



Identifikasi Minat Belajar Siswa Pada Pembelajaran Biologi Kelas X SMK ISLAM AL Azhar

Identification of learning interests in biology learning in class X of SMK ISLAM AL AZHAR

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ABSTRACT. Education plays a crucial role in shaping human development and serves as the foundation for every citizen's right to quality learning. Within the educational process, learning activities are central, and students' interest in learning strongly influences academic success. This study aims to identify and measure students' interest in learning biology at *SMK Islam Al Azhar*. The research was initiated in response to teachers' concerns about the difficulty of assessing students' learning interests, which affects the effectiveness of classroom instruction. A qualitative approach was adopted using three primary techniques: observation, interviews, and questionnaires. Participatory observations were conducted during lessons, followed by teacher interviews to validate the findings. Questionnaires based on established indicators of learning interest were then distributed to students. The results showed that the average questionnaire score among 20 active students was **72%**, indicating a **moderate level of learning interest**. These results were supported by the data obtained from interviews and observations. Overall, the findings suggest that Grade X students at *SMK Islam Al Azhar* exhibit a moderate level of interest in biology, highlighting the need for innovative teaching strategies to enhance student motivation and engagement in science learning.

INTRODUCTION

Education is a crucial element for the development of a nation and an essential right for every citizen [1]. It represents a continuous process of national and societal development through which educated individuals contribute to the advancement of their country. Education aims to improve the quality of life while fostering the acquisition and internalization of skills [2]. Through equitable and high-quality education, every individual has the opportunity to optimally develop their potential. Therefore, education plays a vital role in cultivating a generation that is competitive, ethical, and capable of contributing meaningfully to society [3].

The Indonesian government strongly emphasizes education for all citizens, as mandated by Article 31 of the 1945 Constitution, which guarantees every Indonesian the right to education regardless of ethnicity, religion, or race [4]. One of the most important aspects of education is the learning process. Participation in learning activities at school is a responsibility that cannot be neglected by students, as it serves as the core of the educational process [5].

Learning is a flexible process that can occur in various contexts and environments [6]. Learning interest plays a significant role in shaping students' academic performance and activeness [7]. However, some students still demonstrate a lack of awareness and motivation toward learning, which negatively affects their engagement and achievement [8]. Several factors contribute to low learning interest, one of which is variability in students' ability to comprehend information [9].

Education serves as preparation for future life and has existed since the earliest human civilizations, albeit in simpler forms. Although people may not have been aware of it at the time, those early activities already represented educational processes. Fundamentally, learning forms the foundation of education. It is an essential human activity that allows individuals to acquire new knowledge and adapt to changing circumstances [10].

The teaching and learning process involves both students as subjects and objects of education. Learning can only be meaningful if students actively engage in both physical and mental activities to achieve educational goals. Without mental engagement, learning does not result in meaningful internal change [11].

Interest is defined as a strong sense of attraction and preference toward an activity, without external compulsion. It reflects a positive relationship between the individual and the object of interest; the stronger this relationship,



the greater the interest. Field observations indicate that biology learning in schools often relies on conventional methods such as lectures and question-and-answer sessions, which are less effective in fostering students' learning interest and outcomes. Insufficient motivation and engagement further hinder learning effectiveness. Therefore, teachers are encouraged to implement innovative teaching models that can enhance students' participation and motivation [12].

Based on this background, the present study aims to measure the level of students' interest in learning biology among Grade X students at *SMK Islam Al Azhar*. The findings are expected to contribute to a better understanding of students' learning interests and inform efforts to improve learning engagement and effectiveness in biology education.

RESEARCH METHOD

This study adopts the behaviorist learning theory as its conceptual foundation. Behaviourism emphasizes observable, measurable behaviours as outcomes of learning. According to this theory, learning occurs through the relationship between stimuli and responses, which can be reinforced through positive or negative feedback. Behaviourism has significantly influenced educational theory and practice, as it focuses on behavioural changes as indicators of learning outcomes (Aprizal & Redo, *Application of Behaviorist Theory to Improve Learning Interest in Islamic Education at SD Negeri 126 Seluma, Bengkulu*).

The research employed a qualitative case study approach, commonly used in social sciences, humanities, and applied disciplines. A case study provides an in-depth, contextualized understanding of specific phenomena or groups. In this study, the researcher examined in detail the issue of students' learning interest.

The research was conducted at *SMK Islam Al Azhar*, located in Dusun Karang Bireh, Sumber Lesung, Ledokombo, Jember. The study involved 20 Grade X students as participants, selected based on classroom observations. The object of research was to determine the extent of students' interest in learning biology.

Data were collected through three main techniques:

1. Observation, participatory observation of students during biology lessons.
2. Questionnaire, distributed to students to assess indicators of learning interest.
3. Interviews were conducted with biology teachers to validate and enrich the data.

Data analysis involved three steps: data reduction, data display, and conclusion drawing. These steps were carried out systematically to ensure the validity and coherence of the findings.

RESULTS AND DISCUSSION

Qualitative research aims to explore and understand phenomena deeply through non-numerical data such as interviews, observations, and field notes. Rather than focusing on measurement or generalization, it emphasizes meaning, process, and subjective human experience. This study sought to determine students' levels of learning interest in biology and to identify the factors influencing their motivation.

Data Analysis

The following table presents the categorical framework used to evaluate students' learning interest in biology at *SMK Islam Al Azhar*.

Table 1. Categorical Framework Used to Evaluate Students' Learning Interest

No	Score percentage	Category
1	80% – 100%	Very interested
2	60% – 79%	Fairly interested
3	40% – 59%	Slightly interested
4	20% – 39%	Lack interest
5	0% – 19%	Very lack interest

4. Observation Results

Based on the classroom observation instrument, it was concluded that students showed low enthusiasm toward biology learning when traditional, lecture-based teaching methods were used. The lack of engagement led to reduced focus, quick boredom, and minimal interaction between students and teachers. Students tended to become passive listeners rather than active participants in applying the material delivered during lessons. The detailed results of the observation on the learning interest of Grade X students at *SMK Islam Al Azhar* are presented in Table 2.

Table 2. Observation Results of Grade X Biology Class

No	Questions	Answers		
		Yes	Sometimes	No
1	Are students enthusiastic about participating in biology lessons?	1	1	16
2	Do students appear bored during biology lessons?	18	2	0
3	Do students enjoy learning biology using lecture-based methods?	0	1	19
4	Do students focus their attention when learning biology through lectures?	0	20	0
5	Do students take notes on important biology materials during lessons?	0	20	0
6	Do students ask friends for help when facing difficulties in biology lessons?	0	5	15
7	Do students read supplementary books during teacher–student Q&A sessions?	0	0	20
8	Do students engage in group discussions related to biology topics during class activities?	0	0	20
9	Do students ask the teacher questions when they do not understand the material?	1	0	19
10	Do students contribute to the smooth progress of biology learning in class?	20	0	0
11	Do students seek biology-related information from the internet?	0	0	20
12	Do students spend extra time studying when they have not yet mastered a topic?	0	0	20
13	Do students frequently ask questions about topics they do not understand?	0	0	20
14	Do students arrive on time for biology lessons?	20	0	0
15	Do students remain in class without leaving during the biology lesson?	0	19	01

Questionnaire Results

Based on the results of the questionnaire on students' interest in learning biology, one student obtained a score of 63%, one student 66%, one student 67%, one student 68%, four students 70%, one student 71%, four students 72%, one student 73%, three students 74%, and three students 75%, with an average score of 69.9%. These results indicate that the learning interest of Grade X students at *SMK Islam Al Azhar* in biology is at a moderate level. Further analysis of the questionnaire responses reveals that the lowest indicator of learning interest lies in the aspect of attention, suggesting that students desire greater attention from teachers, both in the delivery of instructional materials and in the teaching methods employed. Therefore, it can be concluded that increased teacher engagement and the implementation of more interactive, student-centered learning strategies are needed to enhance students' focus, motivation, and overall interest in biology learning.

Table 3. Questionnaire Results

No	Indicator						Total score	Category
	1	2	3	4	5	6		
1	13%	9%	14%	12%	13%	14%	75%	Fairly interested
2	11%	10%	13%	13%	10%	15%	72%	Fairly interested
3	13%	9%	14%	13%	11%	14%	74%	Fairly interested
4	11%	9%	13%	12%	12%	13%	70%	Fairly interested
5	12%	8%	13%	11%	11%	13%	68%	Fairly interested
6	13%	9%	12%	12%	12%	12%	70%	Fairly interested
7	13%	8%	14%	12%	12%	13%	72%	Fairly interested
8	13%	10%	13%	13%	13%	13%	75%	Fairly interested
9	10%	6%	12%	13%	10%	12%	63%	Fairly interested
10	13%	9%	14%	13%	11%	14%	74%	Fairly interested
11	12%	6%	13%	10%	10%	16%	67%	Fairly interested
12	13%	9%	14%	12%	11%	11%	70%	Fairly interested

13	13%	9%	13%	10%	10%	15%	70%	Fairly interested
14	12%	9%	13%	14%	10%	15%	73%	Fairly interested
15	13%	8%	14%	12%	11%	13%	71%	Fairly interested
16	13%	9%	15%	10%	11%	14%	72%	Fairly interested
17	11%	9%	13%	10%	10%	13%	66%	Fairly interested
18	14%	9%	14%	12%	14%	13%	76%	Fairly interested
19	13%	9%	15%	12%	11%	14%	74%	Fairly interested
20	13%	9%	15%	11%	14%	13%	75%	Fairly interested

Description of Indicators

Indicator 1 represents enjoyment, indicator 2 represents attention, indicator 3 represents interest, indicator 4 represents involvement, indicator 5 represents persistence, and indicator 6 represents discipline.

Interview Results

The interview with the biology teacher was conducted on March 7, 2025. Based on the teacher's responses, it can be concluded that biology learning for Grade X students at *SMK Islam Al Azhar* still predominantly uses conventional methods, specifically the lecture method. This method is considered less effective in fostering students' activeness, creativity, and freedom to express ideas. The detailed results of the teacher interview are presented in Table 4.

Table 4. Interview Results with the Biology Teacher

No	Questions	Answer
1	Do students appear enthusiastic during biology lessons?	Most students show little enthusiasm during classroom learning activities.
2	What teaching method do you use in biology classes to attract students' attention?	The lecture method is used, where students take notes from the board and then listen to the teacher's explanation.
3	What teaching method do you consider effective in increasing students' interest in biology?	Outdoor or field-based learning would be more engaging for students.
4	Do students currently learn indoors or outdoors?	Students learn indoors.
5	Do students persist when facing problems during biology lessons?	Students tend to give up easily when encountering problems and often leave them unresolved.
6	Do students attend biology classes punctually?	Students consistently arrive on time.
7	What strategy could be implemented to enhance students' learning interest in biology?	Conducting both indoor and outdoor learning sessions could help increase interest.
8	What challenges do you face in teaching biology?	Students show low enthusiasm for learning.
9	How would you describe students' level of interest in biology?	Students' learning interest is at a moderate level.
10	What efforts have you made to improve students' interest in biology?	I have used PowerPoint-based instruction as a supporting strategy.

From the interview results, it can be concluded that the average learning interest of Grade X students at *SMK Islam Al Azhar* in biology is 69.9%, which indicates a moderate level of interest. This condition arises because the current teaching method does not sufficiently stimulate students' curiosity, and practical learning activities—both indoors and outdoors—are still limited. As a result, students tend to feel bored when biology lessons are conducted solely in the classroom.

This qualitative study, conducted at *SMK Islam Al Azhar Karang Bireh, Ledokombo*, aimed to assess students' interest in learning biology through observation, questionnaire distribution, and teacher interviews. The study took place on March 7, 2025, involving two observers who participated directly in the classroom to collect authentic behavioral data.

During the observation phase, the researcher participated in teaching and learning activities to understand students' attitudes and behavior. The results showed that students were generally unenthusiastic during lessons, often talking to their peers, with 18 out of 20 students displaying a lack of focus on biology learning.

The questionnaire results revealed that students' learning interest remained at a moderate level, mainly due to the teaching method applied by the teacher. The lecture-based approach was less engaging, resulting in students feeling sleepy, distracted, and less active in asking questions or interacting during class. Furthermore, the limited use of laboratory tools and practical activities restricted students' ability to explore and apply concepts.

The interview findings confirmed that the teacher still relied heavily on conventional lecture methods, which negatively affected students' enthusiasm and learning motivation. As reflected in question number 2 of the interview, the conventional approach was perceived as ineffective in fostering student engagement. The teacher also noted that outdoor or activity-based learning could be a more effective strategy to increase students' interest and participation in biology.

Overall, the findings of this study indicate that Grade X students at SMK Islam Al Azhar demonstrate a moderate level of interest in learning biology. The results from observations, questionnaires, and interviews consistently reveal that the conventional teaching method predominantly used in the classroom has not been effective in maximizing student engagement. The learning environment remains largely passive, with limited opportunities for discussion, hands-on activities, or varied instructional media. This condition contributes to students' low enthusiasm and reduced focus during lessons. The lowest-performing indicator, namely attention, reflects students' need for more engaging learning experiences and more active interaction with the teacher.

In addition, students' tendency to feel bored easily and their reluctance to ask questions suggest that their curiosity and self-regulated learning skills have not been sufficiently stimulated. Considering that biology often involves abstract concepts, students would benefit greatly from contextual and experiential learning approaches. Activities such as outdoor learning, simple classroom experiments, and greater utilization of laboratory tools can help students better understand biological phenomena. Interviews with the teacher also support this view, highlighting that field-based learning could significantly enhance students' interest and participation because it allows them to observe concepts directly in real contexts.

Therefore, the findings of this study underline the need for pedagogical innovation in biology learning. Implementing active learning models—such as project-based learning, discovery learning, or practical activities connected to daily life—can serve as effective strategies to increase students' motivation and involvement. These findings are consistent with previous research suggesting that learning interest is influenced not only by students' internal factors but also by the quality of teaching strategies, classroom activities, and teacher–student interaction. Consequently, teachers are encouraged to adopt more adaptive, varied, and enjoyable instructional approaches to help students become more motivated, engaged, and capable of achieving optimal learning outcomes.

CONCLUSION

The findings of this study indicate that the learning interest of Grade X students in biology at *SMK Islam Al Azhar* is classified as moderate. This conclusion is supported by consistent results from observations, questionnaires, and interviews. Observation data showed that students' enthusiasm remained stable but relatively low, while questionnaire results revealed moderate average scores, particularly on the indicators of enjoyment and attention. These findings suggest that students desire more attention and interaction from teachers during lessons. Therefore, improvements in teaching methods are necessary, moving away from monotonous classroom routines toward more engaging, experiential learning such as outdoor or project-based activities. The interview results further emphasized the need for pedagogical renewal, as the continued use of the conventional lecture method has limited students' activeness and curiosity.

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