



CENDEKIAWAN:
JURNAL PENDIDIKAN DAN STUDI KEISLAMAN

Volume 2 Nomor 2 Tahun 2023 Page 242-247

<https://zia-research.com/index.php/cendekiawan>



The Effect of The Power of Two Learning Strategies on Natural Science Material on the Thinking Ability of PGMI Students

Dinda Patliana Sukma

Universitas Islam Negeri Sumatera Utara Medan, Indonesia

Email : dindapatliana061002@gmail.com

Abstract

Through the cooperative learning model, students will work together in their groups, then discuss some information, and disclose it to other groups. One type of cooperative learning, namely The Power Of Two Type. (The strength of both types) is learning in small groups by cultivating maximum cooperation through learning activities by friends themselves with two members in it to achieve basic competence. In this qualitative study, the literature review must be used consistently with methodological assumptions. This means that it must be used inductively so as to be able to answer the questions posed by the researcher.

Keywords: *Thinking Ability, Learning Strategies, The Power of Two.*

PRELIMINARY

Education is the key to all quality progress and development, because education is a process of transforming the behavior of students into adult humans who are able to live independently and as members of society in the surrounding natural environment. Implementation of the 2013 program will help create a competent and competitive generation in facing increasingly fierce global competition. It is called the 21st century competence with the characteristics of the 4C capabilities (1) communication/communication, (2) collaboration/cooperation, (3) critical thinking and problem solving thinking, critical thinking and problem solving, and (4) creativity and innovation.

Efforts to form 21st century skills must of course be based on teacher competence which must be continuously improved, because here the teacher is one of the keys to acquiring 21st century skills. includes steps that teachers are expected to be able to apply 5M, namely knowing (1) observing, (2) asking, (3) gathering information, (4) reasoning/associating, and (5) communicating. These learning stages are considered as the basis for teachers to develop learning activities in class so that students are more actively involved in learning (Sudjianto, 2012).

Critical thinking is a mental activity carried out to assess the truth of a statement. Critical thinking skills indicators are: (1) provide simple explanations; (2) develop basic skills; (3) conclusion; (4) provide additional explanation (preliminary clarification); (5) determine strategy and tactics. The purpose of critical thinking is to put more emphasis on students so they can deepen their understanding in researching and expressing an event or solving a problem and making decisions (Faiz, 2012).

Through this article, the author will describe the power of two learning model to improve students' critical thinking skills in classroom learning. To find out the relationship between the power of two learning model in improving critical thinking skills, it is necessary to know in advance what the power of two learning model is and what are the steps and critical thinking skills and the goals of a person's critical thinking ability.

METHOD

The method of writing this scientific article is a qualitative method and literature study. Reviewing theories and reviewing literature books that are in accordance with the theories discussed. In addition, it also analyzes reputable and non-reputable scientific articles and journals. All scientific articles come from Google Scholar and Mendeley. In qualitative research, literature review should be used consistently with methodological assumptions (Sugiyono, 2019). One of the main reasons for conducting qualitative research is that it is exploratory in nature (Assingkily, 2021). In the next step it will be discussed in depth in the "Related Literature" or "Literature Review" section, as a basis for forming hypotheses, and in the last step, these two literatures become the basis for comparing results and finding out what results are revealed in research.

FINDINGS AND DISCUSSION

The Essence of The Power of Two Strategy

Cooperative learning is a teaching system that provides opportunities for students to work together with other students in carrying out structured tasks (Anita, 2002). Thus, through the cooperative learning model, students will work together in their groups, then discuss information, and disclose it to other groups. That way students are able to be actively involved in the learning process, work together with friends, exchange ideas, respond, express opinions, and share information without having to feel shy and afraid and it is hoped that it will be easier to understand the material when explained by their peers.

One type of Cooperative Learning, namely The Power of Two Type, is learning in small groups by cultivating maximum cooperation through learning activities by friends themselves with two members in it to achieve basic competence (Putri, *et.al.*, 2020). The Power of Two type is designed to maximize collaborative (together) learning and minimize gaps between one student and another. Collaborative learning is becoming popular in today's educational environment. By placing students in groups and giving them assignments where they depend on one another to get the job done is an amazing way. They tend to be more interested in learning because they do it with their classmates.

The Power of Two means combining the strengths of two people. Combining the strengths of two people in this case is to form small groups, each group consisting of two. This activity is carried out so that synergy appears, namely two people or better than one person. "The Power of Two learning activities are used to encourage cooperative learning and reinforce the importance and benefits of synergy between two people. This strategy has the principle that thinking together is far better than thinking alone (Zaini, *et.al.*, 2008). The same thing was stated by the Cooperative Learning Model type The Power of Two which aims to show that learning in pairs will have better results than learning individually (Hamruni, 2012). So, it can be concluded that the Cooperative Learning model type The Power of Two is an activity carried out to enhance collaborative learning and encourage the interests and benefits of synergy, that's why 2 heads are certainly better than 1 head.

The following is the process of carrying out the power of two strategy for prospective educators:



Figure 1. Application of the Power of Two learning strategy to PGMI students



Figure 2. Media for the Implementation of The Power of Two Learning Strategies

Learning Objectives The Power of Two

The Power of Two Cooperative Learning Model has the principle that thinking together is much better than thinking alone (Hamruni, 2012). The purpose of implementing this model is to get used to active learning individually and in groups (learning together results are more memorable) (Ismail, 2008). In this lesson, educators provide opportunities for students to hold scientific discussions in order to gather opinions, make conclusions, or compile various alternative solutions to problems given by educators. Proceed with giving.

In implementing the Cooperative Learning model of The Power of Two type there are several objectives that must be achieved including: a) Familiarize active learning individually and in groups (learning together results are more memorable), b) To improve collaborative learning, c) So that students have the skills solving problems related to the subject matter, d) Minimizing the gap between one student and another student (Zaini, *et.al.*, 2008).

The Power of Two Strategy Steps

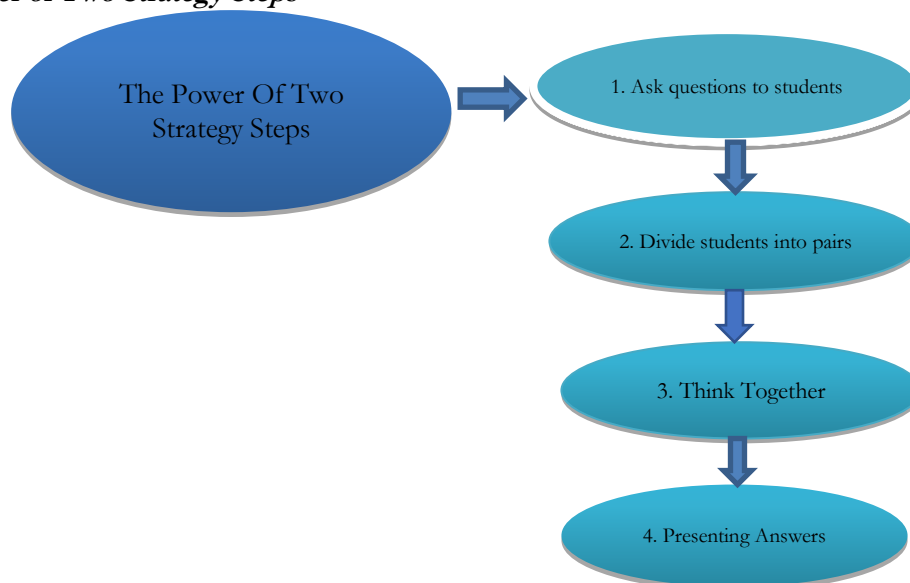


Figure 3. Schematic of The Power of Two Learning Strategy Steps.

Implementation of The Power of Two learning model through four stages, namely the questioning phase, grouping students in pairs, brainstorming together, and presenting answers (Budiharti & Devi, 2016). *First*, ask questions. The first step in The Power of Two learning model is asking questions to the teacher. Before dividing students into two groups, the teacher asks the first question to students. Ask this question/problem to first have students complete it individually and when they have completed it individually, divide it into pairs. After finding a partner, students are asked to share their answers with each other. After exchanging answers, students discuss and correct their answers. After discussing and correcting answers with you, students will have new answers. Which answer to use later.

Second, divide students into pairs. The second step in realizing the pair learning model is like dividing the group into pairs. The division of the group into pairs can be done by the teacher in a fun way. The power of two learning model shows that having small groups based on pairs encourages students to think more positively. Because in pairs, students will discuss the problems that will be raised by the teacher. Therefore, by using the power of two learning model, it is expected that students' critical thinking skills will increase.

Third, think together. The third step in realizing the power of two learning model is joint reflection. This joint reflection phase is intended to lead students to new answers. This joint reflection stage is carried out with students discussing their respective responses, which are then discussed together and corrected. By doing reflection together, students are expected to be able to think more critically. The results of the general reflection will provide new answers that will be used after the discussion. The results of the discussion were asked by students to present in front of the class, then other groups were invited to answer and compare the results.

Forth, present answers. The fourth step in unleashing the power of the paired learning model is presenting the answers. The presentation of this answer is carried out by students at the direction of the teacher. In presenting these answers, students will explain their group's answers and then these answers will be compared with the answers of other groups. At this stage there will also be discussions between the teacher and students.

Advantages of Implementing The Power of Two Strategy

First, students are more active in learning, the power of two learning model makes students more active in learning. More active here means an active class situation and students are able to answer questions and solve problems raised by the teacher. This is evidenced by previous research which shows the status of students before applying the mixed learning model of the two strengths and after implementing the mixed learning model of the two strengths, after applying the power of two learning model they are more active and know how to answer the teacher's questions.

Second, students can process the results of their own thinking, the application of the pair strength learning model can improve students' thinking skills in processing the results of their own thinking. The learning process will be more effective if the teacher facilitates the active participation of each student and if there is a mutually supportive dynamic relationship between one student and another student which improves critical thinking skills, student argumentation. Students can process the results of their own reflections when the teacher asks questions to students but must be addressed individually first. Therefore, forcing students to think individually so that they can develop their insights/ideas and critical thinking skills here can be improved because then the teacher provides opportunities for students to discuss with friends and compare the results of your group. discuss with other groups.

Third, students can acquire basic skills, the acquisition of basic skills is an indicator of critical thinking skills. With the application of a two-student learning model, students can develop basic skills where students can observe and review observations and students are involved in drawing conclusions. This observation is related to the questions and problems raised by the teacher. The basic skills of these students also need to be improved to improve their critical thinking skills.

Fourth, students can provide additional explanations, providing additional explanations is a sign of critical thinking. This additional explanation can be seen from students who are able to provide additional explanations after the teacher asks questions to students. Thus, after being asked questions, students reflect and can explain to the teacher. Providing additional explanations can be done by talking to their group mates, by discussing students will exchange ideas and critical thinking skills will be honed more.

Fifth, students can conclude the results of the discussion, in each lesson carried out by the teacher, then there is the final stage, namely concluding what has been learned from the material being taught. By applying the The power of two learning model, students can conclude the results of the discussion, because by applying the model In this learning students actively reflect and participate directly in solving it. able to conclude the discussion. If students can conclude the results of their discussions, this shows that they are able to think critically.

Sixth, students can develop strategies and tactics which are also indicators of critical thinking skills. The purpose of these strategies and tactics is so that students can decide on an action and be able to provide solutions to questions/problems raised by the teacher. These strategies and tactics also interact with other people. And with the application of the power of two learning, students can develop strategies and tactics, because during the power of two learning stage, students will think and behave in positive actions.

Weaknesses of Implementing The Power of Two Strategy

In addition to the advantages, of course the pair learning strategy also has weaknesses, including: *first*, sometimes it can happen from different angles to solve the problem, maybe even the conversation is distorted so that it takes a long time. *Second*, dividing the group into pairs and sharing between pairs makes learning less effective. *Third*, with groups, students who are less responsible for homework force them to rely more on their partners to play alone without wanting to do homework.

CONCLUSION

Based on the description above, it can be concluded that using the power of two learning model can improve students' critical thinking skills, in addition to increasing students' critical thinking skills. Think about. skills, can also inspire students to be more active in learning. The steps for using the power of two learning model go through four stages, namely asking questions, grouping, thinking together, and providing answers. The questioning stage can be done by asking questions from the teacher to students, asking questions is done by giving homework in the form of assignments given by the teacher and at this stage students are invited to think independently before discussing with the group. Next is the group separation stage, the group separation stage is installation, this separation can be done in various ways depending on the teacher's wishes. However, the division of this group must be considered by the teacher so that there is no unrest in the class. And the third stage is co-thinking, where co-thinking is carried out under the teacher's supervision to monitor the progress of the discussion. With brainstorming, students can brainstorm together with their groups and from previous answers they will get new answers from the results of the discussion. This shared brainstorming phase will also make students more active in brainstorming again because they can exchange their answers with new ones. The final stage is the presentation of answers, the presentation of answers is carried out by students at the request of the teacher, at this stage students explain their answers, invite other groups to compare their answers, in this section he will be able to restart the discussion.

REFERENCES

- Anita, L. (2002). *Mempraktekkan Cooperative Learning di Ruang-ruang Kelas*. Jakarta: Gramedia Pustaka Utama.
- Assingkily, M. S. (2021). *Metode Penelitian Pendidikan*. Yogyakarta: CV. K-Media.
- Budiharti, R., & Devi, N. U. C. (2016). "Efektivitas Model Pembelajaran Kooperatif Tipe *The Power of Two* dalam Pembelajaran Fisika" *Jurnal Materi dan Pembelajaran Fisika (JMPF)*, 6(1). <http://www.jurnal.fkip.uns.ac.id/index.php/fisika/issue/viewFile/732/58>.
- Faiz, F. (2012). *Thinking Skill: Pengantar Berpikir Kritis*. Yogyakarta: SUKA Press.
- Hamruni, H. (2012). *Strategi Pembelajaran*. Yogyakarta: Insan Madani.
- Ismail, I. (2008). *Strategi Pembelajaran Agama Islam Berbasis PAIKEM; Pembelajaran Aktif, Inovatif, Kreatif, dan Menyenangkan*. Semarang: Media Group.
- Putri, F. A, Bramasta, D., & Hawanti, S. (2020). "Studi Literatur tentang Peningkatan Kemampuan Berpikir Kritis Siswa dalam Pembelajaran Menggunakan Model Pembelajaran *The Power of Two* di SD" *Jurnal Educatio FKIP UNMA*, 6(2). <https://ejournal.unma.ac.id/index.php/educatio/article/view/561/406>.
- Sudjianto, S. (2012). "Penerapan Metode *The Power of Two* untuk Meningkatkan Kemampuan Belajar Kolaborasi" *Jurnal Cakrawala Pendidikan*, 14(2). <http://digilib.stkippgri-blitar.ac.id/366/>.
- Sugiyono, S. (2019). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: Alfabeta.
- Zaini, H., Munthe, B., Aryani, S. A. (2008). *Strategi Pembelajaran Aktif*. Yogyakarta: Insan Madani.