The influence of script-type cooperative learning model on student learning activities

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ABSTRACT

This study aimed to determine the effect of the learning model Cooperative Type Script Against Student Learning Activities. The method used in this study is an experimental research method using a research design experiment that aims to determine the difference in the increase in student learning activities who learn to use the Learning Model Cooperative Type Script (experimental class) with students who do not use conventional learning models (control class) in economics subjects, observations are used to see teacher activities and. This study's results indicate differences in student learning activities between the experimental class and the control class after doing the treatment. The experimental class uses a script-type cooperative learning model, and the control class uses a conventional method. This is shown in the results of the analysis. It can be seen that the value of tcount is greater than ttable or 2.717>2.002. This is following the Asymp. Sig. value of 0.009 which is less than the value of 0.05. So there are differences in student learning activities after treatment in the experimental and control classes.

INTRODUCTION

Education is a decisive process for individual development and the development of society (Sanjaya, 2011). Education is a process to influence students to adapt as well as possible to their environment and thus will cause changes in themselves that enable them to function powerfully in social life (Hamalik, 2016; Riyanto, 2014). Education is a place for the formation of citizens or human resources so that they have good qualities for the nation, society, and themselves. Education also aims to form cultured humans, develop and change human behavior and prepare superior human resources (Darmadi, 2018).

School is a formal educational institution (Rusman, 2018). At school, there is a learning process. Learning is an instructional system that refers to a set of interdependent components to achieve goals, as a learning system includes a component including objectives, materials, methods, and evaluation (Hamruni, 2012). Learning activities are carried out by two actors, namely teachers, and students. The teacher's behavior is teaching, while the student's behavior is learning. The learning process in the classroom is an activity of transforming knowledge, attitudes, and skills (Whitney & Fox, 2017).

The learning process requires student activity so that learning can take place correctly. According to Sardiman (2018) that in principle, learning is doing. Act to change behavior and carry out activities. So learning requires activity. Learning is only possible if there is activity. Activity is

a fundamental principle in teaching and learning interactions. Learning activities are all carried out in the interaction process (teachers and students) to achieve learning objectives. The activity referred to here emphasizes students because student activity in the learning process will create active learning situations. There are many activities that students can do at school. Diedrich (2010) classifies student activities as follows: visual, verbal, listening, writing, drawing, metric, mental, and emotional activities.

Student learning activities at school still need to improve (Keengwe et al., 2008). This is known based on the initial survey results or pre-research from teachers of the basics of banking at SMK Negeri 1 Ambon, saying that students are less active when the learning process takes place. In contrast, when the teacher asks questions, students are silent. Students do not express opinions, give suggestions, and do not even ask questions. In addition, the teacher also gave practice questions to students, and only a few students could analyze and work on practice questions, and most students only copied the work of their peers.

The researcher also made observations in class during the teaching and learning process and found the same thing from the teacher's explanation. In addition, before starting with a new subject matter, the teacher asked students to answer the material previously taught. However, only a few students could remember the material the teacher had taught. Then in the teaching and learning process, students need to respond to the delivery of the material provided. Learning is also still centered on the teacher. The teacher uses the lecture method to provide subject matter so that learning becomes monotonous. Students sit and silently pay attention to the material delivered by the teacher. Teachers are more active, and students become passive.

One of the steps that can be taken in developing teaching and learning activities is that teachers must master and develop learning using learning methods and models to enhance learning activities in students and teachers (Sclafani, 2008). One of the learning models used is the script-type cooperative learning model to increase student activity. The script-type cooperative learning model is indirectly a learning contract between teachers and students and students and students regarding how to collaborate (Severance et al., 2008). Another research conducted by Hidayatullah (2016), the relationship between the cooperative script learning model and the cooperative Sq3r learning model on learning outcomes, this study looks at the relationship between the two learning models in improving learning outcomes while this study examines two different learning models on student learning activities without being influenced by factors other than the two models the learning.

In the script-type cooperative learning model, there is a learning contract in the form of an agreement where there are collaborative rules. Students agree with each other to carry out their respective roles. These namely students act as speakers, reading out the results of the solutions obtained along with the procedures, and students who are listeners listen and hear explanations from the speaker, reminding the speaker if there is an error. Problems are solved together and then concluded together. This research contributes to knowing the effect of script-type cooperative learning models on student learning activities.

METHOD

Research design the reason the researcher chose experimental research was that an experiment in the field of education was intended to assess the effect of an action on behavior or to test whether or not the effect of the action existed. The action in the experiment is called treatment, which means giving the conditions to be assessed for its effect. The post-only group design is intended as follows: The action in the experiment is called treatment, which means giving the conditions to be assessed for its effect. The experimental and control groups were managed intensively in conducting experimental research so that the two classes had the same or nearly identical characteristics. What distinguishes the two groups is that the experimental group is given a specific treatment or treatment, while the control group is given treatment as usual.

The post-only group design is intended as follows: The control group was given treatment as usual. The post-only group design design is intended as follows: The control group was given treatment as usual. The post-only group design can be seen in Table 1.

Table 1. Research Variable Design

	Group	Dependent variable	Postest
(R)	Experiment	X	O1
(R)	Control	-	O2

RESULT AND DISCUSSION

Result

Based on the data collected by researchers through observation sheets for students' final learning activities, using five indicators. Descriptively, all data were analyzed using the SPSS version 16.0 program, as described in the following Table 2. Based on Table 2, the distribution value after treatment in the experimental and control classes shows a different average difference between the experimental and control classes of 1.4.

Table 2. Descriptive Statistics After Treatment

Information	After Treatment	
	Experiment Class	Control Class
Minimum	7.00	6.00
Maximum	16.00	13.00
Average	10.2000	8.7667
Standard Deviation	2.29542	1.75545

Data Quality Test

Before testing the hypothesis, it is necessary to test the data's normality and homogeneity, which are the requirements of the analysis in this study. Testing for normality and homogeneity of data is assisted by using the SPSS version 16.0 program.

Normality Test

This study uses a normality test to see whether the dependent variable and the independent variable have a normal distribution in the regression model. Data analysis requires normally distributed data to avoid bias in data analysis, and the normality test results can be explained in Table 3.

Table 3. Normality Test Results

Class	Learning activity	Normality test		
		Asymp value Sig. (2-tailed)	A	Notes
Experiment	After treatment	0.365	0.05	Normal
Control	After treatment	0.172	0.05	Normal

In testing for normality in this study using the Kolmogorov – Smirnov method. The criteria that must be met in the data normality test are: (1) If the significance (Sig) obtained is $> \alpha$ (0.05), then the sample comes from a normally distributed population; means if the Asymp value is greater than atsig value (0.05), then the learning activity of students in the experimental class and control class is normally distributed; (2) If the significance (Sig) obtained is $< \alpha$ (0.05) then the sample comes from a population with an abnormal distribution means if the Asymp value is less than atsig value (0.05) then the learning activity of students in the experimental class and control class is not normally distributed. Based on Table 3, it can be concluded that the student activity data after treatment in the experimental and control classes are normally distributed. This is shown through all Sig values greater than the alpha value of 0.05.

Homogeneity Test

This homogeneity test aims to see whether two or more data groups come from populations with almost the same variance. Data analysis requires variance differences after the treatment in the control and experimental classes. The homogeneity test results using the SPSS program can be seen in Table 4.

Table 4. Homogeneity Test Results

Learning activity	Homogeneity test		
	Sig. Value Levene's Test for Equality of Variances	A	Notes
After treatment	0.246	0.05	Homogeneous

To see the homogeneity of the data can be seen in the value of Sig Levene's Test for Equality of Variances, with the following criteria: (1) If the significance (sig) obtained is > α (0.05), then the variance of each sample is said to be homogeneous; meaning that if the Levens test value is greater than atsig value (0.05), then the learning activity of students in the experimental class and the control class is homogeneous; (2) If the significance (sig) obtained is < α (0.05), then the variance of each sample is said to be non-homogeneous meaning that if the Levens test value is smaller than sig value (0.05), then the learning activity of students in the experimental class and control class is declared not homogeneous. Based on Table 4, the learning activity data has a Levene value above the sig value (0.05), so it is said that the student learning activity data between the experimental class and the control class are homogeneous.

Hypothesis Testing Results

After the data has been declared normal and there are differences or not homogeneous, the hypothesis is tested using the independent sample t-test. According to Wahyono (2009), testing the independent samples t-test is an analysis used to test two averages of two samples that are mutually independent or unrelated. The criteria for testing the Independent samples t-test are: (1) If Asymp. Sig> 0.05, then there is no difference; in other words, H0 is accepted; and (2) If Asymp. Sig < 0.05, then there is a difference, or in other words, H0 is rejected.

Hypothesis Test

This hypothesis states that there are differences in student learning activities after conducting treatment on experimental class students who use cooperative script-type models with control class students who use conventional methods. The results of the independent sample t-test on the hypothesis can be seen in Table 5.

Table 5. Independent Sample T-Test Results

Data	tcount	ttable	Df	Asymp. Sig.	A	Information
After treatment	2.717	2.002	58	0.009	0.05	There is a significant difference

The analysis results in the table above show a tcount value of 2.717 degrees of freedom 58 or ttable 2.002 and the Asymp. Sig. value of 0.009 is smaller than the alpha value (0.05). The criteria for testing the hypothesis in this study are: If tcount > ttable, then there is a significant difference, meaning there is a significant difference in learning activities between the control class and the experimental class. If tcount < ttable, then there is no significant difference.

Otherwise, there is a significant difference in learning activities between the control and experimental classes. If a significant value < 0.05, then H0 is rejected. There is a significant influence of the cooperative script learning model on student learning activities between the experimental and control classes. Significant value > 0.05, then H0 is accepted, meaning there is a significant influence

of the Cooperative Script learning model on student learning activities between the experimental and control classes, with the hypothesis:

H0: μ1 = μ2 (there is no difference in student learning activities between the experimental class and the control class)

H0: μ1 ≠ μ2 (there are differences in student learning activities between the experimental class and the control class)

Based on the analysis in the t-test results in Table 5, the tcount value is greater than ttable or 2,717 > 2.002, so H0: μ1 ≠ μ2 is accepted. Thus, there is a significant difference after the treatment between the experimental and control classes.

Discussion

There is a different treatment between the control and experimental classes in the learning process. The control class uses a conventional learning model, while the experimental class uses a script-type cooperative learning model from both classes. Each class uses a different model in the learning process, which causes differences in learning activities between the control and the experimental classes. Learning using the top script cooperative model begins with agreeing with students about the rules for collaborating. Problems that are solved together will be concluded together.

The role of the teacher is only as a facilitator who directs students to achieve learning goals (Grow, 1991). In student interactions, there is an agreement, discussion, expressing opinions on the main ideas of the material, reminding each other of the misconceptions that have been concluded, and making joint conclusions. Student activities during cooperative script learning empower students' potential to actualize their knowledge and skills, which aligns with the constructivist approach currently being developed (Wahyuni & Ruhimat, 2018). This aligns with Brousseau in Muniroh (2011) states that the script-type cooperative learning model is indirectly where there is a learning contract between the teacher and students and students and students regarding how to collaborate, namely one student with another agrees to carry out their respective roles, namely students who act as speakers read out the results of the solutions obtained along with the procedure and the students who are listeners listen and hear the explanation from the speaker, reminding the speaker if there is an error.

The process of teaching and learning using the cooperative script learning model provides many opportunities for students to compare their answers and assess the accuracy of answers so that it can encourage less able students to keep trying to improve their deficiencies. This learning model also makes it easier for students to interact socially, thereby developing discussion skills (Harun et al., 2021). Students can respect other people more, in line with Schank and Abelson (2013) script type cooperative learning that describes student learning activities in the form of interactions such as illustrations of students' social life with their environment as individuals, in families, community groups, and the wider community.

Learning using the cooperative script model can also educate students to learn to speak in front of the class and learn to respect the opinions of others through class discussions so that the skills and attitudes of students will automatically develop and will ultimately influence student learning outcomes. This follows the opinion of Rusman et al. (2011) that learning needs activity. With a learning activity, it is possible to take place properly. In student activities during learning, using the script-type cooperative model empowers students' potential to actualize their knowledge and skills (Muniroh, 2011; Nurfitriyanti, 2016).

The difference in learning between conventional learning and the cooperative script learning model will certainly have a different impact on student activities in the teaching and learning process (Macdonald, 2003). The application of the cooperative script learning model in learning allows students to know the benefits of the material being studied for their lives, to be active in learning activities, to discover the concepts themselves without having to always depend on the teacher, to be able to solve problems related to the concepts being studied, cooperate with other students, develop their understanding, increase creativity, dare to express opinions and be able to respect the opinions of others. Students become more challenged to learn and try to solve all the problems encountered so that students will remember the knowledge gained. Thus, student activity in the learning process

using script cooperative learning models is better than students whom conventional learning models teach.

The results of this hypothesis test indicate differences in student learning activities between the experimental class and the control class after doing the treatment, the experimental class uses a script-type cooperative learning model, and the control class uses conventional methods. This is shown in the analysis results, and it can be seen that the value of tcount is greater than ttable or 2.717 > 2.002. This corresponds to the Asymp. Sig. of 0.009, which is less than the value of 0.05. So there are differences in student learning activities after conducting treatment in the experimental class with the control class. The results showed that students in the experimental class who were treated with the script-type cooperative learning model were able to increase student learning activities.

The results of this study follow what was stated by Dansereau (1988) states that in cooperative script learning, there is an agreement between students regarding the rules of collaborating. That is, one student with another agrees to carry out their respective roles. These students act as speakers, reading out the results of the solutions obtained along with the procedures. Students become listeners who listen and hear an explanation from the speaker, reminding the speaker if there is an error. Problems are solved together and then concluded together. Thus, script-type cooperative learning can increase student learning activities.

In line with research conducted by Suryani et al. (2013) in the Jurnal Administrasi Pendidikan Indonesia with the title the effect of the cooperative script learning model on learning outcomes in terms of student achievement motivation, the results of his research show that there are significant differences in learning outcomes between students who learn using the cooperative script learning model and students who learn using conventional learning models. The research only discussed learning outcomes, while this research was limited to student learning activities. Further research is still needed to dissect further learning problems in class related to increasing learning achievement.

CONCLUSION

The results showed that the script-type cooperative learning model could increase student activity in teaching and learning compared to conventional methods at SMK Negeri 1 Ambon. Learning by using the script-type cooperative learning model, students are trained and allowed to seek information and learn from and with friends, able to communicate, and able to express opinions. The results of the hypothesis test calculations show that the Asymp. Sig. value is 0.009 < 0.05, and these results indicate that the script-type cooperative learning model can increase student learning activities. The results of this study are an illustration for teachers that in the learning process, teachers must pay more attention to usage following the characteristics of the subjects and students so that in the learning process it can increase learning activities and become a reference for further researchers to continue this research by adding variables.

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