Students' Understanding of Interest in Learning Science

Liao Ho¹, Ismawan Prasetia Devi²

¹Middle School Qiau, China ²SMA 5 Tebo, Jambi, Indonesia

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ABSTRACT

Purpose of the study: Describe the trend of shifting student interest in learning science in middle school.

Methodology: This study uses descriptive qualitative and descriptive inquiry approaches in analyzing new trends of student interest in learning science in middle school.

Main Findings: The findings can be concluded that the shift in interest is influenced by technology.

Novelty/Originality of this study: The novelty of this research interest in learning science has changed dramatically with the ease of internet access.

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Corresponding Author:

Ismawan Prasetya Devi, SMA 5 Tebo, Tebo, Jambi, Indonesia Email: mawanbruno@gmail.com

1. INTRODUCTION

Education is important to continue to be improved in order to compete in the global era. The education world is currently trying to improve its quality from various perspectives. Challenges from time to time continue to increase and are more complicated and challenging [1]. Changes that occur due to the rapid development of science and technology have brought changes in almost all aspects of human life, and this has brought people into an era of increasingly fierce global competition. This problem is a challenge both for teachers, lecturers, or anyone related to the world of education and dealing with students.

The influence of students in learning becomes a benchmark for educational success. One of them is student interest in learning [2]. Interest in learning is very influential on educational success because students who are interested in the subject matter will have the enthusiasm and a strong desire to be able to master the subject matter. Interest is very influential on a person [3]. With the interest, someone will do something that would produce something for that person [4]. Thus the effort to increase interest is very important so that what we expect in learning can be achieved.

Another factor for making optimal student learning outcomes is the learning process, be it strategies, approaches, methods, techniques, and models. Several kinds of ways that are carried out in the learning process can improve learning outcomes and also students' interest in learning [5]. Science lessons are considered difficult because there are many concepts that require high-level thinking. To understand science students are required to have a stronger abstract thought power, also have the ability to understand images, tables, graphics, and relationships between concepts. In this 21st century, the ability to learn, think creatively, make decisions, and solve problems is very necessary for getting a job, so science education or science should be able to help students to develop understanding and thinking habits, so students have the ability to ensure their survival [6,7,8].

Efforts to improve the ability of science can not be separated from efforts to increase student interest in learning science [9]. When students feel they have an interest in learning something, it will add motivation and enthusiasm in learning it, thus the learning outcomes will increase interest will influence the lingering tendency in the subject to feel attracted to the field of study. In addition, student interest in learning is influenced by three aspects, among others: student attention during the teaching and learning process takes place, students' pleasure, and student curiosity [10]. These three factors are internal factors that are included in the psychological aspects that influence the success of student learning processes [11]. The teacher who successfully fosters students 'willingness to learn means that he has done the most important thing that can be done in the interests of the students' learning [12]. Because interest is not something that exists just like that but something that can be learned.

From the explanation above, we see the importance of interest in order to improve the quality of students' scientific abilities. So it is important to create student interest in science. From this problem, it is necessary to find a solution to solve it. However, in this study, the researchers wanted to know the shift in student interest in science lessons in middle school. This research will create a new trend in increasing students' interest in learning science.

2. RESEARCH METHOD

The research method used is descriptive qualitative and descriptive inquiry methods in analyzing student interest trends in learning science [13]. While the instruments used were interview guide sheets and learning outcomes every semester. Interviews were conducted to find out the opinions of science teachers [14]. Learning outcomes to strengthen the teacher's opinion from the results of the interview [15]. Data and interview results are matched to see changes in student interest each semester from student learning outcomes each semester in the last 3 years. Analysis of the findings follows the chart in figure 1.

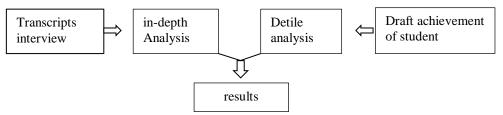


Figure 1. Analysis data procedure

3. RESULTS AND ANALYSIS

The results of the study in the form of interviews and conclusions readings of student learning outcomes data. Interview results can be briefly described in table 1, while student learning outcomes can be used as reinforcing data in a descriptive form.

Table 1. Result of interview

Discussion of learning interest in science	Resume
Students currently grade 10 grades	Students tend to like demonstrations. Students will
, ,	be more interested in learning science if students
	are given demonstrations or impressions through
	layers of science.
Current students grade 9	Students tend to like action. Students tend to like or
	are interested in learning science if the teacher
	provides a project or practicum to students.
Current students grade 8	Students tend to discover. Students are interested in
	learning discovery; students will provide good
	feedback if the teacher guides students for
	observation.
Current students grade 7	Students tend to be cooperative. Students tend to be
	cooperative and collaborative.

From the results of interviews with science teachers grad 7 who has been undergoing for about 9 years. The teacher tells and describes the experience of teaching science from time to time. From the findings

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of the interview, the researchers found that the average student interest in science was good, according to the teacher this can be seen from their enthusiasm when learning took place. The enthusiasm was seen that the average student always came on time and was also seen from his good attendance. Students are also interested in learning science, among them, there are those who like to ask questions related to science subject matter. Even according to the science teacher some students often ask before the science material is finished being explained by the teacher.

The interview with the teacher turned out to be interested in science. The teacher revealed that they did not understand much of the material learned in science, but students were very enthusiastic, especially students who are currently in grade 8. When researchers ask if your students know why they should study science, the teacher responds that on average students do not understand why they must study science. They don't understand what is the use of studying science and what they can do after learning science. But their answers changed after creating a new learning approach, for example, based on discovery [16,17]. As a result, they understand the importance of studying science. they know the benefits of studying science and can name what work they can do after studying science. To find out the interests of students, namely feeling happy, student interest, student attention, and student involvement.

After learning science is associated with practicum it turns out students' interest is increasing for students who are currently in grade 9. Interest in learning science in children does not just appear but through a long process and stages of change that appear regularly and continuously [18,19]. Some experts say that interest is a feeling of preference and an interest in an activity or an activity that is indicated by the desire or tendency to pay attention to the activity without anyone asking, carried out with awareness, and followed by a sense of pleasure [20]. An interest in learning science is a strong desire accompanied by one's efforts to find out more about science. Someone who has a strong interest in learning will be manifested in his willingness to get reading material and then read it out of self-awareness [21]. From the above understanding, it can be concluded that the interest in reading is a sense of preferability and a sense of more interest in the activities of meaningful interpretation of science as indicated by the desire, a tendency to pay attention to these activities without being ordered or carried out with his awareness, followed by a sense of pleasure and the presence one's efforts to read are done because of the motivation from within [22].

Students who have a strong interest in science will be manifested in their willingness to get reading material and then read it on their own consciousness so that the right meaning is obtained towards a measurable understanding [23]. Interest is very important for human life [24,25], students not only increase self-knowledge but also change their future. However, middle school students have not made science a habit. That is because they have not made reading a necessity or culture. Student interest is not present by itself but there are several factors that influence scientific interest.

1. Internal Factors

Internal factors are genetic factors passed down from parents to their children. If both parents like to read science it will be possible that the trait will decrease in their children. If the child already has a sense of pleasure to read, it means he already has an awareness of the importance of reading science books.

Gender. Differences in scientific interest are also influenced by gender differences. Maybe because of nature, then men and women have different interests and tastes.

Level of education. People with higher levels of education will have different interests in science from people with lower levels of education. Different interests are caused by differences in abilities and needs.

State of health. Interest in reading a person's science will be influenced by the state of his health. If a student has an interest in reading books, but he is in an unhealthy condition, his passion for reading science will be disrupted, even his interest in reading can be lost. Conversely, if the person/child is in a healthy condition then he is very eager to read science.

Habit. students who have a habit/fondness of reading science certainly have an interest in books/readings, or conversely people who have a great interest in reading because they already have the habit and are fond of reading science. The intensity/amount of time required for someone who likes to read science to someone who doesn't like to read science will be different.

2. External factors

Source of knowledge. The diversity of sources of knowledge also influences scientific interest. Students will feel more attracted to something if there is an interesting source of knowledge.

Student needs. A student will be interested in science if it attracts students' attention.

Student environmental factors. The family environment that has habits and hobbies in science will provide a major influence on scientific interest.

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From the explanation above, it can be concluded that students' interest can be formed due to factors that influence it. These factors can come from within and external factors. But in this case, only 5 (five) aspects were taken to find out the interests of science.

4. CONCLUSION

Looking at the results of the study it can be concluded that students' scientific interest can be influenced by the way teachers teach. Changes in student interest in science have tended to shift to group work and are based online. Shifting the trend of all students studying independently, for now, is more cooperative. This research is highly recommended for teachers to use cooperative and online-based learning.

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