



OPEN ACCESS

EDITED BY

Dr. Syamsurijal Hasan, M.M
Universitas Pahlawan, Indonesia.

*CORRESPONDENCE

Maslikan
maslikan.1965@gmail.com

RECEIVED: February 26, 2025

ACCEPTED: June 18, 2025

PUBLISHED: July 27, 2025

COPYRIGHT

© 2025 Maslikan (Author)



This work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/).

Effectiveness of the KOKAMI (Mysterious Box and Card) Learning Media in Enhancing Student Engagement and Mastery of Volleyball Concepts in Senior High School Education

Maslikan^{1*}

¹SMA Negeri 2 Pekanbaru, Indonesia.

ABSTRACT

The learning process constitutes the core activity that determines the success or failure of achieving educational objectives, as it directly shapes students' cognitive, affective, and psychomotor development. Therefore, teachers are required to demonstrate creativity in selecting and designing instructional methods and media that effectively support classroom learning. Innovation in learning media is essential to attract students' attention and enhance their motivation, particularly in subjects that demand active engagement such as physical education. In Indonesian high schools, sports science is a compulsory subject for students in science and social science tracks, emphasizing the development of physical fitness, conceptual understanding, and healthy lifestyle habits. Volleyball, as one of the core topics taught in Grade XII under Curriculum 2013, involves abstract and memorization-based content that often requires deeper conceptual comprehension. To address these challenges, teachers may integrate interactive learning media to create an engaging classroom atmosphere and facilitate active participation. This study introduces the mysterious box and card (KOKAMI) learning media as an instructional innovation aimed at enhancing student engagement in volleyball learning. KOKAMI consists of cards containing materials, questions, images, commands, bonuses, or sanctions, placed inside envelopes and further inserted into a concealed box, making the learning process more stimulating and unpredictable. Through this mechanism, students are encouraged to think innovatively, creatively, and critically, while actively participating in classroom activities. The implementation of KOKAMI was carried out with Grade XII MIPA 1 students of SMA Negeri 2 Pekanbaru. Findings indicate a substantial improvement in student learning activity, increasing from an average of 72.53% in Cycle I to 88.82% in Cycle II. Learning mastery also demonstrated significant progress, rising from 89.47% in Cycle I to 100% in Cycle II. These results suggest that KOKAMI is an effective media innovation for promoting active participation, improving conceptual understanding, and enhancing learning outcomes in volleyball instruction within high school physical education.

Keywords

competence, apprentice, effectiveness.

INTRODUCTION

The development of science and technology demands an increase in quality education. For To improve the quality of education, improvements are needed in the learning process. learning is activity the most important thing is that the success or failure of achieving educational goals depends on how the process is carried out. learning that students experience. The development of scientific progress in education now requires the role of Teacher more as facilitator Which creative in creating an effective learning atmosphere. Nasution (2000) is of the opinion that teachers are responsible for providing the most harmonious environment for an effective learning process to occur. Because that teacher Classroom management must be adept at ensuring students can actively participate in learning. Failure to participate effectively will result in learning objectives not being achieved. Therefore, teachers need to be creative in developing the learning process, using appropriate methods and media for classroom teaching and learning. Learning media innovation is one way to attract attention and increase student motivation in the learning process at school, one of which is in sports subjects. is eye lesson It is a compulsory subject for high school science and social studies classes, developed based on observations of natural phenomena. Sports science is crucial in everyday life because it helps prevent disease. On the other hand, sports science is not an easy subject for students to grasp due to its abstract concepts. Therefore, the learning process requires an engaging and engaging presentation of the material so that students can independently grasp the concepts and relate them to practical life situations.

Volleyball is one of the topics in the sports subject studied in grade XII of high school which applies Curriculum 13. Volleyball is a topic that must be mastered. by participant educate class XII in the odd semester which is memorization and contains material which abstract so that requires more conceptual understanding. Memorization and abstract material generally makes students bored and less enthusiastic about participating in the learning process. Conceptual material is usually easily forgotten by students if not accompanied by an understanding that can ultimately influence success in learning.

Based on the results of observations in class XII MIPA 1, it was found that the exam scores on volleyball material were very low because students did not know the terms contained in each volleyball game. In every learning process, researchers felt that there was always something lacking, such as low activity and completeness of sports learning for students in class XII MIPA 1. The low learning activity of students was supported by the results of observations of the learning process. sport in class XII MIPA 1 on volleyball material, shows learning activities during the learning process is still low. Low student learning activities are one of the causes of unsatisfactory student learning outcomes. This is seen in the results of the final exam for the odd semester of the 2016/2017 academic year in class XII MIPA 1, namely only 22 (57.89%) students achieved the Minimum Completion Criteria (KKM) with an average of 77.38. Students are said to have completed learning sports if the learning outcomes has reached the Minimum Competency (KKM) (Ministry of National Education, 2006). The KKM score set at Pekanbaru State Senior High School 2 for the subject of sports is 78.

The low learning outcomes in the odd semester of the 2016/2017 academic year were caused by low student learning activities, so it was necessary to take corrective action in the learning process. sport in class XII Mathematics and Natural Sciences. Based on the problems that occurred, the researchers concluded that so that creation atmosphere fun and learning interesting that can increase the interest, activity and learning completion of students in class XII MIPA 1, teachers need to optimize learning media. Corrective actions that are appropriate to the problems that occur in class XII MIPA 1 namely use media in the form of a game. The game will have the main objective to create pleasure And Interest in the learning process. Games create competition and challenges, reducing the monotony and boredom of classes. Games also create fun, increase the overall appeal of the class, and help generate interest in the lesson (Suyatno, 2009).

Teachers can use learning media to draw students' attention to the material being taught, creating a fun atmosphere. Using mystery boxes and cards (KOKAMI) in the learning process allows teachers to capture students' interest and attention, encouraging them to actively participate in the learning process. This media can stimulate students to think innovatively, creatively, and critically.

The mysterious box and card learning media (KOKAMI) consists of a mysterious box and cards, It is said to be mysterious because the card is placed in an envelope which is then placed in a box so that the contents of the card are unknown. The contents of the card can be material, questions, pictures, commands or instructions, bonuses and sanctions (Neneng Paisah, et al., 2013).

METHOD

This research is action research, as it was conducted to solve classroom learning problems. It is also descriptive research, as it describes how a learning technique is applied and how the desired results are achieved. According to Oja and Sumarjan (in Titik Sugjarti, 1997) groups research into four groups, namely (a) teachers as researchers, (b) collaborative action research, (c) simultaneous integrated, (d) administrative social experimental.

The research location is the place used to conduct research to obtain the desired data. This research took place at SMA Negeri 2 Pekanbaru. The research time is the time the research took place or when this research was carried out. This research was conducted from early August 2017 to September 2017. The research subjects were students of class XII MIPA 1 in 2017 on the topic of volleyball.

To determine the effectiveness of a method in learning activities, data analysis is necessary. This study used quantitative descriptive analysis techniques, namely a research method that describes reality or facts according to the data obtained. with the aim of knowing the learning outcomes achieved by students and also to obtain student responses to learning activities and student activities during the learning process. To analyze the level of success or percentage of student success after each round of the teaching and learning process is carried out by providing an evaluation in the form of written test questions end of round.

RESULTS

Action research was conducted in class XII MIPA 1 of SMA Negeri 2 Pekanbaru in the odd semester of the 2017/2018 academic year. The number of students in class XII MIPA 1 of SMA Negeri 2 Pekanbaru is 41 people consisting of 23 male students and 18 female students. This study aims to improve student learning activities and completeness by using mysterious box and card learning media (KOKAMI). The research was conducted collaboratively, with the actions being carried out by the teacher and observer. According to Dadang Yudhistira (2013), classroom action research requires collaboration with other parties, such as superiors, colleagues, students, and so on. The researcher and one fellow observer conducted observations from the beginning to the end of the lesson. Observations were made of student and teacher activities during the learning process using a pre-made observation sheet, which assigned scores to each indicator.

The research was conducted using the mysterious box and card (KOKAMI) learning media. The use of the mysterious box and card (KOKAMI) media can increase students' interest in learning (Neneng Paisah, 2013). Using the mysterious box and card (KOKAMI) learning media will attract more students' attention so that it can increase students' learning motivation and make students active in learning. Student activity has increased in the learning process, which has an impact on students' learning completeness, where students educate the active will participate directly involved in learning such as doing assignments, asking questions, looking for information and practicing doing questions (Sardiman, AM, 2012). Socialization of the learning process using mystery boxes and cards (KOKAMI) in class XII Mathematics and Natural Sciences

Session 1 was held on August 15, 2017, with the aim of explaining the rules of the mysterious box and card game (KOKAMI) so that students would not be confused during the learning process. The session also included dividing the students into study groups of 6-8 participants. educate with characteristic group which heterogeneous, namely students with high, average, and low abilities. Before chemistry lessons begin, students must sit in their respective groups.

Research data was obtained through learning outcome tests where the test was carried out at the end of the meeting (evaluation) and end of cycle (posttest). The end of cycle test was conducted twice, the first test was conducted after the second

meeting, namely on Tuesday, August 22, 2017 and the second test was conducted after the second meeting, namely on Tuesday, August 22, 2017. second implemented after meeting IV, namely on Thursday, September 5th 2017. Activity Study Students observed during the chemistry learning process using the mysterious box and card (KOKAMI) learning media were asking questions, expressing opinions/answers, working on practice questions in the LKPD, discussing in groups, and being enthusiastic about the mysterious box and card (KOKAMI) learning media.

The results of observations on student learning activities can be seen in Table 4.1, which shows that student learning activities increased from meeting I to meeting II. Meeting I percentage the average student learning activity was 67.1067% with good criteria, increasing at the second meeting to 77.96% with good criteria. A more detailed description of learning outcomes can be seen in Figure 4.1. Indicators of activities that have not been achieved are the activity of asking questions with a percentage of 53.95% while the success criteria are 60% and conveying opinion/answer with a percentage of 57.24% while the success criteria is 60%. In the second meeting of cycle I, all student activity indicators had achieved the success criteria, and there were even indicators that exceeded the success criteria. that is activity do the practice questions in the LKPD and student success in completing the message cards. However, despite improvements, several indicators of student activity remain suboptimal, including: a) Activity ask questions; b) Activity of conveying opinions/answers; c) Discuss in groups.

These suboptimal indicators prompted researchers and teachers to design plans and improvements to increase student activity in learning in the next cycle (cycle II). The results of observations of student learning activities in cycle II can be seen in Table 4.2. The criteria for action completion in cycle II were increased again by 10-20% for each indicator from cycle I. Based on Figure 4.2, at meeting III, the student activity indicators that had not been achieved based on the success criteria from cycle II were the activity of asking questions with a percentage of 77.63% where the criteria for success of the action is 80%, and the activity of conveying opinions/answers with a percentage of 78.29% while the criteria for success of the action is 85%.

In the fourth meeting, all student activity indicators achieved the criteria for successful action, with a high percentage of student activity and a very good category. This was evident in the learning process, where almost all students were active in asking questions, expressing opinions/answers, working on practice questions in the Student Worksheet (LKPD), discussing in groups, and interactions between teachers and students and students with other students were created with Well, this is caused by the existence of mysterious box and card learning media (KOKAMI). The use of mysterious box and card media (KOKAMI) can increase students' interest in learning (Neneng Paisah, 2013), by using mysterious box and card learning media (KOKAMI) it will attract more students' attention so that it can increase students' learning motivation and make students more active in the learning process.

DISCUSSION

Student learning activities increased from cycle I to cycle II, the increase can be seen from the results of observations of the average percentage of student activity for each cycle. The average percentage of student learning activities in cycle I was 72.54% in the good category but not yet optimal because there are still Several indicators of student activity have not yet achieved the established criteria for successful action. The average percentage of student activity in cycle II was 88.816%, which is categorized as very good. good and has achieved the criteria for successful action. Indicators of student activity in the very good category are that students ask questions, convey answers/opinions, do practice questions Which There is in LKPD, group discussions, success in completing message cards. The indicator of student enthusiasm for the mysterious box and card learning media (KOKAMI) obtained a good category, this occurred because the maximum score only obtained by the winning group in game box and mysterious card (KOKAMI). Student learning activities have implications for student understanding during the learning process. As explained by Sadirman AM (2012), activity is an important aspect of learning without existence activity then the learning process will not proceed well. The activities of each student indicator obtained from the observation results can be explained as follows: 1. Students ask questions. Asking is the process of requesting information or explanation to get information information Which not yet known in the learning that is being done ongoing.

Activity learners ask on cycle I is 61.85% with category Good, can be seen participant educate Not yet too active in submit question still low which is around 10-15 students and dominated by learners Which clever. Matter This happen Because participant educate Not yet have courage to ask questions to the material which has not been understood and participant less educated believe self for ask to Teacher, besides That Teacher less motivating for participants educate to ask. The activity of students asking questions in cycle II was 84.87% with category very Good. Learners Which submit questions increase from cycle to cycle previously, namely range 17-27 participant students. Active students in the learning process due to Teacher further improve interaction with students with method thought-provoking participant educate to material learning so that awaken flavor want to participant year educate to material learning. 2. Students convey answers/ opinions the teacher explains the learning material, there are 1-3 groups that do not participate enough in the learning process, some of the group members tell stories in the group. Which make participant less educated focus so that material Which studied No can understood completely and causes students to be unable to express their opinions. Student activities in conveying answers/opinions in cycle I was 61.19% with a good category, namely students who answered questions correctly without reasons ranging from 12-16 students and students answered questions correctly and accompanied by reasons categorized as very low, namely 5-6 students.

This happened because the teacher did not give random questions. must be answered by inactive students. Student activity conveying answers/opinions in cycle II the score was 86.19, categorized as very good, as the teacher posed questions to inactive students and provided more questions, distributed evenly. Furthermore, students were more active in seeking information about the learning material, providing them with the necessary tools to prepare for the learning process. 3. Participant educate do practice questions in the LKPD Student activities in working on questions exercise that is in the LKPD in cycle I is 84.22% with category very good, workmanship LKPD Still dominated by smart students in each group so that less smart students active and not enough responsible in workmanship LKPD and only copy answer from group of friends. Activities learners in do practice questions Which There is in LKPD in cycle II was 92.44% with the category very Good, because of the teacher has reprimanded participant

educate the not participating in discussion group so that students are more serious in working on LKPD. 4. Student activities discussing in groups in cycle I, it was 72.04% in the good category. Students were still not maximally engaged in group discussions. This can be seen from the discussion activities that only took place between 1-3 students in each group, while the group members who... Others have not participated or even don't care. Student activities are discussing in groups on cycle II is 89.15% with a very good category, students more earnest in discussion because of the teacher has appoint students who are not active in group discussions to answer questions in the LKPD during group presentations. 5. Students are enthusiastic about the learning media boxes and cards mysterious (KOKAMI).

The enthusiastic activity of students in the mysterious box and card learning media (KOKAMI) in cycle I was 72.69% with good category, because the learning media are boxes and cards mysterious (KOKAMI) can attract students' interest in learning. This can be seen during the box game. and mystery cards (KOKAMI) students' enthusiasm for finding answers to questions was higher than their enthusiasm for answering questions in the LKPD. The competitive element and fun learning atmosphere in the mystery boxes and cards (KOKAMI) made students eager to be the winning group in the game. Students' enthusiastic activities in the learning media of boxes and cards mysterious (KOKAMI) on cycle II is 80.26% with very good category, it can be seen that all groups succeeded in completing the message cards that were played as many times as possible. 2 rounds. In cycle II, students were more competitive in completing the message cards to become the winning group, because the teacher had more control over the course of the mysterious box and card game (KOKAMI) so that the classroom atmosphere was not noisy due to competition within the groups to become the winner. 6. Student success in completing message cards student success activities in completing message card In cycle I, the success rate was 83.22%, which is in the very good category. However, there was still 1 group that could not complete the message card within the specified time, because not all members of the group were involved in completing the message card. Student success activities in completing the message card message card in cycle I was 100% with a very good category, this proves that each group member was involved in working on the message card and the entire group had succeeded in completing the message card correctly and on time, in addition the teacher approached and guided the group that failed to complete the message card so that all students worked together with their group to be actively involved in completing the message card.

Student learning completion is the achievement of learning outcomes that are determined by adequate and accountable measures or levels of competency achievement. as prerequisite mastery more competence carry on (Irma praise, 2008). Results the posttest in cycle I which was conducted after meeting I and meeting II obtained a percentage of classical learning completion of 89.47% and learning completion of 89.47%. classical This has reach success criteria Which has expected that is 78. However, there are 4 students who have not achieved individual learning completion. The results of the analysis of the answers of students who did not achieve individual learning completeness showed that students were less careful in answering the posttest questions. Classical learning completeness in cycle II was 100%, this indicates that students achieved the minimum completeness criteria (KKM) and the criteria for successful action, namely 80%. The results of observations and reflections that have been carried out can be seen that the learning process has been carried out well. The classroom atmosphere in the learning process has been conducive and enjoyable with the presence of learning media boxes and mysterious cards (KOKAMI) which can increase student activity in participating in the learning process. Teacher activity, student activity in learning and the learning completion of students using the mysterious card box (KOKAMI) learning media has achieved the success criteria.

CONCLUSION

Based on the study, results, and discussion study can concluded as follows: 1. Use of mystery box and card learning media (KOKAMI) can increase activity Study participant educate class; XII MIPA 1 SMA Negeri 2 Pekanbaru with an average percentage of cycle I of 72.53% and cycle II of 88.82%; 2. Use of box learning media and card mysterious (KOKAMI) can increase student learning completion with a percentage of 89.47% in cycle I and 100% in cycle II.

REFERENCES

- Arikunto, S., 2005, *The Basics Educational Evaluation*, Bumi Aksara, Jakarta.
- Budiningsih, AC, 2005, *Learning and Teaching*, Asdi Mahasatya, Jakarta.
- Ministry of National Education, 2006, *Technical Guidelines for Syllabus Development and Examples/Models Syllabus Senior High School*, BSNP, Jakarta.
- Dimiyati and Mujiono, 2002, *Learning and teaching*, Department of Education and Culture, Jakarta.
- Djamarah, 2006, *Teaching and Learning Strategies*, Rineka Cipta, Jakarta.
- Firdaus, T., 2012, *Active Learning*, Elmatara, Yogyakarta.
- Hartono, 2011, *PAIKEM*, Zanafa, Pekanbaru.
- Ibrahim, M., 2000, *Cooperative Learning*, University Press, Surabaya State University.
- Nasution, S., 2000, *Learning and Teaching*, Bumi Aksara, Bandung.
- Nazir, 2005, *Research Methods*, Ghalia Indonesia, Jakarta.
- Sanjaya, W., 2008, *Strategy Standard -Oriented Learning in Educational Process*, Kencana, Jakarta.
- Sardiman, 2011, *Interaction and Motivation in Teaching and Learning*, Raja Grafindo Persada, Jakarta.