



Efforts to Improve Learning Outcomes Through the Use of Magic Box Media in Science Subjects for Fourth-Grade Students at Sd Negeri 37 Bengkulu City

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Abstract:

This study aims to determine the significant impact of using the Magic Box media on the learning outcomes of fourth-grade students at SD Negeri 37 Bengkulu City. This research is a classroom action research conducted in two cycles. The subjects of this research were 28 fourth-grade students at SD Negeri 37 Bengkulu City. Data was collected through multiple-choice tests. The results of the study showed that the use of the Magic Box media improved learning outcomes in each cycle. The students' results increased from the pre-cycle, cycle I, and cycle II. In the pre-cycle, the student mastery percentage was 42.86%, or 12 students, in cycle I, it increased to 71.43%, or 20 students, and in cycle II, the mastery percentage significantly increased to 89.29%, or 25 students out of a total of 28 students. The research concluded that applying the Magic Box media could improve students' learning outcomes. Thus, the Magic Box media can enhance the learning outcomes of fourth-grade students at SD Negeri 37 Bengkulu City.

Keywords: Learning Outcomes, Magic Box Media, Science

1. INTRODUCTION

Education is still very important for the progress of a country and is very important for human survival. This is consistent with the idea of lifelong learning, which postulates that learning never ends, i.e., that it must continue from birth to death. Education is an effort to improve children's character (attitude), mind (cognitive), and physical well-being for a satisfying life, as well as guiding them to live in harmony with the environment and society (Dwi Nopita Sari, Bukman Lian, 2023). Learning is an effort that is carried out systematically and systemically to initiate, facilitate, and improve the learning process. This is closely related to the nature, type of learning, and learning achievements achieved (Heryanto, 2024). Thus, education is the process of using teaching and training to change attitudes, behaviors, and maturity. The purpose of education is the focus of this procedure (Farhana et al., 2020).

It is important to remember that the human resources of a nation increase with the quality of education. As a result, education serves to prepare students to become a highly skilled source of labor. Creating intelligent, competent, and responsive people who can function in the digital age is the goal of education. Especially now that the independent curriculum is being implemented in Indonesia, Indonesia is implementing the Independent Curriculum as an effort to improve the quality of education and prepare the young generation who are competent, have character, and are ready to face future challenges (Hunaepi et al., 2024). Students are exposed to a variety of topics in this setting, including social sciences, mathematics, and natural sciences. These topics must also be developed and used in daily activities (Twiningsih, 2020). However, the application of this information presents difficulties, especially in topics that students often face, such as science and social sciences (IPAS) Wati et al. (2022) in their article affirm that IPAS is very important in shaping students' perceptions of their environment, including nature and interpersonal relationships. Despite their significance, not all students achieve the best learning outcomes in IPAS, often as a result of elements such as the scarcity of diverse teaching strategies. Some teachers use a boring instructional approach that exacerbates this problem. There is an effect on learning outcomes, which are characterized as things that students learn from the process and are usually represented in grades or scores (Ardisa et al., 2022).

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Assessment of attitudes, cognitive values, and skills are examples of learning outcomes. Usually, evaluation or assessment is used to measure these results (Veryawan et al., 2021). The author suggests the use of instructional media as a substitute to improve student learning outcomes and make social studies more attractive. It is hoped that the media used in teaching IPAS will answer the challenges faced by students in this topic (Septianti & Afiani, 2020). The effectiveness of the learning process is highly dependent on the choice of media. As conveyed by Anitah and further source Nurrahmah et al. (2018), media is characterized as a communication channel or message assistance to achieve educational goals. This description makes it clear that incorporating media into IPAS learning helps avoid misunderstandings, simplifies concepts, and clarifies everything that helps maximize learning and improve learning outcomes.

Using more interesting and diverse material is crucial to the learning process. The term "media" describes the persons, things, or occasions that foster an environment where students can improve their attitudes, skills, or talents. As a result, it makes sense that the surroundings, instructors, and textbooks in a school are all a part of the media (Taha & Abdulrahman, 2023). To ensure that learning objectives are met, media selection should take into account the characteristics of the students, the subjects being taught, the setting in which they will be used, and the teacher's proficiency with them. For instance, utilizing the proper learning resources, students are expected to comprehend and explain each chapter and subchapter in the "Plant Parts and Their Functions" lesson. Students' motivation to learn will increase when adaptable and entertaining media are used, both in the classroom and on their own.

The computer is a popular tool for self-directed learning since it lets students engage directly with the course materials. Individual learning can occur while important components, such as auditory and visual components in the form of graphics, animation, movies, and other formats, are shown at the same time. In order to successfully support the learning process and meet educational objectives, learning media are instruments that can be used to communicate messages from the presenter to the recipient. These tools can be used to stimulate students' thoughts, feelings, attention, interest, and readiness to learn.

Learning media must therefore promote student involvement and engagement. Passive pupils can become more active through the use of interactive media. While preserving an entertaining and engaging learning environment, the media should test

and improve students' critical thinking abilities. This problem highlights the necessity for a variety of educational materials that can pique students' interest, be entertaining, and encourage participation in the learning process especially in science classes that cover "Plant Parts and Their Functions". As a result, more students will participate in class and professors will find it easier to present the material. The researcher is therefore inspired to create the Magic Box, a teaching tool.

One school with comparable issues is SD Negeri 37 in Bengkulu City, especially in the fourth grade. First observations indicate that learning outcomes for students in IPAS typically plateau and don't meet expectations. Two major contributing issues are the use of static instructional methods and the dearth of interactive media. Learning resources that are interactive and engaging are essential for improving students' comprehension of the subject matter and increasing their desire to study. The usage of "Magic Box" media is one possible remedy. According to Claudea Winandyaz Rakasiwi & Muhtadi (2021), The Magic Box is an interactive and captivating educational resource that combines aspects of surprise and gaming to keep students' attention and spark their curiosity. The purpose of this media is to pique students' interest and spark their imagination, which will improve their comprehension of the lessons being taught.

This study is to investigate how students' responses to the usage of the Magic Box media in the learning process may be examined, as well as how using it can enhance students' learning results in IPAS. The learning results of fourth-grade students at SD Negeri 37 Bengkulu City are expected to significantly improve with the application of more creative and innovative instructional media.

2. MATERIAL AND METHOD

A classroom action research (CAR) methodology is used in this study. CAR was selected because the purpose of this study is to enhance the learning outcomes of fourth-grade students at SD Negeri 37 Bengkulu City in the Science and Social Studies (IPAS) curriculum by utilizing Magic Box medium. The phases of planning, carrying out the action, observing, and reflecting are all included in the cycles that make up the CAR. 28 fourth-grade kids from SD Negeri 37 Bengkulu City served as the research subjects. The author and the teacher worked together to undertake this study. In order to enhance students' learning, the researcher and the students' actions were observed by the classroom instructor, who took on the role of observer and teacher, respectively.

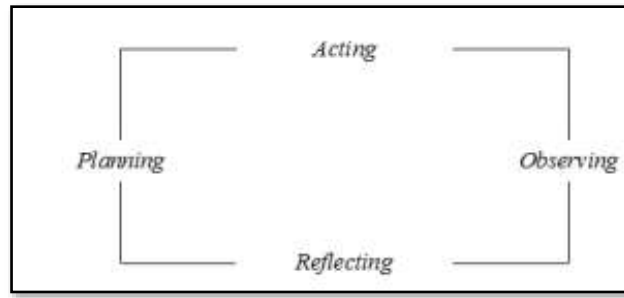


Figure 1. Research Cycle (Veryawan et al., 2021)

The data collection techniques included observation, documentation, and tests. The documentation technique involved gathering and searching for data in the form of written records and images. The test was administered by the researcher, consisting of 5 questions given to the students to assess their learning outcomes before and after the intervention. Observation was carried out to monitor the learning

process and assess students' responses during the lessons conducted by the teacher. The learning outcome assessment instrument was in the form of multiple-choice questions. Quantitative data analysis on learning outcomes was performed using the percentage method from the Ministry of Education and Culture (Kemendikbud) (Mutmainnah & Ningsih, 2023), as follows:

$$\text{Final Score} = \frac{\text{Score Obtained}}{\text{Total Score}} \times 100$$

The formula used to calculate the average learning

outcomes of students is stated by Aqib (Gultom et al., 2023)

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

Information:

X = Average value

$\sum X$ = Total value of all students

$\sum N$ = Total number of students

Student learning completeness percentage can be calculated using the following formula: (Rambe, 2018).

$$\text{Average Score} = \frac{\sum \text{Student who completed the learning}}{\sum \text{All Students}} \times 100\%$$

The success indicator is determined if, in Cycle I, 80% of the students achieve successful learning outcomes.

teaching methods using textbooks. At this stage, the researcher gathered information at SD Negeri 37 Bengkulu City through observations of the students' conditions and characteristics, the teaching methods used by the teacher, and collected learning outcome data prior to any intervention. This pre-cycle phase was carried out before the researcher conducted Cycle I and Cycle II.

3. RESULT AND DISCUSSION

Pre-Cycle

The pre-cycle activities were conducted on July 16, 2024. The researcher implemented conventional

Table 1. Pre-Cycle Learning Outcomes

No.	Score	Frequency	Total Score	Percentage	Remarks
1.	>70	12	1020	42,86 %	Pass
2.	<70	16	670	57,14 %.	Fail
Total		28	1.690	100%.	
Average				60,36	

Based on the data, it can be seen that the percentage of students who scored above the Minimum Passing Criteria (KKTP) or were considered successful was 42.86%, while the percentage of students who did not meet the criteria or did not achieve the KKTP was

57.14%. From the pre-cycle activities, it was evident that the students' learning outcomes were still low due to a lack of motivation and enthusiasm in participating in the learning process.

Cycle I

During the implementation of Cycle I, students were quite enthusiastic about the learning activities using the Magic Box media, but there were still some shortcomings, and the learning process was not yet

optimal. Cycle I was conducted on August 2, 2024. During the implementation of Cycle I, the researcher also conducted observations. The data obtained at this stage are as follows:

Table 2. Cycle I Learning Outcomes

No.	Score	Frequency	Total Score	Percentage	Remarks
1.	>70	20	1760	71,43%	Pass
2.	<70	8	460	28,57 %.	Fail
Total		28	2.220	100%.	
Average			79,29		

Based on Table 2, the results of Cycle I show that 20 out of 28 students achieved scores meeting the Minimum Passing Criteria (KKTP) with a total score of 1,760, representing 71.43%. Meanwhile, 8 out of 28 students did not meet the KKTP, with a total score of 460, or 28.57%. The total score of the students in Cycle I was 2,220, with an average score of 79.29. This indicates that Cycle I was not yet optimal, as the success percentage of 71.43% fell short of the 80% success criteria for classroom action research. Therefore, it was necessary to proceed with Cycle II.

Cycle II

The actions in Cycle II followed the same steps as in Cycle I, but with improvements in the planning and implementation phases. These improvements were based on the reflection of Cycle I to avoid repeating the same shortcomings. Cycle II was conducted on August 6, 2024. The following table shows the results obtained in Cycle II:

Table 3. Cycle II Learning Outcomes

No.	Score	Frequency	Total Score	Percentage	Remarks
1.	>70	25	2.280	89,29 %	Pass
2.	<70	3	180	10,71 %.	Fail
Total		28	2.460	100%.	
Average				87,86	

Based on the learning outcomes in Cycle II, success was achieved, with 25 out of 28 students reaching the Minimum Passing Criteria (KKTP) with a total score of 2,280, or 89.29%, while only 3 out of 28 students did not meet the KKTP, with a total score of 180, or 10.71%. The total score of the students in Cycle II was 2,460, with an average of 87.86. This indicates that the implementation of the Magic Box media in this cycle was successful.

4. CONCLUSION

The utilization of Magic Box media can enhance fourth-grade pupils at SD Negeri 37 Bengkulu City's learning outcomes in the subjects of science and social studies (IPAS), according to the research's findings. Through increased interaction and engagement during the learning process, the Magic Box improved students' comprehension of the subject

matter. Between Cycle I and II and the pre-cycle, the pupils' performance improved. 12 students, or 42.86% of the student body, met the KKTP in the pre-cycle. This rose to 71.43%, or 20 students, in Cycle I. By Cycle II, 25 out of 28 pupils, or 89.29% of the students, met the KKTP, a considerable increase. According to the results, using Magic Box media can greatly improve student learning outcomes.

Drawing from the review of literature and subsequent discussion, the investigator offers the following suggestions: 1) To enhance student learning results, teachers are urged to regularly use cutting-edge material into their lessons, such as the Magic Box. 2) To improve the effectiveness of teaching and learning, schools should encourage the distribution of innovative and captivating learning materials.

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