



Perceptions of Biology Department Students, State University of Gorontalo On Online Learning During the Covid 19 Pandemic

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ABSTRACT

Article History

Received 06-12-2022
Revised 18-12-2022
Accepted 01-01-2023
Published 15-01-2023

Keywords:

Perceptions, Online Learning, Students

The research aims to determine the perceptions of Biology Department students at Universitas Negeri Gorontalo towards online learning during the Covid-19 pandemic. This research employs a survey method, and data are collected through a questionnaire. The research participants are all students majoring in Biology who were affected by the Covid-19 pandemic from 2018 to 2021, totaling 420 participants. The sample is determined by using stratified random sampling with 15% in each year totaling 67 participants as the sample. The results indicate that: (1) the lecturer capability indicators are in the very good category with 84%; (2) indicators of learning activities are in the good category with 83.7%; (3) the indicators of facilities and infrastructure are in the good category with 85.3%; (4) The average of all indicators indicate that perception of students majoring in Biology at Universitas Negeri Gorontalo towards online learning during the covid-19 pandemic are in the very good category with 84.3%.

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How to Cite

Mamonto, D. S., Mamu, H. D., Lamondo, Dj. (2022). Perceptions of Biology Department Students, State University of Gorontalo On Online Learning During the Covid 19 Pandemic. *Jurnal Pendidikan Biologi*, 11(3), 45-51.

INTRODUCTION

The impact of the covid 19 pandemic in 2020 in Indonesia began penetrated the world of education, the center of government to the regions providing policy to close all educational institutions. This is done as an effort to prevent the spread of the corona virus. Hope with all educational institutions not carrying out such activities usually, this can minimize the spread of this covid 19 disease.

Matter The same has also been done by various countries exposed to the disease Covid 19, the lockdown or quarantine policy was carried out as an effort reducing the number of people who can give access to the interaction the spread of the coronavirus. The spread of this corona virus was very early had an impact on the world economy which was starting to be sluggish, but now the impact is education is also felt. Policies taken by many people countries including Indonesia by closing all

educational activities, make the government and related institutions have to present an alternative educational process for students and students who can not carry out the educational process in educational institutions. Policy on the education sector taken by the government related to the Covid 19 case namely: brave learning for school children, brave lectures, national exams 2020 abolished, 2020 UTBK SBMPTN postponed, and implementation of SNMPTN still under review (Anhusadar, 2020).

Indonesian education has been impacted by the advancement of information and communication technology, particularly in the learning process. One indication of this phenomenon is the existence of filtering in the learning process where the interaction between educators and students is not only carried out through face-to-face relationships but also through communication media such as computers, the internet, and so on.

According to Lande (2017) online lectures are a learning process that utilizes information technology, in this case utilizing the internet as a method of delivery, interaction and facilitation. Inside it learning service support that can be utilized by learning participants. In addition, there is also a learning system design that can be studied and known by each learner. Online learning exist as an alternative method of learning that does not require them to be present in class. For lecturers, online learning methods exist to change conventional teaching styles which will indirectly impact work professionalism. There are so many applications that can be used to assist the online learning process, which can be used to continue studying from home including: zoom, google meet, whatsapp, skype, youtube, google classroom and others, but all of that is influenced by perception (Amelia & Rahmawati, 2020).

Perception is a person's tendency towards something in a relative realm, meaning that individual perceptions of something will vary

based on the perceptions of each person. So that perception will also affect differences in the learning outcomes of each individual (Permana, 2019). Perception is related to how to gain knowledge about objects or events at a certain time so that the perception of a person or group is different because they have different points of view. Perception includes the interpretation of objects, signs and people from the experience of a person or group (Widoyoko, 2018). Perception can affect differences in learning outcomes from each person (Amelia & Rahmawati, 2020).

During the Covid 19 pandemic, Gorontalo State University was one of the state universities that was conducting online learning. For students of the Department of Biology, Faculty of Mathematics and Natural Sciences, State University of Gorontalo who will become future educators, they must master and develop science and technology. Ni'mah (2015: 26) states that many things can be done to develop the creativity of teachers and lecturers in teaching so as to create an interesting learning atmosphere. One of them is by using technology-based learning media.

During the Covid-19 pandemic, Gorontalo State University implemented its online learning program as a substitute for on-campus instruction. With this shift in the learning model, feedback from students regarding online learning is required as a guide for subsequent learning procedures. If student perceptions are positive, it may be decided that the online learning process is a continuous learning model that is used in addition to being carried out because of a pandemic.

METHOD

Research Type and Subjects

This research is a quantitative description research. This research was conducted at the Department of Biology, State University of Gorontalo. The sampling method was carried out by means of stratified random sampling,

which is a sampling technique by dividing the population into smaller populations.

The sample used in this study was 15% according to Arikunto (2010: 112) if there are more than 100 subjects, 10-15% is taken. The sample in this study were 67 active students majoring in biology.

Research procedure

The stages in this study include observation, questionnaire validation, data collection and analysis of the results. At the observation stage, researchers who also include active biology students take online lectures.

At the validation stage the researcher makes a questionnaire and distributes the link

to the trial sample, in this case batch 17. Invalid statement points are distributed back to batch 17 for other classes. After 3 repetitions each in class A Biology Education, class B Biology Education and class Biology finally all statements are valid.

Data Collection and Analysis Techniques

The data collected by distributing a questionnaire link to respondents, in this case students majoring in Biology in the form of a Google form via WhatsApp. The questionnaire contains statements accompanied by 5 alternative answers with a Likert scale.

Table 1. Alternative Answers Score

Alternative Answers	Score
Strongly agree	5
Agree	4
Disagree	3
Don't agree	2
Strongly Disagree	1

(Saragih & Sebayang, 2020).

Respondents who filled out the questionnaire were automatically read on the researcher's gdrive. After the data collected has reached the target, the researcher proceeds to the data analysis stage.

In this study the data were analyzed using the formula:

1. Calculate the percentage score of each statement item.

$$P = x 100\% \frac{f}{n}$$

(Sugiyono, 2013).

Information:

P = percentage number

f = Frequency (number of respondents' answers)

n = Many respondents

2. Determine the overall percentage, then use the following steps:

- a. The lowest score if all items get a score of 1 = 1 x 67 = 67 score

- b. The highest score if all items get a score of 5 = 5 x 67 = 335 score
- c. Determine the category using the formula $67/335 \times 100\% = 20\%$
- d. Range = $100\% - 20\% = 80\%$
- e. Interval length = range/number of classes = $80 / 5 = 16\%$
- f. The following are the assessment criteria to determine the overall percentage:

Table 2. Interpretation Score Criteria

Score	Interpretation
84%-100%	Very good
67%-83%	Good
50%-66%	Enough
33%-49%	Bad
0%-32%	Very Bad

Adoption of (Arikunto: 2010).

RESULTS AND DISCUSSION

The results of the research on the perceptions of students majoring in Biology at

Gorontalo State University towards online learning during the Covid 19 pandemic on indicators of lecturer capability can be seen in Figure 1.

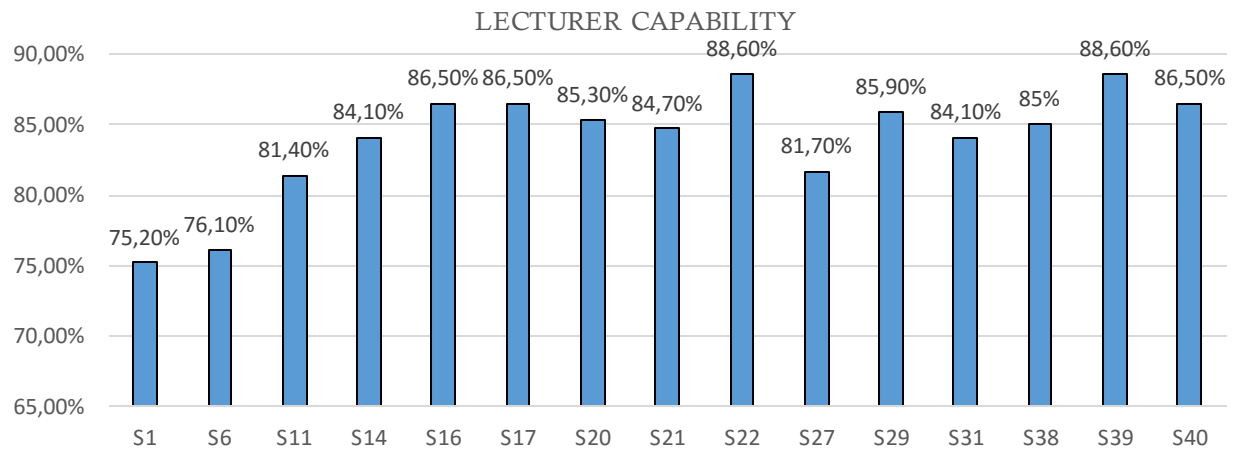


Figure 1. Lecturer Capability Indicator Percentage Results

Information: S = Statement

Based on Figure 1. The responses of respondents to the implementation of online learning on the lecturer capability indicator with the highest indicator in statement item number 22, the lecturer explaining the direction and learning objectives that must be achieved for one semester, with a percentage score of 88.6%. In item statement number 39, the lecturer explaining the subject or topic of learning appropriately, it has the same percentage score as item statement number 22, which is 88.6%. Both are included in the very good category. The statement item with the lowest percentage is number 1, the lecturer is

always present in the room during the online learning process, with a percentage score of 75.2% which is included in the good category.

This is supported by Kadir (2018) which explains that lecturers are the key in every effort to improve the quality, relevance and efficiency of education. The ability of lecturers in carrying out their role as facilitators is to provide facilities for students in the teaching and learning process, and to set a good example for students (Suyanto & Jihad, 2013).

The results of the research on the perceptions of students majoring in Biology at Gorontalo State University regarding online

learning during the Covid 19 pandemic on indicators of facilities and infrastructure can be seen in Figure 2. Based on Figure 2, the respondents responses to the implementation of online learning were in the facilities and infrastructure indicator with the highest indicator in statement item number 25, students using smartphones to take part in

online learning, with a percentage score of 89.5% including the very good category. The statement item with the lowest percentage score is number 43, the network in the area where students live strongly supports the online learning process, with a percentage score of 73.4% included in the good category.

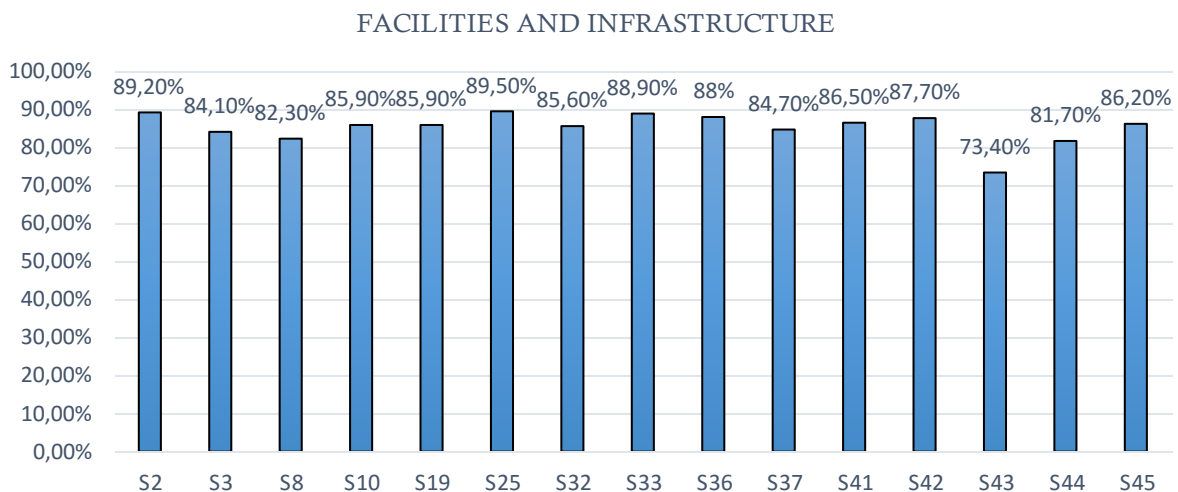


Figure 2. Facilities and Infrastructure Indicators Percentage Result

Information: S = Statement

This is supported by the opinion of Novita (2017) who stated that facilities and infrastructure are an important resource in supporting the learning process so that the achievement of learning objectives can run smoothly. The results of the research on the perceptions of students majoring in Biology at Gorontalo State University regarding online learning during the Covid 19 pandemic on indicators of learning activities can be seen in Figure 3.

Based on Figure 3, the respondents' responses to the implementation of online learning were in the learning activity indicator with the highest indicator in statement item number 30, students using smartphones to take part in online learning, with a percentage score of 89.5% including the very good

category. The statement item with the lowest percentage score is number 7, the network in the area where students live strongly supports the online learning process, with a percentage score of 73.4% which is included in the good category. This is in accordance with Inah (2015: 159) which states that teaching and learning activities are characterized by the cultivation of a special material. Therefore the material must be designed in such a way that it is suitable for achieving learning objectives.

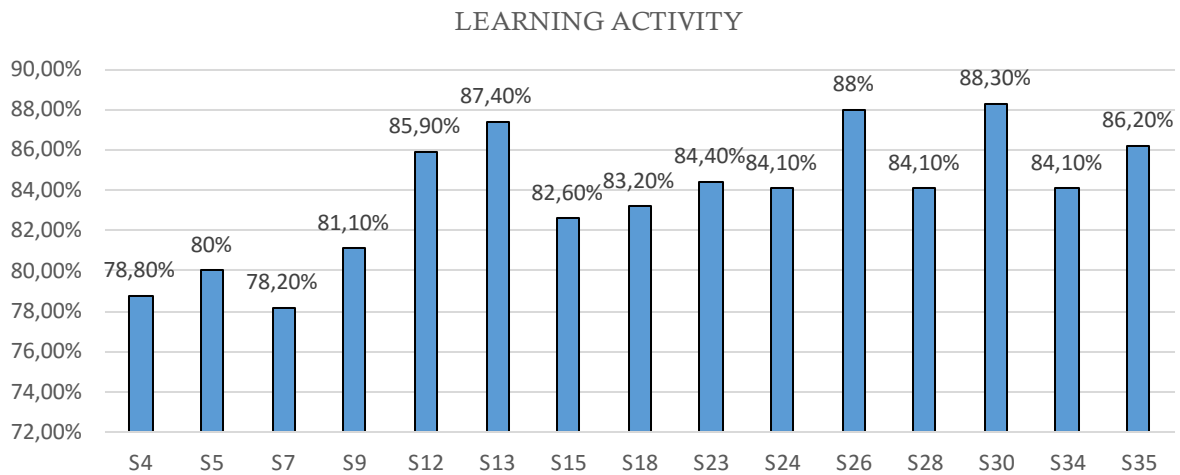


Figure 3. Learning Activity Indicators Percentage Result

Information: S = Statement

Table 3. The average score

Indicator	Score	Category
Lecturer Capability	84%	Very good
Learning Activity	83.7%	Good
Facilities and Infrastructure	85.3%	Very good
Average	84.3%	Very good

Table 3 above shows that the perceptions of students majoring in UNG biology towards online learning during the Covid 19 pandemic for the highest score were in the facilities and infrastructure indicator with a percentage score of 85.3% in the very good category, and the lowest score was in the learning activity indicator with a score percentage of 83.7% in the good category. The lecturer capability indicator with a percentage score of 84% is in the very good category. For the overall results of the 3 indicators of student perceptions majoring in UNG biology towards online learning during the Covid 19 pandemic with an average score of 84.3% in the very good category.

CONCLUSION

Based on the results of data processing and data analysis that has been described, it can be concluded that the perceptions of students

majoring in UNG Biology towards online learning during the pandemic on the lecturer capability indicators are included in the very good category with a percentage score of 84%. Learning activity indicators are included in the good category with a percentage score of 83.7%. The input and infrastructure indicators are included in the good category with a percentage of 85.3%. The average of all indicators shows that the perceptions of students majoring in Biology at Gorontalo State University towards online learning during the Covid 19 pandemic were in the very good category with a percentage score of 84.3%.

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