood by the students. In addition, the teacher's job as a learning designer is to determine learning outcomes by designing how to use the instrument along with its success criteria.

Student learning outcomes are determined by how teachers can make students understand or understand the lessons taught by the teacher. There are many ways a teacher can enable the classroom atmosphere or the learning atmosphere to become active and students can understand the information or knowledge that is delivered or taught in school. In teaching, teachers can use a variety of learning strategies, learning models, learning methods and learning media.

To get maximum learning outcomes, teachers should be able to plan their learning activities well. For that, teachers need a proper learning model in the process of teaching. According to Priansa (2017:187), Learning models are teacher blueprints in preparing and implementing the learning process, as the learning model is an overview or learning flow design that teachers will use. According to Arends (in Trianto, 2012:74) suggests that the teaching model directs to a particular learning approach including its purpose, its syntax, its environment, and its management system. One of the learning models that teachers can use in the learning process to get maximum learning results by using Project-based learning model.

Project-Based Learning is a learning model that can make students think creatively to participate in a performance and implement a live learning experience. Project-based learning models are a model that regulates learning through a particular project. Further explained by Putri (2012:7), Project-based learning is a project conducted individually as well as a group that is implemented within a certain period of time. Project-based learning has a distinctive feature of engaging students in designing, solving problems or giving students an experience to work independently and think of creative ideas to solve problems. Project-based learning is applied to the motivation of students to be more active, innovative and creative in thinking and implementing solutions in resolving the problems faced to acquire desirable objectives of both cognitive, affective Psychomotor.

The learning process is not only fixed on the use of learning models only. To get maximum learning outcomes in addition to using the right learning model, teachers must also be able to attract students' attention and need the right help of learning media to steer, describing an abstract object into More concrete so that the knowledge gained by the students of each other can be fixed in the same direction/flow. There is a variety of learning media that can be applied and developed in accordance with the ability and environment around the school. Learning Media is a tool that is used to clarify specific learning, and must be appropriate to achieve specific learning objectives and materials with certain characteristics.

Media is an intermediary from the source of information to information recipients (Sanjaya, 2012:57). Media learning is a component of learning resources or physical rides that contain instructional material in a student environment that can stimulate students to study (Arsyad, 2013:4). Learning Media is a tool used by teachers with customized Desai to improve the quality of learning (Musfiqon, 2012:28). So, learning Media is a prop that can be used/utilized by the teacher in a learning process. Media learning has a great influence on the learning process because the media is not only as a teacher in teaching aids but can also serve as a source of information or communication bridge teachers with students so that learning can Easily be accepted or understood by students. Media can be utilized to stimulate students' curiosity and can stimulate students' activity in the learning process. With a high curiosity and the level of student activity in learning high, students' learning outcomes can increase.

Sanjaya said, (2012:68) suggests that students will be more able to gain knowledge through direct experience, through artificial objects, experiences through drama, travel demonstrations, and exhibitions. This allows it because students can directly relate to the object being studied. Compared to using learning where teachers explain

all learning without using the media, students will become bored and passive.

The merger of student work products in the implementation of Project-based learning (PJBL) learning models can be processed or displayed as learning media that can explain or describe what students have done during their project work. In addition, to work on the project well, teachers must stimulate students in the ongoing learning process. The Stimulus done by teachers in addition to implementing learning models can also be done with the help of learning media that stimulates students' knowledge.

In this study, researchers were interested in researching the influence of the project-based learning model with miniature media work. Researchers want to know how influential project-based learning models have a miniature media job and activity on student learning outcomes of Grade IV Elementary School. Researchers choose to use fourth graders as they begin to learn critical thinking, abstract thinking, and further digging deeper information. Therefore, the appropriate model of learning is required to support the matter. In addition to requiring the right learning model, teachers also need learning media that can support the learning process that is done to work well and can attract students' interest in learning. With this research expected the learning process in school can be implemented more varied by teachers and learning can be absorbed by both students. In the explanation that has been submitted above, researchers choose the title the influence of project-based learning with support miniature work media on activity and learning outcomes students of grade IV Muhammadiyah elementary school 4 Surabaya.

**Method**

The type of research used in this research is quantitative research (experimental Research) is a quantitative study that has a primary goal to test causal relationships. The hallmark of other experimental studies is to test the influence between variables and test the truth of the hypothesis. So, it can be said that experimental research is predictive. This study, researchers selected experimental research. The purpose of this research is to know the effect of a treatment on something controlled. This study, researchers used Pre-Experimental design with the form of One group Pretest-Posttest Design. In this case, the treatment is a model of PjBL learning with a miniature media job. The population in this study is class IV elementary School Muhammadiyah 4 Surabaya, semester 2017/2018. Sampling used is a purposive sampling technique with the number of Students 38 students. The Data In this study was gathered through study results tests.

**RESULTS AND DISCUSSION**

**Result**

Exposure to students' learning outcomes before and after implementation of based Learning Project Model with a miniature media work on the activity and learning outcomes of Grade IV Elementary School Muhammadiyah 4 Surabaya hasilnya can be seen below:

**Table 1. Average student learn activity before and after Treatment**

Value	Student Learning Activity	
	Before Treatment	After Treatment
Average	59,4	77,6
Highest value	66,6	83,3
Lowest value	50, 0	66,6

**Table 2. Paired Samples Test Student Activity On Model Project-Based Learning With Support Miniature Work Media**

	Paired Differences	t	df	Sig. (2-tailed)	
					95% Confidence Interval of the Difference
					Upper
Pair 1 pretest - posttest	-16,10358	17,577	37	,000	

**Table 3. Average Student Learning Outcomes In Project-Based Learning Model With Support Miniature Work Media**

No	Value	Student Learning Outcomes	
		Pretest	Posttest
1	Average	65,47	83,16
2	Highest value	76	92
3	Lowest value	52	76

**Table 4. Paired Samples Test Student Learning results in Project-Based Learning Model With Support Miniature Work Media**

	Paired Differences	t	df	Sig. (2-tailed)	
					95% Confidence Interval of the Difference
					Upper
					Lower
Pair 1	pretest - posttest	-15,46660	16,158	37	,000

**Discussion**

Research results relating to student activity, indicating a significant difference in activity value. Before treatment obtained the value of learning activities at 59, 4and the value of learning activities after giving a treatment of 77.6. Starting from the data that has been obtained, the researcher to process the data using SPSS for Windows generates T-count > T-table with a signification status value (2-tailed) of 0.000. So the significance value is smaller than 0.05. Thus, the PjBL learning model with a miniature media work affects the activity of students at SD Muhammadiyah 4 Surabaya.

In addition to discussing the influence of treatment of students' activities, the study also discusses student learning outcomes. Good activity will encourage the creation of a conducive learning atmosphere that leads to an increase in student learning outcomes. Because basically, learning is a process that people do in a conscious condition that aims to acquire concepts, knowledge, and new information that causes the emergence of self-change for the better. As originally did not know to know and that initially could not be able to.

In this research, the measurement of student learning is done by giving a test result of learning in the form of pretests and posttest. Before being taught with the PjBL model of media-assisted miniature work, the results of the study were very much below average and after treatment, the student learning test was increased. In the results of early observation, results can be obtained average pretests value of 65.47. After the treatment was given the average posttest value of the learners increased to 83.16. Starting from the data that has been obtained, the researcher processed the data using SPSS for Windows and obtained the value of T-count > T-table with a signification status value (2-tailed) of 0.000. So the significance value is smaller than 0.05. Thus, the model PjBL assisted miniature media work affects the outcomes of students' learning at Muhammadiyah Elementary School 4 Surabaya.

**CONCLUSION**

Based on the results of the data processing obtained at the time of the study accompanied by relevant research and supporting theory, it can be concluded that the PjBL learning model of miniature work media is an influence on activities and Student outcomes in class IV elementary school. This can be seen from the difference of results ttest pretests and posttest both activity and student learning outcomes. For calculation of activities and learning outcomes, students obtained a significance value of 0.000 with T-count > T-table. So, it can be concluded that:

1. Model PjBL support work with miniature work media influence in the study activity students of grade IV Muhammadiyah Elementary School 4 Surabaya.
2. Model PjBL support work with miniature work media influence in the study learning outcomes students of grade IV Muhammadiyah Elementary School 4 Surabaya.

Based on the conclusion of the above research, it is hoped that the teacher to apply the model in various other KD to increase the interaction of learners in discussing and expressed his opinion. In addition, learning media can be used as clearance in the learning process so as to help students understand the learning materials that are performed in concrete learning in the equation of understanding in the learning process will Well when learning

can be carried out well too.

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