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Growing Interest in Learning Class IXa Students at Smp Negeri 7 Sukabumi Through Optimizing Practicum Learning in The Laboratory

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ABSTRACT

The aim of the research is to foster students' interest in learning in Class IX A of SMP Negeri 7 Sukabumi City through optimizing learning in the laboratory. This experimental research was carried out in class IX A of SMP Negeri 7 Sukabumi City in 2024/2025, consisting of 28 students, 15 male students and 13 female students. This research was carried out for 13 days from August 8-20, 2024. The research results proved that "Optimization of Practical Learning in the Laboratory can be achieved. "Growing Students' Interest in Learning", especially science subjects in class IX A of SMPN 7 Sukabumi City. Before the action, students' interest in learning was still categorized as low, from the results of the initial survey, students' interest in learning only reached 46.4%, with the criteria of 5 indicators of interest in learning, namely feelings of joy, interest, attention, participation, desire/awareness of science learning. After the action, interest in learning science in class IX A reached 64.8%.

INTRODUCTION

Science learning is one of the important lessons to study because it can improve the ability to develop science and technology and understanding of the universe which consists of many facts that have not been revealed so that the results of the discoveries can continue to develop into new knowledge and can be applied in everyday life day (Wugaje et al., 2023). Thus, science learning has a very important

role in progress in the field of Science and Technology (IPTEK) which has an influence on the world of education, especially science education in Indonesia. However, many students consider science learning to be a difficult subject, resulting in reduced student interest in participating in learning. In fact, one thing that influences a person's learning success is interest in learning. This was stated by Siagian (Rojabiyah and Setiawan 2015) who defined that interest is a feeling of liking or pleasure and interest that arises without anyone ordering something or an activity. . Meanwhile, according to Hala (Hotimah et al., 2021), interest in learning is basically one of the factors that can influence a person's learning outcomes. Because teachers and the educational environment should foster feelings of liking or enjoyment in students towards the learning atmosphere, to improve learning outcomes (Desi et al., 2023).

However, learning conditions that make students interested in learning, especially science lessons, have not been found at this school. The learning conditions here still emphasize learning in the classroom, where the teacher explains the subject matter in front of the class, occasionally the teacher gives demonstrations, students are asked to pay attention to what the teacher is doing in their respective seats. This way of learning turns out to make students bored and less interested in learning. Student boredom was discovered through interviews with several students, both students who frequently participated in learning and students who often did not participate in learning. Then the researcher distributed a questionnaire to determine students' interest in learning. From the questionnaire distributed, it was identified that students' interest in science learning was low or had not yet grown (Ismail et al., 2024).

In assessing student competency, we do not only assess cognitive aspects, but there are effective and psychomotor assessments. Psychomotor assessment is a physical activity to measure cognitive abilities (Shirran, 2008). This physical activity assessment can be seen with support from school facilities such as laboratories. Laboratories have an important role in the teaching and learning process. The concepts conveyed by teachers in class can be better understood by direct observation of natural phenomena through activities in the laboratory (Rochman et al., 2024). Activities that occur in the laboratory are practical. This practicum activity is usually accompanied by questions and answers between the teacher and the students doing the practicum. This practicum can detect whether students have misconceptions about the concepts that the teacher has taught in class (Suparno, 2005).

According to WJS Poerwadarminta, a laboratory is a place to conduct experiments (investigations, etc.) on everything related to physics, chemistry, and so on. Meanwhile, laboratory assistants are people (chemists and so on) who work in laboratories (Emha, et al, 2002). The laboratory is one of the facilities that must be provided by the education unit to support learning activities.

Practicum is one manifestation of scientific work in learning. Trisnawati (2011) stated that in order for practicum activities to run according to the desired objectives, adequate laboratory facilities and relevant teaching materials are needed, including in the form of practicum guidebooks. Practical instructions are needed so that practical activities can run smoothly, the main objectives can be achieved, they must contain work safety to minimize the risk of accidents that may occur and so on.

SMP Negeri 7 Sukabumi already has a science laboratory as a learning facility, but it has not been utilized optimally. The use of laboratories is not yet optimal due to several factors, including: 1) There is no professional LAB manager, 2) the teacher's ability to use the tools and materials available in the laboratory is still low, so that classroom learning is often done using the lecture method, 3) lack of understanding teachers regarding Laboratory Standard Operating Procedures, 4) the inventory of laboratory equipment and materials is chaotic, making it difficult for teachers to carry out practical work in the laboratory, 5) the LAB looks dirty because a lot of table chair powder has fallen, even though it has been swept, 5) the LAB feels hot because there is some windows that couldn't be opened. 6) many school inventory items are stored in the LAB so that the LAB looks like a warehouse.

Based on a survey of student learning styles, especially in class IX A, 72% of students in this class have a kinesthetic learning style. According to Yunsirno, the kinesthetic learning style is the type of learner who tends to be active. He must explore and optimize his physique. So he doesn't feel comfortable if he is asked to sit for a long time in class or just listen to lectures. Then it is explained that learning style is the key to success in developing performance in learning, this can be applied

in techniques for obtaining knowledge or information individually or even in the world of work.

It is with this background that researchers try to foster students' interest in learning through laboratory improvement activities and Optimizing Practical Learning in the Laboratory. That is, carrying out science learning in a practical way in the laboratory, with available tools and materials and a comfortable learning environment, so that learning is more interesting, concrete and experienced directly by students, not just watching the teacher do demonstrations.

By doing this activity, students can explore and optimize his physique. It is hoped that it can foster students' interest in learning. This has been proven by Santiana, Endah Peniatia, Ani Rusilowatia, in their research entitled "Use of Science Laboratory Practicum Strategies". Likewise, research conducted by Dwi Prasetyoningsih, Astuti Budi Lestari, Novi Ratna Dewi entitled "Increasing Interest in Learning Science Through Practicum Methods".

METHOD

This research is experimental research, namely research method carried out to find the effect of certain treatments on other variables under controlled conditions. The research aims to determine the effect of optimizing practical learning in the laboratory on interest in studying science subjects in class IX SMPN Sukabumi, West Java. The research period is 13 days starting from August 8 to August 20 2024.

Collection Techniques.

This research is qualitative research with three methods of collecting data, namely distributing pre- and post-action questionnaires, observing during the action, answering questions about the subject matter using a practical method.

Data analysis

Data analysis was conducted using a Likert scale with four answer choices: Strongly Agree (SS), Agree (S), Doubtful (R), and Disagree (TS). The data obtained were processed using Microsoft Excel after collecting a questionnaire regarding students' interest in learning science. Subsequently, the analysis focused on the students' learning interest data in science education, employing a scoring form to determine the learning interest scale using a modified Likert scale. Additionally, observations of practicum activities were made to assess students' enthusiasm for learning during science practicum sessions in the laboratory. This analysis utilized a scoring form with the criteria Very Enthusiastic, Enthusiastic, Less Enthusiastic, and Not Enthusiastic. Furthermore, student learning outcomes were evaluated by analyzing students' answers to the provided questions, using a scoring form with a passing criterion of 77 and above, indicating that students had met the Kriteria Ketuntasan Minimal (KKM), while scores below 77 indicated failure to meet the KKM.

RESULTS AND DISCUSSIONS

This research was carried out in 5 meetings by providing science lesson material which included practical material, namely Induction Electrical Motion Forces, Electrical Circuits, Measuring Objects, Optics, Newton's Force Experiments using balloons. The implementation stages in this research include: planning, implementing actions, observing and reflecting.

The data obtained in this research shows an increase in students' interest in learning science. The first indicator of interest in learning, namely the aspect of feeling happy during pre-action, was 48.7%, which was classified as moderate. Then after taking action, namely carrying out learning in the science lab using complete equipment, each group experienced an increase to 77.33% there is an increase of 28.63%.

The second indicator of interest in learning is students' interest in pre-action at 43.83%. Then action was taken using practicum learning in the Science LAB to increase to 58.00%, there was an increase of 14.17%.

The third indicator of learning interest is students' attention to pre-action at 45.33%. Then action was taken using practical learning in the Science LAB, increasing to 61.00%, an increase of 15.67%. The fourth indicator of interest in learning, namely the indicator of student participation in science learning in pre-action, was 47.67%. Then action was taken using practical learning in the Science LAB, increasing to 71.83%, an increase of 24.16%. The fifth indicator of interest in learning, namely the indicator of students' desire to take part in science learning in pre-action, was 46.50%. Then action was taken using practical learning in the Science LAB, increasing to 61.00%, an increase of 14.50%. For more details, the comparison of students' learning interest before and after the action is in the table 1.

Table 1. Percentage of pre-action and post-action student interest in learning indicators

Indicator	Action	
	Before	After
Feelings Indicator	48.47%	77.33%
Indicator of Attraction	43.83%	58.00%
Attention Indicator	45.33%	61.00%
Participation Indicators	47.67%	71.83%
Desire/Awareness Indicator	46.50%	61%
Average	46.4%	64.8%

This learning interest questionnaire was given using Google Form, which consists of 25 statement items with data collected using a non-test instrument in the form of a questionnaire sheet. then analyzed based on Likert scale scoring, from the results of diagnostic tests carried out before the action, the data obtained are obtained as shown in table 1.

Based on the table, there was an increase in students' interest in learning from several indicators before the action and after the action there was an increase. We can also see this interest in learning in the figure 1.

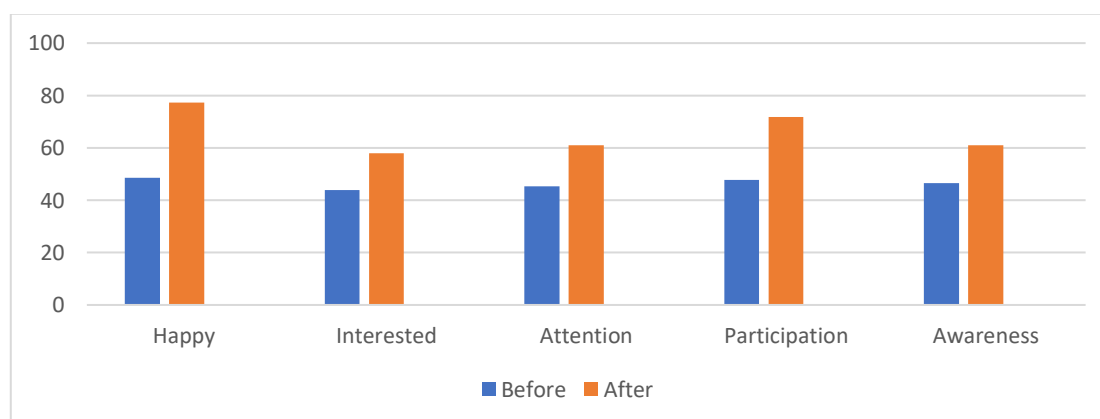


Fig 1. Graph of the Percentage of Student Interest in Learning

Based on the data in the graph of Student Learning Interest between before the action and after this action, it can be seen that each indicator has increased. For the indicator of feelings of enjoyment in learning science, before the action 0% percent after the action became 77.33%, there was an increase of 77.33 points. According to Djamarah (Sucipto and Firmansyah 2021) interest is shown by a feeling of liking something. The indicator of interest in science lessons before the action was 43.83%, after the action it became 58.00%, there was an increase of 14.17 points. Flora (Manalu et al., 2019) is of the opinion that student interest in learning is a feeling of interest and liking for something being studied

that arises from oneself. The indicator of attention to science lessons which was previously 45.33% after action became 61%, there was an increase 15.67 pounds. The previous participation indicator was 0% after the action became 71.81% there was an increase of 71.81 pounds. Based on the opinion expressed by Dalyono (Sucipto and Firmansyah 2021) whether students are interested in learning in a lesson can be seen from how students follow or participate in the lesson, whether their notes are complete or not, and whether they pay attention or not in the lesson. The desire indicator before the action was 46.50% after the action was 61.00%, there was an increase of 14.5 points. According to Purwanto (Sucipto and Firmansyah 2021) someone who has an interest has the urge or desire to do something actively and better.

To see the high and low levels of student interest in learning science after taking action, it can also be explained in the figure 2.

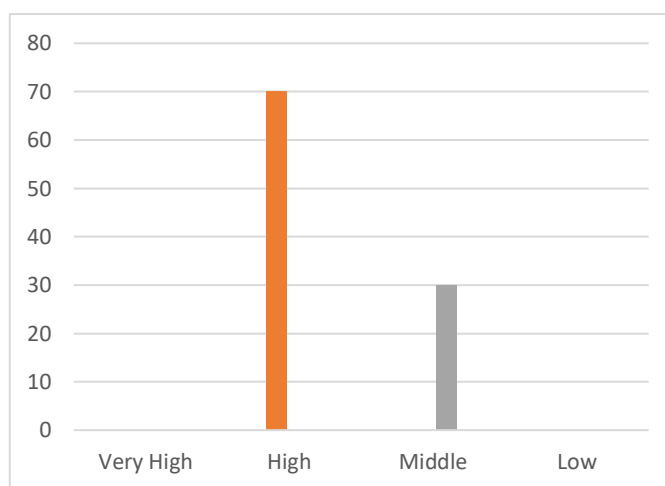


Fig 2. Graph of student learning interest after the action

The graph shows that the number of students who obtained a score between 64-82 was 19 out of a total of 28 students (70% of students who had a high interest in learning). There were 9 students who obtained a score between 45-62 out of a total of 28 students (30% of students who had moderate interest in learning).

Observation Results During Learning

Apart from using a questionnaire to see students' interest in learning, researchers used observation sheets during learning. This observation sheet is used to see students' enthusiasm for practical learning in the school laboratory. From the results of these observations, the results obtained are shown in the figure 3.

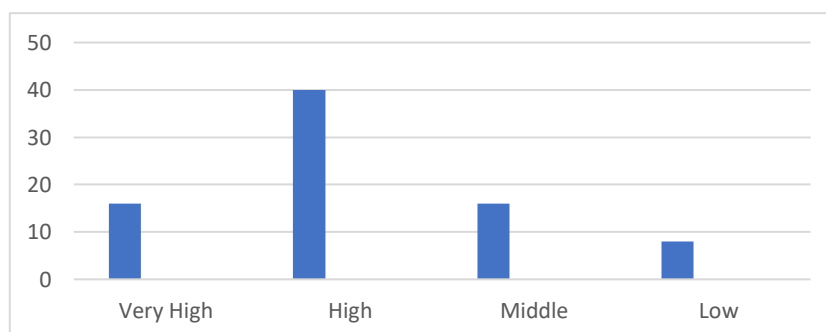


Fig 3. Graph of Student Enthusiasm for Learning

From the figure 3, it can be seen that 16% of students have very high enthusiasm for learning, 40% are high, 16% are moderate, and 8% are still low.

Student learning outcomes

Student learning outcomes are obtained by giving questions related to practical material, namely about Induction EMF, Electrical Circuits, Measurement, Optics, Newton's Law Experiments. The questions are in the form of 6 item descriptions. The data is processed by giving a score of 1-6, then converted into learning outcome scores. We can see the results in the figure 4.

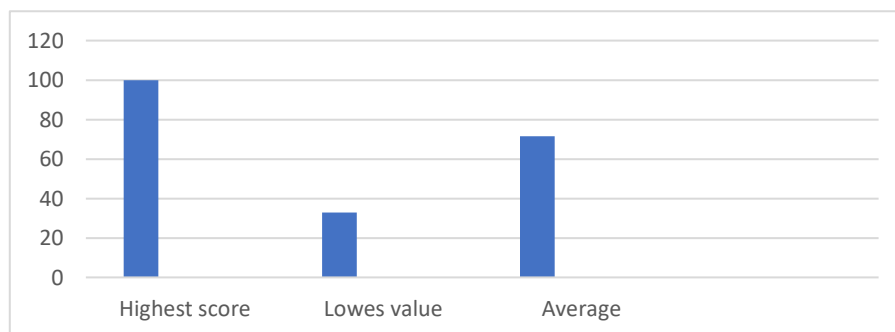


Fig 4. Graph of Student Learning Results

From the figure 4, it can be explained that there were 2 students who got a score of 100, 2 people got a score of 33, while there were 24 students who got a score between 33 and 99.

In this research, the observation sheet was used to strengthen the questionnaire only, it turns out that the information received through the questionnaire can be strengthened by the observation sheet and student achievement scores. Based on the results of analysis of research data that has been carried out at SMP Negeri 7 Sukabumi City, it can be concluded that implementing learning optimization in the science laboratory can foster interest in learning in class IXA students. Through learning activities in pre-action it was 46.4% and after action it was 64.83%.

CONCLUSION AND SUGGESTION

In accordance with the general and specific objectives of this research, and based on the data processing and analysis from the conducted study, it can be concluded that practical learning in the laboratory is effectively applicable at SMP Negeri 7 Sukabumi. Specifically, this research provides valuable insights regarding the effectiveness indicators for the 2022/2023 academic year at SMP Negeri 7 Sukabumi. First, optimizing practicum learning in the laboratory has successfully fostered students' interest in learning in Class IX A, as evidenced by their engagement in four practicums in the science laboratory, where students expressed feelings of pleasure, interest, attention, and a strong desire or awareness towards both the learning topics and the scientific attitudes encouraged during the practicum. Additionally, optimizing practical learning in the laboratory is identified as a key strategy to enhance students' interest in learning in Class IX A at SMP Negeri 7 Sukabumi.

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