



## Improving Student Learning Outcomes Through the Picture and Picture Cooperative Learning Model

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**Abstract:** This research aims to describe the application of the Picture and Picture Cooperative Learning Model and improve student learning outcomes after implementing this model. This type of research is Classroom Action Research (PTK), carried out over two cycles on class II elementary school students, totaling 24 students. Research procedures include planning, implementation, observation, evaluation, and reflection stages. Data collection uses observation, testing, and documentation techniques, which are then analyzed descriptively and qualitatively. The research results show that the implementation of the Picture and Picture Cooperative Learning Model has succeeded in increasing the activities of teachers and students. Teacher activity increased from 85.71% in cycle I to 95.23% in cycle II. Meanwhile, student activity increased from 79.16% in cycle I to 88.88% in cycle II. Student learning outcomes also experienced a significant increase. The average student score before the action was 51.21, with a learning completion level of 18.51%. After the actions in cycle I, the students' average score increased to 74.16, with a learning completion level of 70.83%. In cycle II, the students' average score increased to 82.08, with a learning completion level reaching 83.33%.

**Keywords:** Learning, cooperative picture and picture, and learning outcomes.

### *Peningkatan Hasil Belajar Siswa melalui Model Pembelajaran Kooperatif “Picture and Picture”*

**Abstrak:** Penelitian ini bertujuan untuk menggambarkan penerapan Model Pembelajaran Kooperatif Picture and Picture serta meningkatkan hasil belajar peserta didik setelah menerapkan model tersebut. Jenis penelitian ini adalah Penelitian Tindakan Kelas (PTK), dilaksanakan selama dua siklus pada peserta didik kelas II Sekolah Dasar yang berjumlah 24 siswa. Prosedur penelitian meliputi tahap perencanaan, pelaksanaan, observasi, evaluasi, dan refleksi. Pengumpulan data menggunakan teknik observasi, tes, dan dokumentasi, yang kemudian dianalisis secara deskriptif kualitatif. Hasil penelitian menunjukkan bahwa penerapan Model Pembelajaran Kooperatif Picture and Picture berhasil meningkatkan aktivitas guru dan peserta didik. Aktivitas guru meningkat dari 85,71% pada siklus I menjadi 95,23% pada siklus II. Sementara aktivitas peserta didik meningkat dari 79,16% pada siklus I menjadi 88,88% pada siklus II. Hasil belajar peserta didik juga mengalami peningkatan yang signifikan. Nilai rata-rata siswa sebelum tindakan adalah 51,21 dengan tingkat ketuntasan belajar sebesar 18,51%. Setelah tindakan pada siklus I, nilai rata-rata siswa meningkat menjadi 74,16 dengan tingkat ketuntasan belajar sebesar 70,83%. Pada siklus II, nilai rata-rata siswa meningkat menjadi 82,08 dengan tingkat ketuntasan belajar mencapai 83,33%.

**Kata kunci:** Pembelajaran, Kooperatif Picture and Picture dan Hasil Belajar.

### 1. Introduction

Basic education, as an important foundation in the formation of students' knowledge and skills, has become the main focus in efforts to improve the quality of education in many countries (Phumphongkhochasorn et al., 2021). In this process, developing an effective learning model is crucial, with the aim of facilitating in-depth understanding, mastery of the material, and the development of students' social skills. In

this context, the cooperative learning model has received significant attention as an approach that can improve students' social interactions, conceptual understanding, and academic achievement (Sappaile et al., 2023).

One cooperative model that is interesting to research is the picture-and-picture learning model. This model integrates the use of images as the main tool in the learning process, where students work collaboratively to analyze and

interpret images relevant to the topic being studied (MUTIA, 2023). The main concept behind this model is that images can present information in a way that is more visual, interesting, and easy for students to understand, thereby helping them construct knowledge more effectively (Nurhana, 2023).

In learning at the Madrasah Ibtidaiyah (MI) and Elementary School (SD) levels, where the curriculum emphasizes the integration of various subjects in one theme, the application of the picture and picture model can have a significant impact (Fatin et al., 2023). By using images as a learning center, students can more easily relate different concepts from various subjects, such as natural sciences, social sciences, languages, and the arts, in a more comprehensive and meaningful context.

Superior human resources are defined as individuals who not only have extensive knowledge but also have the creativity and skills necessary to utilize it effectively (Syafuddin et al., 2022). (The development of quality human resources cannot be separated from the important role of education (Mardhiyah et al., 2021). Education is considered a process that not only provides opportunities for students to access knowledge but also a systematic effort to develop their learning abilities, including aspects such as intelligence, behavior, personality, and other skills, in accordance with the provisions regulated in Law No. 20 of 2003 concerning the National Education System. The true essence of education is to provide a framework that allows students to increase their potential holistically (Kusumawati et al., 2023).

The Indonesian government has taken various steps to improve the quality of student education, including training to increase teacher competency, improving educational facilities, and improving the curriculum (Fadil et al., 2023). Improvements in the curriculum have resulted in a paradigm shift in the learning process, from a teacher-centered approach to one that focuses more on students (Sari, 2023). Within the framework of the independent curriculum, the role of educators is key in creating a dynamic, creative, innovative, effective, and attractive learning environment for students (Alfath et al., 2022). This curriculum emphasizes the importance of developing competencies, which include students' attitudes, knowledge, and skills. The aim of this curriculum reform is so that students can optimize their potential (Ningtyas & Juliantari, 2022).

This curriculum update encourages students to be more proactive in the teaching and learning

process (PBM) and improve their skills (Ramadhia et al., 2023). The development of students' skills does not only depend on the teacher's ability to present learning material but also on the teacher's ability to choose and apply approaches, learning models, and strategies that suit students' needs and characteristics (Sulistiyosari et al., 2022). Apart from that, teachers are also expected to bring innovation to the implementation of learning in the classroom (Mustafa et al., 2021). They need to have skills in selecting and using various learning resources, as well as adapting learning models, strategies, methods, and media appropriately according to the material to be delivered. However, in reality, there are still many teachers who have not been able to implement various innovative models, strategies, methods, and learning media. Many of them still rely on conventional learning methods such as lectures, written assignments, and practice questions. As a result, students' interest in learning decreases, which leads to a decrease in their learning achievement and a mismatch in scores with the Minimum Completeness Criteria (KKM) (Anggun, 2021).

Students in lower grades of elementary school still experience challenges in maintaining focus and concentration during the teaching and learning process (PBM), especially children aged 8 years who are in grade 2 of elementary school, where their concentration tends to only last for 5–15 minutes. To overcome this challenge, educators need high creative efforts in designing and presenting interesting and effective learning processes (Telaumbanua et al., 2021). Therefore, it is necessary to use appropriate learning models to facilitate effective learning in the classroom.

Based on the results of observations in September at MI Asy-Syafi'iah Kendari, especially in class IIc, it shows that when learning takes place, students tend to pay less attention to the teacher's explanations. They are more interested in interacting with their classmates, which results in disruption in class and a lack of calm. This condition is caused by students' limited concentration, which only lasts for around 5 minutes. Apart from that, in the learning process, teachers still rely on conventional learning models, such as lectures and written assignments, without introducing more varied learning models. This causes a decrease in students' enthusiasm for learning, who tend to get bored with monotonous learning methods. Therefore, it is necessary to introduce and implement learning models that are different from previous approaches, which can arouse students' interest

and encourage active involvement in the learning process.

According to the results of research conducted by (Nita, 2021), it is concluded that using the picture and picture learning model can improve the learning outcomes of class IV students at MI Masyariqul Anwar Bandar Lampung. This is also supported by the results of four studies conducted by (Putra & Chasanatun, 2023) using the picture and picture learning model, which can improve the learning outcomes of class II MIN 16 Aceh students. Although many studies have revealed the success of the cooperative learning model in general, specific research on the application of the picture and picture model in the context of basic education is still limited. Most previous studies focused more on other cooperative models such as Jigsaw, Think-Pair-Share, or Group Investigation. Therefore, research investigating the effectiveness and implications of implementing the picture and picture model is important to fill this knowledge gap.

This research aims to provide a new contribution to the understanding of how the picture-and-picture learning model can improve student learning outcomes in the context of basic education. By exploring aspects such as how images are used in the learning process, interactions between students, measuring learning outcomes, and their impact on understanding concepts and social skills, this research is expected to provide valuable insights for educators, policymakers, and researchers in their efforts to improve the quality of basic education.

Based on the results of interviews conducted by researchers, it is known that the daily test scores of students in class IIC MIS Asy-Syafi'iyah show that around 65% of students got a score below 65, while the remaining 35% got a score above 65. This means that the majority of students have not yet reached the Minimum Completion Criteria (KKM) set by the school, namely 65. To be considered complete, students must reach the completion criteria of 80% of the total class IIC students, which is 25 people.

One solution to overcome these challenges is to apply the picture-and-picture cooperative learning model. This learning model is an active learning approach that uses pictures that are arranged or arranged systematically, such as arranging a sequence of pictures or presenting pictures related to the subject matter (Ramdana, 2021). By utilizing images related to learning content, students can be more creative and achieve learning goals more effectively. The steps

for implementing the picture and picture model can be described as follows (Sapitri & Lasari, 2023): 1) Convey the learning objectives to students, 2) Discuss the material that was taught at the previous meeting as an introduction to learning. 3) Divide students into small groups, usually consisting of five students in each group. 4) Show pictures related to the learning material. 5) Direct students in turns to arrange or present the pictures in a reasonable sequence. 6) Encourage students to explain the reasons behind the arrangement of the images they make. 7) Using students' explanations as a basis for exploring the concepts they want to achieve in accordance with the desired competencies, 8) Concluding learning.

Thus, this research will not only provide more detailed information about the effectiveness of the picture-and-picture learning model but will also provide a basis for the development of more innovative and effective learning strategies in the context of basic education. It is hoped that the results of this research can be a guide for educational practitioners in designing learning that is more interesting, meaningful, and has an impact on students' holistic development.

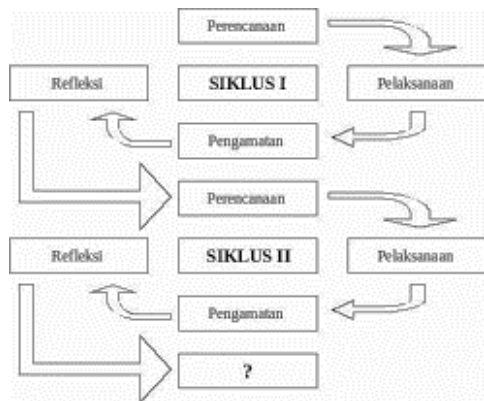
Based on the context above, the research that will be carried out using the Picture and Picture Cooperative Learning Model is very relevant. This is due to several important reasons, including: 1) Students in the age category are still children who tend to like new things, have high creativity, are active, and enjoy working in groups; 2) The learning model that uses pictures has been proven to be an effective way to attract children's attention (Ur, 1996), so this model has a strong appeal for them; and 3) The material to be examined in this research requires the use of pictures so that students can understand it better. Therefore, the author is interested in raising the research title "Improving Student Learning Outcomes Through the Picture and Picture Cooperative Learning Model".

## 2. Research Methods

This type of research is classroom action research (PTK), which consists of several cycles for problem solving. According to (Machali, 2022), PTK is one of the efforts that teachers can make to improve the quality of their roles and responsibilities, especially in managing learning. This research was conducted in class IIC MI Asy-Syafi'iyahhich is located at Jl. Baruga Market, Baruga District, Kendari City, Southeast Sulawesi. This research took place from February 6 to April 1.

This research will be carried out in two interrelated cycles. The research design uses Kurt

Lewin's classroom action research model (Prihantoro & Hidayat, 2019). Each cycle includes four steps: planning, action, observation, and reflection. The detailed research procedures are described as follows:



Picture 1. Kurt Lewin's Classroom Action Research Design

In its implementation, the Kurt Lewin's model combines observation and action. This combination forms a cycle that will be used in one lesson. One cycle includes planning, implementation, observation, and reflection. In its implementation, these four stages cannot be separated or reduced because they are interrelated. The end of the cycle in this research is marked by the achievement of the previously determined research targets. The reason for using classroom action research using the Kurt Lewin's model is because the stages in the action are simple, so they are easy to understand, and the problems faced in the classroom require resolution through PTK. Cycle 1 includes; 1) Planning, at this stage, prepare a syllabus or teaching module using the picture-based learning model; 2) Implementation, the action implementation stage is when the researcher applies learning according to the plan that has been prepared using the picture-and-picture learning model. The stages are introduction, core activities, and closing; 3) Observation, At this stage, observation is the procedure for collecting data regarding the learning process carried out by observers, namely thematic teachers and colleagues in the picture and picture learning model, using teacher activity observation sheets and student activity observation sheets; 4) Reflection, At this stage, the results obtained after carrying out research actions in Cycle I. The homeroom teacher and writer evaluate and analyze the problems that arise during PBM, which can then be used as a basis for planning the next activity, whether to continue to cycle II or not.

### 3. Results and Discussion

This classroom action research (PTK) consists of two cycles, where each cycle involves two meetings. The implementation of this research was adjusted to the subject schedule agreed upon by the teacher as an observer with the researcher. The results of observations before the action showed that the learning outcomes of class IIC students were still low because teachers used conventional learning models such as lectures, questions and answers, and taking notes without implementing various learning models. As a result, students become bored and less active in learning. However, after implementing the Picture and Picture Cooperative learning model, teacher and student activity increased, and student learning outcomes became more satisfying.

Application of the picture and picture cooperative learning model. Based on careful observation analysis, students basically show a fairly high level of passivity in the learning process before implementing the picture and picture cooperative learning models. They tend to be less active and prefer to talk with classmates rather than be directly involved in learning activities. Oktavia stated that the use of active learning models can attract students' attention and have a positive impact on learning outcomes, as expected (Oktavia & khotimah, 2023). Thus, it can be concluded that the application of learning models can improve students' learning achievements because it can attract their interest, attention, and creativity. Furthermore, learning models can also spark interest and make the learning process more interesting and enjoyable (Harianja & Sapri, 2022). From this explanation, it can be seen that the use of learning models has a significant role in increasing the effectiveness of the learning process, as is done by the Picture and Picture Cooperative model.

After taking action, student activity increased. At the first meeting of Cycle I, students still experienced confusion during the learning process with the Picture and Picture Cooperative model, because they were not yet familiar with this model. As a result, several activities do not run optimally, such as the absence of responses from students, lack of readiness of students to participate in learning, lack of attention or listening to learning objectives, and minimal interaction between students and teachers.

At the second meeting of Cycle I, students were still not used to using the Picture and Picture Cooperative learning model, although there were still several activities that did not go well. For example, students rarely ask the

teacher, are less active in conveying reasons regarding the sequence of pictures, do not respond when called upon, and pay less attention to learning objectives. In the learning process, there is no response from students regarding attendance because the teacher does not take attendance.

Based on the evaluation of student activities in Cycle I, especially in the first and second meetings when implementing the Picture and Picture Cooperative learning model scenario, there were several students who showed an inability to accept their group members. They are only willing to group with students who are considered intelligent or close to them personally, resulting in the process of implementing this learning model not running optimally. In addition, some students refused to participate in group assignments. This is reflected in the student activity observation sheet at the first meeting, which reached 61.11% and increased to 79.16% at the second meeting, achieving a successful scenario for implementing the picture and picture cooperative learning model in mathematics and PPKN content learning.

At the first meeting of Cycle II, students had begun to get used to the use of the picture-and-picture cooperative learning model, which was reflected in the level of student activity, which was almost completely organized. However, there are still shortcomings that need attention, such as students' inactivity in asking teachers for help when they have difficulty understanding mathematics material and students' lack of attention to the teacher's explanation of material in PPKN lessons. As a result, the level of success in implementing the picture and picture cooperative learning model in Cycle II of the first meeting reached 84.72%. Meanwhile, at the second meeting of Cycle II, all aspects of learning went well, starting from students actively listening to the learning objectives, being enthusiastic in group work, and their ability to present the results of group observations. This is reflected in the successful achievement of implementing the Picture and Picture Cooperative learning model at the second meeting of Cycle II, which reached 88.88%.

Hidayati revealed that students really like using the learning model because it is considered more fun and not boring (Hidayati et al., 2022). Apart from that, the learning model also increases students' enthusiasm for the learning process (Aji et al., 2022). Therefore, based on research findings, it can be concluded that the picture and picture cooperative learning model is an effective method for increasing student enthusiasm and

involvement by utilizing activities such as arranging or sequencing pictures.

Teacher Activities Using the Picture and Picture Cooperative Learning Model. In the world of education, the role of teachers is very important as educators and mentors, helping students apply knowledge well (Muadzin, 2021). The success of education in schools does not only depend on teacher professionalism but also on the learning model applied in the teaching and learning process (Husain, 2020). The use of effective learning models can help teachers convey material more easily and help students understand the material better, so that learning objectives can be achieved (Wulandari et al., 2023).

Based on the results of observation, analysis, and reflection, it was found that teacher activities in the learning process before implementing the picture and picture cooperative learning models were still less effective. This is caused by the use of conventional learning methods (lectures) without the application of alternative learning models, which has a negative impact on student learning outcomes. However, after implementing the picture and picture cooperative learning model in Cycle I of the first meeting, the teacher's performance became more active and effective.

At the first meeting of Cycle I, there were several aspects that had not been implemented optimally, including: the teacher did not take student attendance, did not convey the learning objectives, did not provide an overview of the material, lacked mastery of the class, did not provide LKS questions, did not collect participant answer sheets, did not ask students' understanding, did not invite students to conclude the material they had learned, did not ask students' readiness to participate in the learning process, and did not close the learning together. This happens because the classroom situation is not conducive, where many students are still noisy, disturbing their friends, and telling stories. As a result, the percentage of teacher activity at the first meeting of Cycle I only reached 71.42%.

At the second meeting of Cycle I, the teacher's activities began to run well, although there were still several aspects that needed to be improved, such as: the teacher did not conduct questions and answers with students, did not take attendance of students, did not ask about students' readiness to take part in the learning process, and did not convey learning objectives. The results of the percentage of teacher activity at the second meeting of Cycle I reached 85.71%.

At the first and second meetings of Cycle II, the teacher's activities were running well, although there were still several aspects that were not optimal. At the first meeting of Cycle II, for example, the teacher did not take the attendance of students and did not invite them to conclude the material they had studied. The observation results showed that teacher activity at the first meeting of Cycle II reached 90.47%. At the second meeting of Cycle II, the teacher's activities were running better because the class situation was under control. When students were noisy, researchers instructed them to memorize multiplication as punishment, which helped maintain classroom order.

Implementing the picture-and-picture cooperative learning model requires competent skills to achieve optimal results. This is caused by several weaknesses in the model, such as the preparation time required to compile images relevant to the material, the relatively high costs associated with using the model, and the need for patience in dealing with variations in student characteristics. Apart from that, students' commotion when dividing into groups can reduce effective time in the learning process. In implementing this learning model, teachers need to have special skills in managing noisy groups of students.

Student learning outcomes through the application of the picture and picture cooperative learning model. The Picture and Picture Cooperative Learning Model is an active approach where pictures are arranged or arranged into a logical and structured series terstruktur (di Madrasah Ibtidaiyah & Ambulu, 2022). Picture and Picture is different from simply using image media because students are responsible for ordering the images, which provides skills in arranging images and explaining the reasons behind the order of images to classmates (Musyrifa et al., 2020). Apart from that, students can easily understand the material because they can see the material being studied directly.

The action begins with cycle I, which involves two meetings, and evaluation is carried out at the second meeting on Tuesday, February 14, 2023, using a multiple-choice test containing 10 questions. This test aims to evaluate the extent of students' understanding and learning progress after implementing the picture and picture cooperative learning models. The test results showed that in cycle I, the level of completion reached 70.83% with an average score of 74.16. The highest score is 100, and the lowest is 20, for a total of 24 students. Of these students, 17

succeeded in achieving completion, while 7 did not. Even though there has been an increase in student learning outcomes after implementing this learning model, it has not yet reached the minimum success rate of 80% as expected.

Implementation of actions in cycle II involved two meetings, with evaluation carried out at the second meeting on Friday, February 24, 2023, using tests to assess the understanding and progress of students' learning outcomes after cycle II. The evaluation results show that in cycle II, the level of completion reached 83.33% with an average score of 82.08%. Of the total 24 students, 20 succeeded in achieving completion, while 4 did not. This learning outcome has met the classical completeness indicator of 80%, even exceeding it by reaching 83.33%. Therefore, it can be concluded that the application of the picture and picture cooperative learning model for thematic subjects, Theme 6 Subtheme 2, especially mathematics and PPKN content, has been successful, so the research does not need to be continued to the next cycle. This conclusion is in line with previous research findings.

Research conducted by (Komara et al., 2020) shows that the application of the picture-and-picture cooperative learning model can increase the level of student activity in the learning process. It can be seen from the results that the average value in cycle I reached 68.4 (20%), while in cycle II it increased to 86.3 (15.8%). This confirms that learning using the picture and picture model is able to increase student learning activity (KHAFIFAH, n.d.). Apart from that, research conducted by (Dewi, 2018) also showed similar results. The average value of student learning outcomes in cycle I was 59.6%, with the percentage of student learning completeness reaching 61%. However, the average score of students in cycle II increased significantly to 83.75%, with the percentage of completeness of student learning outcomes reaching 86% (Diantoro et al., 2020).

Based on the explanation above, it can be concluded that the application of the Picture and Picture Cooperative learning model can provide improvements in learning outcomes, as well as teacher and student activities during the learning process. This learning model can be a useful alternative in the learning process, which has the potential to increase student creativity and involvement. Apart from that, variations in the use of learning models during the learning process can create a learning environment that is more interesting, active and not boring, so that it can improve student learning outcomes according to the expected standards.

#### 4. Conclusions and suggestions

Based on the results of the research and discussion previously described, the following conclusions can be drawn. The implementation of the picture and picture cooperative learning model has increased the involvement of teachers and students in class IIc, MI Asy-Syafi'iah. The level of increase in teacher activity in each cycle can be identified, with the percentage reaching 71.42% in the first cycle of the first meeting and 85.71% in the second meeting. Likewise, in cycle II, the percentage of teacher activity increased to 90.47% at the first meeting and 95.23% at the second meeting. Meanwhile, student activity also showed an increase, with the percentage reaching 61.11% in cycle I of the first meeting and 79.16% in the second meeting. In cycle II, the percentage of student activity increased to 84.72% at the first meeting and to 88.88% at the second meeting.

The application of the picture and picture cooperative learning model can improve the learning achievement of students in class IIc at MI Asy-Syafi'iah in thematic learning theme 6 sub-theme 2, which includes mathematics and PPKN. This improvement is visible in the evaluation tests carried out at the end of each cycle. Before the action, the level of learning completion only reached 18.15% with an average score of 51.21. However, after implementing this learning model in cycle I, the percentage of learning completeness increased to 70.83% with an average score of 74.16. Furthermore, in cycle II, the percentage of learning completeness reached 83.33% with an average score of 82.08. There was an increase in learning achievement from pre-cycle to cycle I by 2.82% and from cycle I to cycle II by 17.64%.

The suggestions from this research are the school urges teachers to adopt various active learning models in the teaching and learning process. Subject teachers are asked to consider the picture-and-picture cooperative learning model as an option that can be implemented in the classroom to improve student learning outcomes. Future researchers are asked to consider this research as a reference point in conducting further studies by applying the picture-and-picture cooperative learning model or other active learning approaches.

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