International Journal of Instruction e-ISSN: 1308-1470 • www.e-iji.net



October 2019 • Vol.12, No.4 p-ISSN: 1694-609X pp. 705-718

> Received: 26/02/2019 Revision: 09/07/2019 Accepted: 13/07/2019 OnlineFirst:12/09/2019

# Effect of Instructional Models and Interpersonal Intelligence on the Social Studies Learning Outcomes

# Muhamad Abas

Universitas Halu Oleo, Kendari, Indonesia, muhamadabas750@gmail.com

# Etin Solihatin

Dr., Universitas Negeri Jakarta, Indonesia, etinsolihatin@yahoo.com

#### Nadiroh

Prof., Universitas Negeri Jakarta, Indonesia, nadiroh@unj.ac.id

This study aims to determine the effect of instructional models and interpersonal intelligence on social studies learning outcomes. The study was conducted in the department of primary education of Halu Oleo University, Kendari, Indonesia. 112 students of primary education at Halu Oleo University in the fourth semester are the population of this study. This research is quasi-experiment with treatment by level. Classes were chosen randomly with 38 students in both controlling and experiment class. As much as 22 students with high and low interpersonal intelligence from both classes are the sample of this research. While the data of learning outcome are gained by multiple choice test, interpersonal intelligence data are taken by questionnaire. The data are then analyzed by ANOVA and Tukey test. The results show that there are differences in student learning outcomes between those taught with reciprocal instruction models and direct instruction models. There is an interaction between instruction models and interpersonal intelligence. The Tukey test results show that reciprocal instruction models have a better effect on students who have high interpersonal intelligence. However, the direct instruction model has a better effect on students who have low interpersonal intelligence.

Keywords: reciprocal instruction, direct instruction, interpersonal intelligence, social studies, learning outcomes

# **INTRODUCTION**

The instructional model is an effort to organize and facilitate learning to improve the ability of individuals to construct knowledge and develop creative thinking. Gredler (2011), Bybee (2015), Ormrod, at al., (2016), and Eggen & Kauchak (2012), explain

**Citation:** Abas, M., Solihatin, E., & Nadiroh. (2019). Effect of Instructional Models and Interpersonal Intelligence on the Social Studies Learning Outcomes. *International Journal of Instruction*, 12(4), 705-718. https://doi.org/10.29333/iji.2019.12445a

that learning can be interpreted as a process of interaction between individuals and their learning environment to strengthen social, intellectual, and conceptual skills so that they are adaptive to global change. Therefore, the purpose of social studies is directed at developing knowledge, attitudes, and values through developing inquiry, problemsolving and social skills to prepare for global challenges. Banks (1990) and Goertz, (2006), explain that meaningful, integrative, challenging and value-based learning in social studies learning can shape the character of students who are adaptive to social change. Susanto (2014), said that there were many innovations in social studies learning. But it still seems that the teacher who teaches only demands the strength of the student's memory. The development of comprehension, critical thinking and problem solving through each dialogue is not developed. As a result, social studies learning is considered to be a boring, uninteresting, exhausting field of science and only memorizing facts and abstract knowledge. The results of interviews with students and lecturers of PGSD in 2016, found that the learning that used is a direct learning model. Lecturers actively explain the material, question and answer, presentations with limited space for dialogue. The impact of student achievement is low and the emergence of anxiety and reluctance of students to social studies. Lecturers should be more creative and innovative in choosing learning models that match the material characteristics. The study of Bastas (2015), explained that the active role of students in learning can increase learning motivation, performance, critical thinking skills and problem-solving. Thus, the interactive learning can stimulate learning activities and improve the quality and learning outcomes.

one model of instruction that can improve the learning activities of students is the reciprocal instruction model. Dell' Olio & Donk (2007) explain that the reciprocal learning model is a reflection of constructivist learning theory. Individuals build understanding through interaction with other people and their environment. Furthermore, Borich (2017), explains that reciprocal instruction provides an opportunity to explore content learned through dialogue in the classroom. This model requires the active role of students to build their thinking processes so that they can be creative in learning. Interactive dialogue between fellow students and also between lecturers and students with questioning strategies, explaining, concluding and predicting, is characteristic of reciprocal models. Through this dialogue students are not required to memorize concepts and facts but understand, find relationships between concepts and facts so that they can construct their cognitive abilities critically. The study of Gilakjani's (2012), showed that the reciprocal instruction model was able to improve students' cognitive abilities in understanding the reading text. In line with that, Mulyono, at. al., (2018), Agoro and Akinsola, (2013), and Zendler & Reile (2018) in their study explained that student learning activities in the learning process can be improved by reciprocal instruction models. Thus, the reciprocal instruction is different from the direct instruction that has been applied so far, where students are required to remember and memorize so that memorization occurs, as demanded by the theory of behaviorism. While the reciprocal learning model departs from constructivism theory, students interact in a process of dialogue with their learning environment so as to be able to build their own understanding of learning material. The role of the lecturer is more on

facilitating and giving scaffolding to students and not concurrently and instructing as well as direct learning models.

Constructivist experts explain that interpersonal interaction is very important in the learning process. Schunk (2012), explains that interaction with the surrounding environment can stimulate developmental processes and encourage cognitive growth, which is referred to as the interaction of interpersonal factors. Armstrong, (2009). and Gardner (2011), explains Interpersonal intelligence is the ability to understand and make differences and respond effectively to various interpersonal cues that include social sensitivity dimensions, social Insight, and social communication. The study of Ahmed's (2012) shows that there is a relationship between learning models and student emotional intelligence on learning outcomes obtained. Thus, the characteristics of multiple student intelligence are also important to be considered in the learning process. One of the intelligences that must be a concern in social studies is interpersonal intelligence. For this reason, this study wants to compare the effect of reciprocal learning models and direct learning in relation to interpersonal intelligence (high and low) on student learning outcomes of social studies education. Therefore, the novelty of this study lies in the use of learning models (reciprocal and direct instruction models) that interact with interpersonal intelligence on the social studies learning outcomes. This research is expected to contribute to the development of science, especially learning models and can be practically used in social studies learning in higher education.

# **REVIEW OF THE RELATED LITERATURE**

#### **Social Studies Learning Outcomes**

Achievement of cognitive learning outcomes, according to Wilson (2016), and Krathwohl & Anderson (2010), consists of remembering, understanding, applying, analyzing, evaluating and creating. Marzano (2011), grouping it into high-level cognitive, moderate level cognitive and low level cognitive. Agreeing with that, Banks (1990) and Susanto (2014) explain that the achievements of social studies education include the dimensions of knowledge, skills, values, attitude, and action. Lovat & Toomey. (2009) call it a dynamic interaction between material subjects, pedagogic strategy, and value to provide an optimal environment for student success. Based on the description, it can be explained that learning outcomes are behavioral changes that include cognitive, affective and psychomotor dimensions which are obtained after students follow and complete their learning programs. To obtain evidence data that will show the level of students' ability to achieve learning goals, a learning outcome test is conducted. Wilson (2016), and Mayer & Alexander (2016) explains that tests can be used to measure the amount of knowledge an individual acquires from a subject matter that is limited to a certain level. Thus, the learning outcomes of social studies education are all behavioral changes that occur in PGSD students are pleased with the subject of social studies education which includes cognitive abilities and mastery of the material concepts of social studies education, change and culture, social problems, and individuals and society.

# **Reciprocal Instructional Models**

Brown & Palincsar (1987), Barkley (2005), Dell Ollio & Donk (2007) and Yang (2010) explain reciprocal learning emphasizes learner interaction through dialogue and discussion in exploring and constructing learning experiences to improve understanding and mastery of learning material. Furthermore, the reciprocal learning step according to Ahmadi & Gillakjani (2012), that reciprocal learning is also referred to as structured dialogue learning consisting of four learning activities including predicting, questioning, clarifying, and summarizing. Furthermore, Palinscar & Brown (2012), and Cooper (2013) explained that (1) in the Questioning stage, students read the material and make a list of questions on material that has not been understood. The lecturer guides students who have difficulties and directs the material substance. (2) clarifying. Students who were appointed as presenters gave explanations related to the material which then other students gave deepening on the presenter's explanation. (3). Summarizing. At this stage, students are given the opportunity to make a summary of the material and discuss it in the group. (4). Predicting. At this stage, the lecturer gives an opportunity for students to be able to make hypotheses about the material to be discussed or discussed at the next meeting. This model fits the characteristics of the Social Sciences Education material which demands the active role of students in the learning process. Social studies education material cannot be well understood if it is only done through lectures or material delivery by lecturers. But it must go through a discussion process that is designed so that students understand the material well (Bank, 1990). The strength of the reciprocal learning model is to train the ability of students to learn independently and reexplain the material learned to other parties. At the same time train the courage of students to appear, and improve their ability to solve problems. But it should be noted the ability of students to take a diverse role, a supportive learning environment and lecturer guidance in the learning process.

#### **Direct Instructional Models**

The direct instruction model is based on the assumption that knowledge can be moved as a whole from the educator's thinking to students. This model is influenced by the behavioristic school of thought which emphasizes the understanding that human behavior has a relationship between stimulus and response that must be implemented by the lecturer as the stimulus provider. Joice & Calhoun (2011), Arend (2012), Lewis at al., (2017), Duffy & Jonassen (2013), Eggen & Kauchak, (2012), state that the direct learning model is a lecture-oriented learning model with steps that are (1) orientation namely the teacher determines the subject matter, reviews previous lessons, learning objectives and procedures, (2) presentations, namely the teacher explains conceptual skills, and assigns assignments. (3) structured practice, namely the teacher leads the group and students respond to questions, the teacher provides feedback or reinforcement. (4) guided practice, teachers guide students in practice. (5) independent practice, namely giving assignments. The advantages of this model according to Estes & Mints (2016), and Zang (2017) are the academic focus, direction, and control by lecturers, and the time management system and priorities for assignments and completion of academic assignments. Based on the opinions of the experts mentioned

above, it can be concluded that the direct learning model is a set of learning procedures oriented to the active role of the teacher to improve mastery of the material, which is carried out through stages of explanation, question and answer, feedback and assignments that are packaged in the preliminary stages, presentation and closing in a series of learning.

The advantage of this model is that educators can control the order and breadth of learning material. Very effective when the learning material that must be mastered by students is quite broad, while the time is limited, students can hear directly through lecturers' narratives. Education conveys information quickly and shares information that is not easily found elsewhere, can be used for large numbers of students and large class sizes. It weakness: The style of communication is more one-way, so the opportunity to control the understanding of students is very limited, Only can be done to students who have the ability to listen and listen well, Can't serve the difference of each student both in terms of abilities, knowledge, interests and talents and differences learning style, Difficult to develop the ability of students in terms of socialization, interpersonal relations and critical thinking and Very much depends on what is owned by educators such as preparation of knowledge, enthusiasm and various abilities such as communication skills and ability to manage classes

#### **Interpersonal Intelligence**

The ability possessed by humans and not possessed by other beings is intelligence or intelligence. Intelligence is the ability that each individual has in responding and adjusting and adapting to the environment. Gardner (2000), dan Tirri at al., (2013), describes intelligence as a mental ability to learn, apply knowledge and manipulate the environment and the ability to think abstractly. Armstrong (2009), Widyasari (2016), and Gardner (2011) explain that there are eight multiple intelligences possessed by humans and each individual has that intelligence with different levels. One important intelligence is interpersonal intelligence. Interpersonal intelligence is also commonly referred to as social intelligence, namely the ability to interact and adapt to its social environment. Armstrong (2009), states that interpersonal intelligence is the ability to understand other people's thoughts, attitudes, and behaviors and the ability to respond effectively to various interpersonal cues. Furthermore, Safaria (2005), Tirri at al., (2013), and Dolati & Tahriri, (2017) explain that "interpersonal intelligence has three main dimensions, namely social sensitivity, social insight, and social communication. Characteristics of children who have high interpersonal intelligence will always show the ability to develop effective social relations, empathize with others, ability to maintain social relations, sensitive to changes in social situations, able to solve problems well and prevent problems in social relations and have the ability and effective communication skills. McKenzie (2005), and Al-Kalbani& Al-Wahaibi (2015) explain that interpersonal intelligence is very important in the learning process which places dialogue and cooperation as instruments in enhancing and developing cognitive abilities. Thus, it can be concluded that interpersonal intelligence is intelligence that includes social sensitivity, social insight, and social communication, which can be used to enhance the ability to interact and adapt to the environment.

Effect of Instructional Models and Interpersonal Intelligence ...

# METHOD

This study used a quasi-experimental method with design treatment by level 2X2. The variable of this study consisted of treatment variables, (the instructional models), the moderator variable (interpersonal intelligence) and the dependent variable that is the social studies learning outcomes. The study population was all students of the primary education department of Halu Oleo University, in the fourth semester of 2018, totaling 112 consisting of three classes. Each Class A1 = 38, Class A2 = 38 and Class A3 = 36students. The research sample was chosen randomly, which creates an experiment class with 38 students taught by a reciprocal instructional model and a controlling class with 38 students taught by a direct instructional model. Students in the experimental and control class were given a questionnaire to obtain interpersonal intelligence score data. The results of the questionnaire scores are sorted from the lowest to the highest. Each class was taken 27% (11 students) of those getting the lowest score of interpersonal intelligence questionnaire, categorized as the low level of interpersonal intelligence students and 27% (11 students) from those achieving the highest score as the student with a high level of interpersonal intelligence. Therefore, the sample total of each class is 22 students. As presented in the following table 1:

#### Table 1

Quasi-Experimental Design Treatment by Level 2X2

Moderator variable	Treatment variable		
	Reciprocal instructional models (A <sub>1</sub> )	Direct instructional models (A <sub>2</sub> )	
High interpersonal	$A_1B_1$	$A_2B_1$	
intelligence (B <sub>1</sub> )	(27% = 11)	(27% =11)	
Low interpersonal	$A_1B_2$	$A_2B_2$	
intelligence (B <sub>2</sub> )	(27% = 11)	(27% =11)	
Total	22	22	

Student interpersonal intelligence data was taken using a questionnaire in the form of a Likert scale before being treated. Learning outcomes data were taken using multiple choice tests conducted at the end of the treatment. The data collection instrument was validated by two education and psychology experts. Test instruments and questionnaires were conducted on the fifth-semester students of PGSD, Kendari. Test construct validity using biserial point correlation coefficients. Valid test items performed reliability tests using KR-20, the results showed a reliability level of 0.89. While the validity of interpersonal intelligence instruments uses the Product Moment correlation coefficient and reliability test using Cronbach Alpha. The result is a reliability value of 0.91. Thus, the two instruments are in the category of high reliability. Student learning outcomes are measured by the post-test at the end of learning. Data were analyzed using descriptive analysis to find the average, median, mode, maximum and minimum values. The research hypothesis test uses a two-way ANOVA. If there is an interaction between treatment variables and attributes, a Tukey test is carried out to find out which class is better.

## FINDINGS

The descriptive on learning outcomes of social studies education as in table 2

Table 2Statistic of Descriptive Learning Outcomes

Interpersona Intelligence		Reciprocal instructional (A1)	models	Direct models (A2)	instructional	Σ
	N	11		11		22
High (B1)	X S	40,364		35,364		37,863
	S	4,965		4,567		5,312
	Mo	44		34		40
	Me	42		34		39
	Min	32		28		28
	Max	46		43		46
Low (B2)	Ν	11		11		22
	X	27,636		27,727		27,682
	S	3,107		2,533		2,767
	Mo	28		29		28
	Me	28		29		28
	Min	22		24		22
	Max	32		31		32
Σ	Ν	22		22		44
	X	34,273		31,545		34,295
	S	7,698		5,316		6,048
	Мо	44		30		28
	Me	32		30		31
	Min	22		24		22
	Max	46		43		46

#### Table 3

Tests of between-Subject Effects by ANOVA

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	1277.909a	3	425.97	27.669	0
Intercept	47258.273	1	47258.273	3069.625	0
A	66.273	1	66.273	4.305	0.044
В	1140.364	1	1140.364	74.071	0
A * B	71.273	1	71.273	4.629	0.038
Inter	615.818	40	15.395		
Total	49152	44			
Corrected Total	1893.727	43			

The first hypothesis. The hypothesis tested is rejected  $H_0$ :  $\mu A_1 = \mu A_2$  and accept  $H_1$ :  $\mu A_1 > \mu A_2$  is accepted, at  $\alpha = 0.05$ . Based on the two-way ANOVA test in the table 3, obtained  $F_{count} = 4.305 > F_{table}$  ( $\alpha = 0.05$ ) = 4.06. This means that the hypothesis  $H_0$  is rejected and  $H_1$  is accepted. Means there are differences in learning outcomes of Social Studies between students taught with reciprocal instruction models and students taught with direct instruction. It is shown in table 2, the average score of Social Studies learning outcomes of students taught with reciprocal models (X<sup>-</sup> = 34,273) and those

taught with direct instruction models of  $((X)^- = 31,545)$ . This means that student learning outcomes using reciprocal learning are higher than those taught by the direct instruction model.

The second hypothesis, the hypothesis tested:  $H_0$ : Interaction A X B = 0.  $H_1$ : Interaction A X B # 0. The results of the two-way ANOVA calculation as in table 3 obtained  $F_{count} = 4,629 > F_{table}$  ( $\alpha = 0.05$ ) = 4.06. This means that  $H_0$  is rejected and  $H_1$  is accepted. It means that there is an influence of the interaction between the instruction model and interpersonal intelligence on student social studies learning outcomes. The form of the interaction is as in figure 1.

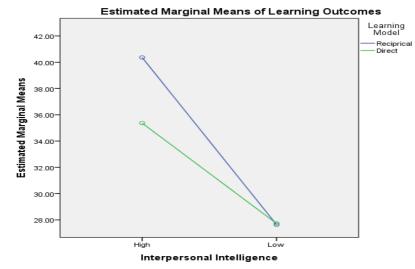


Figure 1

Interaction of Instruction Models and Interpersonal Intelligence

The third hypothesis, the hypothesis tested: Reject  $H_0$ :  $\mu A_1 B_1 = \mu A_2 B_1$  and accept  $H_1$ :  $\mu A_1 B_1 > \mu A_2 B_1$  at  $\alpha = 0.05$ . Based on the results of the Tukey test as in table 4, the value of  $Q_{count} = 4.226 > Q_{table} = 3.84$ . This means that there are differences in learning outcomes of Social Studies between students who have high interpersonal intelligence who are taught with reciprocal learning models and who are taught by direct learning. It is evidenced in table 2, the average learning outcomes of students who have high interpersonal intelligence taught by reciprocal instruction models  $(A_1B_1)$  of  $X^- = 40,364$ , higher than those taught with direct instruction models  $(A_2B_1)$  of  $X^- = 35,364$ . A summary of the Tukey test results can be seen in table 4.

Table 4					
The Summary of Tukey Test Results ( $\alpha = 0.05$ )					
Group compared	Q <sub>value</sub>	Q <sub>table</sub>			
$A_1B_1$ dengan $A_2B_1$	4,226	3,84			
$A_1B_2$ dengan $A_2B_2$	0,076	3,84			

The fourth hypothesis, the hypothesis tested,  $H_0: \mu A_1 B_2 = \mu A_2 B_2$  and  $H_1: \mu A_1 B_2 < \mu A_2 B_2$ at  $\alpha = 0.05$ . Based on the Tukey test results in table 4, obtained  $Q_{count} = 0.076 < Q_{table} =$ 3.84. Means  $H_1$  is accepted and  $H_0$  is rejected. This means that there are differences in student social studies learning outcomes that have low interpersonal intelligence taught by reciprocal instruction models and which are taught by direct instruction models. It is proven as table 2, the average learning outcomes of students who have low interpersonal intelligence taught by reciprocal models  $(A_1B_1)$  of X) = 27,636 and those taught with direct instruction models  $(A_2B_2)$  of XX = 27,727, but the difference is not significant.

# DISCUSSION

First hypothesis. Based on the results of ANOVA calculations on the table 3, obtained  $F_{count}$  = 4.305>  $F_{table}$  ( $\alpha$  = 0.05) = 4.84 and table 2 shows the average social studies learning outcomes of students taught with reciprocal instruction models of (X = 34,273)and taught with a direct instruction model of  $(X)^{-1} = 31,545$ ). It can be interpreted that students' social studies learning outcomes taught with reciprocal instruction models are higher than direct instruction models. This finding shows that reciprocal instruction has a better influence on student learning outcomes than direct instruction. It is known that reciprocal instruction requires students to explore learning content through dialogue and discussion in the classroom. Students play an active role in developing their cognitive abilities and dialogue with their colleagues and lecturers in an interactive process. Yang (2010), in his study, found that reciprocal learning with questioning steps, clarifying can improve student understanding. While the direct model emphasizes the dominance of lecturers in the presentation of materials. As a result, students are not creative in elaborating on their knowledge so that mastery and understanding of material become less effective. In reciprocal learning students actively communicate, and think through the process of compiling questions on material that is considered difficult and giving explanations to colleagues. The dialogical process requires students to read and understand the material and then discuss it in small groups. Borich (2017) and Jenifer, (2013), explains that the role of students in reciprocal teaching is as a student and teacher who emphasizes the realization of mutual exchange through multiple student roles. This opinion emphasizes the importance of behavioral modeling in the learning process to help students develop their cognitive skills. Doolittle, at al., (2012), in his study found that reciprocal learning as an effort to enhance students' ability to think and understand the material so that students can improve the effectiveness of collaboration. Thus, it can be understood that the learning model that emphasizes dialogue and collaboration between students is better the learning outcomes than the learning model that is dominated by lecturers in the learning process. IPS material will be very interesting if the learning process that occurs emphasizes the effort to build the cognitive potential of students through an interactive dialogue process. This interaction will result in the exchange of experience and knowledge so that it can improve the quality and achievement of learning outcomes. This is evident from the results of this study which shows the learning outcomes of students who study with reciprocal models are higher than students who are taught by direct instruction.

Second hypothesis. Based on the results of ANOVA calculations presented in the table 3 the value of F count = 4.629> F table (0.05) = 4.06. Furthermore, in Figure 1, there appears to be an interaction between the instruction model and interpersonal intelligence on student social studies learning outcomes. This shows that the quality of social studies learning outcomes is not solely determined by the instruction model but also influenced by the quality of student interpersonal intelligence. The selection of learning models conducted by lecturers in designing learning materials needs to pay attention to the diversity of student characteristics. Students who have high interpersonal intelligence are suitable to use reciprocal instruction models in social studies learning. This is because social studies learning material can be well understood if it is done through an empowering process, where students take an active role in improving and developing their cognitive abilities. Palinscar & Brown (2012), explains that the reciprocal model is learning that utilizes peers to act as a teacher for other friends then involves each student to hold responsibility for helping others in learning the material. This emphasizes the provision of opportunities for students to explore the material through discussion and scaffolding. This can help students learn independently, actively and creatively and develop thinking and problem-solving skills. Slavin (2012) and Armstrong (2009), explained that the reciprocal instruction model is a small group learning model that is based on the formulation of questions, through teaching and example and lecturers fostering students' metacognitive abilities. Students who have high interpersonal intelligence have the ability to work together and have a dialogue. This ability can increase the mastery of learning material. Agreeing with that, Dell Ollio & Donk (2007) emphasize the importance of constructing learning experiences through the process of interaction in learning. Interpersonal intelligence is often also referred to as social intelligence, namely the ability to interact and adapt to its social environment. Students who have such characters are generally able to place themselves and build cooperation and synergy to produce positive results. Dolati & Tahriri. (2017), explains that intelligence is a very common mental ability involving the ability to think about planning, solving problems, thinking abstractly, understanding complex ideas, learning quickly and learning from experience. This shows that interpersonal intelligence, when interacted with reciprocal models, has a positive effect on student learning outcomes.

The third hypothesis as presented in table 2 shows that the average social studies education outcomes of students who have high interpersonal intelligence are taught by reciprocal models of  $X^{-}40,364$  and students taught with direct instruction models of  $X^{-}35,364$ . Similarly, in table 4, any difference between the learning outcomes of students who have high interpersonal intelligence taught by reciprocal models and direct learning models. This finding shows that students who have high interpersonal intelligence are more suitable to be taught with reciprocal learning models than direct instruction models.

Students who have high interpersonal intelligence will be able to establish effective communication with other students, able to empathize well, like working in groups. This will help them to create dynamic learning conditions that help students solve problems given by the lecturers in their groups. The typology of students like this is very much in line with the characteristics of reciprocal learning models that emphasize cooperation

and dialogue in increasing their knowledge and understanding (Ormrod, at al., (2016). The character of students with high interpersonal intelligence generally likes the logic of learning and collaboration models. While dialogue and cooperation in the form of discussion through direct learning models are very limited due to the dominance of lecturers in learning. Estes & Mints (2015), and Janiafer (2013) explain that reciprocal learning is often referred to as structured dialog resulting from predicting activities, making questions, clarifying and summarizing. IPS learning material is difficult to understand with a one-way learning model but must go through deepening through discussion and dialogue. Students who have high interpersonal intelligence will easily adapt themselves to reciprocal learning environments. Slavin (2012) explains that direct learning emphasizes teacher control and presentation of structured lessons in the classroom. Students must have the ability to direct their own learning behavior.

Fourth hypothesis. Tuckey test results as in the table 4 obtained Q count = 0.076<Qtable = 3.84. This means that there are differences in learning outcomes of students who have low interpersonal intelligence taught by reciprocal instruction models and direct learning. Furthermore, the average learning outcomes using reciprocal instruction were obtained (X<sup>2</sup>27,366) and those taught with the direct learning model were obtained  $((X)^{-}27,727)$ . This shows that students who have low interpersonal intelligence are taught with reciprocal instruction models more than students taught by direct instruction. But the difference is not significant. This is because students who have low interpersonal intelligence lack experience in communicating their thoughts. When taught with reciprocal models or directly do not affect the learning outcomes. Typology of students who have low interpersonal intelligence generally does not like discussion and cooperation in learning. Eggen & Kauchak (2012) explains that direct learning is a model that uses demonstration and explanation that is combined with training and student feedback to help them get the real knowledge and skills needed. Therefore, students who have low intelligence in learning need help in adapting to the environment so that they are able to organize the environment intellectually. Joice & Calhoun (2011), explained that the direct learning model has several advantages including the existence of academic focus, teacher direction, and control, and time management systems and priorities on assignments and completion of academic assignments Students who have low interpersonal intelligence are taught with reciprocal learning models of difficulties follow the learning process because the model requires students to interact through discussion and collaboration. This means that reciprocal learning models require social communication skills. Therefore, students who have low interpersonal intelligence are more suitable to use the direct learning model. Arends (2012) states that the direct learning model is teacher-oriented which aims to maximize student learning time and develop independence in achieving and realizing learning goals. It shows that the learning outcomes of students who have low interpersonal intelligence can be optimized by the existence of tutoring.

## CONCLUSION

From the results of the research and discussion, it can be concluded that (1) Social studies education outcomes of students who use reciprocal instruction models are higher

than the group of students who use the direct instruction model. (2) There is an influence of interaction between learning models and interpersonal intelligence. (3) Students who have high interpersonal intelligence taught by reciprocal instruction models have higher learning outcomes than students taught with direct instruction models. (4) Social studies learning outcomes of students who have low interpersonal intelligence taught by reciprocal instruction models. For this reason, it is recommended (1) that the reciprocal instruction models in struction models. For this reason, it is recommended (1) that the reciprocal instruction models in social studies learning. Lecturers must pay attention to the diversity of students' intelligence in choosing to learn and innovative models in finding and developing learning models that are in accordance with material characteristics. Students who have high interpersonal intelligence are more suitable to use reciprocal instruction. W hile direct instruction is more suitable for students who have low interpersonal intelligence. Therefore, for universities, the need to create a learning environment that is comfortable, pleasant and conducive in order to support the learning.

#### REFERENCES

Agoro, A. A., & Akinsola, M. K. (2013). Effectiveness of reflective reciprocal teaching on pre-service teachers' achievement and science process skills in integrated science. *International Journal of Education and Research*, *1*(8), 1-20.

Ahmadi, M. R., & Gilajkani, A. P. (2012). Reciprocal teaching strategies and their impacts on English reading comprehension. *Theory and Practice in Language Studies*, 2(10), 2053-2060. doi:10.4304/tpls.2.10.2053-2060.

Al-Kalbani, M. S., & Al-Wahaibi, S. S. (2015). Testing the multiple intelligences theory in Oman. *Procedia-Social and Behavioral Sciences*, *190*, 575-581. doi: 10.1016/j.sbspro.2015.10.001.

Arends, R. I. (2012). Learning to teach. New York: McGraw-Hill.

Armstrong, T. (2009). Multiple intelligences in the classroom. Alexandria, VA: ASCD.

Banks, J. A., Banks, C. A. M., & Clegg, A. A. (1999). *Teaching strategies for the social studies: Decision-making and citizen action*. New York: Longman.

Bastas, H., & Killian, M. (2015). The effect of an active learning strategy on students' attitudes and students' performances in the introduction sociology class. *Journal of the Scholarship of Teaching and Learning*, *15*(3), 53-67. doi: 10.14434/josotl.v15i3.12960.

Behjat, F. (2012). Interpersonal and intrapersonal intelligence: Do they really work in foreign-language learning? *Procedia - Social and Behavioral Sciences*, *32*, 351-355. doi: 10.1016/j.sbspro.2012.01.052.

Borich, G. D. (2017). Effective teaching methods: Research-based practice. Pearson.

Brown, A. L., & Palincsar, A. S. (1987). *Reciprocal teaching of comprehension strategies: A natural history of one program for enhancing learning*. New York: Ablex.

Bybee, R. W. (2015). *The BSCS 5E instructional model: Creating teachable moments*. Thousand Oaks, CA: Corwin.

Cooper, J. M. (Ed.). (2013). Classroom teaching skills. UK: Cengage Learning.

Dell'Olio, J. M., & Donk, T. (2007). *Models of teaching: Connecting student learning with standards*. Sage.

Dolati, Z., & Tahriri, A. (2017). EFL teachers' multiple intelligences and their classroom practice. SAGE Open, 7(3), 1-12. doi: 2158244017722582.

Doolittle, P. E., Hicks, D., Triplett, C. F., Nichols, W. D., & Carl, A. Y. (2012). Reciprocal teaching for reading comprehension in higher education: A strategy for fostering the deeper understanding of texts. *International Journal of Teaching and Learning in Higher Education*, *17*(2), 106-118.

Eggen, P., & Kauchak, D. (2012). Strategi dan model pembelajaran. Jakarta: Indeks.

Estes, T. H., Mintz, S. L., & Gunter, M. A. (2015). *Instruction: A model's approach*. Pearson.

Forehand, M. (2010). Bloom's taxonomy. In M. Orey (Eds.), *Emerging perspectives on learning, teaching, and technology*, (pp. 41-48). E-book. Retrieved from https://textbookequity.org/Textbooks/Orey\_Emergin\_Perspectives\_Learning.pdf.

Gardner, H. (2011). Frames of mind: The theory of multiple intelligences. Hachette UK.

Gardner, H. E. (2000). Intelligence reframed: Multiple intelligences for the 21st century. Hachette UK.

Goertz, G. (2006). Social science concepts: A user's guide. Princeton University Press.

Gredler, M. E. (2011). Learning: Theory into practice. Pearson,

Jenifer R Seymour dan Helena P Osana, (2013) Reciprocal teaching procedure and principles: two teachers developing understanding. *Teaching and Teacher Education*, *19*(3), 325-344. doi: 10.1016/S0742-051X(03)00018-0.

Joice, B., Weil, M., & Calhoun, E. (2011). *Models of teaching: Model-model pengajaran.* Yogyakarta: Pustaka pelajar.

Krathwohl, D. R., & Anderson, L. W. (2010). Merlin C. Wittrock and the revision of Bloom's taxonomy. *Educational Psychologist*, 45(1), 64-65.

Kauchak, D. P., Eggen, P. D., & Carter, C. (2008). *Introduction to teaching: Becoming a professional*. PH/Merrill/Pearson.

Lovat, T., & Toomey, R. (2009). Values education and quality teaching. Springer.

Marzano, R. J. (2011). Making the most of instructional rounds. *Educational leadership*, 68(5), 80-82.

Mayer, R. E., & Alexander, P. A. (Eds.). (2016). *Handbook of research on learning and instruction*. Taylor & Francis.

Mulyono, D., Asmawi, M., & Nuriah, T. (2018). The effect of reciprocal teaching, student facilitator and explaining and learning independence on mathematical learning results by controlling the initial ability of students. *International Electronic Journal Of Mathematics Education*, *13*(3), 199–205. doi: 10.12973/iejme/3838.

Nadine Sporere, Joachim, dan Ulf Kieschke (2009). Improving student reading comprehension skills: effects of strategy instruction and reciprocal teaching" *Learning and Instruction Journal*, Vol. 19 (2), No. pp. 272-286.

Ormrod, J. E., Anderman, E. M., & Anderman, L. H. (2016). *Educational psychology: Developing learners*. Pearson.

Palinscar, A., & Brown, A. L. (2012). Reciprocal teaching. International guide to student achievement, 369.

Safaria, T. (2005). *Interpersonal intelligence: Metode pengembangan kecerdasan interpersonal anak.* Amara Books.

Schunk, D. H. (2012). *Learning theories an educational perspective*. Boston, MA: Pearson Education.

Shoda, T. M., & McConnell, A. R. (2013). Interpersonal sensitivity and self-knowledge: Those chronic for trustworthiness are more accurate at detecting it in others. *Journal of Experimental Social Psychology*, 49(3), 440-443. doi: 10.1016/j.jesp.

Slavin, R. E. (2012). Educational psychology: Theory and practice. Pearson.

Susanto, A. (2014). Pengembangan pembelajaran IPS di SD. Kencana.

Suhaimi, A. W., Marzuki, N. A., & Mustaffa, C. S. (2014). The relationship between emotional intelligence and interpersonal communication skills in disaster management context: A proposed framework. *Procedia - Social and Behavioral Sciences*, *155*, 110-114. doi: 10.1016/j.sbspro. 2014.10.265.

Tirri, K., Nokelainen, P., & Komulainen, E. (2013). Multiple intelligences: Can they be measured? *Psychological Test and Assessment Modeling*, *55*(4), 438-461.

Tuckman, B. W., & Monetti, D. M. (2011). Psicología educativa. Cengage Learning.

Widyasari, F. (2016). The correlation among reading attitude, interpersonal intellegence, and reading comprehension. *Ssrn*, 7(2), 288-298.

Wilson, L. O. (2016). *Anderson and Krathwohl-Bloom's taxonomy revised*. Retrieved from https://thesecondprinciple.com/teaching-essentials/beyond-bloom-cognitive-taxonomy-revised/.

Yang, Y. (2010). Developing a reciprocal teaching/learning system for college remedial reading instruction. *Computer and Education*, 55(3), 1193-1201. doi: 10.1016/j.compedu.2010.05.016.

Zendler, A., & Reile, S. (2018). The effect of reciprocal teaching and programmed instruction on learning outcome in computer science education. *Studies in Educational Evaluation*, *58*, 132-144. doi: 10.1016/j.stueduc. 2018.05.008.

Zhang, D. (2017). Effects of visual working memory training and direct instruction on geometry problem solving in students with geometry difficulties. *Learning Disabilities:* A Contemporary Journal, 15(1), 117-138.