Analysis of students’ learning interest in biology subject at SMAN 1 Panai Hulu in the independent curriculum era

Anggi Pradana, Risma Delima Harahap *, Sakinah Ubudiyah Siregar

Study Program of Biology Education, Faculty of Teacher Training and Education, Universitas Labuhanbatu, Rantauprapat, North Sumatera, Indonesia

*Corresponding Author Email: rismadelimharahap@gmail.com

Abstract

Interest greatly determines student learning outcomes both academically and non-academically. Students’ interest in learning decreased due to factors in learning methods that were less memorable and learning media factors that were less attractive. This study aims to describe the learning interest of class XI students at SMAN 1 Panai Hulu in biology subject. Subjects in the study were students XI IPA1, XI IPA2 and XI IPA3, with a total of 105 people. This type of research is a qualitative descriptive research. Data collection techniques using questionnaires, observation, and interviews. The results of research that has been carried out with four indicators are obtained, namely the feeling of pleasure of students in participating in learning by 75.77%, student attention to learning by 70.78%, student interest in learning by 74.04%, student involvement in learning by 73.91 %. Based on these results, it can be concluded that students’ interest in learning biology in class XI IPA1, XI IPA2 and XI IPA3 at SMAN 1 Panai Hulu is high. Even though students’ learning interest is high, student activity is still influenced by the completeness of learning media.

Abstrak

Minat sangat menentukan hasil belajar siswa baik secara akademik maupun non akademik. Minat belajar siswa menurun dikarenakan faktor cara belajar yang kurang berkesan dan faktor media pembelajaran yang kurang menarik. Penelitian ini bertujuan untuk mendeskripsikan minat belajar siswa kelas XI di SMAN 1 Panai Hulu pada mata pelajaran biologi. Subjek dalam penelitian adalah siswa XI IPA1, XI IPA2 dan XI IPA3, dengan total sebanyak 105 orang. Jenis penelitian ini adalah penelitian deskriptif kualitatif. Teknik pengumpulan data menggunakan lembar angket, observasi, dan wawancara. Hasil penelitian yang telah dilakukan dengan empat indikator didapatkan yaitu perasaan senang siswa dalam mengikuti pembelajaran sebesar 75,77%, perhatian siswa terhadap pembelajaran sebesar 70,78%, ketertarikan siswa terhadap pembelajaran sebesar 74,04%, keterlibatan siswa terhadap pembelajaran sebesar 73,91 %. Berdasarkan hasil tersebut dapat disimpulkan minat belajar siswa kelas XI IPA1, XI IPA2 dan XI IPA3 di SMAN 1 Panai Hulu terhadap pembelajaran biologi adalah sangat tinggi. Meskipun minat belajar peserta didik tinggi, keaktifan peserta didik masih dipengaruhi oleh kelengkapan media pembelajaran.
A. Introduction

Education is the process of changing attitudes and behavior of individuals or groups with the aim of human maturity through education and training. Education includes conscious and planned efforts carried out by individuals to create an effective learning process with the aim of educating students to develop their potential (Cahyani et al., 2020). Education which means production and creation, creation is limited in games, but is greatly influenced by many factors, one of which is the child's interest in learning. Education in Indonesia is still classified as not good, and not optimal, especially in Biology Subjects. For example, the intended learning outcomes are not only aspects of the ability to understand biology or cognitive science, but also aspects of attitudes towards biology. An indication of the low level of education in biology in Indonesia can be seen from the average score of the National Final Examination (UN) at the senior high school (SMA) level, which has a relatively low score (Supardi et al., 2015)

Quality education is the basis for improving people's lives and sustainable development (Irmita et al., 2022). The success of the teaching and learning process can be seen from various factors, including student learning interest. High interest in learning affects student achievement at school (Ratnasari, 2017). The four learning interests that students have, namely 1) Attention, with the attention of educators, students can be supported and motivated, 2) feelings of pleasure or displeasure, this is an expression that is expressed by students when they feel excited or feel dissatisfied with something, 3) awareness, according to KBBI, awareness is what a person feels or experiences, 4) will, is a will that is desired by students (Azizah et al., 2022).

Each student has a different view of biology lessons. Some view biology as a fun subject and some as a difficult subject. Broadly speaking, biology comes from the Greek, namely from the words bios and logos. Bios mean "life" and logos mean "science" or learning about something. So, biology is the science that studies about living things and the problems that concern their lives. Biology is the science of life and living organisms from the past to future predictions, both in terms of structure, function, taxonomy, growth and development. According to Yohana et al. (2022) biology is a science that studies living things and the processes in their lives. Biology also studies all living things, not only plants and animals that live on this earth, but plants and animals that lived in the past and even in other places where life might have existed.

The 4.0 era was marked by extraordinary developments in both technology and industry, changing many things in life. The Corona outbreak in 2019 has also changed various aspects of human life, especially in the world of education. Changes in the way of learning and curriculum directly through his speech on the commemoration of National Teacher's Day (HGN), namely the Minister of Education and Culture Mr. Nadiem Anwar Makarim sparked the concept of "Free Learning Education" or Free Learning Curriculum. The independent curriculum is a curriculum with a variety of intra-curricular learning so that students are more optimal and have concepts and strengthen their competence, and also teachers have the flexibility to choose the right and appropriate materials for their students based on the learning needs and interests of each student. In this independent curriculum it also strengthens the achievement of student profiles which are developed according to the themes set by the government (Jannah et al., 2022).

The concept of an independent learning curriculum is inseparable from the role of the teacher who is the main character in learning who has the task of educating, guiding, training and developing various aspects contained in students. The application of the curriculum should be able to create a conducive learning atmosphere, namely having fun, interesting elements, giving a sense of security, being active, creative and innovative in exploring the abilities of students so that they are able to achieve learning goals (Alfath et al., 2022). The teacher's role in the curriculum concept is as a learning facilitator where this can be supported by knowledge competence, skills, and basic values whose reflections in the ability to think and act are included in professional, pedagogic, personality, and social competencies.

In biology lessons in the era of independent curriculum learning makes students more free and active in learning. According to Fahira et al. (2022), an independent learner is someone who directs the goals, methods, and assessment of learning and is marked by the acquisition of skills and personalization. In biology subjects at Senior High School (SMA), students organize their knowledge, ideas and concepts about the natural environment, and are understood to gain experience through a series of scientific processes such as research, organization and presentation. In contrast to the old curriculum which used basic competence (KD), the independent curriculum used the term learning achievement (CP). The curriculum structure in SMA is divided into two phases, namely phase E for class...
X and phase F for class XI and XII. In phase F for class XI, XI the subject structure is divided into five namely, general subjects, MIPA, social studies, language and culture, and vocational and crafts. In addition, learning activities at this education level are also divided into two, namely curricular learning and projects to strengthen the profile of Pancasila students with a time allocation of 30% of the total time allocation per year.

A teacher must be able to have the right teaching and learning strategy so that the learning process can run well, one of which is the selection and use of discussion learning methods in the learning process (Prihatini, 2017). Interest in learning also affects student learning performance, when students are interested, they clearly pay attention and always want to learn more about Biology, so that their Biology subject scores are much better than children who do not have Biology subjects (Ratnasari, 2017). Students’ interest in learning is difficult to walk if the teacher does not motivate students. According to learning motivation Hidayati et al. (2022) in learning it is very necessary so that students can grow and develop their thinking as a whole during the learning process. If students are motivated they will feel valued and will go beyond what the teacher asks them to do.

Interests play a very important role in students’ lives and have a great influence on attitudes and behavior. Students who are interested in learning activities will try more than just in the form of activities, students work and experience what they learn well because it is not interesting for them. Students will be lazy to study and the environment will not study material that interests students, they will be more satisfied with the lesson (Ratnasari, 2017). Interest can be interpreted as special attention. Students who are interested in a subject, their attention will be high and their interest will function as a strong incentive to be actively involved in teaching and learning activities (Muliani & Arusman, 2022).

Judging from the interest in learning, there are still students who have a fundamentally low interest in learning. This can be seen by the presence of participants who are not active in learning and do not pay attention to the teacher’s explanation, and so on. This shows that students’ interest in learning is still low. The above should be the concern of the teacher and encourage the search for learning methods that are considered appropriate in delivering the material so that the teaching and learning process runs effectively so that the delivery of material can be well absorbed by students (Wijoyo, 2020).

The learning problems above were experienced by SMAN 1 Panai Hulu. The location of the school which is quite far from urban areas is one of the problems that teachers feel in using learning methods so that it causes students to feel bored, sleepy in learning, not paying attention to the teacher when explaining, doing things that are not related to the lesson, and a lack of interest in learning in the biology lesson.

State Senior High School 1 Panai Hulu, has a total of 740 students spread across 15 classes. State SMA 1 Panai Hulu has a total of 32 teachers who teach all subjects, including Biology. Biology is a subject that must be studied, especially in class XI IPA1, XI IPA2 and XI IPA3 with a total of 105 students, consisting of 35 students in class XI IPA1, 35 students in class XI IPA2 and 35 students in class XI IPA3. Interest in learning is a very important factor in the success of learning. Interest in learning can make a student gain knowledge and achieve an understanding of his knowledge at school so that interest in learning is a very important factor in the success of this learning has been proven by several researchers. Based on research Dalimunthe et al. (2021) that learning with an environmental approach increases student interest in learning. This is shown by the students really like natural activity material and what is around them. The results of the analysis show that biology learning resources have an effect on students’ learning interest. Furthermore, research conducted by Sihombing et al. (2021) apart from motivational material greatly influences interest in learning. It is shown that motivation can be understood as a driving force from passive to active and appears with the aim of achieving what is desired. It can be concluded that students’ interest in learning and motivation are needed in a lesson to be able to attract students’ interest in learning, especially in learning Biology. Therefore according to Wiradarma et al. (2021), to improve student learning outcomes requires an interest in learning accompanied by student motivation which determines the achievement of learning objectives.

Some of the teacher’s tasks are to be able to foster student learning interest in order to achieve the desired learning outcomes, especially in Biology subjects. Teachers must be more creative and innovative in creating a fun and interesting learning environment, so that students can easily understand the lessons conveyed by the teacher (Fitriani et al., 2022). Therefore, the purpose of this study was to analyze students’ interest in learning biology at SMAN 1 Panai Hulu in the independent learning curriculum.
B. Material and Method
The method used in this research is to use qualitative. This research was conducted from November 2022 to January 2023. The subjects of this study were students of SMAN 12 Panai Hulu. The research location is Panai Hulu 1 Public High School, Tanjung Sarang Elang Village, Panai Hulu District, at Labuhanbatu Regency of North Sumatra. Data collection techniques in this study used data collection techniques from various existing sources, in this study researchers used interview data, questionnaires as well as observation and documentation. The sample in this study were students in class XI IPA1, XI IPA2 and XI IPA3 with a total of 105 students consisting of class XI IPA1 with a total of 35 students, class XI IPA2 with a total of 35 students, and class XI IPA3 with a total of 35 students. The data analysis method in this study used a questionnaire in the form of a survey which was distributed directly to class XI students. The survey research model is used to determine students’ interest in learning biology with statements given to respondents so that they are answered according to the attitudes and characteristics of students (Wijoyo, 2020). The questionnaire component includes statements consisting of 20 statements from 4 indicators regarding students' learning interest in biology lessons. Questionnaire results data were analyzed descriptively based on categorization results of percentage calculations. The range of students’ learning interest categories is 0-25% = very low; 26-50% = low; 51-75% = height; and 76-100% = very high. Interviews were conducted with students of SMAN 1 Panai Hulu to strengthen the researcher's data. As for the interview data is the perception or response of students regarding biology subjects were analyzed descriptively.

C. Results and Discussion
The results of the analysis of students’ learning interest in biology subject at SMAN 1 Panai Hulu in the independent learning curriculum can be seen in Table 1. The indicator of students’ feelings of pleasure in participating in learning is 75.77%, with learning outcomes categorized as very high. Where from feeling happy is a very important factor to support student activities. Students in biology classes XI IPA1, XI IPA2 and XI IPA3 are included in the student categories who are interested in participating in learning natural sciences at school. According to Andira et al. (2022), students’ feelings of pleasure towards subjects can be used as a determinant to determine the level of achievement of competency in student learning outcomes. Addition, Ernawati et al. (2022) state that feelings of pleasure are an indicator of student learning interest that has a positive effect on student learning outcomes and the interest category indicates that most students have feelings of pleasure.

The indicator of students’ attention to learning is 70.78%, with a high category in students’ attention to Biology subjects. This is one of the physical factors that have salient characteristics, both from within and from outside the individual during the learning process. The results of the data show that the use of learning methods can improve students' listening during the learning process. This is in line with Harris et al. (2020); Pradani (2022) proving that using appropriate methods can increase students’ seriousness in learning and active students in learning. This is a way for educators to achieve students in biology learning.

Then for the indicator of student interest in learning 74.04%, this shows that student interest in the lesson is student interest in learning with a high category, this is evidenced by the interest of students when taking Biology lessons with learning methods that make them interested in learning, namely by how to practicum in accordance with the theme of the lesson, with the existence of learning materials that attract students, it will be often studied by students. The teacher is also an object that can stimulate student learning interest. Therefore, in the learning process the teacher must be sensitive to the classroom situation, he must know and pay attention to teaching methods that are suitable and appropriate to generate students’ interest in the lesson. According to Irwandi & Fajeriadi (2019); Wiradarma et al. (2021); Inganah et al. (2023) interesting learning materials will generate students’ interest in taking lessons.

Furthermore, the indicator of student involvement in learning is 73.91%, this shows that student involvement during biology learning is categorized as high, there are discussions between students and teachers regarding the material, students are active in asking questions in lessons they do not understand. But most of them do not experience material lagging behind. According to Amini et al. (2021), students need to be actively involved in biology learning activities. In line with Nasution et al. (2022), this is done by keeping students engaged, attracting their attention, being involved in doing something enthusiastically for a long time, easily concentrating, remembering easily, and not easily getting bored with what they have learned.

Based on the results of the interviews in Table 2 on question 1, it is known that students’
attitudes towards learning biology are very easy, the concepts of learning biology are very diverse so that it makes them interested in taking the lesson. Panggabean et al. (2021) state that biology learning activities that are full of thoughts can be a means to improve the quality of human resources in Indonesia, especially in terms of increasing thinking skills. Juanda et al. (2021) adds biology education also helps a person develop habits of understanding and thinking, and enables students to master many life skills. Aswita et al. (2018) state the existence of natural science can generate curiosity about the state of the natural environment, participate in the protection, care, processing and preservation of nature, and provide insight into natural concepts in the development of science and technology. The most important Windyariani (2017); Agustin et al. (2021) state the concepts in biology are very useful and can be applied in everyday life. According to Sakila et al. (2023) the application of natural knowledge in everyday life includes making medicine, making soap, making table salt, preserving food, extinguishing fires, and processing food.

Based on the researcher’s direct experience in this research process, there are several limitations experienced and there are several factors that may be of concern to future researchers to complement and perfect further research. The limitations of this research are: 1) the number of respondents is only 95 people, of course there are still not many to describe the real situation, 2) the time available to complete this research is relatively short, and 3) there are respondents who do not understand the questionnaire so that the data is less accurate.

Table 1 Student Learning Interest Questionnaire Data

<table>
<thead>
<tr>
<th>No.</th>
<th>Indicators of Student Learning Interest</th>
<th>Percentage</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The feeling of pleasure of students in participating in learning</td>
<td>75.77%</td>
<td>Very high</td>
</tr>
<tr>
<td>2</td>
<td>Student attention to learning</td>
<td>70.78%</td>
<td>High</td>
</tr>
<tr>
<td>3</td>
<td>Student interest in learning</td>
<td>74.04%</td>
<td>High</td>
</tr>
<tr>
<td>4</td>
<td>Student involvement in learning</td>
<td>73.91%</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td><strong>Average</strong></td>
<td><strong>73.63%</strong></td>
<td><strong>High</strong></td>
</tr>
</tbody>
</table>

Table 2 Interview Results with Students

<table>
<thead>
<tr>
<th>Questions</th>
<th>Students Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What do you think about learning science, is it difficult?</td>
<td>Based on the results of interviews with informants: &quot;it's not difficult, because learning science is interesting, fun, and fun related to nature, such as animals, plants, the solar system and the environment.&quot;</td>
</tr>
<tr>
<td>2. When learning science, do you use learning media?</td>
<td>Based on the results of interviews with informants: &quot;Yes, there is, but not every time we study we always use learning media, in fact we prefer learning science using learning media, so we understand more easily and don’t feel bored while learning.&quot; This is certainly one of the factors in learning interest. The existence of learning media is very influential on students' interest in learning.</td>
</tr>
<tr>
<td>3. In learning science, what can you apply in everyday life</td>
<td>Based on the results of interviews with informants: &quot;We can apply a lot in our daily lives after we studied Biology lessons, we became aware of the occurrence of day and night, why leaves are green, photosynthesis, and more importantly we love the environment by disposing of garbage in place, not cutting down trees carelessly and preserving nature such as plants and so on.</td>
</tr>
<tr>
<td>4. Are there any difficulties or obstacles in learning science?</td>
<td>Based on the results of interviews with informants: &quot;We feel that we have no difficulty in learning Biology, even though there are things we don't understand, usually we will ask the teachers who teach in our class, but if only we studied more often using learning media, let alone using teaching aids, or videos, we It will be faster to understand the lessons given. This is proven by the limitations in SMAN 1 Panai Hulu regarding learning media. Subject teachers who teach Biology Lessons usually only use makeshift learning media, the teacher will prepare learning media according to the theme of the lesson, later students will help prepare media from home and bring it to school.</td>
</tr>
</tbody>
</table>

D. Conclusion

The conclusion is that students’ interest in biology subjects in the implementation of the learning process is high. Based on the research conducted, it can be concluded that interest in learning is in line with the learning process in biology subjects. According to them learning biology is fun and makes their curiosity higher about themselves and their surroundings. But in this case the limitations of learning media make students less active in learning. This is the task for educators to play a role in the teaching and learning process. Students’
learning interest determines their success in the teaching and learning process.

E. Acknowledgement
I thank Allah SWT who has made it easy for me to complete this article. I also thank my parents, supervisors who have helped me in completing this thesis and thanks to the Faculty of Biology, Labuhanbatu University, for supporting this article.

F. References


biology teachers’ tpack to conduct learning during the covid-19 outbreak. *Jurnal Pendidikan IPA Indonesia*, 10(1), 48-59. DOI: https://doi.org/10.15294/jpii.v10i1.26499


