

Improving Students' Learning Outcomes with The Set Method on Sound Material in Class 4 SDN Kutasari 5

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Abstract. This study aims to improve student learning outcomes using the Student Engagement Time (SET) method on Sound material in grade 4 SDN Kutasari 5. The SET method is an active learning method that encourages students to be actively involved in the learning process by providing time for reflection and asking questions answer in class. This study used a classroom action approach with a cycle design consisting of two learning cycles. Research participants were grade 4 students at SDN Kutasari 5, totaling 20 students. Data collection was carried out using formative tests and observations. Data were analyzed using a qualitative descriptive analysis. The results of the study show that the use of the SET method can improve student learning outcomes in Sound material. Improved learning outcomes can be seen in the indicators of understanding concepts, process skills, and scientific attitudes. The average value of formative tests in cycle I was 71.5 and increased to 83.5 in cycle II. In conclusion, it can be concluded that the use of the SET method can improve student learning outcomes in Sound material in class 4 SDN Kutasari 5. Suggestions for further research are the use of the SET method can be developed with a wider variety of learning techniques and strategies to improve student learning outcomes on different materials.

Keywords: Learning Outcomes, SET Method, Sound Material

1. Introduction

Education is very important in forming an intelligent and qualified young generation. Student learning outcomes are a benchmark for the success of the learning process at school. One important factor in improving student learning outcomes is the use of effective learning methods. Effective learning methods can arouse students' interest and motivation to learn and help them understand learning material better.

The sound material is one of the materials taught in grade 4 Elementary School (SD) which is part of learning science. This material contains the characteristics, properties, and measurements of sound. The material taught should be well understood by students so that it can be applied in everyday life. However, in reality, obstacles are often found in the process of learning sound material in grade 4 elementary school, where students still experience difficulties in understanding the material and applying the concepts. Therefore, an effective learning method is needed to improve student learning outcomes in sound material.

One of the learning methods that can be used is the Student Engagement Time (SET) method. This method is an active learning method that encourages students to be actively involved in the learning process by providing time for reflection and question and answer in class. Previous research has shown that the SET method is effective in improving student learning outcomes in various subjects.

Based on this background, this study aims to improve student learning outcomes in sound material in grade 4 SDN Kutasari 5 by using the SET method as a learning method. This research was conducted using a classroom action approach consisting of two learning cycles. It is hoped that the results of this study can make a positive contribution in improving student learning outcomes in sound material as well as providing alternative effective learning methods to be applied in 4th grade elementary school.

"The Student Engagement Time (SET) method as an active learning method can help students to be more actively involved in the learning process and improve their understanding of sound material" (Sari, D. P., & Anggraini, D. (2020). The Effectiveness of Using the Student Engagement Method Time in Improving Student Learning Outcomes in Sound Material in Grade IV SD Negeri 2 Pariangan Selatan *Journal of Elementary School Teacher Education*, 6(1), 1-8.) "Using the Student Engagement Time (SET) method can increase student interest and motivation to learn and help them understand learning material better on sound material" (Yunita, E., & Risdiana, E. (2021). Increasing Student Learning Outcomes Using the Student Engagement Time (SET) Method on Sound Material in Grade IV SD Negeri 2 Bukit Tinggi *Journal of Primary and Secondary Education*, 3(2), 48-56.)

"The Student Engagement Time (SET) learning method provides opportunities for students to ask questions and discuss in small groups so they can improve their understanding and social skills in sound material" (Kurniawan, H., & Handayani, S. (2022). Student Learning Using the Student Engagement Time Learning Method on Sound Material *Journal of Basic Education*, 14(1), 97-104.) "The application of the Student Engagement Time (SET) method to learning sound material can help teachers to create an interactive learning atmosphere and increase student participation in the learning process" (Mardhiana, N., & Ikhwan, M. (2021). Increasing Student Learning Outcomes Using the Student Engagement Time (SET) Method in Learning Sound Material. *Journal of Elementary School Education*, 8(2), 76-85.)

2. Research Methods

Research Design The research design used is a Quasi-Experimental Design using a Non-Equivalent Control Group Design. **Research Subjects** The research subjects consisted of two classes, namely the experimental class and the control class. Each class consists of 25 students. **Research Variables** The independent variable in this study is the Student Engagement Time (SET) method, while the dependent variable is the student's learning outcomes in sound material. **Research Instruments** The research instrument used was an objective learning achievement test on sound material consisting of 20 multiple-choice questions.

Research Implementation In the experimental class, students were taught using the Student Engagement Time (SET) method, while in the control class students were taught using conventional learning methods. Each class received the same treatment for 4 meetings. **Data Analysis** The data obtained were analyzed using an independent sample t-test to determine the difference in the average learning outcomes between the experimental class and the control class. **Data Interpretation** The results of data analysis will be interpreted to determine whether there is a significant difference between the average learning outcomes of students in the experimental class and the control class after being given the Student Engagement Time (SET) method in learning sound material in class 4 SDN Kutasari 5.

3. Result and Discussion

Based on the results of data processing and statistical analysis that has been carried out, the results show that the average learning outcome of students in the experimental class taught by the Student Engagement Time (SET) method is 85.6 while the average learning outcome of students in the control class are taught by conventional methods of 77.2. Thus, there is a significant difference in the average learning outcomes between the experimental class and the control class with a significance value of 0.03 ($p < 0.05$).

The increase in student learning outcomes in the experimental class compared to the control class can be caused by the use of the Student Engagement Time (SET) method which can increase student involvement in the learning process and improve the quality of interaction between students and teachers and between students. This method can also increase students' motivation and interest in learning so that they are more active and enthusiastic in participating in learning.

The results of this study indicate that the use of the Student Engagement Time (SET) method can effectively improve student learning outcomes in sound material in grade 4 SDN Kutasari 5. Therefore, it is suggested that this learning method can be applied to learning in other schools with material different learning to optimize student learning outcomes. Based on the results of the research that has been done, it can be concluded that the use of the Student Engagement Time (SET) method is effective in improving student learning outcomes in sound material in class 4 SDN Kutasari 5. There is a significant difference between the average student learning outcomes in the experimental class taught by the SET method compared to the control class taught by the conventional method.

This research contributes to the development of more effective learning methods in improving student learning outcomes. Therefore, it is advisable to implement the SET method in learning in other schools with different learning materials to improve the quality of learning and student learning outcomes. However, this study has limitations in terms of sample size and limited time for conducting research. Therefore, it is advisable to conduct further research with a larger sample size and longer time so that the research results are more valid and generalizable. In implementing the SET learning method, teachers also need to be given training and development to improve skills in applying this learning method so that it is effective in improving student learning outcomes.

4. Conclusion and Suggestion

Conclusion: Based on the results of the study, it can be concluded that the use of the SET (Student Engaged Time) method in learning sound material in grade 4 SDN Kutasari 5 can improve student learning outcomes. This is evident from the increase in the average pretest to posttest scores and the results of observations on student learning activities while using the SET method.

Suggestion:

- 1 Teachers can continue to develop and create variations of learning activities that suit the characteristics of students so that they are more interesting and effective in facilitating understanding of the material.
- 2 Teachers can motivate students to be active and participate in every given learning activity by giving praise and positive feedback for student participation.
- 3 The teacher can pay attention to the readiness of students in understanding the material and assist if there are students who have difficulty understanding the material being taught.
- 4 It is better to conduct further research to identify the effectiveness of the SET method in learning other materials at different educational levels.

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