

# Comparison of Learning Effectiveness Cooperative Integrated Reading and Composition, Group Onvestigation, and Team Games Tournament on Social Studies Concept Understanding

Eldi Mulyana and Mamat Ruhimat  
Universitas Pendidikan Indonesia, Bandung, Indonesia  
eldimulyana30@gmail.com, mamatruhimat@upi.edu

**Keywords:** Cooperative Integrated Reading and Composition (CIRC), Group Investigation (GI), Team Games Tournament (TGT), understanding of Social Studies concepts.

**Abstract:** This research is motivated by a low of Social Studies concept understanding that occurred in students of class VIII SMP Negeri 38 Bandung. The low of Social Studies understanding is caused by misconception that students brought from their environment as a result of wrong mindset and learning method of Social Studies that less persuade the students to actively involved in learning process. Researchers has tried to use Cooperative Integrated Reading and Composition (CIRC), Group Investigation (GI) and Team Games Tournament (TGT) to increase the understanding of Social Studies concept. The method that used was quasi experiment with nonequivalent [pre test and post test] research design. Data were obtained by tests (pre test and post test), observation sheets and interview. Data analysis is by using right only method, analysis of increasing Social Studies concept understanding (gain), normality test *Lilliefors (Kolmogorov-Smirnov dan Shapiro-Wilk)*, homogeneity test *Levene Test*, hypothetical test (*paired sample t test, independent sample t test, dan matched subject*). The result of this research showed that learning of CIRC, GI, and TGT are effective to gain the understanding of Social Studies in students, it is based on the average marks of Social Studies concept understanding after the treatment is higher than before. Conclusion from this research is CIRC, GI, and TGT are effective to improve the understanding of Social Studies concepts. Comparison the effectivity of these cooperative learning types, GI learning is better and more effective to gain students understanding of Social Studies concept compared with CIRC and TGT learning.

## 1 INTRODUCTION

The use of lecture method in Social Studies subject can not be avoided by teachers because it contains data, information, concepts and generalization. Result of a research which was conducted by Maryani & Sjamsuddin (2008, pg. 88) showed that “67,7% students of Junior High School in West Java does not want lecture methods in learning activities”. Meanwhile, Al Muchtar (2014, pg. 3) points out that “one of weakness in Social Studies education is too much emphasis knowledge rather than understanding and attitude”. Understanding the wrong concept of Social Studies could lead to misconceptions of students.

Based on observation on students of class VII at SMP Negeri 38 Bandung, found the problem of Social Studies concepts understanding from the result of the daily test, as follows:

Table 1. Table of Daily Test Score of Social Studies Concepts Understanding

No	Class	Data of Daily Test Class VIII		
		Highest Score	Lowest Score	Average
1	VIII A	74	24	55,42
2	VIII B	74	16	48,63
3	VIII C	78	40	56,47
4	VIII D	70	20	51,53
5	VIII E	72	36	54,58
6	VIII F	76	32	54
7	VIII G	72	28	47,79
8	VIII H	70	30	45,84
9	VIII I	68	30	47,54
10	VIII J	74	30	46,65
11	VIII K	68	32	51,47
Total Average of Daily Test Score				54

Source: Research Result

One implementation of changes in Social Studies learning can be done through cooperative learning. Solihatin & Raharjo (2011, pg. 2) points out that "Efforts to improve the quality of teaching and learning process in Social Science education is a very urgent need to do. One of the learning model is cooperative learning". Some methods in cooperative learning can be an alternative to improve the understanding of the concept of Social Studies, including the *Cooperative Integrated Reading and Composition, Group Investigation* and *Team Games Tournament*). Lie (2008, p. 28) argues that "the underlying philosophy of cooperative learning methods are *homo homini socius* which emphasizes that human beings are social beings". All cooperative learning methods offer students to work together in learning and provide learning to be responsible for their teammates, also able to make themselves learn as well as others.

CIRC could train students abilities to make explanations on predictions about how problems will be addressed and summarize the main elements of a subject. Both abilities, according to Palinscar & Brown (in Slavin, 2008, p. 203) are 'activities that are found to improve reading comprehension'. CIRC uses cooperative teams to help students learn the ability to understand learning materials.

GI is a method that provides interpersonal dialogue to students by conducting investigations in solving problems in groups to generate a report. GI according to Joyce, Weil & Calhoun (2011, p. 34) is designed to "guide students in clarifying the problem, explore various perspectives of the issue, and examines together to master the information, ideas and skills that simultaneously also to develop their social competences". GI emphasizes all group members to plan a study along with problem solving then the results are presented in front of the forum.

TGT is a method that involves the activities of all students without any differences in status with the peer tutoring system that contains elements of the game and reinforcement. TGT according to Slavin (2008, p. 163) is "a method that uses an academic tournament using quizzes and scores of individual progress, the learners compete as representatives of their team with other team members ". The scope of this study is to compare the three methods of cooperative learning (CIRC, GI and TGT) to see the effectiveness in improving the understanding of Social Studies concept of the students in class VIII SMPN 38 Bandung.

## 2 THEORITICAL REVIEW

### 2.1 Understanding the Concept of Social Studies

Definition of understanding (*comprehension*) according to Bloom, et al. (1986, p. 89) is *Here we are using the term comprehension to include Reviews those objectives, behaviors, or responses roomates represent on understanding of the literal message contained in a communication.* Students can be said has understand according to Anderson & Krathwohl (2010, pp. 105) is if they can construct the meaning of learning messages, whether oral, written or graphic, delivered through learning, books or computer screens. The definition of the concept according to Jarolimek (1986, p. 22) is *sometimes Described as abstract categories of meanings. Concept definitions therefore tell us only about the qualities or attributes that a class or group of examples have in common.* Understanding the concept is very important in the social studies, as proposed by Chadwick (2009, p. 4) that the *Concept are embedded in all the social studies achievement across the four conceptual strands and are an essential part of teaching and learning in social studies . Moreover, many of the same concepts form the buliding blocks for learning in the senior social sciences, so understanding them is crucial for these students. Teaching for conceptual understanding in social studies enables teachers to select and structure learning around important concepts. This process also provides students with their conceptual frameworks for their own constructing way for structuring their understandings.*

Reece & Walker (2003, p. 18) suggests that *Learning to understand something involves giving answers to the question of why and how.* Banks (2012, p. 59) argues that having knowledge of the basic concepts of various social science disciplines makes it possible to pay attention to problems that span multiple disciplines, or become interdisciplinary in its scope. The concept of Social Studies according to Chapin & Messick (in Somantri, 2010, p.38) illustrates material from seven disciplines: 1) History; (2) Geography; (3) Economy; (4) Political Science; (5) Sociology; (6) Anthropology; and (7) Psychology. Some examples of the concept of Social Studies stated by Womack (1970, p. 30), including: *Revolution, Ideology, Stratification, Family, Balance of Power, Diminishing Returns, Republic, Regional, Specializations, Government, Productivity, Institutions, Culture Lag, Customs, Nationalism, Election.*

## 2.2 Cooperative Integrated Reading and Composition (CIRC)

The CIRC learning steps according to Komalasari (2013, p. 69) are presented as follows:

1. Establish groups whose members are heterogeneous;
2. Teachers give a discourse/clipping that accordance with the learning topic;
3. Students work together reading for each other and find the main idea and give a response to the discourse/clippings and written on a sheet of paper;
4. Presenting/reading out group results;
5. Teachers make a conclusion together; and
6. Closing.

Slavin (in Suyitno, 2005, p. 6) suggests the advantages of CIRC Learning are:

1. CIRC is appropriate to improve skills of students in completing solving problem questions;
2. Domination of teachers in learning would be reduced; and
3. Students will motivated on results carefully, because they work in group.
4. Students could understand the meaning of question and they could check each other works; and
5. Help weak students.

Deficiency of CIRC learning are:

1. On the presentation time only active students would appear; and
2. Not all students can solve question carefully.

## 2.3 Group Investigation (GI)

The GI learning steps according to Komalasari (2013, p. 75-76) consist of topic selection, cooperation planning, implementation, Analysis and Synthesis, Presentation of Final Results, and evaluation. Setiawan (2006, p.9) describes some of the advantages and disadvantages of GI learning, as follows:

Advantages of GI Learning

1. Personally
  - a) Can works freely in the learning process;
  - b) Give enthusiasm to be ininitative, crative, and active;
  - c) Confidence level will be increased;
  - d) Can learn to solve, handle a problem;
  - e) Develop enthusiasme and taste.
2. Socially
  - a) Improves teamworking;

- b) Learn to communicate well either with friends or teachers;
- c) Learn to communicate well systematically;
- d) Learn to respect opinion of others; and
- e) Improves participation in making a decision.

### 3. Academically

- a) Students has been trained to take responsibility of any given answers;
- b) Works systematically;
- c) Develop and train skills in various field;
- d) Planning and organizing their works;
- e) Check the validity of answers they have made;

Disadvantages of GI learning: The least material presented at a single meeting, the difficulty of giving personal assessments. GI learning type fits into a topic that requires students to understand a subject from their own experiences.

## 2.4 Team Games Tournament (TGT)

Komalasari (2013, p. 67-68) points out that there are five main components in TGT, namely class presentation, group, games, tournaments and team recognition.

Taniredja, Faridli & Harmianto (2013, pp. 72-73) points out the advantages and disadvantages of TGT learning:

Advantages of TGT:

1. In cooperative class students has a freedom to interact and using their opinions;
2. Students confidence will be increased;
3. Disruptive behaviour to other students will getting smaller;
4. Motivation of students to studying will be increased;
5. Deeper understanding to the subject;
6. Increase kindness, sensitivity, tolerance between students and between students with teachers.

Disadvantages of TGT: (1) not all of students contribute their opinions, (2) Lack of time for learning process; and, (3) The probability of noisy condition if the teacher does not manage the class well.

## 3 RESEARCH METHODS

This *quasi experiment* research design using *Nonequivalent [Pre Test and Post Test] Control Group Design*. This design according to Creswell (2013, p. 242) is the experimental group and the control group were selected without random

assignment. In the two groups, both performed a pre-test and post-test. Only the experimental group who is in treatment. Therefore, this design is almost the same as the pre test and post test control group design as the only form of true experiment only experimental group or the control group was not chosen randomly. Data of descriptive statistics using *Microsoft Office Excel for Windows* software. Normality Test using *Lilliefors (Kolmogorov-Smirnov and Shapiro-Wilk)* methods. Homogeneity test using the *Mann Whitney*. Statistical analysis manually and also using *Software SPSS 18 for windows* with a significance level = 5% (0.05).

Hypothesis testing using different test, written test requirements matched subjects that had requirements which was initial data of Social Studies concept understanding of students should be equal and pairs (*matching*). Using a different test *paired samples t-test* and test of *independent sample t-test*. The process of data analysis and hypothesis testing assisted with *SPSS software*.

#### 4 RESEARCH RESULTS

These are the summarizes of research hypothesis, the type of statistical tests and the conclusion of the hypothesis tests result:

Table 2: Table of Hypothesis Tests Result

No	Research Hypothesis	Statistical Test	Summarizes
1	There is a difference in understanding the concept of Social Studies in control class that using conventional learning before and after treatment.	t'	H1 Accepted (Very Significant)
2	There is a difference in understanding the concept of Social Studies in experimental class 1 that using CIRC learning before and after treatment.	t'	H1 Accepted (Very Significant)
3	There is a difference in understanding the concept of Social Studies in experimental class	t'	H1 Accepted (Very Significant)

	2 that using GI learning before and after treatment.		
4	There is a difference in understanding the concept of Social Studies in experimental class 3 that using TGT learning before and after treatment.	t'	H1 Accepted (Very Significant)
5	There is a difference in improving understanding the concept of Social Studies between control class that using conventional learning with experimental class 1 that using CIRC learning.	t'	H1 Accepted (Very Significant)
6	There is a difference in improving understanding the concept of Social Studies between control class that using conventional learning with experimental class 2 that using GI learning.	t'	H1 Accepted (Very Significant)
7	There is a difference in improving understanding the concept of Social Studies between control class that using conventional learning with experimental class 3 that using TGT learning.	t'	H1 Accepted (Very Significant)
8	There is a difference in improving understanding the concept of Social Studies between experimental class 1 that using CIRC learning with experimental class 2 that using GI learning.	t'	H1 Accepted (Very Significant)

9	There is no difference in increased understanding the concept of Social Studies between experiment class 1 that using CIRC learning with experimental class 3 that using TGT learning.	t'	H1 Rejected (Non Significant)
10	There is no difference in increased	t'	H1 Rejected

understanding the concept of Social Studies between experiment class 2 that using GI learning with experimental class 3 that using TGT learning.	(Non Significant)
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Source: Research Results.

Here is a diagram of matched subjects based on the average score of pre-test and post-test understanding of Social Studies concepts:

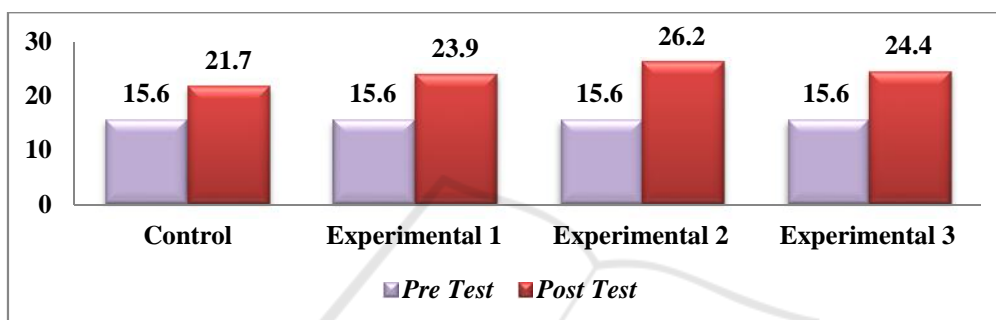


Figure 1: Pretest Postest  
Source: Research Results

Here is a diagram of matched subjects based on the average score gain of understanding Social Studies concept:

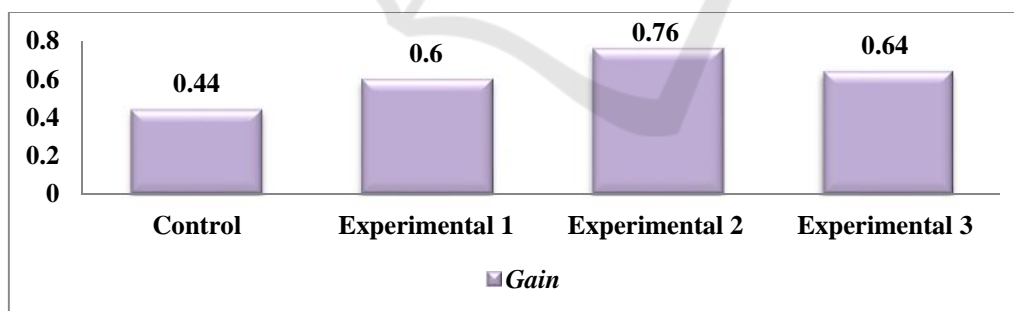


Figure 2: Gain  
Source: Research Results.

The obstacles of Implementation of CIRC, GI and TGT Learning during the study are as follows:

1. CIRC Learning Type

The use of CIRC learning in Social Studies learning activities of students in class VIII at SMP Negeri 38 Bandung City is something that has never been done. The results of the observation show some obstacles such as students not fully understand the

essence of CIRC learning, lack of provided time to summarize the key words in the subject, the ability to summarize concepts of Social Studies that meaningful not yet able to be implemented properly due to lack of competent participants students and teachers at the first meeting still lack of respect for that condition, the creativity of students is still

lacking, and at the time of presentation only active students who want to perform.

### 2. GI Learning Type

The use of GI learning in students of class VIII in SMP Negeri 38 Bandung is something that has never been done. The results of observations show some obstacles such as the lack of supervision of students at the time of group investigation, learning time for the GI learning method is still not effective, GI learning is only suitable for materials that challenge in problem solving and decision making.

### 3. TGT Learning Type

The use of TGT learning in students of class VIII in SMP Negeri 38 Bandung is something that has never been done. The results of observations show some obstacles such as the lack of ability of teachers to manage a tournament for students, occasionally the debate occurred at the time of the tournament because the tournament system is not well understood by teachers, the learning time for the TGT learning method was still not effective, the lack of time that given to students in doing games and tournaments.

## 5 CONCLUSION

Understanding the concept of Social Studies in the control class has succeeded to improve after treatment compared to the treatment before using conventional learning. It is seen from the scores that students achieved in the pre-test has increased during the post-test. Therefore, the average score of understanding the concept of Social Studies after treatment is higher than before treatment has given. Understanding the concept of Social Studies in the experimental class 1 has been successfully improved after treatment by using CIRC learning. The average score of Social Studies concept understanding after treatment is higher than before treatment has given. Understanding the concept of Social Studies in experimental class 2 has successfully improved after being treated by using GI type learning. The average score of Social Studies concept understanding after treatment is higher than before treatment has given. Understanding the concept of Social Studies in experimental class 3 has been successfully improved after being treated by using TGT learning. The average score of Social Studies concept understanding after treatment is higher than before treatment has given. Understanding the concept of Social Studies in the control class that using conventional learning is lower than the experimental class 1 that using CIRC learning. CIRC type learning is better and more effective to improve understanding

of Social Studies concept than conventional learning. Understanding the concept of Social Studies in the control class that using conventional learning is lower than the experimental class 2 that using GI learning. GI learning is better and more effective to improve understanding of Social Studies concept than conventional learning. Understanding the concept of Social Studies in the control class that using conventional learning is lower than the experimental class 3 that using TGT learning. TGT learning is better and more effective to improve understanding of Social Studies concept than conventional learning. Understanding the concept of Social Studies in the experimental class 1 that using CIRC learning is lower than the experimental class 2 that using GI learning. Therefore, GI learning is better and more effective to improve understanding of Social Studies concept than CIRC learning. Understanding the concept of Social Studies in experiment class 1 that using CIRC learning has a slight difference compared to experimental class 3 that using TGT learning. CIRC and GI learning are equally good and effective in enhancing the understanding of Social Studies concepts. Understanding the concept of Social Studies in the experimental class 2 that using GI learning has a difference compared to the experimental class 3 that using TGT learning. No difference score gain in the experimental class 2 and class experiment 3. GI and TGT learnings are equally effective to improve the understanding of the concept of Social Studies.

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