Effect of Reciprocal Teaching Model against Social Studies Activities and Learning Outcomes of Class IV Elementary School Students

Siti Machmudah 1, Muhammad Turhan Yani 2, Waspodo Tjipto Subroto

1Post Graduate, State University of Surabaya, 2Lecturer, State University of Surabaya, 3Lecturer, State University of Surabaya

DOI: 10.29322/IJSRP.10.01.2020.p97105
http://dx.doi.org/10.29322/IJSRP.10.01.2020.p97105

Abstract: This study aims to determine the effect of the reciprocal teaching model on social studies learning outcomes and activities fourth grade students in elementary school. This research was conducted in SDN Sooko 2 Sooko Mojokerto in the school year 2018/2019.

This study uses a quantitative approach. This type of research is experimental research with non equivalent (pretest and posttest) control group design. This study uses two classes namely the experimental class (IV A) and the control class (IV B). The research instrument used was the Instrument sheet activities and student learning outcomes test sheets. Data analysis techniques used include normality test, homogeneity test, and independent samples t-test.

The research data shows: the results of the analysis of normality in the experimental class are 0.164 and in the control class 0.149. Both groups have significance > 0.05 or 0.5%. So, it can be concluded that the data for each group is normally distributed. The homogeneity test results obtained by the value of homogeneity of student learning outcomes produce a significant value of 0.661. Amount of significance > 0.05. So, it can be concluded that the sample variants are homogeneous. The average value of the experimental class is 84.00 and the control class is 59.75. Then by looking at the test results of the independent sample t-test it was found that (t-count) is 7, 248 and (t-table) 1.686. If we do a t-count ratio of 7.248 > t-table 1.686 and the results of sig. 2 is 0.000 > 0.05 so Ho denies that means there is a significant difference. The results showed that there were differences in learning outcomes between the control class and the experimental class.

The conclusions of this study are: 1) the reciprocal teaching model affects activity fourth grade students in elementary school; 2) the reciprocal teaching model affects social studies learning outcomes fourth grade students in elementary school.

Keywords: reciprocal teaching model, student activity, learning outcomes.

I. Preliminary

Education exists in every aspect of life and the results are reused for the benefit of society. A person can obtain education in various educational environments such as, at home, at school, and in the community. Based on Law Number 20 of 2003, the aim of national education is to develop the potential of students to become human beings who believe and devote to God Almighty, have good morals and knowledge, are creative and independent and become citizens of a democratic and responsible state. The legislation is supported by opinions stating that, the goal of education is that all children in competent and well-adjusted individuals, now and in the future, by creating an atmosphere that supports learning. To be effective, this goal must be shared by children, and they must have an essential part in developing it through communicating their interests. (Taylor and MacKenny (2008: p1)

The purpose of education is a conscious effort to make or determine the direction of students who excel in knowledge, attitudes, and skills. To realize this, an optimal and conducive learning process is needed. Has il learn a i r ah purpose of learning is planned. The achievement of learning outcomes are consistent with the objectives pemeb e disable in can be achieved if teachers are able to create an interactive classroom atmosphere when inactive itas students' progress. This is consistent with Astutik's (2012) statement that, the conducive atmosphere supports learning activities (p.144).

Subjects in Elementary School consist of seven types, which are among them are Social Sciences (IPS). Social Studies in Elementary Schools is integrated with other subjects and follows the theme based on the 2013 curriculum, but IPS is still referred to as a subject (Trianto, 2017, p.171). Various parts included in the family of social studies subjects, such as History and Culture, have different characteristics and goals so that their parts are taught to achieve learning goals through an interdisciplinary approach. Social studies education aims to educate and provide basic skills to students to be developed in accordance with their talents, their interests are adjusted to the needs of the surrounding environment and students’ interest in social life to continue their education to a higher level (Trianto, 2010 p. 174).
Astuti (2009) states that social studies examines humans in relation to their social and physical environment (p. 2). IPS is a very important subject to be studied by students, because it examines things related to values, norms and manners that are different between each region in the human environment. Social studies aims to provide students with supplies in living in society. Students are expected to gain knowledge and insights about the basic concepts of social science, gain sensitivity and awareness of social problems in their environment, so that they are skilled in studying and solving these social problems.

Huda (2011) Well-designed learning can attract students' interest in the learning process. Curiosity (curiosity) and being challenged becomes the initial capital to focus students' attention on teaching materials. Students who have taken an interest in teaching materials are more dynamic and interactive in receiving and developing the information they obtain during the learning process (p.3). The teacher is the main character who controls the process of teaching and learning activities in the classroom. The direction of the educational goals to be achieved is very dependent on the teaching methods and strategies used by the teacher. Rusman (2012) states that the learning component that is directly involved and gives the main influence is the teacher. (p.58). All learning process controls are made by the teacher but the teacher does not dominate as an information center but opens the way for information. Shiva learns from the direction of the teacher and develops their potential.

The importance of these social studies subjects has not been fully realized by many parties. Most people assume that this charge only contains concepts and obliged to memorize it. The presumption that is still inherent in most of our society, also influences the ongoing teaching and learning activities taking place in the classroom. Many teachers are more focused on math and science lessons, and not a few students tend to be interested in exploring and understanding numeracy and science. This is because these lessons are considered more challenging and more prestigious.

Professionalism of teachers in teaching methods that are used to determine student achievement is the highest is the ideal learning conditions but in fact learning still use conventional learning models. Guru not use student-oriented method. Bain in Rustiyan (2015, p 2) k ecenderungan towards learning teacher-centered to an approach that is centered student centered will provide opportunities for students to me developers of right / reflect on their own learning, me mperoleh experience added in the concept of science so that it will become a better critical thinker.

The problem now is that the material presented teachers to be memorized by students without estab ikiran who se k barrel with ondisiriel, students are less active search for resources other than teachers. Understanding like this results in children not understanding and interpreting social studies as a whole and can result in activities and learning outcomes a child.

In reality, there are still many students who lack interest and tend to avoid social studies. This happens because the facts and concepts to memorize too many dit awarkan in social studies. Facts in the field indicate that the achievement of learning objectives is still far from expectations. It also occurs in the implementation of social studies lesson in class IV Elementary School Sooko 2 Mojokerto, particularly in economic activity and related materials with a variety of occupations and keh i dupan social and cultural environment. Students still experience difficulties in the learning material.

Reaching in the field students are less active in participating in social studies learning activities and the teacher's role is very dominant. IPS learning implementation still apply a teacher-centered learning (teacher centered). Learning is carried out with the delivery of material by the teacher then students only listen to the teacher's explanation, accept concepts, take notes, and memorize material. Materials in learning, especially in the sub-themes of economic activity and their relationship with various fields of work and social and cultural life in the surrounding environment are often identified with memorizing material. Mastery of social studies material becomes verbalistic, so learning outcomes cannot last long.

The teacher becomes one of the parties responsible for improving education. Educational activities in schools in the sense of providing guidance and teaching to students are the responsibility of the teacher "according to Hamalik's opinion. (2011 p 44), Teachers are required to make an innovation regarding their duties as educators. These innovations are strived to improve student learning achievement. In the opinion of Uno (2008) "a teacher is very influential on learning students (p. 17)

Based on these problems, a solution is needed to improve the learning activities that have been carried out. P eneliti offer solutions to this research by using cooperative learning model reciprocal teaching. According to Oktavianti (2014: 97), cooperative learning has a positive impact on students who have low learning achievement and can help build self-confidence in one's thinking ability in understanding the IPS concept. P learning with the model is in accordance with the conditions, situation, and student learning environment. If this is achieved, the students are expected to be able, creative, interactive, and active in the learning process so that student learning outcomes will be good.

(Arends, 1997: 266) argue that Reciprocal Teaching is a constructivist approach designed to teach students about cognitive strategies in the hope that learning material can be helped to be well understood by students.

Reciprocal Teaching is style learning which was originally developed to train children to be independent. This is categorized as interactive learning. G aya teacher and students take turns sharing information and discussion is a notion interactive embelajaran p. The model shows student way cooperate professionally, study, and understand. S students are prepared to interact in the world outside of school is Reciprocal teaching.

On Reciprocal Teaching The opportunity to communicate and interact socially with friends is given to students to achieve learning objectives, while motivators and active facilitators of students are played by a teacher. That is, in the learning process, students build their own knowledge and take responsibility for learning. Reciprocal learning (reciprocal teaching) intended to assess student activity. A kitv itas is meant is k e activities students during the students work in groups, namely (1) notice; (2) provide an explanation; (3) respond to explanations; (4) asking questions, (5) making resumes; (6) solving problems; (7) estimate; (8)
enthusiastic and happy with others. Therefore, the early learning implementers reciprocal (reciprocal teaching) perceived student activity can be improved.

As for in terms of learning outcomes using the reciprocal teaching model student learning outcomes can increase. This is evidenced by the increase in scores in the experimental class compared to the control class.

By paying attention to the translation / explanation above, m aka researchers interested in formulating this research titled "The Effect of Reciprocal Teaching Model Against Activities and Learning Outcomes IPS Grade IV S ekolah Basic"

II. Research Methods

The approach used in this study is a quantitative approach. Based on the formulation of the problem, this study is categorized into experimental research, in which researchers want to manipulate variable freely or provide treatment (treatment).

The main characteristic of experimental research is the treatment (treatment) imposed on the object or object of research. In this case penelit want to know the effect of p erlakuan (treatment) is. The treatment in question in this research is in social studies materials keg iatan i dentifikasi economy, including production, distribution, and the consumers msi, in the experimental group. The form of experimental research used in this study is the quasi-experimental Nonequivalent Control Group Design.

The procedure of the research was carried out in three stages, namely: a) the preparation stage which consisted of observation, determining the sample, determining the experimental class and control, determining the material; b) the implementation phase by carrying out a pretest, apply learning in experimental class model Reciprocal Teaching, while the control class using conventional learning, doing post-test the experimental class and control class; c) stage of data analysis by collecting and analyzing data, concluding the results of data analysis.

The data collection technique in this study is by using observation and test methods. The data collection of this study uses the results of observations of activities & learning outcomes after the pre test and post test. Data is taken using instruments in the form of written questions. The instrument or test questions used in this study were tested before students outside the sample. After being tested, the test questions themselves were tested to determine the feasibility of the instrument. Tests on questions include validity test, reliability test, difficulty level test and distinguishing test. Data analysis to measure student learning outcomes by using the achievement values of each individual, class average values, and classical learning completeness values. Students 'initial abilities were measured using a pretest while students' final abilities were measured using posttest. Several measured test was used Independent Sample t-test (t test), which aims to determine the effect of model Reciprocal Teaching on the activity of learning outcomes IPS elementary school students. To help the analysis used analysis package SPSS for Windows version 2 2.00.

III. Discussion

1. Simple Regression

This study uses simple regression to find out and analyze the influence of variable X (reciprocal teaching model) on variable Y 1 (student activity) and the effect of variable X (Activity reciprocal teaching model) on variable Y 2 (learning outcomes). Data is processed statistically using SPSS version 22.

The results of simple regression analysis on research variables can be seen in the following table:

<table>
<thead>
<tr>
<th>Coefficients *</th>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>38.074</td>
<td>4.783</td>
<td></td>
</tr>
<tr>
<td>Student activities</td>
<td>.403</td>
<td>.149</td>
<td>.378</td>
</tr>
<tr>
<td>Learning outcomes</td>
<td>.961</td>
<td>.102</td>
<td>1.317</td>
</tr>
</tbody>
</table>

Decision Making Simple Regression Test

a. If the Sig value is > 0.05, then the variable X does not affect the variable Y
b. If the Sig value is <0.05, then the variable X has an effect on the variable Y

The results of several regression tests in table 4.24 are explained as follows:

a. For the Effect of X (Reciprocal Teaching Model) at Y 1 (Student Activity) at 0.011 > 0.05 so that it can be concluded that there is an influence of X (Reciprocal Teaching Model) at Y 1 (Student Activity)

b. For the Effect of X (Reciprocal Teaching Model) at Y 2 (Learning Outcomes) at 0.000 > 0.05 so it can be concluded that there is an influence of X (Reciprocal Teaching Model) at Y 2 (Learning Outcomes)

2. Test F (Simultaneous)

The implementation of F or the simultaneous test is to find out what variable X is (Reciprocal Teaching Model) simultaneously or individually affects the variables Y1 (Student Activity) and (Y 2(Learning Outcomes).
The results of the F or simultaneous tests on the research variables are in the following table:

### Table 4.25 F Test Results (Simultaneous)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1884,821</td>
<td>2</td>
<td>942,410</td>
<td>219,202</td>
<td>0.000 (^{b})</td>
</tr>
<tr>
<td>Residual</td>
<td>124,679</td>
<td>29</td>
<td>4,299</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2009,500</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* \(^{a}\) Dependent Variable: Posttest. Experiment  
  \(^{b}\) Predictors: (Constant), Activities , Learning Outcomes

#### Test Decision Making F

- **a.** If the Sig value is > 0.05, then the variable X simultaneously does not affect the variables Y1 and Y2
- **b.** If the Sig value is < 0.05, then the X variable simultaneously affects the variables Y1 and Y2

Based on table 4.25 shows a significant value for the X direction (Reciprocal Teaching Model) simultaneously (simultaneous) against Y1 (student activities) and Y2 (Learning Outcomes) is 0.000 < 0.05 so it can be concluded that there is influence X (Reciprocal Model Teaching) simultaneously (together) with Y1 (Student activity) and Y2 (Learning Outcomes).

### Table 4.28 T Test Results

<table>
<thead>
<tr>
<th>Independent Samples Test</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference Lower</th>
<th>95% Confidence Interval of the Difference Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>T</td>
<td>Df</td>
</tr>
<tr>
<td>Pretest</td>
<td></td>
<td></td>
<td>.000</td>
<td>.994</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td></td>
<td></td>
<td>.787</td>
<td>62</td>
</tr>
<tr>
<td>Equal variances not</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>assumed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>.127</td>
<td>.674</td>
<td>4,808</td>
<td>62</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td></td>
<td></td>
<td>4,808</td>
<td>62</td>
</tr>
<tr>
<td>Equal variances not</td>
<td></td>
<td></td>
<td>4,808</td>
<td>60,970</td>
</tr>
<tr>
<td>assumed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.28 shows the results of the analysis with the Independent T-test sample at the pretest obtained t count 0.787. The value of table at (df, 62) and the real level of 0.05 is 1.670, if a comparison is made then t count < t table with the results of sig. 2 with a tail of 0.434 > 0.05 and said to accept H0 which means there is no significant difference. Which means there is no difference in student learning outcomes between the control class and the experimental class at the time of the pretest. Whereas in Posttest there is t count 4.808. The value of t table at (df, 62) and the real level of 0.05 is 1.670, if a comparison is made then t count > t table with the results of sig. 2 is tailed at 0.000 < 0.05 and is said to accept H0 which means there is a significant difference. Which means that there are differences in student learning outcomes between the control class and the experimental class at the posttest.

### IV. Discussion

Based on the results of a simple regression analysis, the test shows that the Sig value in the learning activity variable (Y1) gets 0.011 < 0.05. From these results, it can be concluded that there is an influence of reciprocal teaching (X) model variables on learning activities (Y).

Based on the results of the analysis of normality tests, the learning outcomes variable obtained a significant value of 0.087 > 0.05 or > 5%. It can be concluded that the learning outcomes data are normally distributed.

Based on the results of the research that has been analyzed in chapter IV, to find out and analyze the effect of variable X (Reciprocal Teaching Model) on variables Y1 (Learning Activity) and Y2 (Learning Outcomes) using the F test, significant value for the effect of X simultaneously (simultaneous) on Y1 (Learning Activity) and Y2 (Learning Outcomes) is 0.000 < 0.05 so it is concluded that there is an influence of X (Reciprocal Teaching Model) simultaneously (together) against Y1 (Learning Activity) and Y2 (Learning Outcomes). The magnitude of the influence of the two variables using the Test Termination Coefficient obtained by the R Square value of 0.938, can be interpreted that the effect of X (Reciprocal Teaching Model) simultaneously (together) at Y2 (Learning Outcomes) is 93.8%.
V. Conclusion

The conclusion of this study can be taken after all variables meet the requirements for normality test, homogeneity test, multicollinearity test and heteroscedasticity test. The results of the normality and homogeneity test for all variables are normally distributed and homogeneous. The conclusions that can be taken are based on the description of the research discussion, namely:

1. There is an influence of the Reciprocal Teaching model on the activities of students in class IV of Sooko 2 Elementary School in Mojokerto. The mean value of learning activities in the control class was 66.23 and the experimental class was 84.52. Then by looking at the results of the Independent Sample T test in table 4.10 \( t_{\text{count}} = 3.485 > t_{\text{table}} = 1.677 \). Sig. 2 tailed 0.001 <0.05 then \( H_0 \) is rejected and \( H_a \) is accepted. This shows that there are differences in the results of learning activities of students who have been treated and without treatment. So it can be concluded that the reciprocal teaching learning model influences student learning activities.

2. There is an influence of the Reciprocal Teaching model on the learning outcomes of students in class IV of Sooko 2 Elementary School in Mojokerto. The results of the statistical test results of the study (pre-test) which shows that the value of \( t_{\text{count}} = 0.015 < t_{\text{table}} = 1.677 \). This shows that there were no differences in student learning outcomes in the past. After being treated (treatment), obtained posttest learning results between the control class and the experimental class showed that the value of \( t_{\text{count}} = 3.485 > t_{\text{table}} = 1.677 \). This shows that there are differences in learning outcomes of students who have been treated and without treatment. So that it can be concluded that the reciprocal teaching learning model affects student learning outcomes.

References

[33]. from the Concept of Student Academic Self