The Implementation of Peer Tutor Learning Model to Improve Student Participation and Student Learning's Score in Basics of Engineering Drawing on Smk Negeri 5 Surakarta's x-dpib a Students.

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ABSTRACT: *This research aims to know the increase student's participation andStudent's learning score by implementing Peer Tutor Learning Modelin Engineering Drawing subject.The research is a classroom action research, conducted in class ofXDesign Modeling Techniques Building Sciences (DPIB) A Public Vocation High School (SMKN) 5 Surakarta consisting of 34 students. It was done in two cycles. Each cycle comprised planned, taking action, observation, and reflection. The researchs instruments were student's learning participation assessment and cognitive assessment. The data validity used expert judgement and analyze the data used qualitative descriptive analysis.The learning activeness of students during pre-cycle includes the category quite active with a value of 54.63 in the first cycle including the active category with a value of 68.75 and the second cycle including the active category with a value of 78.00. Student learning outcomes have increased from the cycle, with a value of 23.52% first, cycle with a value of 44.11%, and in the second cycle with a value of 76.47%*
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Keywords *- Peer Tutor Learning Model, learning participation, Student's learning score.*

I. INTRODUCTION

The learning process for each unit of primary and secondary education should be interactive, inspiring, fun, challenging, and motivating learners to actively participate and provide enough space for innovation, creativity and independence according to their talents, interests, and physical and psychological development of learners (Permendiknas RI No. 41, 2007: 6).Learning oriented teachers and students who are less enthusiastically to the cause of learning that students can not achieve the expected learning goals. Based on the observations that have been implemented at Public Vocation High Scholl *(* SMKN) 5 Surakarta, student's learning score in subjects of the engiennering drawing class XDesign Modeling Techniques Building Sciences (DPIB-A) is not optimal. This is due to lack of instructional strategies used precisely.

The learning model used must be in accordance with the needs of the class, it will increase the activeness and learning outcomes of students. There is a student-oriented learning strategy that can increase the activeness of the Peer Tutor Learning Model.

Peer Tutor Learning Model is a model of learning maximize the potential of students with skills to enter higher compared with other students. Tutor role is to help other students when learning takes place(Angela Merici,2014).

II.RESEARCH METHODS

Research is an Action Research (PTK) are implemented in the class X DPIB SMKN 5 Surakarta in A class.The timing of started in November 2018 and April 2019. The subjects were 34 students of class X DPIB A SMKN 5 Surakarta academic year 2018/2019.

Namely data collection techniques with student activity observation, interviews, documentation and a written test. Test the validity of the data using expert judgment.

This research data analysis techniques usingqualitative descriptive analysis, each of the data obtained is then incorporated into the five categories below

Table 1.1 Categoryactiveness

No.	Interval	Information
1	80-100	Very Active (SA)
2	60-79	Active (A)
3	40-59	Quite Active (CA)
4	20-39	Less Active (KA)
5	0-19	Not Active (TA)

Source. Arikunto (2010)

Indicators of research performance isif 75% of students received grades of at least 76 learning outcomes according to the criteria specified percentage of the school and activity indicator reaches an average of 70%

III. RESULTS AND DISCUSSION

A. Pre-cycle

The results of this pre - cycle observation data obtained as follows:

a. The average grade for the cognitive value of57.09with the percentage of completeness 23.52%

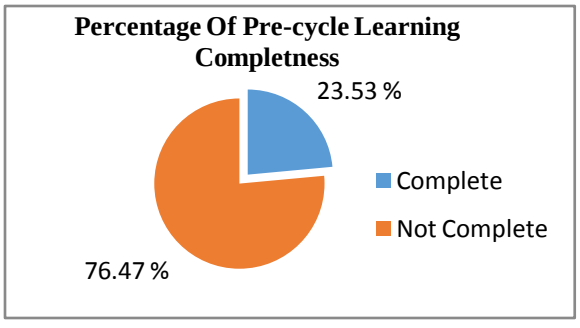

Figure 1Percentage of Preliminary Learning Completness

b. The average value of students' learning activeness is54.63 %with Quite Active category.

Table 1.2 Pre-cycle student learning activeness results

No	Indikator Aktivitas	Avarange Score		Averange	Categori
		Observer 1	Observer 2		
1	Visual	57 %	56 %	56.50 %	CA
2	Oral	50 %	49 %	49.50 %	CA
3	Listen	61 %	62 %	61.50 %	A
4	Writing and Drawing	50 %	52 %	51.50 %	CA
Averange scores				54.63%	CA

B. First Cycle

The first cycle research data regarding the application of learning models Peer Tutor obtained the following data:

a. The average value of 69.27 cognitive ability class with a percentage of 44.11% completeness.

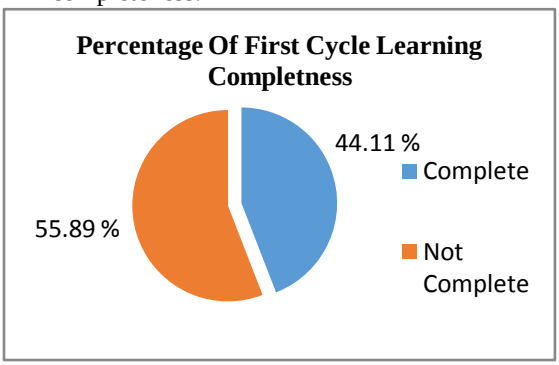

Figure 2 Percentage of First Cycle Learning Completness

b. The average value of students' learning activeness is 68.75% with the Active category

No	Indikator Aktivitas	Avarange Score		Averange	Categori
		Observer 1	Observer 2		
1	Visual	65 %	64 %	64.50 %	A
2	Oral	79 %	80 %	79.50 %	A
3	Listen	60 %	63 %	61.50 %	A
4	Writing and Drawing	71 %	68 %	69.50 %	A
Averange scores				68.75 %	A

Table 1.3First cycle student learning activeness results

C. Second Cycle

Second cycle is the improvement of the previous cycle. This second cycle resulted in an increase in student activity and student learning outcomes. The results of the second cycle research are presented in figure 3 and table 1.3:

a. The average value of cognitive abilities at 80.14 with the percentage of completeness of 76.47%.

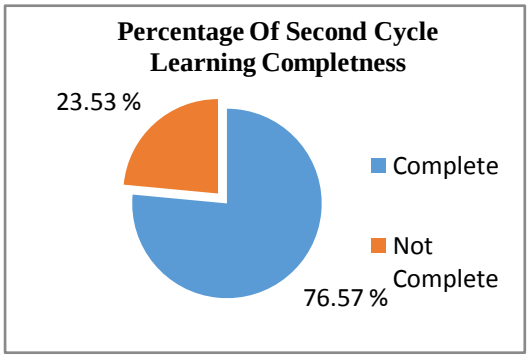

Figure 3 Percentage Of Second Cycle Learning Completness

b. The average value of students' learning activeness is 78.00% with the Active category

Table 1.4Second cycle student learning activeness result

No	Indikator SAktivitas	Avarange Score		Averange	Categori
		Observer 1	Observer 2		
1	Visual	82.00 %	80.00 %	81.00 %	A
2	Oral	81.00 %	81.00 %	81.00 %	A
3	Listen	74.00 %	74.00 %	74.00 %	A
4	Writing and Drawing	78.00 %	76.00 %	77.00 %	A
Averange scores				78.00%	A

D. Comparison Results Activeness Students

Observation of student activities during the learning process includes: a) Visual; b) Oral; c) Listening; d) Writing and Drawing (Oemar Hamalik, 2017: 17)

The achievement of student learning activity in each cycle is illustrated in figure 4 below

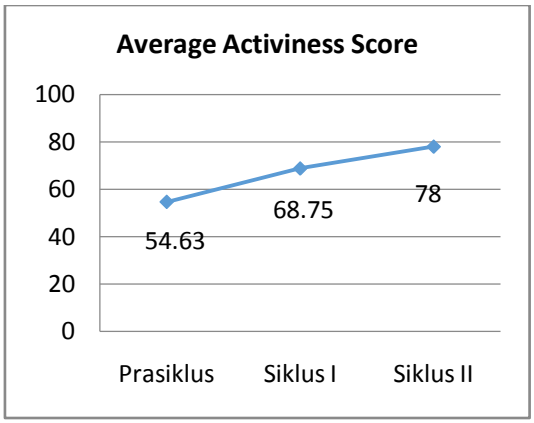

Figure 4. Graph Comparison of Average Valueliveliness Prasiklus, Cycle I and Cycle II

The graph shows the application of the Peer Tutor learning model canincraseactivity of students in the subjects in class X DPIB A SMKN 5 Surakarta.

The peer tutoring learning model has a positive impact when learning takes place, for example:

1. Students are easier to discuss material because they are accompanied by peer tutors talking about
2. Students are not reluctant to be active in groups because the group leader is a tutor from their peers
3. Learning becomes not monotonous so students learn actively in it

The value of pre-cycle student activity was 54.63%. The results of the first cycle of action increased to 68.75% and the second cycle of action increased to 78.00%

E. Comparison of Student Results

The achievement of student learning outcomes in each cycle is illustrated in figure 5 below

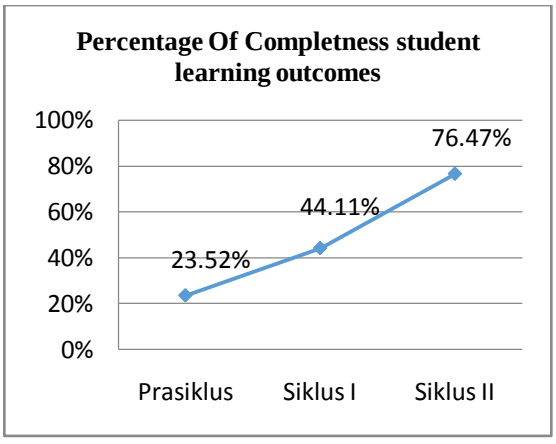

Figure 5. Comparison of Complete Graphs Student Learning OutcomesPrasiklus, Cycle I and Cycle II

The graph shows that application of Peer Tutoring Learning Model can improve student learning outcomes in class X DPIB A SMKN 5 Surakarta.

Pre-cycle achievement of student learning outcomes is 23.52%. The results of the implementation of peer tutoring learning models in the first cycle reached 44.11% and then increased to 76.47% in the second cycle.

IV. CONCLUSION

1. Peer tutoring learning model can improve the activity of EnginneringDrawingsubjects in class X DPIB A SMKN 5 Surakarta.
2. Peer tutoring learning model can improve student's learning score in subjects in class X DPIB A SMKN 5 Surakarta.

V. SUGGESTION

1. Teachers can use a lot of learning strategies for achieve satisfyingactivity and learning outcomes were satisfactory, but it must be adapted to the circumstances of the situation and the state of the class
2. Schools should always support teachers to use appropriate learning strategies to complement the learning facility.
3. Students should be able to maximize the existing instructional media to improve learning achievement.
4. Students are expected to participate actively and maintain an atmosphere conducive to the learning process

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