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ANALYSIS OF STUDENT RESPONSES TO ONLINE LEARNING IN BIOLOGY SUBJECTS AT SENIOR HIGH SCHOOL OF CENTRAL LOMBOK

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Abstract: The current Covid-19 pandemic has a significant impact on all aspects of human life, one of which is in the field of education. This study aims to determine how the senior high school students of North Batukliang central Lombok Indonesia respond to online learning in biology subjects. This research is qualitative descriptive research. The sampling technique in this research is saturated sampling. Meanwhile, the instruments used in this study were interviews and questionnaires. The study showed a positive response: the understanding indicator obtained a student response of 61%, and the independence indicator was 67%, which was included in the strong category. In the facility indicator, the student response value is 79% which is in a very strong category. The learning process still needs to be optimized and needs to be evaluated for the sake of improving online learning in the next period.

INTRODUCTION

The current Covid-19 pandemic has brought significant influence and change to the world. The Covid-19 virus has spread and is the cause of the highest death toll today. Of course, this has a significant impact on all sectors of life. This pandemic crisis attacks human health and stops the education and learning system that is normally held through face-to-face learning in schools. The whole world is busy preventing the transmission of Covid-19 so that all activities outside the home, such as offices and schools, are temporarily closed [1].

One of the problems facing the world of education today is the impact of the Covid-19 pandemic, which is now starting to penetrate the world of education. Indonesia is one of the countries affected by the Covid-19 outbreak. The government has chosen an effort to suppress the virus's spread in Indonesia through physical restrictions or distancing. Restrictions cause many social, economic, cultural, and even educational changes. The Indonesian Ministry of Education issued a Circular Letter of the Minister of Education and Culture Number. 4 of 2020 concerning the Implementation of Policies and Education in an Emergency Period for the Spread of Corona Virus Disease (Covid-19), which is strengthened by the Secretary General's Decree Number 15 of 2020 concerning Guidelines for the Implementation of Learning From Home during the Covid-19 emergency, namely by giving holidays and replacing the activity process. Teaching and learning in schools use an online learning system at home [2].

Online is an abbreviation of communication in the network, which is a way of communicating in which the delivery and recipient of messages are done via the internet. Actually, online learning is not new to Indonesia. This learning model has been developed since 2013 as an alternative learning, meaning that before the outbreak of this virus, Indonesia had applied the method. But not all institutions apply, especially schools in rural areas. With the outbreak of this virus, all schools, colleges, and other educational institutions use online learning methods without exception, aiming that the learning process continues even though it must be done at home [3].

There are several advantages to implementing online learning, including (1) flexibility, meaning that students can adjust the time and place that is suitable for learning; (2) can increase students' knowledge because it is easier to access information; (3) providing greater opportunities for students to express their opinions in online discussion activities because it can remove obstacles such as the fear of speaking; (4) more cost-effective because there is no need to spend money to travel; (6) online learning allows students to learn at their own pace [4].

Implementing online learning in schools will undoubtedly impact the learning process and the implementation of the existing curriculum in all subjects at school, including the subject of Biology. Biology is part of science subjects where the knowledge learned constantly evolves and can be understood by scientific methods such as practicum [5]. The biology learning process will be more effective and meaningful if, in the learning process, students are invited to experience an experience for themselves, namely through practical activities, because biology lessons are closely related to practical activities; therefore, it becomes a challenge for biology teachers to have creativity in conveying

material to students so that students can understand the material that has been studied.

Based on an interview with a biology teacher at Senior High School of One North Batukliang, she explained that learning which is a little difficult to do online is biology. Of course, this learning requires quite a lot of time to explain the theory and also requires practicum to prove the theory. Akhmad's research stated that if science learning was given in theory, its meaning would not be conveyed to students [6]. Therefore, students' learning difficulties need to be considered in science learning so that a method that can collaborate between theory and practice is needed so that students can understand it. Thus, the learning carried out will be more meaningful.

In the current study, we focus on analyzing student responses to online learning in biology subjects at the senior high school of North Batukliang Central Lombok Indonesia in the 2021/2022 academic year. The responses from these students will be used to evaluate the advantages, and disadvantages of online learning carried out by teachers and find clear corrective steps so that teachers and students are ready to face the new normal era.

RESEARCH METHODS

The research was conducted at the Senior High School of One North Batukliang, which is located on the street of tourism Aik Bukak, Teratak Village, in the odd semester of the 2021/2022 academic year. This research belongs to the type of qualitative descriptive research. This research is descriptive because it aims to describe students' responses to online learning in biology subjects at SMA Negeri 1 Batukliang Utara. The sampling technique in this study is saturated sampling, meaning that all populations are used as samples. The samples in this study were students of classes XII MIA 1 and XII MIA 2.

Data collection techniques in this study used questionnaires and interviews. Questionnaires were distributed directly to the respondents, namely students of class XII MIA 1 and XII MIA 2, with 50 respondents. The indicators from the questionnaire consist of three indicators as follows; 1) understanding, 2) independence and 3) facilities. The questionnaire consists of 13 statements with the answer options SS (strongly agree) worth 4, S (agree) worth 3, TS (Disagree), and STS (strongly disagree) worth 1.

Table 1. Student response result category interval

% NRS	Categories
$0\% \leq \%NRS < 25\%$	Very Weak
$26\% \leq \%NRS < 50\%$	Weak
$51\% \leq \%NRS < 75\%$	Strong
$76\% \leq \%NRS \leq 100\%$	Very Strong

The results of student responses to each statement obtained are then interpreted using the categories in table 1.

RESULTS AND DISCUSSION

The research results show that in indicator 1, namely understanding of biological material, the average value of student responses is 61% which is included in the strong category, meaning that students can understand biological material online. Indicator 2, independence, the average value of student responses is 67% which is included in the strong category. Online learning can increase students' sense of independence in doing assignments. Indicator 3 is the facility. The average value of student responses is 79% which is included in the very strong category. It means that students do not experience problems related to the facilities used to support online learning. (Figure 1).
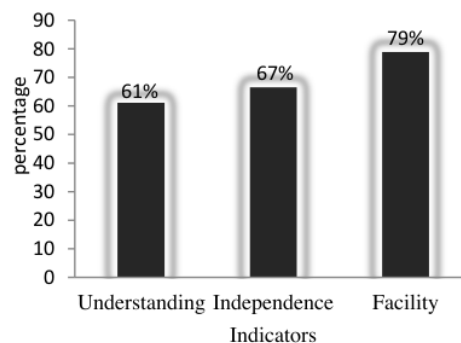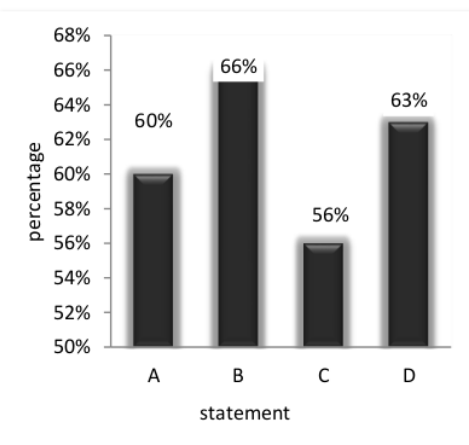

Figure. 1 Student Response Result

Figure. 2 Student Responses to Indicator of Understanding

Indicators Of Understanding

The result of student responses to indicators of understanding is shown in Figure 2.

Explanation
A : Understanding of biological material
B : Easy of finding information on biological material
C : Understanding of teaching materials in the form of biology learning videos made by the teacher
D : Interesting in learning biology in the class

The results showed that the indicator of understanding biology material with online learning obtained a student response of 60%, which was included in the strong category. It means that students can understand biology material with online learning so that students do their assignments optimally. It is, of course, closely related to the ease of finding information on biological material, which is also included in the strong category. Online learning makes it easy for students to find learning resources on biology material. The advantage of online learning is that students can access learning materials freely anytime and anywhere. Therefore, students can easily access various materials from various sources [7-8].

The aspects of the level students' understanding of biology materials made by the teacher are included in the strong category with a percentage of 56%. It indicates that students can understand biology material with teaching materials in the form of learning videos made by their teacher. Learning by using videos makes it easier for students to understand the material and motivates them to do online learning. Students learning motivation will increase if the learning media attracts students' attention more by presenting communicative material in images, animations, and videos [9]. Students learning motivation is also determined by the availability and completeness of online learning supporting facilities and infrastructure, such as the teaching materials used [10].

Interest in learning biology in class aspect has a strong category, meaning that students are more interested in doing biology learning directly in class. In line with that, Ningsih's research suggests that students prefer face-to-face lectures because they feel that the lecturer's explanation of the material is not clear when online learning takes place, making it difficult for them to understand the material [11]. The results of Differences in students' learning motivation in online learning are also due to

the availability and completeness of online learning supporting facilities and infrastructure [10]. Another reason students prefer to study biology directly is that students can carry out practical activities in the laboratory to prove a theory being studied.

Indicators Of Independence

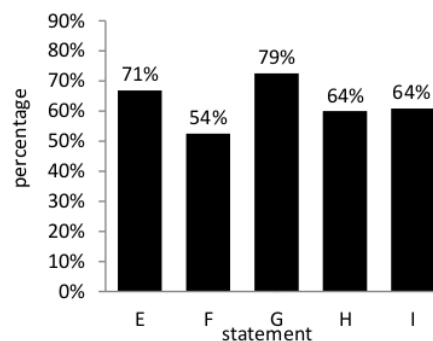The result of student responses to indicators of independence are shown in Figure 3.

Figure. 3 Student Responses to Indicators of Independence

Explanation
E : The level of infrequent reading of biology teaching materials
F : The level of communication between teachers and students
G: The level of doing biology assignments independently
H : The level of working on biology assignments by revising the answers of friends
I : The level of giving biology assignments by the teacher

In the independence indicator, the average student response value is 67% which is included in the strong category. The highest response is shown in the aspect of the level of doing the task independently with a percentage of 79%, meaning that with online learning, students can do biology assignments independently. The interview results show that online learning helps students do assignments independently, where assignments can be carried out in a relaxed and relaxed manner while listening to music.

Online learning has the advantage of being able to foster student learning independence. In online learning, students must prepare for their learning, evaluate, organize and maintain motivation in learning [12]. Akhmad stated that online learning

could train students' responsibility in learning independently at home [13].

In the aspect of reading teaching materials infrequently, it is included in the strong category, meaning that in the learning process, students often do not read the teaching materials given by the teacher, especially if the teaching materials provided are only in the form of modules that contain material in the form of writing which makes students feel bored and unmotivated in learning. Rasyid suggests that students' interest in the media can be used as a measure of learning success [14]. Most of the student's attention will be focused on the learning process so that students will play an active role and respond positively [15]. Therefore, teachers should choose interesting and varied teaching materials, for example, in the form of pictures and learning videos [16].

In the aspect of the level assignment by the teacher, it is quite strong with a percentage of 64%, meaning that the teacher gives a lot of biology assignments while students' understanding of the material is still lacking, this causes students not to do assignments independently or in other words, students copy and paste the answers of their friends. A lot of assignments will make students feel pressured and feel stressed. To overcome this, students will take shortcuts by asking about their friends' assignments and copying them [17]. The assignments are usually given in the form of practice questions and sometimes also make reports.

The lowest response is shown in the level of communication between teachers and students. Even though it is included in the strong category, if it is seen from the percentage obtained, it can be said that communication between teachers and students is still running less than optimally during online learning. The interviews showed that students felt embarrassed and afraid to interact with the teacher during online learning.

Students feel more comfortable expressing opinions and asking questions when participating in online learning. By learning at home, students do not feel psychological pressure from other friends, as is usually experienced when face-to-face learning. In addition, not dealing directly with the lecturer also causes students to feel less awkward in expressing themselves [18-19].

Indicator Of Facility

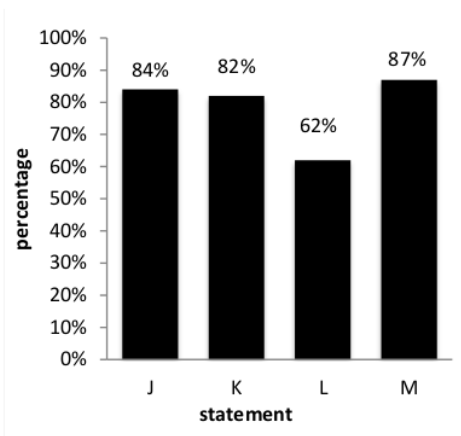The result of student responses to indicators of independence is shown in Figure 4.

Figure. 4 Student Responses to Indicator of Facility

Explanation
J : Level of knowledge of online learning applications
K : Level of use of online learning applications

L : Level of inability to use online learning applications
M: Level of the fulfillment of online learning facilities

In the facility indicator, the average student response is 79%, which is very strong. On the level of knowledge regarding online learning applications, it shows a positive response. Based on the interview results, it known that the online learning applications that are often used are WhatsApp (WA), Google Class Room, Zoom, and Youtube. According to Andriyani et al.'s research results, online lecture applications are carried out using various platforms, including Schoology, WhatsApp, Zoom meeting, Google Classroom, YouTube, and Telegram [20].

In the aspect of using online learning applications, it is also very strong. It means that in addition to knowing, students can also use online learning applications. Based on interviews with students, it is known that the WhatsApp application is the application that is most often used when learning online. Awalia et al., and Dari, et al. stated that WhatsApp is recognized as having the advantage that it is easy to use, easy to download, and consumes little quota compared to other applications [21-22]. It follows Barhoumi's opinion, which states that WhatsApp is a simple application that can save privacy and is an application with a low cost compared to other learning applications [23].

In terms of the level of fulfillment of online learning facilities, it is included in the very strong

category, meaning that, on average, all students' parents support online learning activities. It is evidenced by the fulfillment of facilities such as cellphones and laptops needed to support online learning activities. Data from the Central Statistics Agency show that in 2018 there were 62.41% of the Indonesian population already owned a cellular phone, and 20.05% of households owned a computer at home [23]. These data are relevant to the results of Sadikin and Hamidah's research which shows that although there are students who do not have laptops, almost all students have smartphones [18].

CONCLUSION

The response of class XII students of SMA Negeri 1 Batukliang Utara to online learning biology subjects showed a positive response. It is based on the results of the percentage of student response to several indicators in the questionnaire given. Online learning is considered effective for students in terms of understanding the material, independence in doing assignments, and students' knowledge regarding the facilities/platforms used in online learning. It shows that students give a good response to online learning. The learning process still needs to be optimized and needs to be evaluated for the sake of improving online learning in the next period

ACKNOWLEDGMENTS

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