APPLICATION OF JIGSAW TYPE COOPERATIVE LEARNING MODEL IN IMPROVING STUDENTS' CRITICAL THINKING CAPABILITIES AND MASTERING THE CONCEPT OF AKIDAH AKHLAK IN MI PARANAKENG 2

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Abstract: This article discusses the application of the Jigsaw Cooperative Learning Model in Improving Students' Critical Thinking Skills and Mastery of Akhlak Concepts at Mi Paranakeng 2. This article uses a quantitative type of research, this study attempts to describe the current condition in a quantitative context. to determine the application of the independent variable, namely the Jigsaw recitation cooperative learning model on the dependent variable, namely the students' critical thinking ability and mastery of the concept of moral agidah, and continued by calculating how much influence the independent variable had. In the learning process activities, the teacher or educator as the central figure of the teacher, and students as the subject of learning, are required to play a role in achieving educational goals in schools. At the same time, teachers and students are required in terms of knowledge, abilities, attitudes, so that the teaching and learning process can be carried out effectively and efficiently. The application of the jigsaw type of cooperative learning model at MI Paranakeng 2 was implemented properly and efficiently when researchers used it in teaching morals.

Keywords: Application, Model, Jigsaw, Cooperative learning

INTRODUCTION

Learning is receiving knowledge, while teaching is giving knowledge. According to Gulo, learning is a process that takes place within a person that changes his behavior, both in thinking, acting, and acting. Learning is essentially a process of interaction with all situations that exist around the individual. Learning can be seen as a goal-directed process and a process of acting through various experiences. Learning is also a process of seeing, observing, and understanding something.¹

Teaching activities are efforts to create an environmental system that allows the learning process to occur optimally.² the learning process activities, teachers or educators as the central figure of teachers, and students as learning subjects, are required to play a role in achieving educational goals in schools. At the same time, teachers and students are required in terms of knowledge, abilities, attitudes, so that the teaching and learning process can be carried out effectively and efficiently. Learning must be able to create a learning environment that encourages optimal development of self-potential. Classes should represent a small community, where students interact. Collaborative learning forms, working in teams in conducting natural exploration, inquiry and problem-based project tasks, are learning activities that can liven up the class and contribute to the formation of the child's personality as a whole.³

¹ Ni Wayan Piasih Ariyanti, dkk., "Pengaruh Model Pembelajaran Kooperatif Tipe Jigsaw Terhadap Kemampuan Berpikir Kritis dan Prestasi Belajar Siswa dalam Pembelajaran IPS pada Siswa Kelas IV SD Cipta Dharma Denpasar" *e-Journal Program Pascasarjana Universitas Pendidikan Ganesha Program Studi Pendidikan Dasar* 3 (2013), p. 2

²Al Mukarram, dkk., "Peningkatan Kemampuan Berpikir Kritis pada Konsep Pencemaran Lingkungan di SMA Negeri 12 Banda Aceh" *Jurnal Ilmiah Biologi Teknologi dan Kependidikan* 4, no. 1 (2016), p. 8.

³Ni Wayan Piasih Ariyanti, dkk., "Pengaruh Model Pembelajaran Kooperatif Tipe Jigsaw Terhadap Kemampuan Berpikir Kritis dan

Learning activities are carried out by two actors, namely teachers and students. Teacher behavior is teaching and student behavior is learning. Teaching behavior and learning behavior are related to learning materials. Learning materials can be in the form of knowledge, moral values, art, religion, attitudes, and skills. The relationship between teachers, students, and teaching materials is dynamic and complex. To achieve success in learning activities, there are several components that can support, namely the objective component, the material component, the teaching and learning strategy component, and the evaluation component. Each of these components are interrelated and influence each other.

In addition, in learning there is a system, which consists of various components that are interconnected with one another. These components include: objectives, materials, methods and evaluation. The four learning components must be considered by the teacher in choosing and determining what learning models will be used in learning activities. Learning models are usually arranged based on various principles or theories as a foothold in their development. Experts develop learning models based on educational principles, psychological, sociological, psychiatric, systems analysis, or other theories. Usually learning learning models are based on learning theories which are grouped into four learning models. The model is a general pattern of learning behavior for the expected competencies/learning objectives.

Joyce and Weil argue that a learning model is a plan or pattern that can be used to shape curriculum and long-term learning, design learning materials and guide learning in the classroom or outside the classroom. The learning model can be used as a pattern of choice, meaning that teachers may choose an appropriate and efficient learning model to achieve

Prestasi Belajar Siswa dalam Pembelajaran IPS pada Siswa Kelas IV SD Cipta Dharma Denpasar". h. 2

learning objectives. The selection of learning techniques and methods that are in accordance with the curriculum objectives and student potential is a basic ability that must be possessed by a teacher. This is based on the assumption that the teacher's accuracy in choosing learning techniques and methods will affect student achievement.

Tan said that in the XXI century, students need to have metacognitive competence and self-regulation as the key to improving their thinking skills, so teachers are required to use learning models that support and shape students' critical thinking skills. According to Duch et al, some of the competencies needed for success, in this case in using learning models for students are forming the ability to (1) think critically, analyze and solve complex real-world problems, (2) find, evaluate, and use appropriate learning resources, (3) working together in teams and small groups, (4) effective oral and written communication skills and (5) using content knowledge and intellectual skills to become continuous learners.⁴

Furthermore, Trilling and Hood mentioned that several skills that must be possessed by students in the knowledge era are (1) critical thinking skills and hard work, (2) creativity, (3) collaboration, (4) cross-cultural understanding, (5) communication, (6) computing, and (7) career and independence. The competencies mentioned above are critical thinking skills, hard work, problem solving, collaboration and cooperation that have not been fully empowered at all levels of education including basic education.

As stated by Sanjaya that in current learning, it seems that students are not encouraged to develop thinking skills, students are directed to memorize information and are forced

⁴Muhiddin Palennari, "Potensi Integrasi Problem Based Learning dengan Pembelajaran Kooperatif Jigsaw dalam Meningkatkan Keterampilan Berpikir Kritis Mahasiswa", *Jurnal Bionature* 13, No. 1 (2012), p. 2.

to remember, as well as hoard various information without being required to understand the information they remember to be associated with everyday life. Various notions of critical thinking have been put forward by several experts. Critical thinking is one component in the higher order thinking process, using basic argument analysis and insight into each meaning and interpretation to develop cohesive and logical reasoning. According to Moore and Parker, Meyer and Goodchild, Feldman and Schwartzber, in Takwin, that critical thinking is an active and systematic and reasonable effort, considering various points of view to understand and evaluate information with the aim of determining whether the information is accepted, rejected or suspended. his assessment.

Weissinger states that critical thinking is an awareness of one's own thinking (self-reflection), and the ability (basic skills) and willingness (willingness to ask questions) to clarify and increase understanding which helps in drawing appropriate conclusions and making the best decisions in context (knowledge base). Cognitive skills which are the core critical thinking skills include; interpretation of (interpretation), analysis (analysis), evaluation (evaluation), inference (inference), explanation (explanation), and selfregulation. Learners are seen as unique individuals and differ from one another with different abilities such as academic abilities and thinking skills. Arikunto said that there are students who have high, medium and low abilities. In addition, students can be classified into smart, moderate, and stupid categories.

In addition to critical thinking skills that are very much needed in today's era, mastery of learning concepts is of course also very necessary, considering that student behavior is a reflection of learning understanding, especially in understanding and mastering moral aqidah learning which is part of religious education which is very important to be implanted in humans and daily life, because Aqidah Akhlak education is an education that children get from an early age until they grow up. Therefore, the Prophet PBUH prioritizes that his people always reflect the true Aqeedah and noble character, so that in the world they have a place of honor and are liked by fellow human beings and receive a reward from Allah swt. The person of the Prophet Muhammad, is the most appropriate example to be used as an example in forming a person who is moral, as the word of Allah swt:

لَّقَدْ كَانَ لَكُمْ فِي رَسُولِ ٱللَّهِ أُسْوَةٌ حَسَنَةُ لِّمَن كَانَ يَرْجُواْ ٱللَّهَ وَٱلْيَوْمَ ٱلْآخِرَ وَذَكَرَ ٱللَّهَ كَثِيرًا

The translation:

Verily there is in the Messenger of Allah a good role model for you (that is) for those who hope (for) Allah and (the coming of) the Day of Judgment and He often mentions Allah (Surah Al-Ahzab/33: 21)⁵

Based on the word of Allah above, it is clear that the mastery of the concept of moral aqidah to form noble character for children must refer to the morals of the Prophet Muhammad. To form this character, understanding and education are needed, not only education in the family but more importantly at school, because then it will shape the child's personality in socializing with teachers and their friends. Education obtained in school institutions is not only related to social sciences and exact sciences, but also religious education, one part of religious education is Aqidah Akhlak material.

The Aqidah Akhlak subject matter is one of the guidelines for knowing the provisions of Islamic Shari'a, the Aqidah Akhlak subject matter is in nature providing guidance to know, understand and believe in the Islamic Aqeedah and can form and practice good behavior in accordance with

⁵Kementerian Agama RI, *Al-Qur'an dan Terjemahnya* (Semarang: CV Toha Putra, 2008), p. 661.

Islamic teachings, which then becomes the basis of the view. and guidance in his life, his family, and his community.

Therefore, religious education in schools means an effort that is consciously carried out by teachers to influence students in the context of forming religious people who believe in the Islamic Aqeedah and behave well in accordance with Islamic teachings.⁶

According to Sidi, the difference in academic ability is very important in learning. The gap between students with upper and lower abilities must be considered and it is hoped that the gap will be narrowed both in the process and in the final learning outcomes. Cooperative learning has an effect on the learning success of students with low academic ability, medium academic ability, and high academic ability.

Trianto revealed that jigsaw cooperative learning provides conditions to improve critical and analytical thinking skills and solve complex problems in real life so that it will bring up a culture of thinking in students.⁷ In line with the above opinion Manahal found that jigsaw cooperative learning is one of the lessons that leads to critical thinking skills and can motivate students to investigate problem solving in real-life situations and stimulate students to produce a work.⁸

Based on an interview with the fifth grade Islamic religious teacher at MI Paranakeng, that in teaching he has not tried to use any type of cooperative learning model, only using the lecture method, on the grounds that SD/MI teachers have duties in addition to teaching, such as school administration, school finance, and inventory. school, so that teachers do not

⁶Zakiah Daradjat, *Metodik khusus Pengajaran Agama Islam* (Jakarta: Bumi Aksara, 1995), p. 172-173

⁷ Bethalisa, dkk. "Pengaruh Model Pembelajaran Tipe Jigsaw terhadap Berpikir Tingkat Tinggi (*Higher Order Thingking Skills*) Kelas XI pada Materi Sistem Perencanaan di SMA Negeri 1 Tanjung Raja", *Jurnal Pembelajaran Biologi* 5, no. 2 (2018), p. 68.

⁸Bethalisa, dkk. "Pengaruh Model Pembelajaran Tipe Jigsaw terhadap Berpikir Tingkat Tinggi (*Higher Order Thingking Skills*)....., p. 68.

try to use a variety of learning models. This has an impact on student learning activities which are known through observations during the learning process in class V at the beginning of the 2020/2021 school year, namely: (1) student cooperation is still lacking. This can be seen when working on assignments, students' individualism is still high, there are students who do not want to help friends who have difficulty understanding assignments, and when working in groups not all members work together to carry out assignments; (2) students' critical thinking skills have not developed optimally. This can be seen from not all students want to ask questions, only accept teacher explanations, students have difficulty answering questions verbally or through written assignments, and group work is not optimal and completed on time;

In addition, also based on the author's initial observations at the research location, the authors found important gaps to be researched and proven, where the problem was that the authors found that the report card scores of MI Paranakeng students on Aqidah Akhlak subjects varied, including high, medium, and low. Students who get high and medium scores are more than students who get low scores. So this indicates that the ability and mastery of the concept of moral aqidah of MI Paranakeng 2 students is still low.

Based on the results of the analysis, the researchers wanted to conduct research on "The Application of the Jigsaw Type Cooperative Learning Model in Improving Students' Critical Thinking Ability and Mastery of the Concept of Akhlak at MI Paranakeng 2".

THEORETICAL FRAMEWORK

1. Cooperative Learning

Cooperative learning comes from the word *cooperative* which means doing something together by helping each other as a group or a team. Slavin suggested that *cooperative learning* is a learning model in which the system learns and works in

small groups of four to six people collaboratively so that it can stimulate students to be more passionate about learning.⁹

Cooperative learning or cooperative learning model is a learning model in which students learn and work in small groups collaboratively whose members consist of four to six people with heterogeneous group structures¹⁰

Cooperative learning is learning in which students are conditioned to work together in small groups to help each other in learning. Jacob stated that cooperative learning is an instructional method that groups students in small groups to work together and help each other in completing academic tasks.¹¹

Cooperative learning (*cooperative learning*) is a learning model that refers to a learning method that makes students work together in small groups to help each other in learning. Roger, et al stated:

Cooperative learning is a group learning activity organized by the principle that learning should be based on socially changing information among learning groups in which each learner is responsible for his or her own learning and is encouraged to improve the learning of other members.¹²

Parker defines cooperative small groups as a learning atmosphere in which students interact with each other in small groups to do academic tasks in order to achieve common goals.¹³

⁹Isjoni, Cooperative Learning Mengembangkan Kemampuan Belajar Berkelompok, (Bandung: Alfabeta ,2009), p. 15

¹⁰E. Solihatin dan Raharjo, *Cooperative Learning Analisis Model Pembelajaran IPS* (Jakarta: Bumi Aksara, 2008), p. 4.

¹¹Masitoh dan Laksmi Dewi, *Strategi Pembelajaran*, (Jakarta: DEPAG RI, 2009), p. 232

¹² Miftahul Huda, *Cooperative Learning Metode, Teknik, Struktur dan Model Pembelajaran,*(Jogyakarta: Pustaka Pelajar, 2011), p. 29.

¹³Miftahul Huda, Cooperative Learning Metode, Teknik, Struktur dan Model Pembelajaran. p. 29.

The purpose of cooperative learning is so that students can learn in groups, respect each other's opinions and provide opportunities for others to express their ideas.¹⁴

According to Eggen, et al in Trianto, cooperative learning is a group of teaching strategies that involve students working collaboratively to achieve common goals. Cooperative learning is structured in an effort to increase student participation, facilitate students to experience leadership attitudes and make decisions in groups, and provide opportunities for students to interact and learn together with students from different backgrounds. So in cooperative learning, students have a dual role, namely as students or as teachers. By working collaboratively to achieve a common goal, students will develop skills relating to fellow human beings that will be very beneficial for life outside of school.¹⁵

According to Wina Sanjaya, Cooperative learning is a learning model with a small grouping/team system, which is between four to six people who have different academic backgrounds, gender, race or ethnicity.¹⁶ This strategy is now a concern and is recommended by education experts to be used. Miftahul Huda stated "Cooperative Learning refers to a learning method where students work together in small groups and help each other in learning". Based on the various definitions above, it can be concluded that cooperative learning is a learning model in which students are divided into several teams/groups to work together and help each other in learning.¹⁷

¹⁴Isjoni, Cooperative Learning (JakartaL Alfabeta, 2013), p. 21.

¹⁵Trianto. *Model – Model Pembelajaran Inovatif.* (Prestasi Pustaka: Jakarta, 2007), p. 31

¹⁶Wina Sanjaya, *Strategi Pembelajaran Berorientasi Standar Proses Pendidikan* (Jakarta: PT. Bumi Aksara, 2013), p. 342.

¹⁷ Miftahul Huda, Cooperative Learning Metode, Teknik, Struktur, dan Model Penerapan. p. 32.

In cooperative learning model students learn together in small groups consisting of 4-5 students. Each heterogeneous group means that it consists of a mixture of student abilities, gender and ethnicity. From this understanding, it can be concluded that cooperative learning emphasizes cooperation in the learning process for students in knowledge. Group learning in cooperative learning is different from ordinary group learning.

The cooperative learning model was developed to achieve the learning objectives summarized by Ibrahim, namely:¹⁸

a. Educational results

In cooperative learning, although it includes a variety of social goals, it also improves student achievement or other important academic tasks. Some experts argue that this model excels in helping students understand difficult concepts. The developers of this model have shown that cooperative rewards have been able to benefit both lower and upper group students who work together to complete academic tasks. b. Acceptance of individual differences

Another goal of cooperative learning is acceptance of people of different races, cultures, social classes, and abilities. Cooperative learning provides opportunities for students from various backgrounds and conditions to work interdependently on academic tasks and through cooperative reward structures will learn to respect each other.

c. Social skills development

The third important goal is to teach students the skills of cooperation and collaboration. It is important for students to have social skills because currently most of the youth are still lacking in social skills.¹⁹

Cooperative goal structure occurs when students can achieve their goals only if other students with whom they

¹⁸ Ibrahim. *Pembelajaran Kooperatif* (Surabaya: Universitas Negeri Surabaya Press, 2000), p. 43.

¹⁹ Ibrahim. Pembelajaran Kooperatif.... p. 43.

work together achieve these goals. These learning objectives include three important types of goals, namely academic learning outcomes, acceptance of diversity, and development of social skills.

Experts have shown that cooperative learning can improve student performance in academic tasks, excel in helping students understand difficult concepts, and help students develop critical thinking skills. Cooperative learning can provide benefits for both lower and upper group students who work together to complete academic tasks.

Lungren in Lie, organizes these cooperative skills in detail into three skill levels. The levels are cooperative skills at the initial level, the intermediate level, and the advanced level. a. Early-level cooperative skills, including:

- 1) Being on duty, namely carrying out duties in accordance with responsibilities;
- 2) Taking turns and dividing tasks, i.e. replacing friends with certain tasks and taking on certain responsibilities in the group;
- 3) Encouraging participation, namely motivating all group members to contribute; and
- 4) Using agreement, namely equating perceptions/opinions.

b. Intermediate level cooperative skills, including:

- 1) Active listening, which uses physical and verbal messages to let the speaker know and energetically absorb information.
- 2) Asking, which is asking or asking for further information or clarification.
- 3) Interpreting, i.e. conveying information back in different sentences;
- 4) Checking for accuracy, i.e. comparing answers, ensuring that they are correct.
- c. Advanced cooperative skills

This advanced level of cooperative skills includes collaborating, it expands concepts, draws conclusions and connects opinions with certain topics.²⁰

METHODOLOGY

The type of research carried out is a quantitative research type, which means that this type of research is a traditional method, because it has been used for a long time so that it has become a tradition as a method for research.

In this study, the researcher tried to describe the current condition in a quantitative context.

This type of descriptive research was chosen because it was adapted to the researcher's goal, namely to determine the application of the independent variable, namely the *Jigsaw* recitation cooperative learning model on the dependent variable, namely students' critical thinking skills and mastery of the concept of moral aqidah, and continued by calculating how much influence the independent variables had.

This research was conducted in one of the Ibtidayyah Madrasah, namely MI Parankeng 2, Parangloe Village, Biringbulu District, Gowa Regency, South Sulawesi. The reason the author chooses this school is because the madrasa is still using conventional learning models, so that the increase in students' critical thinking skills and mastery of the concept of moral aqidah is still minimal, so students want to do research using the *Jigsaw* cooperative learning model.

RESULTS AND DISCUSSION

1. MI Paranakeng 2

Madrasah Ibtidaiya Private Paranakeng 2 is one of the names of private educational unit institutions that are legal entities under the auspices of the Ministry of Religion of the Republic of Indonesia.

²⁰ Anita Lie. *Cooperative Learning*. (Jakarta: Grasindo, 2007), p.62

This institution is one of the formal educational institutions that has a curriculum similar to other formal education, both under the auspices of the Ministry of Education and Culture or the Ministry of Religion based on the Constitution which regulates education and the applicable curriculum.

Madrasah Ibtidaiyah Paranakeng 2, commonly abbreviated as MIS Paranakeng 2, is an educational institution located in one of the villages, namely Borongtangngnga, Bontomajannang Hamlet, Parangloe Village, Biringbulu District, Gowa Regency, where this madrasa was founded by a group of community leaders led by Mr. 1999. At the beginning of the establishment, the madrasa was not yet named MIS Paranakeng 2 because this madrasa was only a class away from MIS Yapit Paranakeng, of course the learning process was still in the home column because it did not have its own building or other facilities and all administration was still centered at the main school including the madrasah principal.

But over time, since 2008 this madrasa was then independent and was named Madrasah Ibtidaiyah Paranakeng 2 so that all administration/management was also centered in the madrasa based on the Operational Permit issued by the Regency Ministry of Religion at that time as well as having head of a separate Madrasa.

After being independent this madrasa from 2008 to 2010 the learning process is still under the home column, but even if it is like that but it does not reduce the learning process and also does not reduce the enthusiasm for learning of the students and also the spirit of the teachers, but since 2011 this madrasa Thank God, the central government's attention, the Ministry of Religion, provided facilities and infrastructure assistance to Madrasah Ibtidaiyah Paranakeng 2 so that little by little it had its own facilities.

2. Application of Jigsaw Type Cooperative Learning Model

Based on the results of observations and applications carried out by researchers related to the application of the jigsaw type of cooperative learning model in learning aqidah morals at MI Paranakeng 2, for approximately one month with four meetings, together with teachers of moral aqidah have made a lot of preparations by making lesson plans that are in it contains a jigsaw type of cooperative learning model to be applied.²¹

Every time they start a meeting, students are given directions to read a prayer, then given motivation and apperception to stimulate students to understand why a subject matter must be studied, and the material is contained in KMA No. 183 Year 2019.

After that, students are notified regarding the learning objectives to be achieved so that later an evaluation will be carried out to find out whether these goals can be achieved or not. After being informed of the learning objectives, the first step to using the jigsaw learning model is to group students into several groups.

Each group consists of three people and consists of four groups. In each group of three people are given different material. Each member who has the same material is grouped again into several groups which are then called the expert group. For about ten minutes, the expert group discussed their material and remained guided.²²

After the expert group discussed, the students then returned to the original group, which was previously formed so that they could tell each other about the material they received so that they could tell their friends who received

²¹Based Observation Pembelajaran Akidah Akhlak Kelas V di MI Paranakeng 2, Wednesday 7 July 2021 started at 08.00-10.25, 7 July 2021

²²Based Observation Pembelajaran Akidah Akhlak Kelas V di MI Paranakeng 2 on Wednesday 7 July 2021 started at 08.00-10.25, 7 July 2021

different material, so that each student knew the overall material being taught.²³

Then, after the original groups had discussions, the teacher guided them to discuss by presenting each group representative according to the available time. During the discussion, the researcher found that each student listened and listened well to the explanations and opinions of their friends, thus illustrating that there is mutual respect between students or students.²⁴

In addition, the researchers also found that every student was brave and tried to give an opinion, when guided by the teacher, although there were still some students who sometimes mixed the standard language with the local language in their arguments, the teacher still appreciated it because the students wanted to try.²⁵

The researcher argues that the application of the jigsaw type of cooperative learning model is applied well for four meetings and can gradually form students' critical thinking skills and can master the concept of moral aqidah more easily, compared to the conventional method used by the previous moral aqidah teacher, so that the application of cooperative learning model the type of jigsaw applied at MI Paranakeng 2 is in the good category.

3. Application of Jigsaw Type Cooperative Learning Model

Regression Output Analysis

a. Output Variables Entered/Removed

²³ Based Observation, Akidah Akhlak Kelas V di MI Paranakeng 2 on Wednesday 7 July 2021 start at 08.00-10.25, 7 July 2021

²⁴Based Observation Pembelajaran Akidah Akhlak Kelas V di MI Paranakeng 2 on Wednesday 7 July 2021 start at 08.00-10.25, 7 July 2021

²⁵Based Observatiokn Pembelajaran Akidah Akhlak Kelas V di MI Paranakeng 2 on Wednesday 7 July 2021 start at 08.00-10.25, 7 July 2021

Model	Variables Entered	Variables Removed	Method
1	Mastery of the Concept of Akhlak, Improved Critical Thinking ^b		Enter

Variables Entered/Removed ^a

a. Dependent Variable: Application of Jigsaw Model Learning

b. All requested variables entered.

From the output table, it can be seen that the independent variables included in the model are the Akhlak Mastery variable, Critical Thinking Improvement and the dependent variable is the Jigsaw Model Learning Application, no variables are removed, meaning that the variable requirements meet the regression method, while the regression using Enter . method

b. Output Model Summary (To Know Correlation)

niodel cultury				
			Adjusted R	Std. Error of
Model	R	R Square	Square	the Estimate
1	, 958 ª	.074	.850	1.441

Model Summary

a. Predictors: (Constant), Mastery of the Concept of Akhlak, Improved Critical Thinking

R is a multiple correlation, namely the correlation between two or more independent variables on the dependent variable. The value of R is between 0 to 1. If the value is close to 1 then the influence is getting closer, otherwise if it is close to 0 then the influence is getting weaker. The R number is 0.958, meaning that the correlation between the variables of Mastery of Akhlak, Improving Critical Thinking and the dependent variable is the Application of Jigsaw Learning Model, of 0.958, this has a close influence because the correlation value is close to 1.

- **R Square (R**²) or R squared shows the coefficient of determination. This figure will be converted into percent, which means the percentage contribution of the influence of the independent variable on the dependent variable. Value (R²) of 0.74, meaning that the percentage contribution of the effect of variable control of Aqeedah Morals, and Improved Critical Thinking on the dependent variable is the Application of Learning Model Jigsaw, amounting to 74.0% while the remaining 0.26% is influenced by other variables not included in the this model.
- Adjusted R Square is an R square that has been adjusted. The value obtained is 0.850. This value also shows the contribution of the influence of the independent variable on the dependent variable. Adjusted R Square is usually used to measure the contribution of influence if the regression uses more than two independent variables

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.485	2	1,243	10,599	.002 ^b
	Residual	31.126	15	2.075		
	Total	33,611	17			

c. ANOVA Output (F Test)

ANOVA ^a

a. Dependent Variable: Application of Jiksaw Learning Model

b. Predictors: (Constant), Mastery of the Concept of Akhlak, Improved Critical Thinking

ANOVA or analysis of variance, is a regression coefficient test together (Test F) to test the significance of the effect of several independent variables on the dependent variable, in this case the role of ANOVA is to test the significance of the influence of the variable, Mastery of Akhlak, and Improvement of Critical Thinking on the dependent variable. namely the Application of Jigsaw Learning Model testing using a significance level of 0.05.

The test steps are as follows:

- 1. Formulating Hypotheses
 - Ho: The application of the Jigsaw Model Learning together has no effect on the Improvement of Critical Thinking and Mastery of the concept of Akidah Akhlak.
 - Ha: The application of the Jigsaw Model Learning together has an effect on the Improvement of Critical Thinking and Mastery of the concept of Akidah Akhlak.

Determine F count and significance

From the output, the calculated F value is 10,599 and the significance is 0.002

2. Determining F Table

F The table can be seen in the statistical table at a significance level of 0.05 with degrees of freedom (df1) (number of variables - 1) = 2, and df2 (nk-1) or (18-2-1) = 15 (n = number of data , k = number of independent variables) the results obtained for F table are 3.68 (can be seen in the attachment of the statistical table)

3. Testing Criteria

If the calculated F value F table, then Ho is accepted If the calculated F value > F table, then Ho is rejected

4. Conclusion

The calculated F value > F table (10,559 > 3.68) and the significance < 0.05 (0.002 < 0.05), then Ho is rejected, so it can be concluded that: The application of Jigsaw Model Learning together has an effect on the Improvement of Critical Thinking and Mastery of Faith Morals, and

Coefficients ^a						
	Unstandardized		Standardized			
	Coefficients		Coefficients			
		Std.				
Model	В	Error	Beta	t	Sig.	
1 (Constant)	26,030	6.268		4.153	.001	
Critical Thinking Improvement	.079	.156	.141	4,507	.019	
Mastery of the Concept of Akhlak	.138	.214	.178	4,643	.030	

d. Output Coefficients

a. Dependent Variable: Application of Jigsaw Model Learning

Unstandardized Coefficients are coefficient values that are not standardized or there is no benchmark, this value uses the units used in the data in the dependent variable. The coefficient B consists of a constant value (the price of X if Y1, Y2 = 0) and a regression coefficient (a value that indicates an increase or decrease in the variable X based on the variables Y1, and Y2). These values are included in the multiple linear regression equation. Meanwhile, the standard error is the maximum value of error that can occur in estimating the population average based on the sample. This value is to find the t count by dividing the coefficient by the standard error.

Standardized Coefficions are coefficient values that have been standardized or use certain benchmarks. If the Beta coefficient value is getting closer to 0, then the relationship between variable X and variable Y is getting weaker. The Standardized Coefficients value is more widely used for conducting path tests (to see the direct and indirect effects of the independent variable on the dependent variable).

t count is a significance test to determine the effect of variables Y1, and Y2 on X partially, whether it has a significant

effect or not. To find out whether the result is significant or not, the t Count number will be compared with the t Table.

Significance is the magnitude of the probability or opportunity to get an error in making a decision. If the test uses a significance level of 0.05, it means that the probability of getting a maximum error of 5% in other words, we believe 95% of the decision is correct.

The output values are then entered into the regression equation as follows:

X = 26,030 + 079Y1 + 138Y2

The meaning of the numbers above are as follows:

- The constant value (a) is **26,030**, which means that if the Mastery of Akida Morals, and the Improvement of Critical Thinking, is 0 (zero), then the Application of Jigaw Learning Model, which is (26,030)
- If the regression coefficient of the variable (b) is positive, namely **079**, it can be interpreted that every increase in Akida Moral Mastery is 1 unit, the Application of Jigsaw Learning Model will also increase by **079** assuming other variables have a fixed value.
- If the regression coefficient of variable (b) is positive, namely **138**, it can be interpreted that every increase in Critical Thinking is 1 unit, then the Application of JIGSAW Learning Model will also increase by **138** with the assumption that other variables have a fixed value.

t test

The t-test (partial regression coefficient test) was used to partially determine whether the Mastery of Moral Akida, and Improvement of Critical Thinking, had a significant effect or not on the Application of Jigsaw Model Learning. The test used a significance level of 0.05 and a 2-sided test,

A. Testing the Variable Coefficient of Critical Thinking Improvement (Y1)

The test steps are as follows:

- Formulating Hypotheses
 - Ho : the application of the Jigsaw learning model has an effect on the improvement of students' critical thinking.
 - Ha : The application of the Jigsaw Learning Model has an effect on increasing students' critical thinking
- Determine t count and significance

Of output cant value is 4, 507 and 0,019 significance

Determining t Table

T table can be seen in the statistical table at a significance level of 0.05: 2 = 0.025 (2-sided test) with degrees of freedom (df) n-2-1 (18-2-1) = 15, the results obtained for the t table are 2.131 (can be seen in the attachment of the statistical table)

Testing Criteria

If the value of -t table t arithmetic table, then Ho is accepted

If the value -t count < -t table or t count > t table, then Ho is rejected

Based on Significance:

If Significance > 0.05, then Ho is accepted If Significance < 0.05, then Ho is rejected

Making Conclusions

Because the value of t arithmetic > t table (4.507 > 2.131) and significance < 0.05 (0.019 < 0.05), then Ho is rejected, so it can be concluded that the **application** of the Jigsaw Type learning model can improve Students' Critical Thinking and Mastery of Moral Concepts.

B. Testing the Coefficient of Variable Mastery of the Concept of Akidah Akhlak **(Y2)**

The test steps are as follows:

- Formulating Hypotheses
 - Ho: The application of the Jigsaw Model Learning has no effect on the mastery of the concept of Akidah Akhlak
 - Ha : The application of Jigsaw Model Learning affects the mastery of the concept of Akidah Akhlak
- Determine t count and significance From the output, the value of t count is 4.643 and the significance is 0.030
- Determining t Table

T table can be seen in the statistical table at a significance level of 0.05: 2 = 0.025 (2-sided test) with degrees of freedom (df) n-2-1 (18-2-1) = 15, the results obtained for the t table are 2.131 (can be seen in the attachment of the statistical table)

Testing Criteria

If the value of -t table t arithmetic table, then Ho is accepted

If the value -t count < -t table or t count > t table, then Ho is rejected

Based on Significance:

If Significance > 0.05, then Ho is accepted If Significance < 0.05, then Ho is rejected

Making Conclusions

Because the value of t count < t table (4,643 > 2,131) and significance < 0.05 (0.030 < 0.05), then Ho is rejected, so it can be concluded that the application of the Jigsaw Type Learning Model can increase the mastery of the concept of Akidah Akhlak

CONCLUSION

The application of the jigsaw type cooperative learning model at MI Paranakeng 2 was implemented properly and efficiently when researchers used it in teaching morals.

The jigsaw type cooperative learning model can improve students' critical thinking skills at MI Paranakeng 2, where the researchers found that the application of the Jigsaw Cooperative Learning model is very well applied in learning morals to improve students' critical thinking. This can be seen from the table which shows that on average students get a good category in improving students' critical thinking by using the jigsaw type learning model.

The jigsaw type of cooperative learning model in increasing mastery of the concept of moral aqidah at MI Paranakeng 2, where the researchers found that the jigsaw learning model could increase the mastery of the concept of aqidah morality at MI Paranakeng 2

REFERENCES

Ali, Mohammad Daud. *Pendidikan Agama Islam*. Jakarta: PT Raja Grafindo Persada, 2004.

Ahmadi, Abu. Psikologi Pendidikan. Jakarta: Rineka Cipta, 2009.

- Ariyanti, Ni Wayan Piasih, dkk., "Pengaruh Model Pembelajaran Kooperatif Tipe Jigsaw Terhadap Kemampuan Berpikir Kritis dan Prestasi Belajar Siswa dalam Pembelajaran IPS pada Siswa Kelas IV SD Cipta Dharma Denpasar" *e-Journal Program Pascasarjana Universitas Pendidikan Ganesha Program Studi Pendidikan Dasar* 3 (2013).
- Baharuddin, dkk. Teori Belajar & Pembelajaran. Malang: AR-Rusmedia, 2007.
- Bethalisa, dkk. "Pengaruh Model Pembelajaran Tipe Jigsaw terhadap Berpikir Tingkat Tinggi (*Higher Order Thingking Skills*) Kelas XI pada Materi Sistem

Perencanaan di SMA Negeri 1 Tanjung Raja", Jurnal Pembelajaran Biologi 5, no. 2 (2018).

- Cahyono, Budi. "Analisis Keterampilan Berpikir Kritis dalam Memecahkan Masalah Ditinjau Perbedaan Gender", *Aksioma* 8, no. 1 (2017).
- Christina & Kristin. "Efektivitas Model Pembelajaran Tipe Group Investigation (Gi) Dan Cooperative Integrated Reading and Composition (Circ) Dalam Meningkatkan Kreativitas Berpikir Kritis Dan Hasil Belajar Ips Siswa Kelas 4", *Scholaria: Jurnal Pendidikan Dan Kebudayaan*, 6, no. 3. (2016).
- Dahana, Cendarayani Oni. "Profil Siswa Yang Memiliki Kemampuan Berpikir Kritis di Sekolah Menengah Pertama Kecamatan Pleret, Kabupaten Bantul, Daerah Istimewa Yogyakarta" *Skripsi*. Yogyakarta: Jurusan Kurikulum dan Teknologi Pendidikan, 2017.
- Daradjat, Zakiah. *Metodik khusus Pengajaran Agama Islam*. Jakarta : Bumi Aksara, 1995.
- Depag RI. Kurikulum Tingkat Satuan Pendidikan. Semarang: MI Islamiyyah, 2007.
- Direkorat KSKK Madrasah, Direktorat Jenderal Pendidikan Madrasah, dan Kementerian Agama Republik Indonesia. "Keputusan Menteri Agama No. 183 Tahun 2019 tentang Kurikulum PAI dan Bahasa Arab pada Madrasah," dalam *Keputusan Menteri Agama Republik Indonesia No. 183 Tahun 2019.* Jakarta: Kementerian Agama RI, 2019.
- Dirjen Bimbaga Islam. Kendali Mutu Pendidikan Agama Islam. Jakarta: Percetakan Negara, 2003.
- Filsaime, Dennis K. Menguak Rahasia Berpikir Kritis dan Kreatif. Jakarta: Prestasi Pustakakarya, 2008.
- Guzali. Makalah Membedakan Akidah Benar dan Salah. https//webkalong.blogspot.com/2019/03/makalahmembedakan-akidah-benar-dan.html?m=1 (6 Oktober 2020).

- Al-Ghazali. Mukhtosar Ihya' Ulumuddin. Turki: Dar al-Fikr, 1993.
- Handayani, Hani, "Pengaruh Implementasi Pembelajaran Kooperatif Tipe Jigsaw terhadap Kemampuan Berpikir Kritis Matematis Siswa Sekolah Dasar", *Pendas* 5, no. 1 (2020).
- Herawati, Lidia dan Irwandi, "Pengaruh Model Pembelajaran Kooperatif Tipe Jigsaw terhadap Hasil Belajar dan Berpikir Kritis Siswa pada Mata Pelajaran PAI di SMP Negeri 09 Lebong". Seminar yang dipresentasikan dalam Seminar Nasional Sains dan Enterpreneurship VI Tahun 2019, 21 Agusutus 2019.
- Hidayah,Ratna. "Critical Thinking Skill: Konsep Dan Inidikator Penilaian", *Jurnal Taman Cendekia* 01 no. 02.(2017).
- Huda, Miftahul. Cooperative Learning Metode, Teknik, Struktur dan Model Pembelajaran. Jogyakarta: Pustaka Pelajar, 2011.
- Al Hisyam, Firdaus. *Kamus Arab Indonesia*. Surabaya: Gita Media Press, 2006.
- Hisyam, Zaini, dkk. *Strategi Pembelajaran Aktif.*. Yogyakarta: CSTD, 2004.
- Husnidar. "Penerapan Model Pembelajaran Berbasis Masalah untuk Meningkatkan Kemampuan Berpikir Kritis", Jurnal Didaktik Matematika", 1, no. 1, (2014): h. 13.
- Ibrahim. *Pembelajaran Kooperatif.* Surabaya: Universitas Negeri Surabaya Press, 2000.
- Isjoni. Cooperative Learning Mengembangkan Kemampuan Belajar Berkelompok. Bandung: Alfabeta ,2009.
- Isjoni. Pembelajaran Kooperatif. Yogyakarta: Pustaka Pelajara, 2010.
- Johnson, Elaine B. *Contextual Teaching and Learning*. Bandung: Mizan Learning Center (MLC), 2007.
- Kariasa, Wayan. "Pengaruh Model Pembelajaran kooperatif Tipe STAD dengan Pemecahan Masalah Terhadap Kemampuan Berpikir Kritis Matematis."*Jurnal*

Program Pasca Sarjana Universitas Pendidikan Ganesha 3. (2015).

- Karim and Normaya. "Kemampuan Berpikir Kritis Siswa dalam Pembelajaran Matematika dengan Menggunakan Model Jucama di Sekolah Menengah Pertama,"Jurnal Pendidikan Matematika", . 3, no. 1, (2015).
- Kementerian Agama RI, *Al-Qur'an dan Terjemahnya* (Semarang: CV Toha Putra, 2008).
- Khatilistiwati, Marta dan Muhyadi Muhyadi. "Pengaruh Model Stad dan Jigsaw terhadap karakter kerja sama, kemampuan berpikir kritis, dan hasil belajar kognitif" *Jurnal Pendidikan Karakter* no. 2 (2018): h. 1.
- Laurens, Joyce M. "Integrasi riset dan desain: Sebuah pendekatan dalam pembelajaran di studio perancangan. Prosedding Seminar Nasional" Jurnal Seminar Nasional Pendidikan Arsitektur Manajemen Studio Menuju Dunia Arsitektur Profesional Denpasar, 9-10 Februari 2008.
- Lie, Anita, Cooperative Learning. Jakarta: Grasindo, 2007.
- Liliasari. "Peningkatan Mutu Guru dalam Keterampilan Berpikir Tingkat tinggi melalui model Pembelajaran kapita selekta Kimia sekolah lanjutan" *Jurnal Pendidikan Matematika dan Sains*. Edisi 3 Tahun VIII, (2003).
- Lismaya, Lilis. Berpikir Kritis dan Problem Based Learning. Surabaya: Media Sahabat Cendekia, 2019.
- Majid, Abdul. *Strategi Pembelajaran.* Bandung: PT. Remaja Rosdakarya, 2013.
- Masitoh dan Laksmi Dewi. Strategi Pembelajaran. Jakarta : DEPAG RI, 2009.
- Maskur, Moh. *Mathematical Intelegence*. Yogyakarta: Ar-Ruzz Media, 2007.
- Mbay, Wa Ode Nurlina, dkk., "Efektivitas Model Pembelajaran Kooperatif Tipe Jigsaw dan Model Pembelajaran Problem Based Learning terhadap

Kemampuan Berpikir Kritis dan Komunikasi Matematika Siswa Sekolah Menengah Pertama (SMP)", *Jurnal Pendidikan Matematika* 8, no. 1 (2015).

- Miftahul, H. Model-Model Pengajaran dan Pembelajaran. Malang: Pustaka Pelajar, 2013.
- Al Mukarram, dkk., "Peningkatan Kemampuan Berpikir Kritis pada Konsep Pencemaran Lingkungan di SMA Negeri 12 Banda Aceh" *Jurnal Ilmiah Biologi Teknologi dan Kependidikan* 4, no. 1 (2016).
- Muhaimin. Wacana Pengembangan Pendidikan Islam. Yogyakarta: Pustaka Pelajar, 2004.
- Mulyati. Arifin. Strategi Belajar Mengajar Kimia, Prinsip dan Aplikasinya menuju Pembelajaran yang efektif. Bandung: JICA IMSTEP UPI Bandung, 2000.
- Murti, Bhisma. Berpikir Kritis (Critical Thingking). Surakarta: Universitas Sebelas Maret, t.th.
- Nasirudin, Mohammad. *Pendidikan Tasawuf*. Semarang: RaSAIL, 2009.
- Nurdin, Muslim. dkk. Moral dan Kognisi Islam. Cet. III' Bandung: CV. Alfabeta, 1995.
- Nata, Abudin. Akhlaq Tasawuf. Jakarta: Raja Grafindo, 1996.
- Nur, Mohamad. *Model Pembelajaran Berbasisi Masalah*. Surabaya: Pusat Sains dan Matematika Sekolah UNESA, 2011.
- Nurdin, Syafruddin. dan Basyiruddin Usman, Guru Profesional dan Implementasi Kurikulum. Jakarta: Ciputat Press, 2002.
- Palennari, Muhiddin. "Potensi Integrasi Problem Based Learning dengan Pembelajaran Kooperatif Jigsaw dalam Meningkatkan Keterampilan Berpikir Kritis Mahasiswa", *Jurnal Bionature* 13, No. 1 (2012), h. 2.
- Purwanto, Ngalim. *Psikologi Pendidikan*. Bandung: PT Remaja Rosdakarya, 2011.
- Purwati, Ratna. "Analisis Kemampuan Berpikir Kritis Siswa Dalam Menyelesaikan Masalah Persamaan Kuadrat Pada Pembelajaranmodel Creative Problem Solving." 7, no. 1, (2016).

- Prameswari, Salvina Wahyu, dkk. "Inculcate Critical Thingking Skills in Primary School", *SHE's Conference Series* 1, no. 1 (2018).
- Rahmaton. "Meningkatkan Kemampuan Berpikir Kritis Matematis Melalui Strategi REACT pada siswa kelas VII MT'sN 6 Aceh Besar", *Skripsi*, (Banda Aceh: Fakultas Tarbiyah Uin Ar-Raniry, 2018).
- Rasyad, Aminuddin. *Teori Belajar dan Pembelajaran*. Jakarta: Uhamka Press & Yayasan Pep-EX 8, 2003.
- Razak, Nazruddin. Dienul Islam. Bandung: al-Ma'arif, 1984.
- Rusdi, Hanumi Oktiyani. Analisis Keterampilan Berpikir Kritis Siswa Kelas XI Pada Pembelajaran Sistem Koloid Melalui Metode Praktikum dengan Menggunakan Bahan sehari-hari. Bandung: UPI Bandung, 2007.
- Rusman. Model-Model Pembelajaran Mengembangkan Profesionalisme Guru. Jakarta: Rajagrafindo Persada, 2010.
- Rusyna, Adun. Keterampilan Berpikir. Yogyakarta: Penerbit Ombak, 2014.
- Saat, <mark>Sulaiman dan Sitti Mania, Pengantar Metodologi Penelitian Panduan Bagi Peneliti Pemula.</mark> Gowa: Pusaka Almaida, 2014.
- Sabri, Alisuf. Pengantar Pasikologi Umum dan Perkembangan. Jakarta: Pedoman Ilmu Jaya, 2001.
- Sanjaya, Wina. Strategi Pembelajaran Berorientasi Standar Proses Pendidikan. Jakarta: PT. Bumi Aksara, 2013.
- Sari, Diah Prawita. "Mengembangkan Kemampuan Self Regulation: Ranah Kognitif, Motivasi, dan Metakognisi", Delta Pi: Jurnal Matematika dan Pendidikan Matematika 3, no. 2 (2014).
- Shoimin, A. 68 Model Pembelajaran Inovatif dalamKurikulum 2013. Yogyakarta: Ar-Ruzz, 2003.
- Solihatin, E. dan Raharjo, *Cooperative Learning Analisis Model Pembelajaran IPS.* Jakarta: Bumi Aksara, 2008.
- Sukmaningtyas, Bethalisa, dkk, "Pengaruh Model Pembelajaran Kooperatif Tipe Jigsaw terhadap

Berpikir Tingkat Tinggi (High Order Thingking Skills) Kelas XI pada Materi Sistem Pencernaan di SMA Negeri 1 Tanjung Raja", *Jurnal Pembelajaran Biologi* 5, no. 2 (2018).

- Suprijono, Agus. Cooperative Learning Teori dan Aplikasi PAIKEM. Yogyakarta: Pustaka Pelajar, 2009.
- Susanti, Evi, "Kemampuan Berpikir Kritis Siswa SDN Margorejo VI Surabaya melalui Model Jigsaw" *Biodusiana* 4, no. 1 (2019).
- Sutrisno, Joko. Menggunakan Keterampilan berpikir untuk meningkatkan Mutu Pembelajaran. <u>http://www.erlangga.co.id</u> diakses 22 januari 2010.
- Trianto. Model Model Pembelajaran Inovatif. Prestasi Pustaka: Jakarta, 2007.
- Al-Utsaimin, Muhammad bin Shalih. Ulasan tentang Tiga Prinsip Pokok terj. Zainal Abidin Syamsuddin. Jakarta: Yayasan al-Shofwa, 2000.
- Wati, Mailinda dan Welly Anggraini, "Strategi Pembelajaran Kooperatif Tipe *Jigsaw:* Pengaruhnya terhadap Kemampuan Berpikir Kritis Fisik", *Indonesian Journal* of Science and Mathematics Education 02, no. 1 (2019).
- Widodo, Ari, dkk, Pendidikan IPA di SD. Bandung: UPU PRESS, 2007.
- Wijaya, Cece. Pendidikan Remedial Sarana Pengembangan Mutu Sumber Daya Manusia. Bandung: PT Remaja Rosdakarya,2010.
- Winarno, Surachmad. Pengantar Interaksi Belajar Mengajar. Bandung: Tasito, 1989.
- Yasin, Al Fatan. Dimensi-dimensi Pendidikan Islam. UIN-Malang Press, 2008.
- Zahruddin dan Hasanuddin Sinaga. Pengantar Studi Akhlak. Jakarta: Raja Grafindo Persana, 2004.