# ANALYSIS OF PROBLEMS IN IMPLEMENTING ONLINE LEARNING DURING THE COVID 19 PANDEMIC IN BIOLOGY LEARNING AT SMAN 1 LINGSAR

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### **Abstract**

This study aims to describe the problems faced by grade XI science students during the Covid 19 Pandemic in biology subjects at SMA Negeri 1 Lingsar. The type of research used is descriptive survey research with a qualitative descriptive approach. Data and data sources were obtained directly from research subjects, namely 47 students of grade XI Science 1 and 2. Data collection in research using questionnaire instruments in the form of closed statements. The data analysis technique used is qualitative descriptive analysis with Likert scale. Based on the results of the study, the problems of implementing online learning during the Covid-19 pandemic in biology subjects in class XI Science 2 and 3 at SMAN 1 Lingsar showed problems, namely: related to personal facilities (73.62%), networks (70.64%), economics (69.36%), methods (67.66%), media (67.66%), learning motivation (68.94%), and overloaded tasks (69.36%). The lowest response from students in grade XI Science 2 and 3 in biology subjects at SMAN 1 Lingsar was in the 1st item (44.26%), 4th (49.79%), 8th (65.96%), 9th (61.70%), 11th (61.70%), and 12th (57.87%) with varied answer categories with an average percentage of 52.83%, this shows that this statement indicates that the complex problems faced in the implementation of online learning during the Covid 19 pandemic in biology subjects at SMA Negeri 1 Lingsar, and there needs to be serious handling if you want to return to using the online system. Based on the results of the study, it can be concluded that online learning in biology subjects in class XI Science 2 and 3 has not been carried out well at SMA Negeri 1 Lingsar and there needs to be a review.

# INTRODUCTION

At the end of 2019, precisely on December 31, 2019, a case of the corona virus pandemic or better known as Covid-19 (Corona Virus-2019) appeared. Covid-19 is a disease caused by infection with the severe acute respiratory syndrome coronavirus 2

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(SARS-CoV-2) virus. This virus was reportedly first spread in Wuhan, China (Lee, 2020). One of the characteristics of this virus is that it is able to spread very quickly. This causes disruption of the respiratory system, ranging from mild flu-like symptoms, to lung infections. Based on data from WHO obtained that Covid-19 has become a global pandemic with a total of 4,534,0731 confirmed positive cases in 216 countries around the world (Update: 17-05-2020).

The Corona virus has now been endemic in Indonesia since early March (Task Force for the Acceleration of Indonesia's Covid-19 Handling, 2020). The impact of the Covid-19 pandemic has changed various aspects of human life. Even in the world of education, it is also affected by the emergence of Covid-19. Because of this virus, community activities in various countries in the world, including Indonesia, one of which has become disrupted, making people in the world have to stay at home to break the chain of the Covid 19 virus so that it does not spread further. With restrictions on interaction, the Ministry of Education in Indonesia issued a policy, namely by closing schools and replacing the process of teaching and learning activities (KBM) by using an online system.

During the Covid-19 pandemic, online learning is the right solution to continue the semester. Online learning is a form of distance learning that utilizes telecommunication and information technology, such as the internet (Molinda, 2005). In addition, the most important thing is the readiness of educators and students to interact with each other online.

Various obstacles began to occur in the midst of the Covid 19 pandemic which most schools complained about in the online learning process. Not all Senior High Schools (SMA) in Indonesia have adequate facilities in carrying out the implementation of online learning (online). One such school is SMAN 1 Lingsar. The obstacles faced by educators, students, and schools are not much different from those complained by other schools that have not been able to carry out online learning. Students do not have Android phones, because from the beginning the government itself prohibited students from having cellphones (Sabudi, vice principal of SMAN 1 Lingsar). Another difficulty at SMAN 1 Lingsar in implementing online learning is related to students, especially in biology subjects, not having the opportunity to ask directly to the teacher if they do not understand the material. Other obstacles such as no signal when carrying out the online learning process. Related to quota constraints which are also one of the obstacles in the teaching and learning process. The learning system used by educators must also be able to be developed to adjust the implementation of learning that has been determined online, so that educators and students inevitably have to follow the short learning process. In fact, the subject of biology itself is not only required to master a set of knowledge in the form of facts, concepts, principles, but also a process of discovery. Therefore, researchers are interested in conducting research on "Analysis of Problems in the Implementation of Online Learning during the Covid 19 Pandemic in Biology Learning at SMAN 1 Lingsar". Because in a learning system that usually the time, place, and infrastructure can be quite adequate compared to the current one that uses online learning, everything is limited.

# **METHOD**

This type of research is a qualitative descriptive research that aims to describe the problems of learning implementation faced by grade XI science students during the Covid 19 pandemic at SMAN 1 Lingsar. Data and data sources were obtained directly from research subjects, namely 47 students of grade XI Science 2 and 3. Data collection in research using questionnaire instruments in the form of closed statements. The data analysis technique used is qualitative descriptive analysis with Likert scale.

Next, the data is tested for validity using the test Transferability and Dependability test.

# 1. Transferabilitty Test (validity)

Validity test is a standard measure that shows the permanence and validity of an instrument. The purpose of the instrument validation test is to see whether the instrument (measuring instrument) used is valid or indeed in accordance with the variable being measured. An instrument is said to be valid if the measuring instrument used to obtain the data is valid and can be used to measure what should be measured. The validation test used is expert validity with an assessment score scale of 1-4.

# 2. Dependability Test (reliability)

Dependability testing can be carried out through audit activities throughout the research process. Reliability tests are performed to see the extent to which the level of similarity of data in different times. According to Sugiyono (2008: 121) that a reliable instrument is an instrument that when used several times to measure the same object will produce the same data as well. The reliability of the instrument is measured using Cronbach Alpha. The reliability test is carried out by comparing the cronbach alpha number with the provision that the cronbach alpha value is at least 0.40. This means that if the Cronbach alpha number obtained from the exel calculation is smaller than 0.40, then the item is not reliable. Conversely, if the Cronbach alpha number is greater than 0.40, then the item is said to be reliable.

# RESULTS AND DISCUSSION Result

The results obtained from questionnaire data on the problems of implementing online learning during the *Covid-19 pandemic in* biology subjects at SMA Negeri 1 Lingsar are presented in the form of tables and diagrams 4.1 results of the percentage of problems.

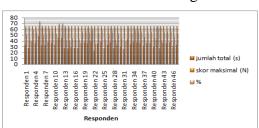


Table 1 Problem Percentage Results

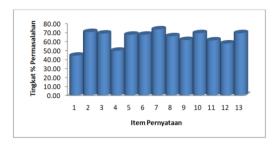


Figure 1 Digram Results of Aspects of the Problem of implementing Online Biology Learning

Table and figure 1 Shows the percentage of problems in the implementation of online biology learning in class XI Science 2 and 3 in biology subjects at SMA Negeri 1 Lingsar with the highest percentage rate of 73.62%, namely with Personal Facilities problems described in the seventh statement item. For the lowest percentage level of respondents with 44.26% found in the first statement item. The complete results of the questionnaire data can be seen in appendix 8 page 88 along with calculations.

### Discussion

Fieka Nurul Arifa (2020) stated that the learning process from home which was chosen as a solution in handling COVID-19 posed obstacles in its implementation. This is because learning from home is an emergency that must be implemented. In fact, not all schools have implemented online learning, resulting in unpreparedness and causing problems in the implementation of learning. This was also felt by students in grade XI of Science 2 and 3 at SMAN 1 Lingsar in biology subjects. The results of the research on the problems of implementing online learning during the covid 19 pandemic in biology learning at SMAN 1 Lingsar there are several problems including: (1) Personal facilities, (2) Networks, (3) Economics, (4) Methods, (5) Media, (6) Motivation and (7) Overloaded tasks shown in diagram figures 4.1.1 and 4.1.2 The most problems felt by students in grade XI Science 2 and 3 at SMAN 1 Lingsar in biology subjects are problems Facilities owned by students with a very agreeable response of 73.62%. The results of different studies conducted by Aji (2020) said that there are many variances of problems that hinder the implementation of the effectiveness of learning with online methods including: (a) limited mastery of information technology by teachers and students, (b) inadequate facilities and infrastructure, (c) limited internet access, and (d) lack of budget provision. The similarities in problems found are caused by the similarity in the level of problems that exist in the school.

The first problem with the most percentage is related to the facilities owned by students such as smart phones or android. It is found in the 7th item with a percentage of 73.62%. The influence of these Supporting Facilities on the implementation of learning is very large. Adequate infrastructureand infrastructure are one of the important elements to support the entire design of online learning activities during this pandemic. The implementation of online learning will not run smoothly without supporting facilities, for example such as Android phones. Android HP is a cellphone / mobile / smartphone with an operating system developed by Google. One of its functions is as a tool to support

activities during the implementation of online learning during the Covid-19 Pandemic. Therefore, students must have an Android phone during online learning to have a complete technology, information and communication media device. If facilities, infrastructure and supporting facilities are not available, then the ability of students to absorb lessons will decrease, until in the end the purpose of holding education is not achieved properly.

The second problem is related to the network, in the 2nd item with a total of 70.64%. This network is very important in implementing online learning. Without a network, the implementation of learning cannot be carried out. Anhar (2016) said that the internet network is a network or system on a computer network that is interconnected using the Global Transmission Control Protocol / Internet Protocol Suite (TCP / IP) System which is a packet exchange to serve billions of users around the world. Therefore the Internet network can be said to be the most important computer network, able to connect computer users from one country to another throughout the world, where there are various information resources ranging from static to dynamic and interactive. In it there are also media to find information and others with programs connected to the internet. This is in line with the research journal Asrul and Eko Hardianto (2020) which said that the stability of internet access plays an important role so that the online learning process can run well.

The third problem is related to the economy. A total of 69.36% on the 13th item. Naserly (2020) stated that another challenge faced was the constraints in financing online learning. Students revealed that to take part in online learning, they had to spend quite expensive to buy internet data quota. According to them, learning in the form of video conferencing has consumed a lot of data quota, especially in biology subjects that are known to have to use video in order to meet practicum scores that cannot be carried out face-to-face. While online discussions through instant messaging apps don't require much quota, they are less efficient in terms of understanding. The average student spends Rp. 100,000 to Rp. 200,000 per week, depending on the cellular provider used. The use of online learning using video conferencing is quite expensive.

The fourth problem concerns the method used with a percentage of 67.66% in the 5th item. Learning methods are used to implement plans that have been prepared in the form of real and practical activities to achieve learning objectives. Eka Susiyanti (2021) The learning method is a systematic and orderly process carried out by teachers in presenting material to students. It can also be interpreted as a strategy in carrying out teaching and learning activities in the classroom so that the learning objectives that have been set can be achieved properly.

The fifth problem is about the media used with a percentage of 67.66% in the 6th item. Learning media is one way or tool used in the teaching and learning process. This is done to stimulate learning patterns in order to support the success of the teaching and learning process so that teaching and learning activities can be effective in achieving the desired goals. Of course, in choosing learning media must be appropriate and correct, because this determines the success of students in receiving learning material delivered

by the teacher. This is in accordance with research conducted by Jalinus (2016) stating that the use of learning media is the right effort in improving the quality and effectiveness of learning in the classroom so that it can improve student learning outcomes. The use of learning media can certainly provide stimulation to students' thoughts, feelings, attention and interests when presented with subject matter both in class and students using independently.

The sixth problem is about student learning motivation with a percentage of 68.94% in the 3rd item. In every learning, intrinsic motivation and extrinsic motivation play a very important role. With moyivation, students can develop activities and initiatives, can direct and maintain perseverance in carrying out learning activities. Therefore, learning motivation can be interpreted as encouragement from students to achieve learning goals, such as understanding material or learning development. With motivation, students will always be enthusiastic to continue learning without any coercion from any party. There are several factors that influence the causes of low motivation in learning among them: interest in the material, the ideals of students and the condition of students, family environment factors, the role of educators and the environment of friends. Masni (2015) said that learning motivation is the overall driving force within students that gives rise to learning activities or learning processes that ensure continuity and provide direction to learning activities, so that the goals desired by the learning subject can be achieved properly.

The 7th problem is about overloaded tasks with a percentage of 69.36% in the 10th item. Excessive assignment is also one of the problems that must be evaluated because it can cause students to become stressed due to task overload during the COVID-19 pandemic. Assignment is one way given by teachers to find out the level of understanding in students. However, if there are too many tasks from the teacher, it is often a complaint for some students who are not used to it. This is also in accordance with research conducted by Hariyanti et al. (2020), that teachers tend to give a lot of tasks without looking at the level of student understanding of the material first. Student learning load must certainly be calculated, measurable, both time and material, so that in online learning students do not feel burdened with very many tasks, so that the learning process can provide a sense of comfort, without boredom, and run according to the expected goals.

The results of this study also showed the lowest response from students in grade XI Science 2 and 3 in biology subjects at SMAN 1 Lingsar, namely in the 1st item (44.26%), 4th (49.79%), 8th (65.96%), 9th (61.70%), 11th (61.70%), and 12th (57.87%) with varied answer categories. In item 1, there are more answers that strongly disagree and the lowest ones that answer strongly agree and agree. On item 4 more answers disagree and the lowest answer strongly agree. Item 8 there are two categories of the highest response from learners, namely strongly agree and quite agree, while the lowest answer is very affirmative. In the 9th item, the highest category is to answer quite agree, while the lowest answered disagree, while the lowest answered disagree, while the lowest category answered disagree, while the lowest answered strongly disagree. And the 12th highest category of respondents answered disagree, with the lowest category strongly agreeing. The results

of the average answer percentage of respondents were strongly agree (ss) by 6%, agree (s) by 37%, quite agree (cs) by 44%, disagree (ts) 13%, and strongly disagree (sts) by 0%. This indicates that students quite agree with the statement of problems in the implementation of online learning during the Covid-19 pandemic in biology subjects at SMAN 1 Lingsar. With an average percentage value of 52.83%, this shows that this statement indicates that the complex problems faced in the implementation of online learning during the Covid-19 pandemic in biology subjects at SMA Negeri 1 Lingsar, and serious handling is needed if you want to return to using the online system.

### **CONCLUSION**

Based on the results and discussion of the analysis of the implementation of online learning during the covid 19 pandemic in biology subjects at SMAN 1 Lingsar, it can be concluded as follows: Problems in the implementation of online learning during the covid 19 pandemic in biology subjects in class XI Science 2 and 3 at SMAN 1 Lingsar are: related to private facilities (73.62%), Networking (70.64%), Economics (69.36%), Methods (67.66%), Media (67.66%), Learning motivation (68.94%), and Task overload (69.36%). With an average percentage of 52.83%, which shows that the percentage index of problems in the implementation of learning is quite complex so you have to review if you want to use the online system at SMA Negeri 1 Lingsar. The solution expected by biology teachers for the implementation of biology learning in the future is so that the school and the school community are able to support each other in terms of private and public infrastructure.

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