IMPROVEMENT OF DIESEL MOTOR TECHNOLOGY LEARNING ACTIVITIES THROUGH COOPERATIVE LEARNING

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Abstract

The objectives of this classroom action research, the model cycle. The object of this research student's courses diesel motor technology as much as 30 people. Data collection using sheets of observation and tests. The results of this study showed a model of cooperative learning can improve student learning outcomes and activity courses for diesel, motor technology indicator asked with a percentage of 38,7%, 70,4% answered the question, the motivation of students with a percentage of 91% and improves the results of the study with an average cycle I 64.5 cycle II became 80.71. Based on the results of the research cooperative approach can be increased the results of the study.

Keywords*:* activities, motivation, study result

1. Introduction

Learning is an activity that is done either deliberately or inadvertently marked with any changes behavior. It is stated by Slameto (2003) that learning is a process of work done to a person to obtain a change in the behavior of the new overall as a result of his own experience in the interaction environment. The learning process can choose the right learning model and according to the characteristics of the material to be taught. This is because the model of learning is an instructional strategies to achieve specific learning objectives (Eggen, 1995). A learning model that is often used is a direct learning model, from the observations of the direct learning model is the less visible interaction between students with professors, or students with students. This lack of information, students tend to be less motivated in following the process of learning is visible from the learning process of students often go out in,

often not the task. This has resulted in a lack of student learning outcomes, so that there are still many students who got a D or E grades.

To cope with these professors need to change the model of learning by using a learning model cooperative. Cooperative learning model emphasized the activity of the students in the group. In the model of learning in a group of students working together to solve a problem or understand the material to be he had learned. Each group member is responsible for trying and help the group to understand the material. The study of the model of lecturer only acts as a motivator and facilitator.

According to Slavin (1997) cooperative learning is learning that involves learners working together in small groups to help each other learn a material.

According to Nur (2000) there are five cooperative learning methods, one of which is the student teams Achievement Divisions-(STAD) or student group team achievements.

Learners are placed in teams of study consisting of 4-5 people that is mixed according to the level of academic achievement, gender and tribal. The teacher presents the core topics, and distributed to the Group and each group studied the material being studied.

2. Method

The research was classroom action research with model cycle. Model cycle consists of 4 stages: planning, action, observation, and reflection. This study uses two cycles, the first cycle consists of four sessions, while the second cycle consists of three times. This research was conducted to evaluate student learning outcomes in the diesel motor technology courses, totalling 30 people.

In this study the observer observes the motivation and activity during the working groups, for each meeting using sheets of observation, and test the results of

the study. The procedure of processing and data analysis using data-processing pattern.

3. Result and Discussion

Observations the observer about the activity and learning motivation of college students during the study

Table 1 Activity of college students

No	Student activity	Cycle I		Cycle II	
		%	Criteria	%	Criteria
1	Students who actively	8,9	Low	38,7	Low
2	An active student to answer	12,7	Low	70,4	Enough
3	Student motivation	42,6	Enough	91	Very high

Table 2 Distribution of the results of the Study

he value of the	The results of the meeting to Learn-								
	1	2	3	4	TEST cycle 1	5	6	7	TEST cycle II
80-100	18	21	15	20	10	17	23	25	12
65-80	2	14	5	7	6	5	21	22	14
55-65	6	7	4	2	4	2	11	4	5
40-55	5	7	4	3	2	8	7	2	1
≤40	1	1	2	3	4	6	5	3	2

Discussion

From the observations I cycle at the first meeting up to four active student asked the liveliness in the diesel motor technology courses are categorized as low 8.9% and cycle II meeting of the fifth to the seventh became 38.7% means have improved 29,8%. Student presentations are actively answering questions on the cycle I only 12.7% classified as low, in the second cycle be 70.4% belongs to simply increasing average 47.7%.

Students ' motivation in the learning process has already started to improve. A high enough increase in cycle I 42.6%, cycle II becomes 91% with an average of 48.4%

4. Conclusion and Remark

Cooperative learning at this stage of the cycle II can increase student motivation and activity courses for motor diesel technology thereby increasing learning results. The cooperative learning model is expected students can make their learning group to the task either self-contained task, as well as discussion groups.

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