

The Application of Cooperative Learning Method on the Subject of Work Exhibition

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Abstract. Work Exhibition is a subject that teaches how to exhibit students' works through statistic and dynamic display. This research aims to reveal students' cognitive, affective and psychomotoric aspect description before and after receiving the subject of Cooperative Learning on the Display Setting of the Subject of Work Exhibition of Study Program of Beauty Class. Instrument for collecting the data consisted of questionnaires, question and answer sheets. Data analysis was carried out using percentage descriptive. The result of the research shows that students were on the category of medium in terms of their study outcome with the respective achievement of the three aspects as 67%, 90%, and 65% (cognitive, affective, and psychomotor), (2) there was an improvement of cognitive, affective, and psychomotoric learning outcome on the display setting of the subject of Work Exhibition using cooperative learning method on the score of pretest and post test

Keywords: Cooperative Learning, Display Setting

1 Introduction

Study is a process of change that is relatively permanent and such change occurs for there is an intentional effort i.e. through training and experience. Behavioral change occurs and is obtained by someone after joining or experiencing a learning process in the form of student learning outcomes. Student learning outcomes can be described in terms of different domains[1], Learning activities could take place everywhere at anytime along someone's life, it could take place at home, at school or even on the street as well as in a wider environment. Helping students to understand how to learn is an important goal for all subjects and levels of education [2]

Learning strategy is one of the skills that must be mastered by a teacher since the use of a correct strategy provides a massive influence to the learning outcomes. In learning the subject of students' work exhibition of study program Beauty Class Education, PKK Faculty of Engineering of UNNES is demanded not only to master a concept or a theory of work exhibition but they are also demanded to master various techniques of how to do a setting in the conduction of work exhibition. Regarding to that matter, it needs a suitable learning strategy in order to be able to reach the goal expected. Student center learning based learning strategy is a learning approach

which many has started to apply since with this approach it is expected that the students would be able to reach their stage of independence.

Cooperative learning focuses on the interaction between teachers and students and among the students themselves in the process of teaching, and emphasizes on the interactive cooperation among the students in the teaching and learning activities [3]. Cooperative learning is very useful to improve the communication and collaboration skill through group activities. Cooperative learning works best to improve students' achievement when the students have group objectives that could only be achieved should all members of the group starts learning that they put the focus on the teaching and learning from one another rather than to merely complete the group tasks. As students, they are also multiple and complex, which quite often even conflicting goals emerge[4].

According to Robert E Slavin, cooperative learning works best to improve the achievement when a group of students has a common objective which only they could achieve should all members of the group starts learning that they put the focus on the teaching and learning from one another rather than to merely complete the group tasks [5]. In his research M.T. Munir conducted a research on cooperative learning-based class learning supported by some literature. The result shows that folded classroom help developing and improving students' learning and analytic critical skill. Besides, cooperative learning improves students' communication skill and enables them to establish working team, problem solving skill and to improve creativity, as well as to improve skill on team work [6], [7]. The result of learning is a manifestation of the ability achieved, controlled or owned by the individual in this case the student after receiving a learning experience and the results can be knowledge, understanding and application of concepts, calculation of problem solving based on the subject [8]. The objective of this research is to see the description of cognitive, affective, and psychomotor aspects of the students before and after receiving Cooperative Learning on the Display Setting of the Subject of Work Exhibition of Study Program of Beauty Class.

2 Method

The research refers to an approach of quantitative research. While the type of the research used is quasi experimental design. Population in this research was students of the study program of beauty class of the Department of PKK of Faculty of Technique of UNNES who study the subject of work exhibition semester 6 which amount to 40 people. Sampling technique used total sampling. Method of data collecting in this research was obtained from the documentation containing the assessment result of display setting seen from the aspect of cognitive, affective and psychomotor. Analysis technique used in this research was descriptive analysis with quantitative approach. Descriptive analysis technique was used to show how far the study result using cooperative learning seen from cognitive, affective, and psychomotor aspect. The categorization of assessment could be seen on **Table 1**.

Table 1. Categorization of assessment of study result

Category	Score	Scale
High	$X < (\mu - 1,0\sigma)$	Ordinal
Medium	$(\mu - 1,0\sigma) \leq X < (\mu + 1,0\sigma)$	
Low	$X \geq (\mu + 1,0\sigma)$	

3 Results and Discussion

Descriptive analysis result uses three categories of achievements, high, medium, and low on the aspect of cognitive before and after the students involved in cooperative learning shown in **Table 2** and **Table 3**.

Table 2. The pretest result of cognitive aspect

Category	Frequency	Percent	Valid Percent	Cumulative Percent
Medium	39	97.5	97.5	97.5
Low	1	2.5	2.5	100.0
Total	40	100.0	100.0	

Table 3. The post-test result of cognitive aspect

Category	Frequency	Percent	Valid Percent	Cumulative Percent
Medium	27	67.5	67.5	67.5
Low	13	32.5	32.5	100.0
Total	40	100.0	100.0	

Based on **Table 2** and **Table 3** of all respondents, it could be seen that there are students in the category of medium in cognitive aspect. The Pretest result shows 39 students (97.5%) are in the medium category and after the treatment given there has been an increase of 27 students (67,5%) in medium category. Assessment of cognitive learning outcomes contribute to the learning methods used [9] There has been a decrease in the number of students in medium category. Such decrease is possibly because of too much theoretical charges, so that the lecturers could squeeze the materials and wrap them in a fun way of delivering. Cognitive Load Theory proposes that extraneous aspects of learning need to be reduced such that learners' working memory capacity will not be overloaded [10]. Besides, there are some other factors influencing the decrease of the students' cognitive aspect. Student presage factors include each individual student's prior cognitive (e.g., knowledge) and non-cognitive (e.g., motivation) factors, which may or may not impact their learning processes and outcomes [11].

The descriptive analysis result using three categories of achievement i.e. high, medium, and low on the affective aspect before and after the students involved within cooperative learning is shown in **Table 4** and **Table 5**.

Table 4. The pretest result of affective aspect

Category	Frequency	Percent	Valid Percent	Cumulative Percent
Medium	35	87.5	87.5	87.5
Low	5	12.5	12.5	100.0
Total	40	100.0	100.0	

Table 5. The post-test result of affective aspect

Category	Frequency	Percent	Valid Percent	Cumulative Percent
Medium	36	90.0	90.0	90
Low	4	10.0	10.0	100
Total	40	100.0	100.0	

Based on **Table 4** and **Table 5** of all respondents, it could be seen that there are some improvements in the number of students in the category of medium in affective aspect of the pretest result shows a number of 35 students (87,5%) is in the medium category and after being treated there have been an increase in a number of 36 students (90%) who are in the medium category. One indicator of the affective aspects is cooperation. With the cooperation of social factors and student motivation increases [12]. For students to work together in the learning process is a fun activity [13]. They are very cooperative in doing the tasks given by the lecturer to achieve the same goal [14].

The descriptive analysis result using three categories of achievement i.e. high, medium, and low on the psychomotor aspect before and after the students involved within cooperative learning is shown in **Table 6** and **Table 7**.

Table 6. The pretest result of psychomotor aspect

Category	Frequency	Percent	Valid Percent	Cumulative Percent
High	5	12.5	12.5	12.5
Medium	29	72.5	72.5	85.0
Low	6	15.0	15.0	100.0
Total	40	100.0	100.0	

Table 7. The post-test result of psychomotor aspect

Category	Frequency	Percent	Valid Percent	Cumulative Percent
High	7	17.5	17.5	17.5
Medium	26	65.0	65.0	82.5
Low	7	17.5	17.5	100.0
Total	40	100	100.0	

Based on **Table 6** and **Table 7** of all respondents, it could be seen that there are some improvements in the number of students in the category of high in psychomotor aspect of the

pretest result shows a number of 5 students (12,5%) is in the medium category and the medium category consists of 29 students (72,5). After being treated, there have been an increase in a number of students in high category of 7 students (17,5%) and 26 students (65%) were in medium category. To improve psychomotor skills requires control in groups so that they can carry out procedures in accordance with what is needed [15]. Learning outcomes of each student are not the same, this is due to the learning experience of each student is different. Student learning experiences are influenced by (1) the nature of the experience, (2) student participation, (3) the duration and intensity of the experience[16]. Learning is a process to be achieved based on experience[17]. The application of cooperative skill is highly effective to improve students' skills and more efficient in maintaining the group so that the learning objective could be achieved [18], [19].

4 Conclusion

Descriptive analysis result using three category of achievements, namely high, medium and low on the three aspect including cognitive, affective, and psychomotor before the students involved in cooperative learning shows that most of the students have achievement category of study result of medium with the respective achievement of the three aspects of 67%, 90%, and 65% (cognitive, affective, and psychomotor). Further, the result of students' achievement on the display setting on the subject of Work Exhibition after using cooperative learning revealed that most of the students were included in the category of medium either in the aspect of cognitive, affective, or psychomotor. Only, the difference after the intervention in terms of the application of cooperative learning could be seen in the increasing number of students whose study result improved from the pretest to the post-test value. Cooperative learning strategy requires the students to think critically, so that they really feel that the learning experience has a positive effects and is useful for their lives, therefore there have been difference on the study result between those who were intervened and those who were not intervened. The application of cooperative learning strategy creates a conducive learning atmosphere for students to work in a team so that it provides students with opportunities to be more active and creative.

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