



DEVELOPMENT OF THE INFLUENCE OF COLLABORATIVE LEARNING MODELS AND INTERPERSONAL INTELLIGENCE ON STUDENT LEARNING OUTCOMES OF CLASS V SD MUHAMMADIYAH 12 SEI KAMBING

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Abstract

One alternative to improve and improve learning outcomes is to apply a collaborative learning model, namely a learning model carried out in groups aimed at encouraging students to find various opinions or thoughts issued by each student in the group, not to unite opinions. This study aims to analyze: (1) the effect of the collaborative learning model compared to the conventional learning model; (2) civics learning outcomes of students who have high Interpersonal Intelligence compared to students who have low learning Interpersonal Intelligence (3) the interaction between collaborative learning models and students Interpersonal Intelligence in influencing student civics learning outcomes. The research was in the form of a Quasi-Experimental Design with a 2x2 factorial. The instruments used were the PPKn learning outcomes test and the Learning Interpersonal Intelligence instrument. Data analysis used two-way ANOVA. The results showed: (1) There is an effect of the collaborative learning model on student PPKn learning outcomes in class V SD Muhammadiyah 12 Sei Goat; (2) The learning outcomes of students who have high learning Interpersonal Intelligence are higher than students who have low learning Interpersonal R Intelligence; (3) There is an interaction between the Collaborative learning model and learning Interpersonal Intelligence on the learning outcomes of Student PPKn at SD Negeri Muhammadiyah 12 Sei Kambing.

Keywords: *learning outcomes, Interpersonal Intelligence, Collaborative learning models*

A. Introduction

Humans and education cannot be separated because education is the key to the future of humans who are equipped with reason. Education has an important role in ensuring the development and survival of a nation because education is a vehicle to improve and develop competent and quality human resources. The success or failure of the educational process in schools and students' success in learning can be seen from the learning outcomes obtained by students. The low learning outcomes obtained by students indicate an indication of low student learning performance and the ability of teachers to manage quality learning.

Based on taxonomic theory, learning outcomes are grouped into three domains, namely the cognitive, affective, and psychomotor domains (M. Hosman, 2014: 34). The application of taxonomic theory in educational purposes in various countries is carried out adaptively according to the needs of each country. In Indonesia, Law number 20 of 2003 concerning the National Education System has adopted a taxonomy to formulate attitudes, knowledge, and skills. The attitude domain includes transforming the substance or teaching material so that students "know why." The domain of skills includes the substance or teaching material so that students have "know-how," The realm of knowledge includes the transformation of the substance or teaching material of students "knowing what." As a manifestation, the education system in Indonesia uses a scientific approach to the 2013 curriculum.

Education Pancasila and Citizenship have a very important role in ensuring the development and survival of an Indonesian state

government and promoting the general welfare, educating the nation's life, and demand the implementation and development of education that can guarantee the development and life of the Indonesian nation. However, it is unfortunate that in its application, this Civics Education lesson is not much sought after and studied in the world of education and schooling because most formal educational institutions are dominant in presenting material that is cognitive and psychomotor, not touching the affective aspect. This is not because the essence is not realized, but because the teachers do not understand (Susanto, 2016:154).

As a subject in the school curriculum, civics has a mission that must be carried out. Among the missions carried out is primary education to form and educate citizens to think critically and creatively, criticize every development and movement that occurs, especially in the field of education. World of education in order to further develop the mindset of the nation's children and citizens. However, in reality, on the ground, there are many weaknesses found in the application of educationPancasila and Citizenship in schools. The most highlighted factor is the level of teacher ability in designing engaging learning for students. The same thing was expressed by Wibowo and Wahono (2017) in a journal which stated that the weakness of EducationPancasila and Citizenship in Indonesia is on the teaching side, which is monotonous, not innovative (overload and overlapping content), and focuses only on cognitive, while affective and psychomotor are omitted and are not included in the national exam. In addition, student learning outcomes on school final exams, classified as low, are also one of the weak points of PPKn subjects.

Based on this, one of the supporting factors to achieve the expected learning process is using learning models following the conditions that

exist in the classroom itself. Teachers must adapt the suitable model to be used when learning Pancasila and Citizenship Education so that the learning process itself does not tend to be monotonous and boring. With learning packaged in such an exciting way, students will be excited and attract their attention to hone their curiosity about something new. This also serves to change their perspective on Civics learning, which we know that Civics learning is a boring lesson.

In order to improve student learning outcomes, teachers need to design and develop learning that focuses on the models that must be used when teaching and the intelligence possessed by students. Students need to be given broad opportunities to explore their abilities in learning civics. One of the efforts to assist teachers in improving student learning outcomes is to apply collaborative learning models and seek to build students' interpersonal intelligence.

According to Susanto (2013: 233), the purpose of Civics learning is to understand and carry out their rights and obligations in a polite, honest, and democratic manner and sincerely as educated and responsible citizens. This must be understood as a benchmark in education to develop abilities and shape the character and characteristics of students based on the values that grow in the life of the nation and state. Therefore, learning outcomes are one of the main determining factors to determine a student's success in the Civics learning process. Students who are said to be successful in Civics learning when they reach the KKM score set by the school is 70.

Student learning outcomes embody educational goals, namely acquiring knowledge, mastering skills, and forming attitudes. Therefore, teachers must design a learning process that involves students as a whole. For this reason, teachers are required to be able to design appropriate

learning models in order to obtain high learning outcomes. Based on the results of initial observations in SD Muhammadiyah 12 Sei Kajmbingshows that student learning outcomes in Civics subjects are still relatively low. This can be seen from the final grades of fifth-grade students in the last three years as follows:

Table 1. The Average Value of UAS for Civics Subjects for Class V SD Muhammadiyah 12 Sei Kambing

No	School year	KKM	Lowest Value	The highest score	Average value
1	2018/2019	70	40	90	60
2	2019/2020	70	55	85	68
3	2020/2021	70	40	95	65

Source: Data of Grade V Students of SD Muhammadiyah 12 Sei Kambing

Based on this fact, it is necessary to apply a learning model that is innovative and can stimulate students' learning motivation to improve student learning outcomes, especially in civics. One of the media that can be applied to Civics subjects for fifth-grade students is the Collaborative model. Panitz (in Suryani, 2010:5) states that collaborative learning is a personal philosophy, not just a learning technique in the classroom. According to him, collaboration is a philosophy of interaction and a lifestyle that makes cooperation an interaction structure designed in such a way as to facilitate collective efforts to achieve common goals. In line with Deutch (Mahmudi, 2006:61) assumes that collaborative learning is learning that places students with diverse backgrounds and abilities working together in small groups to achieve common goals. In his research, he explained that the collaborative model was able to improve student learning outcomes.

In addition, every child must find and develop their intelligence, especially interpersonal intelligence, namely intelligence in understanding [704]

the teaching and learning process by interacting with other people effectively (Said, 2015:61). Researchers are interested in developing this intelligence because, at the time of observation, researchers saw many children whose social level was still low, such as the ability to get along with others, lead, work together, and lack empathy.

Previous research revealed that many problems related to learning models, interpersonal intelligence, and learning outcomes. Some of their research from Mustika (2016) with the title "Self-Regulation and Interpersonal Intelligence with Citizenship Education Learning Outcomes" showing that the distribution of Citizenship Education learning outcomes of 25 people (39.06%) is in the group above the average while (61,96%) students have the below-average ability. It is also written that self-regulation and interpersonal intelligence both have a positive relationship with civics learning outcomes and build student character in schools, and it is necessary for parents and teachers in schools to play an active role with each other.

B. Method

In carrying out the research, the author took the location at SD Muhammadiyah 12, in Sei Kambing. This research will be carried out in the even semester of the 2020/2021 academic year, which is in March-April 2021. The reason the author chose the research location at the school was due to 1) The low learning outcomes of students, especially in Civics subjects at SD Muhammadiyah 12, which is located in Sei Goat; and 2) There has never been a study with the same theme in that school. The population in this study were all fifth-grade students of SD Muhammadiyah 12 Sei Kambing, as many as 50 students spread over 2 classes, namely VA and VB. The sample in this study was a whole

population of 50 students consisting of 25 students in-class VA and 25 students in class VB.

This research is a quasi-experimental study with a 2x2 factorial design. The dependent variable in this study is the learning outcomes of civics in fifth-grade elementary school on the theme "Various Jobs." Student learning outcomes are obtained from test results that will be tested on students in the form of multiple-choice, which will be given at the final meeting after the treatment is carried out. In comparison, the independent variable in this study is the learning model, which will be distinguished into collaborative learning models and conventional learning models, while the moderator variable in this study is interpersonal intelligence. This variable is distinguished into high interpersonal intelligence and low interpersonal intelligence. This grouping is done from the results of observations at school which are carried out directly in class for 3 meetings.

The normality requirement test was carried out with the Kolmogorov Smirnov test with a significant level of 0.05. The decision-making criteria in the normality test are if the value of sig. > 0.05, then the data is said to be normally distributed. On the other hand, if the value of sig. <0.05, then the data is said to be not normally distributed.

Meanwhile, the data homogeneity test was carried out using the Levene test with a significant level of 0.05. The decision-making criteria in Levene's test is if the value of sig. > 0.05, then the data is said to be homogeneous. And vice versa, if the value of sig. <0.05, then the data is said to be inhomogeneous. Testing for normality and homogeneity of the data was carried out with the help of SPSS version 23. After testing the analysis requirements, then a two-way ANOVA test was performed with the help of SPSS.

C. Finding and Discussion

The data in this study were obtained from the distribution of instruments in the form of PPKn learning outcomes tests and interpersonal intelligence tests. The instrument was given to students in class VA and class VB at SD Muhammadiyah 12. Class VA applied the Collaborative learning model, and class VB applied the Conventional learning model. The study results regarding the learning outcomes of civics and students' interpersonal intelligence were analyzed using SPSS 20.0 software for windows. The analysis carried out in this research is descriptive statistical analysis and inferential statistical analysis.

Measurement of student Civics learning outcomes using pretest and post-test with the same questions but different periods for the distribution of tests. Measurement of students' interpersonal intelligence using intelligence tests. Pretest, post-test, and interpersonal intelligence tests were given to each student in two experimental classes: class VA with 25 students and class VB with 25 students.

PPKn Study Results Pretest Pre

Table 1. Pretest Data on PPKn Learning Outcomes

Control Class			Experiment Class		
Score	F	f relative (%)	Score	F	f relative (%)
18-22	2	8	23-27	3	13.043
23-27	3	12	28-32	6	26,087
28-32	6	24	33-37	4	17,391
33-37	6	24	38-42	7	30,435
38-42	6	24	43-47	1	4.3478
43-47	2	8	48-52	2	8.6957
Total	25	100	Total	23	100
mean	33.4		mean	34.4	

The average student learning outcomes in the control class is 33.4, and the experimental class is 34.4. From the average, both classes have the same learning outcomes.

So that later research data can be analyzed using parametric tests, it is necessary to carry out several assumption tests or prerequisite tests. The first condition so that the data can be tested parametrically is the normality test. Normality test aims to see the distribution of student learning outcomes data in the two sample classes, usually is distributed or not. Table 2 shows the normality test results using the Shapiro-Wilk test with the help of SPSS 20.0.

Table 2. Normality Test of Pretest Data

		Normality test					
Class		Kolmogorov-Smirnova			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Pretest	Control	.150	25	.150	.940	25	.150
	Experiment	.153	25	.137	.948	25	.229

a. Lilliefors Significance Correction

Based on Table 2, it can be concluded that the Experiment class and Control class come from a normally distributed population.

After knowing that the data is normally distributed, it is then determined whether the two sample classes have the same variance. The variance similarity test and the pretest value were carried out with the Test of Homogeneity of Variance using SPSS 20.0, presented in Table 3.

Table 3. Test of Homogeneity of Pretest Data

Homogeneity Test	
Pretest	

Levene Statistics	df1	df2	Sig.
.546	1	48	.463

Table 3 shows that the two PPKN student learning outcomes data have a sig value. ($=0.463$) is greater than the value of ($=0.05$) so that H_0 is accepted. Based on this, it can be concluded that the two samples have homogeneous variance.

PPKn Study Results Posttest Post

Table 4. Posttest Data on PPKN Learning Outcomes

Control Class			Experiment Class		
Score	F	f relative (%)	Score	F	f is relative
50-55	5	20	68-73	2	8
56-61	5	20	74-79	4	16
62-67	2	8	80-85	12	48
68-73	5	20	86-91	2	8
74-79	4	16	92-97	3	12
80-85	4	16	98-103	2	8
Total	25	100	Total	25	100
mean	66.8		mean	83.8	
St.dev			St.dev		

Based on the data in Table 4, it is obtained that the post-test results of civics learning outcomes for experimental class students have an average of 83.8 while the control class has an average of 66.8. From these data, it can be concluded that there is a difference in the average post-test score between the control class and the experimental class.

Analysis of Research Results

Pretest and Posttest Data Analysis of Student Civics Learning Outcomes

After the raw data from the research are obtained, the next step is to analyze the results of these observations. The initial analysis conducted

on the results of the PPKn learning outcomes research was to compare pretest and post-test data in the experimental and control classes. An increase in the average student learning outcomes of Civics before and after being treated. In the experimental class, there was an average increase of 50, while in the control class, there was an average increase of 33.4. So it can be concluded that the improvement of civics learning outcomes of class students who were taught with the Collaborative learning model was better than the control class, which was taught with the Conventional model.

Table 5. Grouping of Learning Outcomes Nilai PPKn Students Based on Interpersonal Intelligence

Control Class					Experiment class			
NO	NAME	KI	Postest	Average	NAME	KI	Postest	Average
1	E18	76.67	65	66.82	Q18	78.34	95	88.85
2	E25	76.67	70		Q25	78.34	85	
3	E11	75	60		Q5	75.42	95	
4	E15	75	85		Q20	75.42	85	
5	E20	75	75		Q15	75	80	
6	E12	74.58	60		Q24	75	80	
7	E19	74.58	70		Q11	74.59	95	
8	E22	74.58	60		Q12	74.59	85	
9	E1	73.75	55		Q1	74.17	100	
10	E13	73.75	60		Q19	74.17	90	
11	E24	73.75	75	Q4	73.75	75		
12	E4	72.92	85	66.79	Q13	73.75	90	
13	E5	72.92	75		Q22	73.75	100	
14	E21	72.92	80		Q8	71.25	80	
15	E9	71.67	55		Q9	71.25	85	
16	E10	71.67	70		Q10	71.25	80	
17	E23	71.67	50		Q21	71.25	70	
18	E3	67.92	75		Q23	71.25	75	78.33

19	E8	67.92	70	Q3	65.42	85
20	E14	67.92	50	Q6	65.42	75
21	E6	65.42	70	Q14	65.42	85
22	E16	65.42	50	Q16	65.42	70
23	E17	65.42	80	Q17	65.42	80
24	E2	62.5	60	Q2	62.5	80
25	E7	62.5	65	Q7	62.5	75

These results indicate that the average value of student learning outcomes in the experimental class is higher than the control class at both high and low levels of interpersonal intelligence. The difference in the value of students' Civics learning outcomes between the control class and the experimental class at both high and low KI levels is because, in the experimental class, students who have interpersonal intelligence in themselves are encouraged and facilitated to learn more actively, innovatively, creatively, scientifically, and put forward cooperation in finding hypotheses made in learning, so that thinking skills are prioritized, while in classes taught with conventional models. This is an early indication that the learning model used in the classroom, either directly or indirectly, has an essential role in developing students' thinking skills and interpersonal intelligence.

Student Civics Learning Outcomes

The results showed that the learning outcomes of students taught with the collaborative model were higher than those of the conventional model. Based on this, it can be concluded that civics learning outcomes of students who were taught using the Collaborative model were higher than students who were taught using the conventional learning model.

In this study, two learning models are compared: the conventional learning model and the conventional learning model *Collaborative*.

Based on the characteristics above, it is following the study results

that the collaborative learning model is considered to have a better effect than the conventional learning model. The learning process will run well and creatively if the teacher provides opportunities for students to find a rule (including concepts, theories, definitions, and so on) through examples that illustrate the rules that are the source. Suppose students learn only with Vygotsky's opinion about the social environment without any rules or examples that must be used as a source.

Differences in Civics Learning Outcomes of High Interpersonal Intelligence and Low Interpersonal Intelligence Groups

Armstrong (2013:7) "Interpersonal intelligence is the ability to understand and make differences in the moods, intentions, motivations, and feelings of others." This intelligence is intelligence with pleasant indicators for others. The attitude shown by students in interpersonal intelligence is very soothing and peaceful. Therefore, interpersonal intelligence can be defined as the ability to perceive and distinguish the moods, intentions, motivations, and desires of others and the ability to respond appropriately to the moods, temperaments, motivations of others, and the ability to self-discipline self-understanding, and self-esteem. Students who have interpersonal intelligence can catch the intent of others,

Interpersonal intelligence has an essential role in learning civics. Implementation in PPKn learning requires solid collaboration between students to create a vibrant learning atmosphere and follow the problems they face. Dewey also argues that learning will be good if there is social interaction in the learning process. Conclusion this is the main consideration why interpersonal intelligence deserves to be taken into account in education, both for students who will become scientists and students who will be involved in society.

Yaumi and Ibrahim (2013:130) states that: four essential elements in interpersonal intelligence include: (1) reading social cues; (2) giving empathy; (3) controlling emotions; and (4) expressing emotion in its place. Students who have high interpersonal intelligence tend to be able to adapt to other students. In addition, these students can lead well when appointed as a leader. Also, able to understand the views of others when they want to negotiate, persuade, and get information.

High interpersonal intelligence leads to good communication between individuals so that it benefits various parties, both themselves and others. In addition, high interpersonal intelligence affects student Civics learning outcomes. Students with high interpersonal intelligence will find it easier to interact with complex problems by asking, concluding, expressing, and analyzing data in groups. With the high interpersonal intelligence of students, the cooperative learning process becomes meaningful and memorable, which causes knowledge to last a long time in students' lives. This is following the results of research conducted by Himmah (2012: 1), which states that there is a significant influence between interpersonal intelligence and learning outcomes, Goleman's statement in Cahyono (2014:119) states that a person's success in any field is highly dependent on emotional intelligence, social and spiritual intelligence. The results of the research that has been described above clearly illustrate that interpersonal intelligence is very influential in one's success both in education and in other fields.

On the other hand, students with low interpersonal intelligence tend to be less sensitive, unconcerned, selfish, and offend others. As a result, students with low levels of interpersonal intelligence will find it difficult to share knowledge and experience with each other. This will make it difficult for students to conduct discussions, group work, and even

conduct cooperative-based scientific activities. In the end, such students will not have meaning in learning, so that the learning outcomes obtained are not good.

The statement above follows the research conducted by Mursid (2012: 93), which concludes that students who have high levels of interpersonal intelligence have higher learning outcomes than students who have low interpersonal intelligence. Suardana et al. (2013:7) conclude a significant relationship between interpersonal intelligence and student learning outcomes. Ristyowati (2010:10) concludes that interpersonal intelligence has a significant effect on increasing student achievement.

Interaction Between Collaborative Learning Models and Conventional Learning Models with Students' Interpersonal Intelligence to Improve Student Civics Learning Outcomes

The collaborative learning model is a learning model that can make students interact with the environment, students who can face challenging situations, making it easier for students to learn new information. Every time they are actively associated with new stimuli in the environment, students can build a new repository of information in themselves. So that it can provide much information which is then used to approach the following situation thus, there will be many opportunities to interact with the environment, with a variety of inputs that can be absorbed from the world.

In the collaborative learning model, students can solve problems and work in groups to grow their motivation to learn and find their learning style. When taught with the Collaborative learning model, students are invited to investigate the material to be studied. The collaborative learning model gives students with high interpersonal

intelligence the right learning process tools to develop their knowledge. On the other hand, students with low interpersonal intelligence are also involved in the collaborative learning model that prioritizes group work activities. However, in the research findings, the learning outcomes obtained by students taught with the Collaborative learning model differed in the high and low interpersonal intelligence groups. In this model, civics learning outcomes of students with high interpersonal intelligence are better than those with low interpersonal intelligence.

Students with high interpersonal intelligence on the model Collaborative learning feel happy to be actively involved in the learning process. Students with high interpersonal intelligence feel excited to learn and positively impact their learning outcomes. While students with low interpersonal intelligence feel less motivated by activities in the Collaborative learning model, so this also impacts student learning outcomes.

Students who have a high level of interpersonal intelligence taught by conventional models will feel less comfortable learning. There is no desire to discuss and exchange opinions. As a result, it cannot be easy to achieve better learning outcomes. Friends exchange opinions are minimal, so they are also limited in exchanging information to broaden their horizons. Students feel tired of all their responsibilities in completing their assignments. If students with low interpersonal intelligence levels are taught using conventional models, students will feel calm because learning information comes from the teacher. Then when taught with the Collaborative model, the student will find it difficult, must learn to adapt in learning activities,

D. Conclusion

Based on the formulation of the problem, research objectives, and research results as stated in the previous chapter, several conclusions were obtained as follows:

The interpersonal intelligence of students who are taught using the Collaborative learning model is higher than those taught using the conventional learning model. This corresponds to The results of the analysis of variance are in Table 4.12. the significance value of the learning model is 0.00. Because of the value of sig. $0.00 < 0.05$, so the results of hypothesis testing reject H_0 or accept H_a in the 5% alpha level, meaning that there is a better influence of the Collaborative learning model on student Civic Education learning outcomes.

Student learning outcomes of Civics using the Collaborative model are higher than those using the Conventional learning model. This is in line with The results of the analysis of variance are in Table 4.12. obtained the significance value of interpersonal intelligence of 0.046. Because of the value of sig. $0.046 < 0.05$, so that the results of hypothesis testing reject H_0 or accept H_a in the 5% alpha level, it means that there are differences in PPKn learning outcomes of students who have high interpersonal intelligence and groups of students who have low interpersonal intelligence. Therefore, it can be concluded that the PPKn learning outcomes for the group of students who have high interpersonal intelligence are higher than the group of students who have low levels of interpersonal intelligence.

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