Implementation of STAD on Practical Course Activity in Fashion Department Universitas Negeri Malang

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Abstract. Learning strategy in the learning process is one of the indicators to achieve learning goals. One of the learning strategies is Student Teams Achievement Division (STAD). It is used in the fashion department in Universitas Negeri Malang, especially in the practical course activity. On the other hand, the other learning strategy that used in practical course activity is demonstration strategy. Hence, the purpose of this study is to compare two groups that used different learning strategies. One group used STAD and the other group used demonstration strategy. T test used in this study to compare between two groups. 52 students from fashion department in Universitas Negeri Malang involved in this study that divided into two different groups. The results of this study presented that learning achievement of group that used STAD learning strategy higher than the group that used demonstration strategy. It can be concluded that STAD learning strategy on the practical course in Fashion department, Universitas Negeri Malang can help student to increase learning achievement than demonstration strategy.

I. INTRODUCTION

The learning model of cooperative learning is a learning model that prioritizes collaboration to achieve goals, where students work in a small group collaboratively with members consisting of 4 to 6 people, with heterogeneous group structure \cite{3}. Fashion Studies Program is a study program that equips students to have knowledge and skills in the field of clothing, which includes knowledge about fashion design, fashion sewing techniques, reading the model until pouring it in the form of a comfortable clothes worn. The usual teaching by lecturers is by explaining through demonstrations and giving examples of the results of stitches in the form of fragments. But sometimes the expected results do not match the desired. The result of the stitching of students is not good, sewing techniques are done a lot wrong, this makes the lecturer disappointed with the learning done.

From the learning outcomes in the subject of women's clothing produced by students in the second semester, on blouse making material the result is no more than half of the 30 students who can sew properly, there are even some students who have to change the fabric because the clothes are made not in accordance with the design chosen. The second semester student has passed the Basic Engineering Course of Tailoring and Construction Pattern which is the base of the women's fashion making course. But this is not evident that they can sew properly.

This problem arises because students may be embarrassed to ask lecturers or other causes. From the results of observations in the fashion lab, it appears that students prefer to ask their own friends rather than to lecturers, because it is the researchers want to try to apply cooperative learning model type student teams achievement division (STAD) in the hope that the above problems can be solved. Student Team Achievement Division (STAD) is one type of cooperative that emphasizes the existence of activities and interactions among students to motivate each other and help each other in mastering the subject matter to achieve maximum performance \cite{3}.

Based on the background that has been described, then the formulation of the problem in this study whether there are differences in learning outcomes between students who taught using learning models using demonstrations and examples of fragments with the model of learning cooperative learning type student teams achievement division on the eyes of the practice material of dress making. This research was conducted in Program of Study of Fashion Department of Industrial Technology, Faculty of Engineering Universitas Negeri Malang.

The purpose and benefits of cooperative learning model are 1) to improve student performance in doing academic tasks especially in understanding difficult concepts, 2) students can accept the themes of their friends who have different background, 3) mahasiswa can develop their social...
skills can share the active duty of asking to respect the opinions of others and can work together in groups.

II. METHODS

This study used t-test to compare two different groups. In this study involved 52 students from fashion department in Universitas Negeri Malang that took the practical course of Fashion Making Technique of Women clothes. One group consist of 26 students that implement STAD of learning strategy and the other group used demonstration strategy. The paragraph below presented in detail.

Table 1 : The Static Design Chart - Group Comparison

<table>
<thead>
<tr>
<th>Group</th>
<th>treatment</th>
<th>Post-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiment</td>
<td>X</td>
<td>0</td>
</tr>
<tr>
<td>control</td>
<td>-</td>
<td>0</td>
</tr>
</tbody>
</table>

[4]
Description:
Experiment : it means experiment class that treated with a STAD learning strategy (Offering A)
Control : it means control class that used the demonstration strategy (Offering B)
X : treatment given to the experimental group
0 : measurement on post - test

This study used a questionnaire to see students' understanding of the material on fashion-making techniques. While to see the results of the practice, it can be seen from the results of stitches and fitting score at the fitting section. In this study, the practical course conducted in the course of Women Fashion Making Technique is given in the second semester. Before it, student must pass from basic sewing courses. They should have competence on the technique of making clothing already. So that, all the students that involved in this study matched with the criteria that determined by researcher.

III. DISCUSSION

The subjects of Women's Fashion Making Technique aimed to have students competency on blouse model analysis of dress skirt and its modification. Then they also have the competence about making pattern and cutting pattern that can design the material and the price can cut the material can be sewing as well as finish the stitches and become a comfortable clothing worn. But in fact it is not true because many students who do not have that knowledge, so that the results are ugly and may not even work.

A student was said very capable of sewing a dress if 1) the dress model is made according to the model previously designed, 2) the student can make the pattern with the appropriate size, 3) the student can cut the material according to the motif and direction of fabric fibers, 4) the student can cut the material according to the motif and direction of fabric fibers, 5) the student can sew the clothes neatly and use the correct sewing technique and comfortable dress worn. From the research results in experimental group, all students can analyze the model correctly, they can make the pattern correctly, only on the addition of leeway is still there who do not understand, so the dress became oversized.

26 students who took the subject of women's clothing on the material making this dress, there was still 8 students (25.8%) who got the value of 65 to 70. The value was obtained because they did not understand in sewing techniques, well it's the sewing technique on the neck collar, arm sleeve did not fit, because there was the wrong zipper sewing technique and wrong bottom elbows. But there was the majority of the value of making this dress ranges from 75 to 90 (74.20%) this meant that they will succeed in understanding the material of dress making.

The final value was not only determined from the understanding of the material but also on the value of the time body entitled. Of the lowest body value of 77 because the dress stitched too loose. The average value obtained for body fit ranging from 77 to 90, it meant that all students can make a dress well, it was shawshed by the value of the fitting that they get.

Learning was successful when more than 75% of students master the material being taught. This meant that learning using cooperative learning method student type teams achievement division on the eyes of dress making practice material can be said to be successful.

To make it easier to find the value of "t", it was necessary to calculate the estimated population value (S2), so that the calculation became easier [1].

From the calculation obtained value of S² = 5.039, then it inserted into the formula to find the value of "t". From the calculation the value of "t" = 4.032 db = 26 + 26 - 2 = 50. t = 0.05 (db 50) = 0.279. Because t count (4.032) > from t table (0.279), this meant that there was a significant difference between the experimental group and the control group on the dress making material.

IV. CONCLUSION

Selecting learning strategies can affect to achieve the learning outcomes. Students' learning outcomes are taught with using cooperative learning strategy type of student teams achievement division (STAD) on the practice of dress making showing higher compared with student learning outcomes taught with using demonstration method in media fragment. This occurred, because in STAD, activities and interactions among students give motivation for each other and help each other in mastering the subject matter in order to achieve maximum performance. Because there showed that students often embarrassed to ask lecturers so this strategy can be used to solve this problem.
REFERENCES