



Implementation of The Make A Match Type Cooperative Learning Model to Improve The Learning Outcomes of SMP Negeri 1 Kolaka

AUTHORS INFO

Marwiah
SMP Negeri 1 Kolaka
marwiah52@guru.smp.belajar.id
+6281341887035

ARTICLE INFO

E-ISSN: 2721-0804
P-ISSN: 2723-6838
Vol. 4, No. 2, December 2022
URL: <https://usnsj.id/index.php/biology>

Suggestion for the Citation and Bibliography

Citation in Text:

Marwiah (2022)

Bibliography:

Marwiah (2022). Implementation of the Make A Match Type cooperative learning model to improve to improve the learning outcomes of SMP Negeri 1 Kolaka. *Journal of Biological Science and Education*, 4(2), 64-70.

Abstract

The main task of the teacher is to teach students, namely to condition students to learn actively so that their potential can develop properly. This study aims to improve the learning outcomes of class VIII A SMP Negeri 1 Kolaka on the subject matter of motion in plants. This research is a classroom action research (PTK) using two cycles. In this CAR, the subjects of the study were students of class VIII. a which consisted of 22 students with 13 female students and 9 male students. The research instrument uses a test instrument to measure students' cognitive learning outcomes. Data were analyzed descriptively using percentage techniques. Based on the research results, it can be seen that the average student learning outcome in cycle 1 is 74.7 and in cycle 2 is 79.4. Based on the results of the study, it can be concluded that the application of the make-a-match type of cooperative learning model to the subject of motion in plants can improve student learning outcomes.

Keywords: Make A Match, Learning outcome

A. Introduction

Education has a very important role to improve quality human resources. Every human being has different potential. Where, humans try to develop their potential, and change behaviour in a better direction to become human resources who are reliable and skilled in their fields.

The success of learning activities Teaching is strongly influenced by internal factors and external factors. Internal factors are factors that originate from the students themselves, namely learning motivation, while external factors, namely factors that come from outside the student's self namely learning methods and students' social interaction (Uki & Liunokas, 2021). The process of teaching and learning is a process that contains a series of actions of teachers and students based on reciprocal relationships, which take place in an educational setting to achieve certain goals.

Teaching and learning activities are core activities in education. Everything that has been programmed will be carried out in the process of teaching and learning activities. In teaching and learning activities the main task of the teacher is to teach students, namely to condition students to learn actively so that their potential can develop properly.

Plant motion material is one of the boring materials for students and is considered difficult because this material is still abstract, so appropriate learning models are needed to be able to

arouse students' enthusiasm for learning and improve students' cognitive learning outcomes. Based on the results of observations of the Biology learning process at SMP Negeri 1 Kolaka, it shows that the cognitive learning outcomes of students in learning Biology do not reach the KKM that has been set in school. It can be seen from the learning in the class that it is known that 30% of students are involved in the learning process in class, while 70% of students are busy with activities that are not related to the learning process and also students' awareness to study seriously is still low

To improve this, it is necessary to develop an approach to learning that is more comprehensive and can relate theoretical material to the reality in the surrounding environment. Solving problems by applying innovative learning models to increase student activity, teacher skills, and student learning outcomes. On this basis, researchers try to solve these problems by developing an alternative innovative learning model, namely the Make A Match cooperative learning model, hereinafter abbreviated as MAM. The Make-a-Match model was developed by Lorna Curran (in Huda, 2011), looking for a partner while studying a particular concept or topic in a fun atmosphere.

Through this Make a Match learning model, besides being able to improve student learning outcomes actively, creative values can also be developed in the ability to participate effectively between one student and another accompanied by an attitude of togetherness and responsibility.

From the description above, the researcher is interested in conducting research with the title "Implementation of the make a match type cooperative learning model to improve the learning outcomes of SMP Negeri 1 Kolaka "

B. Literature Review

1. Learning model Type Make a Match

The Make Match method is a type of method in cooperative learning. This method was developed by Lorna Curran (1994). One of the advantages of this technique is that students look for partners while learning about a concept or topic, in a pleasant atmosphere (Rusman, 2012).

The Make Match learning model or looking for a partner is an alternative that can be applied to improve student learning outcomes. The Make-a-Match learning model is learning using cards. These cards consist of cards that contain questions and other cards contain answers to these questions (Hamza et al, 2011).

The Make Match learning model or looking for a partner is an alternative that can be applied to improve student learning outcomes. The Make-a-Match learning model is learning using cards. These cards consist of cards that contain questions and other cards contain answers to these questions (Supriyono, 2010).

2. Learning outcome

The result according to the Big Indonesian Dictionary is "something that is held (made, used and so on)" (Alwi, 2008). Learning outcomes are changes in behaviour that are obtained by students after experiencing learning activities. The acquisition of these aspects of behaviour change depends on what is learned by the learner (Anni, 2004).

According to Mulyono Abdurrahman, "Learning results are abilities that children acquire after going through learning activities" (Mulyono, 2007). According to W.S. Winkel, "Learning results are changes in attitude or behaviour after the child goes through the learning process" (Winkel, 2014). A learning process will cause a change in a person. The purpose of learning is a behaviour change that students want. Therefore, to find out the extent of the changes experienced by students, an assessment activity is carried out, namely, an action or activity to see the extent to which the learning objectives can be achieved by students in the form of learning outcomes that are shown after they have taken the learning process.

3. Factors Affecting Learning Outcomes

Optimal learning outcomes can be achieved by being influenced by several factors, namely internal and external factors. According to Syah (2010), the factors that affect student learning globally are divided into three types, namely: (a) internal factors (factors from within the student), namely the physical and spiritual state/condition of students, (b) external factors (external factors), namely environmental conditions around students and (c) learning approach factors (approach to learning), namely types of student learning efforts which include strategies and methods used by students to carry out learning activities of learning materials.

These three factors are one of the things that can influence success in optimal student learning because if the physical and spiritual conditions of students are not healthy, then the learning outcomes to be achieved will also be less than optimal.

In addition, factors that exist within students such as interests, talents, and positive motivation will greatly affect student learning outcomes. Interests, talents, and positive motivation can help improve student learning outcomes.

C. Methodology

1. Research Design

This research is classroom action research (PTK). PTK is an activity to examine an object with the use of certain rules to obtain that information usefully and aims to improve or improve quality learning practice (Noviana & Huda, 2018). This classroom action research was conducted at SMP Negeri 1 Kolaka Class VIII. A. This research was conducted in the 2016/2017 school year Even Semester from April to May 2017. In this research, the subjects of the study were students of class VIII. a which consisted of 22 students with 13 female students and 9 male students.

This research was carried out in 2 cycles to see an increase in student learning outcomes on the subject matter 'Motion in Plants' through the application of the Make A Match type cooperative learning model. Each cycle consists of 4 stages, which consist of: first, planning, the steps taken by the teacher when starting actions to improve, improve or change behaviour and attitudes as a solution. Third, Observation is the process of observing the course of action or observing the result or impact of the treatment or action given. Fourth, in Reflection, the researcher examines, sees and considers the results or impact of the action based on various criteria.

2. Instruments

Data collection tools in this study include tests. The test uses item questions to measure student learning outcomes. An indicator of the success of action research is if 85% of students have obtained a score of ≥ 76 according to the KKM that has been set by the Teacher Team on plant movement material

3. The Technique of Data Analysis

The data collected in each observation activity from the implementation of the research cycle were analyzed descriptively using the percentage technique to see trends that occur in learning activities.

The formula used is:

1. Determine the average value:

$$\bar{X} = \frac{\sum Xi}{n}$$

Information :

\bar{X} : The average value obtained by students

n : total number of students

$\sum Xi$: The number of marks obtained by each student (Sudjana, 1996)

2. Calculating the level of achievement of student learning completeness:

$$\text{Complete Study} = \frac{\text{Achieved value}}{\text{ideal value}} \times 100\%.$$

3. Determine the percentage of KKM with the formula:

$$\% \text{ TB} = \frac{\sum TB}{N} \times 100 \%$$

Information :

$\sum TB$ = the number of students who complete study

N = the total number of students (Usman dan Setiawati, 1993).

D. Findings and Discussion

1. Findings

The results of this study were obtained from data in the form of student learning outcomes in learning activities. The data were analyzed using descriptive statistics, in the form of determining the average value, achievement of learning completeness and KKM percentage, which is intended to provide an overview of science learning outcomes in the subject of Motion in Plants using the Make - A Match Learning Model.

a. Cycle I

Cycle I is divided into several stages:

a) Planning Stage

The activities carried out at this stage are preparing everything needed in carrying out the learning scenario.

b) Action implementation stage

The teacher explains to students the procedures for using the Make-A-Match learning model. Students are asked to look for pairs of cards that are held according to the agreed time.

c) Observation Stage

During the learning process, there are still children who do not understand the Make A Match learning model, so it takes a lot of time to find pairs of cards and are still guided by the teacher during learning. Teachers have not been able to manage time well.

d) Data Analysis and Reflection Stage

Based on observations during the learning process using the Make A Match learning model in cycle I, the following results were obtained:

- The lesson plan has not been implemented properly, so there are stages that have not been carried out.
- Students are still confused about learning by using the Make A Match learning model.
- Teachers do not motivate students and cannot manage time well.

From the results of the learning analysis of students in cycle I, data was obtained, and the value achieved by students did not meet the passing standard, namely 78. From the evaluation results after learning, the highest value data was obtained by 1 person with a score of 100, and the lowest score was 1 person with a value of 33. The percentage of completeness of students is only 45.45% with an average value of 74.7. Overall, the results of the evaluation of the first cycle can be seen in Table 1. below.

Table 1. Student learning outcomes in Cycle 1

NO.	Students Name	KKM	Score	Information
1	AR		67	Not Finished
2	BAW		73	Not Finished
3	EKP		73	Not Finished
4	HJW		93	Finished
5	MAD		73	Not Finished
6	MAK		80	Finished
7	MF		53	Not Finished
8	SA		100	Finished
9	SP		93	Finished
10	AND		93	Finished
11	AT	78	67	Not Finished
12	ANZ		73	Not Finished
13	ARD		93	Finished
14	FI		47	Not Finished
15	IS		53	Not Finished
16	JHL		80	Finished
17	LP		33	Not Finished
18	NP		93	Finished
19	NR		93	Finished
20	SAAN		87	Finished
21	TA		67	Not Finished
22	ZM		60	Not Finished
Amount			1644	
Average			74,45	
			45,5%	

2. Cycle II

In cycle II, several stages were carried out, namely;

a) Planning Stage

Planning in cycle II is based on the results of reflection from the previous cycle I. By fixing things that have not been fulfilled.

b) Action Implementation Stage

Students are asked to focus on paying attention to the explanation of the material delivered by the teacher, then the teacher re-explains the procedure for using the Make A Match learning model to students. Students are asked to find a partner according to the question or answer card held.

c) Observation Stage

From the observations during the learning process using the Make A Match learning model in cycle II, optimal results were obtained. The teacher can control the class well, and carry out the learning stages according to the plan.

d) Reflection Phase and Data Analysis

Students have adapted to Make A Match learning so they are no longer confused about finding pairs of cards. In cycle II the teacher and students were able to work well together.

From the results of the evaluation of student activities, it was obtained that the average student activity data was 3.64 with a percentage of 91.07% with a very good predicate. While the results of the evaluation of student learning outcomes obtained the highest value data occupied by 7 people with a value of 100, and the lowest score was 2 people with a value of 67. More complete can be seen in Table 2. below.

Table 2. Student learning outcomes in Cycle 2

NO.	Students Name	KKM	Score	Information
1	AR	78	87	Finished
2	BAW		97	Finished
3	EKP		97	Finished
4	HJW		100	Finished
5	MAD		80	Finished
6	MAK		93	Finished
7	MF		67	Not Finished
8	SA		100	Finished
9	SP		93	Finished
10	AND		93	Finished
11	AT		87	Finished
12	ANZ		80	Finished
13	ARD		100	Finished
14	FI		87	Finished
15	IS		67	Not Finished
16	JHL		100	Finished
17	LP		87	Finished
18	NP		100	Finished
19	NR		100	Finished
20	SAAN		100	Finished
21	TA		93	Finished
22	ZM		93	Finished
	Amount	1,747		
	Average	79,4		
	KKM	90,9 %		

2) Discussion

This research was conducted in 2 cycles with 4 meetings. This research was conducted to determine the increase in student learning outcomes by using the Make A Match learning model. In the first cycle of action, there were still many students who did not meet the minimum standard of completeness. This is due to the lack of optimal students participating in learning. This can be seen from some students who still cannot answer the questions on the cards distributed by the teacher, some are still chatting without paying attention to the teacher's explanation.

The minimum completeness score set by the teacher is 78, as many as 12 students or 54.5% are declared incomplete, and 10 students or 45.5% are declared complete with scores above 78. Based on observations and reflections using the model learning Make A Match in cycle I obtained data from students who did not understand and were still confused about learning to use the newly implemented learning model. Of the 22 students, only a few students understood

the teacher's explanation regarding the Make A Match learning model, so they quickly found the pair of cards they were holding.

The obstacles experienced in cycle I included students who were still accustomed to previous learning, namely the teacher as the main resource had not been able to manage the class properly, students were still busy, paid little attention to teacher instructions or explanations and learning exceeded the allotted time.

Based on the reflections on cycle I, steps were generated to overcome these obstacles so that they did not occur in the next cycle of learning, these steps include Providing a re-explanation of the Make A Match learning model and explaining a little about the material to be delivered. Teachers should be more active in motivating students to concentrate. Teachers must be able to manage time well. From the reflection above, it can be used as a reference for improving actions in the learning process of the material for Motion in Plants in Cycle II.

In cycle II the learning process using the Make A Match learning model has been going well and smoothly because students and teachers already have experience in the previous cycle I. Students are more enthusiastic, and it's easier to get a pair of cards held.

Based on data on student learning outcomes in cycle II, it can be seen that student learning outcomes have increased. Of the 22 students, there were 20 people or 90.9% who were declared complete, and 2 people or 9.1% who did not complete. Classical completeness has reached 90.9%, this shows that science learning on the subject matter of Motion in Plants using the Make A Match learning model has been successful.

In cycle II the learning process is going well, students and teachers can understand their respective roles so that learning can take place in an orderly manner and the results achieved are satisfactory or reach predetermined indicators.

The results of the evaluation carried out on the use of the Make A Match learning model show its advantages, among others, it is done while playing about a concept or topic in a fun atmosphere by matching cards or looking for partners while learning. In addition, it will also foster cooperation between students and can stimulate students to be more active. the results of Rosidha's research (2020) also show an increase in student learning outcomes after being taught using the Make a Match model. In cycle I, completeness was 62%, the average value was 78.5 and in cycle II completeness 82%, the average value is 83. This means there is an increase of 20% in student completeness and an average value of 4.5%.

The application of the make a match cooperative learning model shows several findings that This model can foster student cooperation in answering questions by matching cards obtained by each student. The make a match learning process seems more interesting and looks partial. Most students are more enthusiastic about participating in the learning process (Aliputri, 2018). The results of Noviyanto et al research (2022) show that application makes a match cooperative learning model can improve biology learning outcomes. It is visible of the percentage of KKM achievement in cycle 2 of 88.24%, which has reached the achievement indicator yield (IPH) $\geq 80\%$.

E. Conclusion

Based on data analysis and discussion of the results of the study, the average student learning outcomes in cycle 1 is 74.7 and in cycle 2 is 79.4, it can be concluded that the application of the make a match type cooperative learning model to the subject of motion in plants can improve student learning outcomes

F. References

- Aliputri, D. H. (2018). Penerapan model pembelajaran kooperatif tipe make a match berbantuan kartu bergambar untuk meningkatkan hasil belajar siswa. *Jurnal Bidang Pendidikan Dasar*, 2(1A), 70-77.
- Huda, M. (2013). *Model-model Pengajaran dan Pembelajaran*. Yogyakarta : Pustaka Pelajar.
- Mulyono. (2007). Pendidikan Bagi Anak Berkesulitan Belajar. Jakarta : Rineka Cipta.
- Noviana, E., & Huda, M. N. (2018). Penerapan model pembelajaran kooperatif tipe STAD untuk meningkatkan hasil belajar PKN siswa kelas IV SD Negeri 79 Pekanbaru. Primary: *Jurnal Pendidikan Guru Sekolah Dasar*, 7(2), 204-210.
- Noviyanto, T. S. H., Susanti, B. H., & Khairunnisa, S. (2022). Penerapan model pembelajaran kooperatif tipe Make A Match untuk meningkatkan hasil belajar biologi. *Edukatif: Jurnal Ilmu Pendidikan*, 4(1), 572-581.

- Rosidha, A. (2020). Peningkatan aktivitas dan hasil belajar siswa pada mata pelajaran biologi melalui model pembelajaran Make A Match berbasis media karu pintar. *Jurnal Paedagogy*, 7(4), 393-401.
- Rusman. (2012). *Model-model pembelajaran : Mengembangkan profesionalisme guru*. Jakarta : Raja Grafindo persada.
- Sudjana. (1996). *Metoda statistika*. Bandung: Tarsito.
- Supriyono,A.. (2010). *Cooperatif learning : Teori dan Aplikasi PAIKEM*. Yogyakarta : Pustaka Pelajar.
- Syah, M. (2010). *Psikologi pendidikan dengan pendekatan baru*. Bandung : Rosda Karya.
- Uno dan Muhammad. 2011. *Belajar dengan pendekatan PAIKEM*. Jakarta : Bumi Aksara.
- Uki, N. M., & Liunokas, A. B. (2021). Pengaruh model pembelajaran kooperatif tipe Jigsaw dan Make A Match terhadap hasil belajar kognitif siswa. *Jurnal Basicedu*, 5(6), 5542-5547.
- Usman, M.U., dan Setiawati, L. (1993). *Upaya optimalisasi kegiatan belajar mengajar*. Bandung : Remaja Rosdakarya.
- Winkel, W.S. (2014). *Psikologi pengajaran*. Jakarta: Grasindo