



Improving Learning Outcomes on Symbiosis Material Using the Make A Match Model for Elementary School Students

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Abstract

This research aims to determine the implementation of the Make a Match learning model in improving science learning outcomes in symbiosis material for class V students at SDN 1 Banding Agung. This type of research is Classroom Action Research (CAR) with research subjects being class V students at SDN 1 Banding Agung consisting of 13 male students and 17 female students. The data collection technique used was a post-test in the form of multiple choice questions and essays. The action research procedure consists of two cycles. Each cycle goes through four research stages including planning, action, observation and reflection. The data analysis technique used is quantitative descriptive. Based on the research results, the percentage of completeness of learning outcomes in the pre-cycle showed a percentage of only 30%, while in the first cycle of action the minimum percentage of completeness of students was 73.3% or an increase of 43.3% from the pre-cycle. In cycle II the actions continued to increase with a minimum percentage of completeness of 100% or an increase of 26.7% from cycle I to cycle II, and an increase of 70% from pre-cycle to cycle II. The learning improvement results obtained in cycle II were in accordance with the researcher's objectives, namely to improve science learning outcomes in symbiosis material for class V students at SDN 1 Banding Agung, Talang Padang sub-district, Tanggamus Regency.

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INTRODUCTION

The goals of science learning in schools are the same as the goals of learning generally, namely, to master the established competency requirements (Dewi et al., 2018). According to Wijanarko (2017), Learning science in elementary school involves studying a lot of content pertaining to the environment. Therefore, the packaging of science learning must be made more interesting and easy to understand

because science requires understanding rather than memorizing (Barus, 2022).

Based on the assessment book (BUPENA) Volume 5B, Symbiosis is a reciprocal relationship between two living things that live in the same ecosystem. Symbiosis learning is one of the content in science learning that is tested in the national exam. The content of science learning in symbiosis material is very important to learn, This is because science learning in symbiosis material in elementary school aims to ensure that

students have the ability to provide examples of symbiosis in everyday life(Asih, 2018), develop curiosity, a positive attitude, and awareness of the mutually influencing relationship between science, the environment, technology, and society(Asysyifa et al., 2017; Septiana & Hayati, 2019; Setyawan & Riadin, 2020).

In fact, most students think that elementary science learning is boring because they don't utilize innovative learning models, methods and strategies(Pralahardo et al., 2021). According to Yulistiana & Setyawan (2020), Science content is one of the less popular subjects, which means that many students' daily test scores are still below the Minimum Completeness Criteria(Suprapti, 2021). Students' grades in science subject content should be able to reach the minimum standard scores that have been determined, or even exceed the specified standards. Optimal learning outcomes in learning will be achieved if there is an emphasis on student activity both physically, mentally, intellectually and emotionally(Ariyani, 2022; Prasetyo et al., 2023). However, complex material makes students feel burdened in their learning.

Based on the results of interviews with homeroom teachers and class 5 students at SDN 1 Banding Agung, states that the content of science lessons is classified as low learning outcomes. Apart from that, the results of observations show that cooperation between students is not well established. Students are more likely to work alone than collaborating with other friends. Therefore, the importance of science learning requires teachers to design learning that is interesting for students(Sukarini & Manuaba, 2021) and can overcome problems that exist in the class.

To overcome this, a teacher must be precise in choosing a learning model that suits the material(Ilhamdi et al., 2020). The application of the learning model is

expected to increase effectiveness and efficiency in the learning process. A learning model is a plan or pattern that is used as a guide in planning learning in class or learning in tutorials(Harefa et al., 2022; Lovisia, 2018; Nurlaelah & Sakkir, 2020). Learning models are used in learning to help teachers explain difficult content or learning that requires practical activities(Safitri et al., 2022). One learning model that can be applied is the Make a Match type cooperative learning model.

Make a match is a model to motivate students to find pairs of cards containing questions and answers(Arisanty & Riyah, 2019). The students are separated into two groups, group A and group B, for the game "Make a Match." Group A receives the topic cards, while Group B receives the topic cards' descriptions. The students match about the topic cards and the description of topic cards(Zawil, 2016).

One of the advantages of this model is that students look for pairs of cards while learning about a concept or topic in a fun atmosphere(Juhji, 2017). By applying the Make a Match learning model, students can play but also still gain knowledge from the game being applied. The application of the Make a Match model is expected to improve students' understanding and science learning outcomes in symbiosis material so that they can meet the minimum completeness criteria determined by the school.

Based on the description above, this research aims to determine the implementation of the Make a Match learning model in improving science learning outcomes in symbiosis material for class V students at SDN 1 Banding Agung.

RESEARCH METHODS

This type of research is CAR or Classroom Action Research. According to Ariyanto (2016), Classroom Action Research (CAR) is research carried out by class teachers, obtaining problems

obtained in the classroom and resolved in the classroom in a structured manner according to the CAR steps and the results of problem solving can be used to improve teacher performance skills in schools.

The subjects in this research were all class V odd semester students at SDN 1 Banding Agung, Talang Padang District, Tanggamus Regency for the 2022/2023 Academic Year. The number of students in class V is 30 students. This research was

carried out in the odd semester, namely in October 2022.

Data collection techniques use tests and documentation. The test technique is used to measure how far students have mastered the material, carried out after carrying out the action. Meanwhile, the documentation technique is looking for data regarding variables in the form of notes, grade transcripts and school profiles. The data analysis technique uses quantitative data analysis.

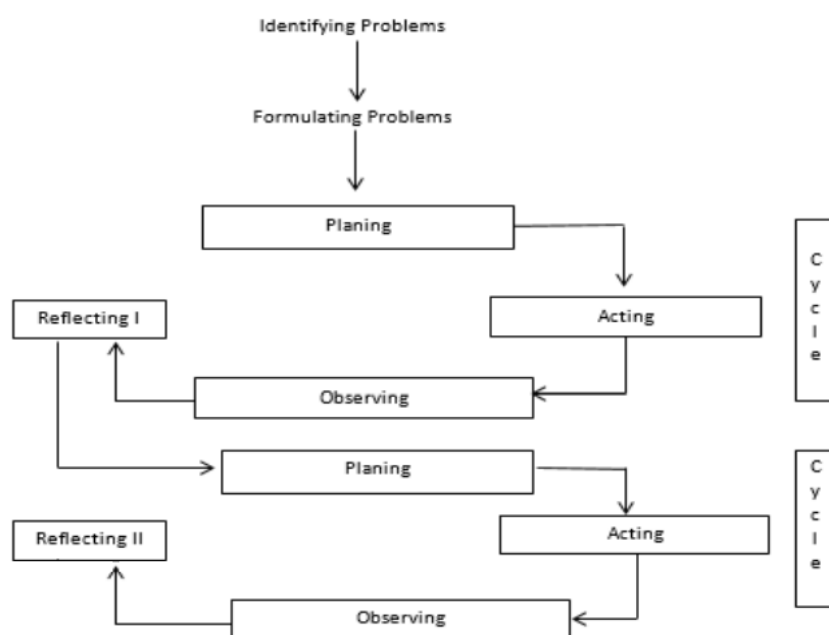


Figure 1. Research design

RESULTS AND DISCUSSION

This research was carried out in class V of SDN 1 Banding Agung. In the initial phase, researchers conducted observations with the goal of gathering data and information on issues that arose in the classroom and choosing the research's emphasis in relation to learning issues at SDN 1 Banding Agung. At this initial stage, researchers observed teaching and learning activities on science learning content.

Researchers have not used the Make a Match learning model in the pre-cycle stage. This is done in order to determine what proportion of students achieve the Minimum Completion Criteria at the start

of science learning. In the pre-cycle stage, the researcher made first observations of the science learning process on symbiosis material in class V of SDN 1 Banding Agung.

Based on the results of observations made by researchers on class V students at SDN 1 Banding Agung, information was obtained that in science learning, especially in symbiosis material, teachers did not provide opportunities for students to participate actively in their learning. This means that teachers use the lecture method more often. This has an impact on the grades of students who have not reached the minimum completion standard set by the school, namely 75%. The Make a Match learning model was not

implemented in the pre-cycle learning process, which makes students appear to be less enthusiastic in the learning process.

In cycle I, the learning process was carried out by applying the Make a Match learning model, which gave quite good results, namely students looked more active compared to learning in the pre-cycle. However, student learning outcomes have not reached the Minimum Completion Criteria set by the school. In cycle II, the learning process is also carried out using the Make a Match learning model. The observation results show very good results and have exceeded the stated

achievements, namely high learning outcomes.

In the pre-cycle stage before using the make a match learning model, the completion percentage was 30% or only 9 people out of 30 students. In Cycle I, students were given learning actions using the make a match learning model, there was an increase in the percentage of completion to 73.3% or 22 students out of 30 students. In the second cycle test, the increase in the percentage of completeness of students' learning outcomes has reached 100% or all students have achieved complete drinking competency. This can be shown in Figure 2 below:

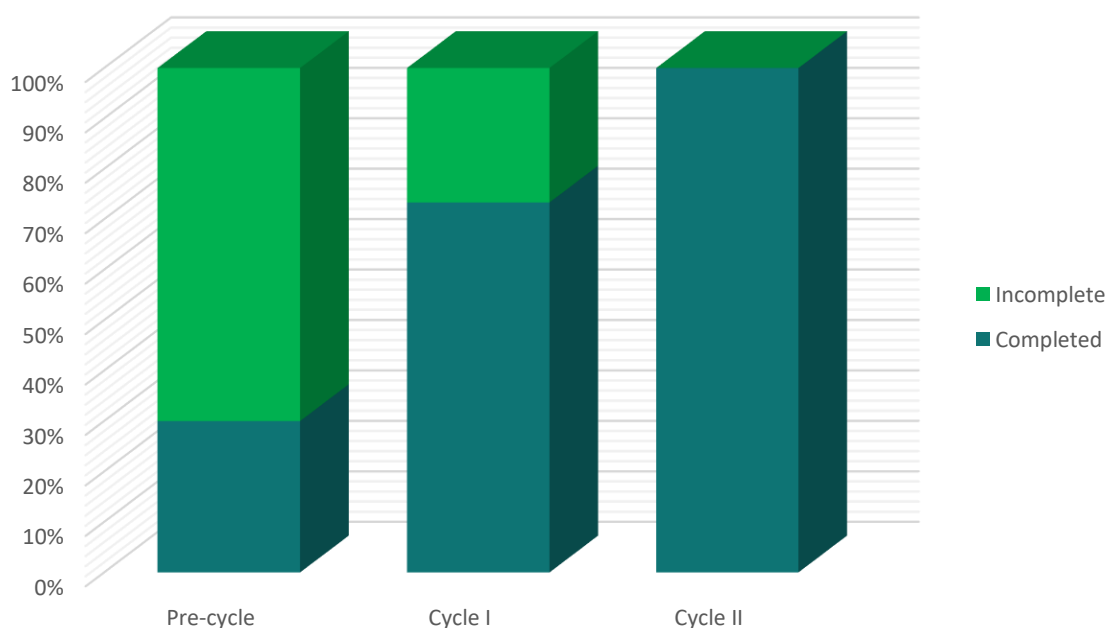


Figure 2. Percentage of student learning completeness from Pre-cycle, Cycle I and Cycle II

Based on the Figure 2, it can be said that the use of the make a match learning model can improve students' science learning outcomes in symbiosis material in class V of SDN 1 Banding Agung.

The results of the learning improvements obtained in cycle II were in accordance with the researcher's aim, namely to improve science learning outcomes in symbiosis material for class V students at SDN 1 Banding Agung, Talang Padang sub-district, Tanggamus Regency.

Therefore, the research was stopped at cycle II stage. Thus, the use of the make a match learning model can improve students' science learning outcomes in the symbiosis material for class V students at SDN 1 Banding Agung odd semester of the 2022/2023 academic year.

The results of this research are in line with the learning outcomes theory put forward by Samino & Marsudi (2015), Learning is an effort made by students to achieve change, which includes aspects of

cognitive, affective and psychomotor change. Nurhayati et al. (2022) in his research stated that the entire series of research processes using the make a match type cooperative learning model succeeded in improving student learning outcomes. Apart from that, Learning activities use the make a match model will also foster a sense of excitement and the realization of cooperation among students dynamically (Arisanty & Riyah, 2019).

When looking for pairs of cards, the learning atmosphere that is created is competition between students. The competitive atmosphere encourages students to study better. A competitive atmosphere will provide opportunities for students to measure their abilities through the abilities of others. Apart from that, learning by competing will create serious learning efforts. Through this research, it is proven that the make a match learning model has a positive influence on student learning outcomes.

The student learning outcomes in this research have advantages compared to previous studies. The advantage of this research is measuring students' science learning outcomes in thematic learning using the Make a Match learning model. Apart from that, it is not only the cognitive aspects that can be seen to increase, but the affective and psychomotor aspects also increase. Using the Make a Match learning model can also make students more active in participating in learning, because students can learn while playing because they are trying to find the right partner from the questions and answers given by the teacher. In the end, this learning will become more exciting and can increase students' attention to the material that will be taught to class V students at SDN 1 Banding Agung for the 2022/2023 academic year.

CONCLUSIONS AND SUGGESTIONS

Based on the data analysis of the research results that have been carried

out, the researchers draw the conclusion that the use of the make a match learning model can improve students' science learning outcomes in the symbiosis material for class V students at SDN 1 Banding Agung. This can be seen from the increase in student learning outcomes which is carried out through two cycles, namely cycle I and cycle II. The increase in students' science learning outcomes on symbiosis material began to be seen from pre-action to cycle I and cycle II. In the pre-cycle, the minimum completeness percentage of students was only 30%, while in the first cycle the minimum completeness percentage of students increased to 73.3% or an increase of 43.3%. and in cycle II the actions increased further with a minimum percentage of completeness of 100% or an increase of 26.7% from cycle I to cycle II, and an increase of 70% from pre-cycle actions to cycle II.

Based on the conclusions above, the use of the Make a Match learning model can be a very effective tool for improving the quality of learning in the classroom. To get the most out of it, teachers can consider designing a Make a Match game that is appropriate to the subject matter and age level of students. Additionally, use variations in matched materials, such as pictures, words, or concepts, so students can engage in different types of thinking.

REFERENCE

- Arisanty, D., & Riyah. (2019). Application of make a match model to improve geography learning outcomes. *Journal of Technology and Science Education*, 9(1), 32-40. <https://doi.org/10.3926/jotse.547>
- Ariyani, A. (2022). Pengaruh Model Problem Based Learning Berbasis Lesson Study Menggunakan Media Virtual Lab terhadap Peningkatan Hasil Belajar Siswa pada Materi Titration Asam Basa. *Ensiklopedia: Jurnal Pendidikan Dan Inovasi*

- Pembelajaran Saburai*, 2(2), 127–139.
<https://doi.org/10.24967/esp.v2i0.2.1747>
- Ariyanto, M. (2016). Peningkatan hasil belajar IPA materi kenampakan rupa bumi menggunakan model scramble. *Profesi Pendidikan Dasar*, 3(2), 134–140.
- Asih, T. (2018). Perkembangan tingkat kognitif peserta didik di kota Metro. *Didaktika Biologi: Jurnal Penelitian Pendidikan Biologi*, 2(1), 9–17.
- Asysyifa, D. S., Sopyan, A., & Masturi, M. (2017). Pengembangan bahan ajar IPA berbasis komplementasi ayat-ayat sains Quran pada pokok bahasan sistem tata surya. *UPEJ Unnes Physics Education Journal*, 6(1), 44–54.
- Barus, M. (2022). Literasi Sains dan Pembelajaran IPA di Sekolah Dasar. *Pendidikan Bahasa Indonesia Dan Sastra (Pendistra)*, 5(1), 17–23.
- Dewi, N., Murtinugraha, R. E., & Arthur, R. (2018). Pengembangan media pembelajaran interaktif pada mata kuliah teori dan praktik plambing di program studi S1 PVKB UNJ. *Jurnal Pensil: Pendidikan Teknik Sipil*, 7(2), 95–104.
- Harefa, D., Sarumaha, M., Fau, A., Telaumbanua, T., Hulu, F., Telambanua, K., Lase, I. P. S., Ndruru, M., & Ndraha, L. D. M. (2022). Penggunaan Model Pembelajaran Kooperatif Tipe Jigsaw Terhadap Kemampuan Pemahaman Konsep Belajar Siswa. *Aksara: Jurnal Ilmu Pendidikan Nonformal*, 8(1), 325–332.
- Ilhamdi, M. L., Novita, D., & Rosyidah, A. N. K. (2020). Pengaruh model pembelajaran inkuiri terbimbing terhadap kemampuan berpikir kritis IPA SD. *Jurnal Ilmiah KONTEKSTUAL*, 1(02), 49–57.
- Juhji, J. (2017). Model pembelajaran kooperatif tipe make a match dalam pembelajaran ipa. *Primary: Jurnal Keilmuan Dan Kependidikan Dasar*, 9(1), 9–22.
- Lovisia, E. (2018). Pengaruh Model Pembelajaran Inkuiri Terbimbing terhadap Hasil Belajar. *Science and Physics Education Journal (SPEJ)*, 2(1), 1–10.
<https://doi.org/10.31539/spej.v2i1.333>
- Nurhayati, Y., Sa'adah, D. N., & Wibowo, Y. T. (2022). Penerapan Model Pembelajaran Kooperatif Tipe Make A Match Untuk Meningkatkan Hasil Belajar Biologi Materi Virus Pada Peserta Didik Kelas X Mipa SMAN 1 Ciledug. *Jurnal Keguruan Universitas Islam Al-Ihya Kuningan*, 1(1), 73–78.
- Nurlaelah, N., & Sakkir, G. (2020). Model Pembelajaran Respons Verbal dalam Kemampuan Berbicara. *Edumaspul: Jurnal Pendidikan*, 4(1), 113–122.
- Pralahardo, D., Untari, E., & Muzakki, F. I. (2021). Penerapan Model Guided Discovery Learning (GDL) Berbantuan LKPD Interaktif Terhadap Kemampuan Menganalisis Siswa SD pada Muatan IPA. *Prosiding Seminar Nasional Kependidikan Sekolah Dasar Dan Prasekolah*, 109–119.
- Prasetyo, B., Winatha, I. K., & Hestiningtyas, W. (2023). The Effect of Blended Learning on Integrated Social Sciences Learning Outcomes in Middle School Students. *Ensiklopedia: Jurnal Pendidikan Dan Inovasi Pembelajaran Saburai*, 3(01), 36–47.
<https://doi.org/10.24967/esp.v3i0.1.2125>
- Safitri, D. R., Makbulloh, D., & Supriyadi. (2022). Pengaruh Discovery Learning Model Berbantuan Media Teka-Teki Silang Terhadap Keterampilan Proses Sains Dan Sikap Ilmiah Peserta Didik. *Ensiklopedia: Jurnal Pendidikan Dan Inovasi Pembelajaran Saburai*, 2(2),

- 9-109.
<https://doi.org/10.24967/esp.v1i0.2.1761>
- English Education Journal (EEJ), 7(3), 311-328.
- Samino, & Marsudi, S. (2015). *Layanan Bimbingan Belajar*. Fairuz Media.
- Septiana, V. W., & Hayati, M. (2019). Hubungan Pemberian Reinforcement dengan Hasil Belajar Ilmu Pengetahuan Alam pada Peserta Didik Kelas V Sekolah Dasar. *Menara Ilmu*, 13(4).
- Setyawan, D., & Riadin, A. (2020). Implementasi Model Pembelajaran Direct Instruction (DI) Berbantuan Media Audiovisual Untuk Meningkatkan Hasil Belajar IPA Pada Peserta Didik Kelas V SDN-1 Langkai Palangka Raya: Implementation Of Direct Instruction Direct Instruction Model Using Audiovisual Media To Improve The Learning Outcomes Of Scientific Learning In Grade V Students At SDN-1 Langkai Palangka Raya. *Pedagogik: Jurnal Pendidikan*, 15(1), 1-9.
- Sukarini, K., & Manuaba, I. B. S. (2021). Video animasi pembelajaran daring pada mata pelajaran IPA kelas VI Sekolah Dasar. *Jurnal Edutech Undiksha*, 9(1), 48-56.
- Suprapti, S. (2021). Meningkatkan Hasil Belajar IPA Materi Energi dan Perubahannya Melalui Metode Proyek. *Jurnal Terapan Pendidikan Dasar Dan Menengah*, 1(2), 265-274.
- Wijanarko, Y. (2017). Model pembelajaran Make a Match untuk pembelajaran IPA yang menyenangkan. *Taman Cendekia: Jurnal Pendidikan Ke-SD-An*, 1(1), 52-59.
- Yulistiana, Y., & Setyawan, A. (2020). Analisis Pemecahan Masalah Pembelajaran IPA menggunakan Model Problem Based Learning SDN Banyuajuh 9. *Prosiding Nasional Pendidikan: LPPM IKIP PGRI Bojonegoro*, 1(1).
- Zawil, R. (2016). Using Make a Match Tehnique to Teach Vocabulary.