TRANSPUBLIKA INTERNATIONAL RESEARCH
IN EXACT SCIENCES
(TIRES)
VOLUME 1 ISSUE 1 (2022)

STUDENTS' PERCEPTION OF BIOLOGY LEARNING AT KEPANJEN ISLAMIC SENIOR HIGH SCHOOL

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Abstract

Biology is one of the subjects in the science specialization. Opinions from students stating that biology is the easiest subject among science specialization subjects. However, some students have difficulties studying biology for a variety of reasons, including the teacher's teaching style, the student's learning style, the students' unfavorable opinion of the course, and a lack of learning materials. This study aims to find out the student's perception of biology learning at Kepanjen Islamic senior high school. This study uses a descriptive quantitative approach. The sample in this study was class X students with the sampling technique carried out by proportioned stratified random sampling. Data collection techniques used in this study were questionnaires and interviews. The score from the questionnaire data is calculated by percentage statistics. The finding reveals that the perception of class X students on the implementation of the biology learning process as a whole is in enough category with a percentage of 79.17%. Of the five activities in the learning process, there are two categories, namely gathering information and communicating with 'good,' category, and those having 'enough' categories, namely observing, asking questions, and associating or processing information.

Keywords: *Student Perception, Biology Learning, Education, Guiding*

1. INTRODUCTION

Education and guiding are two approaches to raising knowledge of aims in a systematic and targeted manner in order to influence behavior toward student maturity. Teaching is a technique that serves to teach students in life, particularly in guiding themselves to develop in accordance with the developmental obligations that students must fulfill. The primary goal of education is to educate students in making changes in their intellectual, moral, and social behavior so that they can remain independent as persons and social beings. Efforts that can be made to accomplish this ambition include guiding processes that allow students to interact with the learning environment that is governed by the teacher (Sadirman, 2012).

The teacher is a human factor in the guiding and learning process who performs a role in an endeavor to build capable human resources in the field of development (Sadirman, 2012). It is critical to develop teacher competency in order to achieve a positive student perception of the teacher. Whereas perception is a person's process of knowing, understanding, and evaluating other people about their nature, quality, and other conditions that exist within the perceived self. If students have faith in the teacher, it will lead to favorable acceptance of both the teacher and the subject matter being taught, and vice versa (Anggraini, 2015).

Biology is one of the subjects in the science specialization. Opinions from students stating that biology is the easiest subject among science specialization subjects. The results of research related to student perceptions of science subjects were also revealed by Prokop et al. (2007) where science subjects are boring for many students, difficult, irrelevant to human life and less interesting for students in higher grades. Although this opinion cannot be applied to all branches of science. Students' opinions on physics and biology studies differ. Students have a more negative attitude toward physics than they do toward biology. Male students, on the other hand, have a greater interest in physics, while female students have a greater interest in biology.

Nugraini (2015) stated that many students struggle with biology and believe that the subject is solely about memorizing. Certain concepts, such as cell division and metabolism, are extremely difficult for students to grasp. Students have difficulties studying biology for a variety of reasons, including the teacher's teaching style, the student's learning style, the students' unfavorable opinion of the course, and a lack of learning materials. Students struggle to understand biology and lose interest in the subject because they believe the material is irrelevant to daily life.

The results of research on student perceptions of the implementation of learning in several high schools have been carried out by Marina (2016); Rahma (2015); and Sewasa & Har (2015) reveals that there is a relationship between students' perceptions of the implementation of biology learning. In addition, this research was also conducted by Anggraini (2015) which also states that there is a positive relationship between students' perceptions of teachers' pedagogic competence and biology learning outcomes. Based on the results of observations, this study aims to determine students' opinions on biology learning at Kepanjen Islamic Senior High School.

2. LITERATURE REVIEW

2.1. Perception

According to Morgan in (Marina, 2016) perception shows how we see, hear, feel, taste, and smell the arena around us, in different terms it can also be described as the whole thing that people experience. Based on the fact that understanding is relative, a teacher can expect a good picture of his students for the next lesson because the teacher already knows the perceptions that have been had by using previous students (Slameto, 1988).

Students' perceptions of mastery can be interpreted as organizing and storing stimuli in the mastery environment. As for the components that are assessed in the form of topics, teachers, substance, opinions and all things related to the way of mastery itself, evaluation can also have good and bad values. For students' perception of the subject of technological knowledge, the method that the topic of technological knowledge and all sports that take part in the mastery of technological knowledge is a good way gadget to assess using students (Maaruf et al., 2013).

2.2. Teacher Learning Implementation

According to Diaz in (Budiana et al., 2022) learning is an accumulation of teaching ideas and mastering ideas. The emphasis lies on the combination of the two, in particular the improvement of male and female undergraduate sports. The idea is gadgets, so that during

the mastery of this gadget there are additions which include: students, desires, substances to obtain desires, centers and methods, in addition to equipment or media that must be prepared.

2.3. Teacher Workload Standards in the Implementation of Learning

1) Planning Lessons

Learning Implementation Plan (hereinafter referred to as RPP) is a plan that describes the methods and methods of mastery to acquire the main competencies set out in the Content Standards and has been set out in the syllabus. The scope of the RPP consists of at least one basic competency consisting of several indicators for one or more meetings (Kunandar & Si, 2014).

2) Learning Implementation

According to Barnawi in (Marina, 2016), the second task of the teacher is to carry out learning. Learning activities are activities when there is an educational interaction between students and teachers, this activity is a real face-to-face activity.

3) Assessing Lesson Results

The third task of the teacher is to assess the results of the lesson. Assessing learning outcomes is a series of activities to obtain, analyze, and interpret data about the process and learning outcomes of students which are carried out systematically so that it becomes meaningful information for assessing students and in making other decisions (Barnawi in (Marina, 2016)).

4) Guiding and Coaching Students

According to Barnawi in (Marina, 2016) the last challenge for teachers is to guide and educate students, especially guiding or educating individuals in mastery, intracurricular, and extracurricular. Furthermore, according to (Sanjaya, 2006) in order for the teacher to behave as a true mentor, many things must be possessed, in particular must have knowledge of the children he is mentoring, both must recognize and be professional in making plans, each making plans desires and acquired skills and making plans with how to master.

3. RESEARCH METHOD

This study uses a descriptive quantitative approach. This descriptive research is exploratory in nature which aims to describe the state/status of the phenomenon and is also a qualitative research, namely to determine students' perceptions of Biology lessons at Kepanjen Islamic Senior High School. The sample in this study was class X students with the sampling technique carried out by proportionet stratified random sampling. Data collection techniques used in this study were questionnaires and interviews. The score from the questionnaire data is calculated by percentage statistics. Students' perceptions of biology learning at Kepanjen Islamic Senior High School, and in this study were obtained from a questionnaire consisting of 40 statements.

Table 1 Determination of percentage categories

No	Percentage Interval	Category
1.	91%-100%	Very good
2.	80%-90%	Good
3	70%-79%	Enough

3.	50%-69%	Bad
4.	<50%	Very bad

4. RESULT AND DISCUSSION

Table 2 Perceptions of Mathematics and Natural Sciences Students in Class X

No	Items Instrument	Indicator	Total score Items (R)	Total score Max(N)	Percentage	Category
1	1 – 8	Observe	1670	2160	77.32%	Enough
2	9 – 16	Ask	1682	2160	77.89%	Enough
3	17 – 24	Gathering Information	1745	2160	80.79%	Good
4	25 – 35	Associate	1710	2160	79.17%	Enough
5	33 – 40	Communicating	1743	2160	80.70%	Good

Based on the research data in table 2, there are two categories of student perceptions, namely the enough and good categories. For the good category it is in the range of 8089%, where for the good category there are two activities, namely the activity of collecting information by 80.79% and communicating 80.70%. As for the enough category, it is in the range of 6579%, where for this sufficient category there are three activities, namely observing 77.32%, asking 77.89%, and associating 79.17%. Based on the two activities in the good category, the highest percentage was in information gathering activities with a percentage of 80.79%. This is because in this activity students feel satisfied because they can collect information from various sources, and students can collect information alone or in groups with friends, so that through collecting information students will be able to train themselves in developing a thorough, honest, polite attitude. attitude, and value opinion. with friends. This information gathering activity can also encourage students to think critically and become more independent in learning. The process supports collaborative learning.

Learning with the *Think Pair Square* (TPSq) type overcomes the passive nature of students in learning because it requires students to think for themselves, share with their partners, and work in groups. The TPSq learning model combined with problem solving is higher than using the lecture method (Masrudi, Sudirman, and Ramses, 2016) because the TPSq learning model motivates students to learn biology (Prayitno et al., 2017), collaborative learning integrated with individuals and other learning models are recommended for use in science education to improve academic performance. Of the three activities that fall into the enough category, the lowest percentage is observation of 77.32%. This is because students are less serious in seeing and paying attention to the material provided by the teacher during the learning process.

According to Regulation of the Minister of Education and Culture (Permendikbud) No. 81 ATH in 2013, through observing, it can train students in integrity, thoroughness, and information seeking. In observation activities, the teacher opens various opportunities for

students to make observations through observation, listening, listening, and reading activities that are formulated in the scenario of the learning process (Yusa & Maniam, 2013).

Based on the data analysis that has been carried out, in this study it can be described in general the perceptions of class X Mathematics and Natural Sciences students towards the implementation of the biology learning process based on the 2013 curriculum at Kepanjen Islamic Senior High School including the sufficient category with a percentage of 79.17%. This is because the biology learning process in class X of Mathematics and Natural Sciences in Kepanjen Islamic Senior High School has been implemented based on the 2013 curriculum which consists of observing, asking questions, gathering information, associating, and communicating. Based on the results of the study, it can be concluded that the perception of class X Mathematics and Natural Sciences students on the implementation of the biology learning process based on the 2013 curriculum of Kepanjen Islamic Senior High School as a whole is sufficient with a percentage of 79.17%. Of the five activities in the learning process based on the 2013 curriculum, there are two categories, namely good and sufficient.

As a professional educator, the role and function of the media is very important to be applied in learning. Media is the integration of the learning system as the basis for policies in the selection, development and utilization. Learning media can lead to good student perceptions by utilizing their senses. Therefore, students can assess and can give their respective arguments about what they feel by using the media when learning.

As revealed by Zacharia & Barton (2004) that students' interest in science depends on how a science topic is presented. If science is taught by involving students, hands-on experience, and science presents interesting situations, it will help to arouse passion for science (Howe & Jones, 1993). The same circumstances is shown by the results of this study, where the favorable perception of class X students has shown on the implementation of the biology learning process.

5. CONCLUSION

Based on the results of the study, it can be concluded that the perception of class X students on the implementation of the biology learning process as a whole is in enough category with a percentage of 79.17%. Of the five activities in the learning process, there are two categories, namely gathering information and communicating with ‘good,’ category, and those having ‘enough’ categories, namely observing, asking questions, and associating or processing information.

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