

APPLICATION OF PLAY-ANSWERS LEARNING METHOD TO IMPROVE STUDENTS' ACTIVITIES AND LEARNING COMPLETENESS IN SCIENCE LEARNING

Mahyaeny

SMP Negeri 4 Mataram, Mataram, Indonesia

Email: Mahyaeny69@gmail.com

Received: October 16, 2021. Accepted: October 27, 2021. Published: November 30, 2021

Abstract: Many students' active role in the teaching and learning process at SMP Negeri 4 Mataram class VIII.5 does not meet the standard criteria for learning completeness, so the researcher, on this occasion, tried to apply the learning method of playing answers as one way to increase student learning activity and completeness. This research aims to determine the application of the learning method of playing answers in improving student learning activity and completeness in science learning class VIII.5 at SMP Negeri 4 Mataram for the 2021-2022 academic year. It is classroom action research carried out in two cycles with quantitative and qualitative research approaches. A quantitative approach obtains student learning outcomes, while a qualitative approach uses observation sheets to observe teacher and student activities. The research results showed that there was an increase in student learning activities. Cycle I with the quite active category and Cycle II with the active category. For achievement data, learning outcomes obtained from the percentage of completion in Cycle I reached 75%, and in Cycle II, it increased to 86.66%. By looking at the percentage of completeness in Cycle II, it can be concluded that classical learning completeness has been achieved. Thus, applying the learning method of playing answers can increase student learning activity and completeness in classroom science learning SMP Negeri 4 Mataram 2021-2022 Academic Year.

Keywords: *Play-answers, Activities, and Learning Outcomes*

INTRODUCTION

Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential for religious and spiritual strength, self-control, personality, intelligence, noble morals, and skills needed by themselves, society, nation, and state [1].

To achieve educational goals, the national government, through the Ministry of Education and Culture, always works hard to create an education system that suits needs in all fields by improving and expanding primary education to realize and make the quality and quantity of student learning [2].

To improve the quality of education, continuous understanding of both material, methods, and evaluation must be carried out by all parties, especially teachers. In teaching and learning, teachers should have the right strategies so students can learn effectively and efficiently and achieve teaching objectives optimally. To apply the right strategy, the teacher masters teaching techniques or various teaching methods [3-4].

Effective teaching depends on the choice of learning methods and strategies used by the teacher in implementing the process of studying in school. It depends on achieving the goals you want to achieve in learning. The method does not stand alone but is closely related to other components. Using appropriate learning methods will increase students' ability to understand and master subject matter so that achievement of teaching objectives can be improved. Teachers should use methods that can support teaching and learning activities as an

effective tool to achieve learning goals to increase student learning achievement [5].

Mataram 4 State Junior High School has various facilities and infrastructure, such as laboratories, greenhouses, textbooks, and other support. To support the process, good teaching and learning still require learning strategies appropriate to students' conditions. Based on initial observations at SMP Negeri 4 Mataram, applying the method in every lesson still mostly uses the lecture method and expects students to sit, be quiet, listen, and memorize the lesson.

Learning methods are patterns used as guidelines in planning learning in class and tutorials. According to Adres, learning methods refer to the approach used, including learning objectives, stages in learning activities, learning environment, and classroom management. Learning methods are conceptual essays that describe systematic procedures for organizing learning experiences to achieve learning goals. One learning method that can activate students is playing answers. This method is carried out by the teacher dividing groups by the number of students. In each group, a maximum of 5 people, the teacher creates several questions requiring concise answers, asks each group to discuss the answers, and looks for the bag where the answers are. Start the game by asking one group to read a question. Then, one group takes the answer from the bag before the class.

Learning activities increase with this method. Learning activities are the effectiveness of an activity to achieve certain goals [6]. Learning activities are activities carried out or carried out by

students to achieve teaching goals. Activities that can be carried out are visual, oral, listening, writing, drawing, motor, mental, and emotional activities [7]. The learning activities in this research are carried out by class VIII students at SMP Negeri 4 Mataram, both through sensing (smell, hearing, touch, sight, and taste) and movement to achieve teaching objectives.

With increased learning activities, this will be followed by increased learning completeness. Learning completeness is the overall acquisition of intelligence or knowledge (cognitive, psychomotor, and affective through effort). In other words, learning completeness is the achievement of the minimum mastery stage of teaching materials that the teacher has determined in the learning objectives of each lesson unit. Learning completeness is mastery of knowledge or skills developed by subjects, usually indicated by test scores or grades given by the teacher [8].

Observation results show that apart from that, the methods presented to students are still dominated by various activities that originate from the teacher's teaching activities. Students only receive lesson material if they make many other alternatives in learning. It makes students less enthusiastic, making them bored when participating in learning activities. Process This kind of teaching and learning does not encourage students to play an active role. It does not allow students to act and think creatively because they are not directly involved in learning activities [5]. One of the reasons is the conventional learning strategy, namely the teacher as the main source of knowledge and lectures being the main choice of teaching method, resulting in science learning being less effective and students finding it difficult to understand concepts, ultimately causing low student activity in learning, which automatically affects student learning outcomes. It causes students to need to complete the completion standard of 65.

For this reason, it is necessary to look for alternatives, such as implementing the answer-play learning model in schools. It is hoped that this can be an option that can be taken into account by the staff. Educators, especially science teachers, must find and implement a learning strategy that is part of the many existing learning strategies.

For this reason, researchers need to conduct research. The researcher formulated "Application of the Answer Play Learning Method in Increasing Student Learning Activity and Completeness Science Learning." In this research, researchers applied learning methods to play answers where learning method students can be directly involved in learning activities.

This research aims to discover the application learning methods that play an inside answer increasing student learning activity and completeness in class VIII science learning Junior High School 4 Mataram 2021-2022 Academic Year.

RESEARCH METHODOLOGY

The type of research used in this research is classroom action research. Classroom action research examines learning activities in the form of actions, which are deliberately created and occur in a class together [9].

The approach used in this research is qualitative and quantitative. The qualitative approach is obtaining data with learning activities in sentences. It is also used to process data from observations, while the quantitative approach is used to obtain an achievement in the form of numbers and is used to process learning outcome data. This research was held at SMP Negeri 4 Mataram, Mataram City, in the even semester from March 7 to April 7 in the 2021-2022 academic year.

The research design in question is action in the form of activities and completion of science learning using the play-answer learning method for class VIII students at SMP Negeri 4 Mataram for the 2021-2022 academic year. To improve activities and learning outcomes in learning, repeated actions or cycles consisting of planning are used. They are carrying out actions, observing, and reflecting. Each Cycle consists of several stages, namely, First Cycle: Planning. In this stage, the researcher is preparing a learning plan, namely preparing a learning implementation plan, making an observation sheet, and designing an evaluation tool in the form of a written test to determine students' abilities. Action: In implementing the action in each Cycle, learning is carried out following the learning plan that has been prepared. Observation: Observation activities are carried out every time learning takes place in implementing actions by observing teacher and student activities. Reflection: The results obtained from observations and student learning outcomes are collected and analyzed so that the teacher can reflect on himself by looking at the observation data from this analysis. Second Cycle: The implementation of this Cycle is in the same order as the implementation of the first Cycle, and the actions carried out in this Cycle are based on the results of the first Cycle and so on.

Research setting is a technique or way of arranging the population used as a research sample. Sampling aimed to determine students' abilities. The class used as the object sample was class VIII.5 because this class has the lowest score, namely an average score of 74 or below.

Data collection techniques are through observation and tests. Observation is a basic effort to collect data systematically using standardized procedures [10]. The observations used in this research were used to see all activities in the learning process using the method of playing answers to class VIII.5 science lessons at SMP Negeri 4 Mataram for the 2021-2022 academic year. A test is a series of questions or exercises and other tools used to measure skills, knowledge, intelligence, abilities, or

talents individuals or groups possess. The test technique in this research is by giving tests in science learning.

The research instrument consists of an observation sheet and a test sheet. Research instruments are tools or facilities researchers use to collect data to make their work easier and the results better [11]. The researcher designed the observation sheet to collect data regarding teacher and student activities during the lesson. Student learning outcomes are in the objective form taken from the science package book with guidelines in the curriculum. This was created to determine the extent of students' understanding of mastering the material on the subject which has been submitted. This test is given at the end of the cycle meeting.

Data Analysis Technique: Analysis of learning activities using the following formula:

$$\% \text{ learning activity} = \frac{\text{scores obtained by students}}{\text{total score of all students}} \times 100 \%$$

After obtaining test data on learning outcomes, the data is analyzed quantitatively by looking for student learning completeness. Each student in the teaching and learning process is said to have completed the subject matter given if they get a minimum score of 75. To find classical completeness, the formula is used:

$$CC = P/N \times 100\%$$

Information:

CC = Classical Completeness

P = the number of students who get grades ≥ 75

N = number of students

If $CC > 85\%$ of students achieve a minimum score of 75 following the completion standards set by SMP Negeri 4 Mataram, then learning is said to be complete. And if $CC < 85\%$, then classical learning is incomplete.

RESULTS AND DISCUSSION

Data from observations of student activities describes the level of student activity in participating in the teaching and learning process. The results of student activities in each Cycle are shown in Table 1.

Table 1. Results of Student Activities in Each Cycle

Indicator	Cycle	
	I	II
The number of students	32	32
Total score	461	574
Blue Rata-Rata	15.3	19.1
Category	Quite Active	Active

Note: Results of Analysis of Student Learning Activities

Based on Table 4.1 above, you can see the percentage of student activity participating in the teaching and learning process from Cycle I to cycle II. In Cycle I, the achievement of student learning activity scores was classified as quite active, with an average score of 15.33. In Cycle II, the achievement of the average score for student activities experienced an increase, which was classified as active with a score of 19.1. In Cycle I, students still made many shortcomings, so they were categorized as quite active. The disadvantages in question are:

1. Students are still embarrassed to ask questions, so communication between students and teachers seems lacking.
2. Students still need to gain the courage to appear in front of the class, so the results of group discussions are directed at certain students.
3. Accompanying students during discussions is not evenly distributed in each group.

Based on the results of student learning activities in cycle II, the average value of student learning activities is 19.1, classified as active. It can be seen from student readiness in learning, student interaction with the teacher, student enthusiasm in taking lessons, student interaction with the teacher, group work, and student activity. Participating in learning activities and student participation in concluding the material is classified as active. Data from observations of teacher activities describes the level of teacher activity during the teaching and learning process. The results of student activities in each Cycle are shown in Table 2.

Table 2. Observation Results of Teacher Activities in Each Cycle

Indicator	Cycle	
	I	II
Amount	13	19
Percentage	54.17 %	79.17%
Category	Quite Active	Active

Note: Results of Teacher Activity Observations

Based on Table 2 above, you can see the percentage of teacher activity from Cycle I to Cycle II. In Cycle I, the achievement of teacher activity scores was classified as quite active with a percentage of 54.17%; in Cycle II, the achievement of teacher activity scores experienced an increase, which was classified as active with a percentage of 79.17%. The first cycle category is quite active because the teacher must still improve during teaching and learning. The deficiencies in question are:

1. The teacher does not read the learning objectives
2. No reflection
3. The teacher only accompanies students during discussions in each group.

From the results of observing teacher activities in Cycle II, the percentage of teacher activity was 79.16%. This teacher activity was classified as active. Based on the deficiencies in student learning activities and teacher activities, reflection or improvements are carried out in Cycle II.

After carrying out the teaching and learning process from Cycle I to cycle II, students are given a multiple-choice evaluation test with 20 questions per Cycle. The evaluation aims to measure the ability to master the material presented and to determine the improvement in students' learning abilities in each Cycle. The results of the student learning tests per Cycle can be seen in Table 3 below:

Table 3. Data from Learning Evaluation Results for Each Cycle

Value name	Cycle I	Cycle II
Number of students who took part in the evaluation	32 students	32 students
The highest score	80	90
Lowest value	45	60
Average value	65	74
The number of students who completed	24	28
Many students did not complete	8	4
Classical completion percentage	75 %	87,5 %

The table above shows that the results of student learning evaluation tests in each Cycle using the play-answer learning method can increase, and students are more active in the teaching and learning process. In Cycle I, the results of the learning evaluation test needed to meet the standard criteria for completeness. Many students still got a score below 75 from the standard for completeness set in the minimum completeness criteria. In Cycle II, it was seen that student learning activities had increased significantly, so evaluation results also increased. It can be seen from the average value per Cycle that the average value for Cycle I was 65 and Cycle II was 74, while the percentage of completion for Cycle I was 75%, and Cycle II increased to 87.5%. The student learning results show increased completeness by implementing the playing answer learning method for grade 8 students at SMP Negeri 4 Mataram for the 2021-2022 academic year.

Implementation Learning actions are carried out in 2 (two) stages, namely Cycle I and Cycle II. The learning steps are contained in the learning implementation plan (RPP). During the learning process, observations are made of student learning activities and observations of teacher activities.

Based on the observations of student activities in Cycle I, the average value of student learning activities was 15.3, with the quite active category and analysis of the results of cycle student learning evaluations. The average score is 65 with a completeness percentage of 65%, so student learning activities in Cycle I still need to be completed. In Cycle I, they have yet to achieve complete learning.

As for the results of observing teacher activities in the Cycle, I show that the percentage of teacher activity is 54.17%, with the category quite active. Based on the results above, the overall research success indicators have not been met, so the research continues to cycle II by correcting the deficiencies in Cycle I.

The observations of student learning activities in Cycle II show that the average value of student activity is 19.1 in the active category. The results of data analysis of student learning completeness show an increase in the class average value to 73.83 and learning completeness of 87.5%, while the percentage of teacher activity is 79, 17% in the active category. For this reason, this research only reached cycle II because the percentage of learning, student activities, and teacher activities had reached the set targets.

The achievement of student learning completeness in Cycle II is that by applying the play learning method, students become active in the learning activities so that learning becomes more exciting and enjoyable [12-15]. This way, playing answers can increase student activity and learning outcomes in class VIII.5 Science learning at SMP Negeri 4 Mataram for the 2021-2022 academic year.

CONCLUSIONS

From the research and discussion results, using the learning method of playing answers can increase student learning activity and completeness in class VIII.5 science learning at SMP Negeri 4 Mataram for the 2021-2022 academic year. This increase can be seen in the average student evaluation score in Cycle I of 65 and the average evaluation score in Cycle II of 74% while learning completion in Cycle I was 75% and Cycle II was 87.5%. Based on the results achieved in this research, it is hoped that science teachers in class VIII.5 of SMP Negeri 4 Mataram will apply the playing-answer learning method because the method used so far still uses the lecture method, causing students to be less active. in learning. The results of this research can be used as an evaluation and introspection tool for teachers to correct deficiencies in learning activities and provide ideas for improving the quality of education in a better direction.

REFERENCES

- [1] Rowiyanto, R., & Maryono, M. (2023). Efforts to Cultivate the Character of Responsibility in Students Through Religious Education at MTS Nurul Ali. *Edumaspul: Jurnal Pendidikan*, 7(1), 1112-1117.
- [2] Isminarti. (2009). *Pengaruh Penggunaan Lembar Kerja Siswa Berorientasi Pembelajaran Kontekstual Terhadap Aktivitas dan Ketuntasan Belajar IPA Pada siswa Kelas VIII SMP Negeri 4 Pujut*. Mataran : Ikip Mataram.
- [3] Shofiah, R. I., Bektiarso, S., & Supriadi, B. (2017). Penerapan model POE (Predict-Observe-Explain) dengan metode eksperimen terhadap hasil belajar IPA dan retensi siswa di SMP. *Jurnal Pembelajaran Fisika*, 6(4), 356-363.
- [4] Safira, C. A., Setyawan, A., & Citrawati, T. (2020). Identifikasi Permasalahan Pembelajaran IPA Pada Siswa Kelas III SDN Buluh 3 Socah. *Prosiding Nasional Pendidikan: LPPM IKIP PGRI Bojonegoro*, 1(1).
- [5] Ulfa, M., & Saifuddin, S. (2018). Terampil Memilih Dan Menggunakan Metode Pembelajaran. *Suhuf*, 30(1), 35-56.
- [6] Salam, M. (2020). WhatsApp: Kehadiran, aktivitas belajar, dan hasil belajar. *Jurnal Pendidikan Matematika*, 11(2), 198-212.
- [7] Sardiman, A. M. (2020). *Interaksi & motivasi belajar mengajar*. Jakarta: PT Rajagrafindo Persada.
- [8] Bahar, H., & Afdholi, N. S. (2019). Ketuntasan belajar IPA melalui number head together (NHT) pada kurikulum 2013. *Holistika: Jurnal Ilmiah PGSD*, 3(1), 1-12.
- [9] Djamarah. 2006. *Strategi Belajar Mengajar*. Jakarta : Rineka Cipta.
- [10] Arikunto. 2010. *Penelitian Tindakan Kelas*. Jakarta: PT Bumi Aksara
- [11] Arikunto. 2006. *Prosedur Penelitian*. Jakarta : PT Rineka Cipta.
- [12] Wardani, M. A. P., & Harwanto, H. (2020). Pengaruh Penerapan Strategi Pembelajaran Berbasis ICT Terhadap Pencapaian Hasil Belajar Sistem Komputer Siswa Kelas X SMK. *Faktor: Jurnal Ilmiah Kependidikan*, 7(2), 99-106.
- [13] Rafikasari, F., Ibrahim, M., Amin, S. M., & Djazilan, S. (2021). Keefektifan pembelajaran agama islam melalui pendekatan pembelajaran aktif, kreatif, efektif, dan menyenangkan (pakem) di Sekolah Dasar. *Jurnal Basicedu*, 5(5), 3232-3241.
- [14] Katauhi, R. C., Widodo, W., & Sari, D. A. P. (2022). Implementation of the science e-module based on guided inquiry with the flipped classroom strategy to improve students science process skills. *Jurnal Pijar Mipa*, 17(5), 657-665.
- [15] Irananda, A. G., & Rosdiana, L. (2022). Effectiveness of socio-scientific issues with mind mapping strategy on students learning outcomes on heat topic. *Jurnal Pijar Mipa*, 17(5), 638-642.