

## Lecturers and students' perceptions about online learning problems during the COVID-19 pandemic

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### ABSTRACT

This research is based on the problem of the outbreak of the coronavirus which has become a global pandemic and a national disaster. The purpose of this study was to describe the perceptions of lecturers and students on online learning problems during the COVID-19 pandemic. The data was collected with the help of questionnaires. This quantitative descriptive study was conducted among lectures and students who selected randomly. Data analysis used a Likert scale and the results of perceptions used descriptive analysis. The results of the study show that the perceptions of lecturers and students on online learning problems during the pandemic consisted of six aspects (lecture plans, online lecture activities, online lecture recording and evaluation, lecture assistance services, and lecture support facilities). Furthermore, it can be agreed that effective online learning occurs due to the interaction of students and lecturers as well as technology connected to education.

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## 1. INTRODUCTION

The world has been shocked by the spread of the coronavirus, known as COVID-19. World Health Organization (WHO) has declared that COVID-19 is a global emergency problem [1], [2]. This condition made the Indonesian government formulate and disseminate a policy of lockdown, physical blocking, and self-limitation from large crowds. This was done to break the chain of spreading COVID-19. Minister of Education and Culture, Nadiem Makarim issued circular number 3 of 2020 dated March 9, 2020, concerning the prevention of COVID-19 in the education unit, circular number 4 of 2020 concerning implementation of education in the emergency of COVID-19, and circular from the minister of education and culture number: 36962/MPK.A/HK/2020 dated March 17, 2020, concerning online learning and working from home. The impact of COVID-19 gradually leads to the world of education. As a result, the education system in Indonesia from pre-school to university has changed. Nearly 900 million students are affected by COVID-19 [3].

Based on the Minister of Education and Culture Circular number 3 and number 36962/MPK.A/HK/2020, University Sebelas Maret lecturers have conducted lectures online. Currently, students are required to use cellphones or laptops to carry out lectures. Several innovations have been made by many groups, including the use of applications such as Zoom, Google Meets, Google Classroom, Skype, and other platforms [4], [5]. Data obtained from the logbook of the Faculty of Teacher Training and

Education (FTTE) from March 15 to April 15, 2020, several lecturers have applied the Whatsapp group (WAG) platform (47.5%), Google Class (21.1%), Online learning system (SPADA) (18.5%), Open Course Ware (OCW) (3.5%), Zoom (3.2%), Google Meet (2.1%), Edmodo (1.6%), others (1.6%), and Schoology (0.9%).

This online learning can be carried out effectively if there is collaboration between lecturers and students [6][6]. Although it is not through direct face to face, teaching and learning activities can still be carried out, and is most students are still motivated to learn. This could have an impact on learning outcomes of all- students can be maximized. Online learning can also improve the effectiveness of the performance of lecturers as well as the activity of all-students in achieving the learning objectives [7]. Campus education management experienced several obstacles during the COVID-19 pandemic. By monitoring, interviews with lecturers and students from March to April 2020, there were several problems. First, learning activities carried out by online processes are still unsuitable in terms of planning, implementing, and assessing learning. Second, some lecturers still have difficulty making strategies suitable for online learning. Third, the evaluation of learning activities carried out by lecturers is still experiencing obstacles. To four, only a small proportion of lecturers who use the facilities of the government several online learning applications such as Genius, Study Room, Google Classroom, Email, Skype, Edmodo, Zoom, Google Meet, Google Class, and other. Fifth, the campus has facilitated the SPADA platform, but it is still constrained by the network so that only a few lecturers and students use it. Sixth, some lecturers and students are less adept at using technology. Seventh, between lecturers and students, because they cannot meet face to face, misunderstandings, and disinformation occur.

Previous researchers have researched about perspective educators on the move to online learning. This study explains that the change from face-to-face learning to online learning requires collaboration between educators and students. In addition, online learning is also a constraint that requires adequate technology, smooth internet access between students and teachers so that learning can run effectively. So that online learning is considered effective if this is fulfilled as evidenced by the increased learning achievement of students [8]. Another study states that a review and implications of college student satisfaction with online learning during COVID-19. This study explains that college students are more satisfied with asynchronous learning. The reason is that college students can review the material that has been given by the lecturer and the learning is flexible. College students are more active in using asynchronous learning compared to synchronous learning because asynchronous learning is facilitated by real-time discussions and discussions can be recorded for review for exam preparation purposes [9]. Discussing technology cannot be separated from advances in information and communication technology (ICT), as well as various possibilities in learning. The advantages of ICT in the learning process will give birth to concepts, benefits, and learning materials for e-learning [10]. E-learning uses information and communication technology as a tool; to increase efficiency, effectiveness, transparency, accountability, and learning comfort; with the object is a better learning service, interesting, interactive, and attractive [11].

Students spend more time with technological media, such as gadgets. Gadgets have become the primary needs of many people. Many use gadgets to access teaching materials, play games, seek entertainment, or interact online with other friends. As a form of support to most students in the use of media and educational technology effectively, lecturers need to use it as a learning resource. Technology-based learning is a valuable tool in integrating the curriculum and is in line with the 21st century [12]. Technology can also be reached by anyone [13]. Thus, it is very clear the benefits that can be obtained from the existence of technology in learning. As stated by Keengwe and Georgina in their research, it has been explained that technological developments provide changes to the implementation of learning [14]. Information technology is also a medium in the educational process, including the teaching and learning process, reference search, and information sources [15]. From the results of various other studies on the study of online learning problems, researchers have not found any field of study related to online learning problems, especially in dealing with the current COVID-19 case. Therefore, researchers were moved to research the perceptions of lecturers and students on online learning problems during the COVID-19 periode. The purpose of this study was to describe the perceptions of lecturers and students on online learning problems during the COVID-19.

## 2. RESEARCH METHOD

This is descriptive quantitative research. According to Sugiyono, descriptive research is a study that explains events or events directly with the time that is happening now. Quantitative research is a technique of taking data using numbers and interpreting research results through numbers [16]. The research was conducted from April to September 2020 at the Teacher Training and Education Faculty, University Sebelas Maret, Surakarta, Indonesia. The reason for this is the production time for designing campus programs and conducting online learning activities. The subjects of this study were 68 lecturers and 209 students at the Faculty of Teacher Training and Education, University Sebelas Maret, Surakarta. The sampling technique

used in this research is purposive sampling technique. Mechanical purposive sampling is a sampling technique with a data source specific considerations or following the purpose [17]. The data in this study consisted of primary data and secondary data. Primary data in this study, in the form of questionnaire results, while secondary data obtained from various agencies involved in the research, namely in the form of archives, documents, and other people's research results. The questionnaire technique was used to determine the depth of online learning problems. The formula for calculating the questionnaire score used is [18].

$$M = \frac{\sum fx}{N}$$

Notes:

M=Average score on the data used

$\sum fx$ =Total score

N=The total number of components used

Analysis techniques are inductive, namely an analysis based on the data obtained, and then a certain relationship pattern is developed. The data analysis model used during the study and after completing data collection was interactive analysis. This study uses a questionnaire that has been validated to be distributed and filled out by respondents, namely lecturers and students. The indicator in questionnaire consists of 6 indicators using 4 categories of the Linkert scale as shown in Table 1. Before the questionnaire was shared, the results showed that  $r$  calculated  $> r$  table with an average (0.815) for each questionnaire statement. Then continued with reliability testing, results were obtained if  $\alpha > 0.80$  means that it suggests that all reliable items have strong reliability.

Table 1. Likert scale on questionnaire

Category	Description
4	Strongly agree (SA)
3	Agree
2	Disagree (D)
1	Strongly disagree (SD)

### 3. RESULTS AND DISCUSSION

From the results of distributing questionnaires regarding the perceptions of lecturers and students about online learning during the pandemic, there were 209 responses from students and 68 responses from lecturers. There are three study programs (specifically for students) that participate in this survey. Meanwhile, there were more than five study programs that participated in the survey (lecturer respondents) at the Faculty of Teacher Training and Education. Student perception data regarding learning problems are viewed from several aspects, namely: lecture design, online lecture activities, online lecture record-keeping and evaluation, lecture assistance services, and lecture support facilities.

In Table 1 it can be interpreted that the course design carried out during online learning has gone quite well. More than 50% of student responses have agreed that the course design, such as the clarity of the formulation of lecture outcomes, online tutorial guides, clarity of competency maps and material, information on learning hours, various learning resources, learning evaluation rules, and study load information has been designed in a representative and systematic manner. This is in line with the lecturer's response where most of the lecturers also agree on several aspects needed in designing lectures. The lecturer has planned the lecture well. As a result, students can follow lecture designs made by lecturers and campus rules or policies quite well. The results are both relevant and interrelated.

Furthermore, regarding the aspects of online lecture activities, the results obtained from Table 2 show that lectures that have been implemented during this pandemic have used varied materials. During lectures, there has been interaction between students and students and between students and lecturers. Lectures are conducted through online media such as chat or e-mail. During lectures, students are required to use a variety of skills. Between lecturers and students, there has been good interaction and feedback. The results of student responses are more than 65% of students who agree. Online lectures provide flexible time. Unfortunately, online lectures place more emphasis on assignments and homework. However, according to them, online lectures were no more effective than face-to-face, especially in explaining material to students.

Table 1. Results of lecturer and student responses on aspects of lecture design

Statement	Respondents	SA	A	D	SD
At each stage of the online lecture, a clear formulation of course outcomes are conveyed	College student	19.6%	56%	19.6%	1%
	Lecturer	64.7%	30.9%	4.4%	-
There is a guide that contains access to online tutorials and all services during lectures online	College student	20.1%	64.6%	12.9%	2.4%
	Lecturer	61.8%	32.4%	5.9%	-
At the beginning of the course, a structured material map/competency map is presented	College student	29.7%	49.3%	20.6%	0.5%
	Lecturer	61.8%	35.3%	2.9%	-
There is information on the distribution of learning hours systematically	College student	28.7%	51.7%	18.7%	1%
	Lecturer	69.1%	29.4%	1%	-
A variety of learning resources are used during online lectures	College student	23%	62.7%	13.4%	1%
	Lecturer	67.6%	32.4%	-	-
At each stage of the online lecture, the rules for evaluating learning outcomes and their weighting are conveyed	College student	16.3%	50.7%	30.1%	2.9%
	Lecturer	66.2%	33.8%	-	-
There is information about study load, study time per day/week, and required technology	College student	18.7%	57.4%	22%	1.9%
	Lecturer	45.6%	47.1%	7.4%	-

Table 2. Results of lecturer and student responses on aspects of online lecture activities

Statement	Respondents	SA	A	D	SD
Online lecture material is presented in a variety of ways	College student	23.4%	50.7%	24.4%	1.4%
	Lecturer	61.8%	38.2%	-	-
There is an interaction between students during online lectures	College student	28.7%	67%	3.3%	1%
	Lecturer	57.4%	38.2%	4.4%	-
There is an interaction between students and lecturers during online lectures	College student	23.4%	70.3%	5.3%	1%
	Lecturer	64.7%	30.9%	4.4%	-
At each stage of the online lecture, teaching materials are delivered in various ways, such as online conferencing, chat, or e-mail	College student	24.4%	69.9%	5.7%	-
	Lecturer	73.5%	26.5%	-	-
Several skills are required during online lectures	College student	30.1%	66%	3.8%	-
	Lecturer	67.7%	32.4%	-	-
There is feedback provided by lecturers and fellow students during online lectures	College student	26.8%	65.1%	7.7%	0.5%
	Lecturer	51.5%	47.1%	1.5%	-
Online lectures provide flexible time to do assignments	College student	19.1%	40.7%	30.1%	10%
	Lecturer	44.1%	47.1%	8.8%	-
Online lectures place more emphasis on assignments and homework	College student	42.6%	27.8%	21.5%	8.1%
	Lecturer	23.5%	22.1%	44.1%	10.3%
Online lectures are more effective at providing an understanding of the material than face-to-face lectures in class	College student	4.8%	14.4%	51.2%	29.7%

The difference in results that stands out is on three things, namely online lectures provide flexible time in doing assignments, online lectures emphasize more on assignments and homework, and online lectures are more effective at providing an understanding of the material than face-to-face lectures in class. In the first problem, the response between lecturers and students is quite different where most students respond to online learning not to help students learn flexibly. The result also spreads to other problems, namely too many assignments given by lecturers when studying from and not effective enough for those who have been accustomed to studying at their eyes. The results revealed by the lecturers were different where for lecturers, online-based teaching was quite flexible, did not emphasize assignments, and was quite effective to be applied in the current pandemic era. Even so, these results can be concluded that it provides information that lecture activities are carried out by the previously established design, but there are obstacles where lectures still focus on assigning assignments and are not effective enough to explain the material that requires direct practice.

Table 3 provides information that both students and lecturers have carried out systematic assessments and evaluations. Lecturers have informed several important things in online lecture assessments, such as the techniques used, weighting scores, examination techniques, and other systems that support the assessment process. Student responses are also in line with the lecturers' responses where students also agree that there is information about lecture assessments whether delivered orally or through information in the education section.

The results in Table 4 can be summarized that the lecturer has used the media in delivering material during online lectures. This was approved by the student. The media users tend to be easy to use and helpful during lectures. Besides, the media used is also following the material to be delivered.

Table 3. Results of lecturer and student responses on the aspects of notes and evaluation of online lectures

Statement	Respondents	SA	A	D	SD
There is information about the overall online lecture scoring system	College student	8.6%	50.7%	37.8%	2.9%
	Lecturer	48.5%	48.5%	2.9%	-
At the beginning of the course, the test implementation technique is clearly explained	College student	18.7%	65.6%	15.3%	0.5%
	Lecturer	55.9%	44.1%	-	-
There is information on the scoring system for collaborative activities, both per group and individually during online lectures	College student	15.3%	51.7%	30.6%	2.4%
	Lecturer	44.1%	48.5%	7.4%	-

Table 4. Results of lecturer and student responses on the aspect of lecture media

Statement	Respondents	SA	A	D	SD
At each stage of the online lecture, media is used to deliver lecture material	College student	15.3%	70.8%	12.4%	1.4%
	Lecturer	55.9%	42.6%	1.5%	-
The lecture media used are easily accessible and of good quality	College student	16.7%	67%	15.3%	1%
	Lecturer	54.4%	42.6%	2.9%	-
The lecture media used are following the characteristics of the lecture material	College student	18.7%	65.6%	14.8%	1%
	Lecturer	51.5%	47.1%	1.5%	-

Based on Table 5, it can be said that the lecture assistance services have been run quite well. The lecturer informed that they had facilitated students in academic services, administration, online tutoring, and lecture complaints. Unfortunately, there were student responses that were not in line with the lecturers' responses. In the statement, independent tutoring services, students still feel they do not get independent tutoring services from lecturers. Likewise, with technical services and online lecture complaints, students are not quite satisfied with this.

Table 5. Results of lecturer and student responses on aspects of lecture assistance services

Statement	Respondents	SA	A	D	SD
There is information on academic and administrative services online	College student	21.1%	62.2%	15.8%	1%
	Lecturer	54.4%	45.6%	-	-
There is a regular self-tutoring service during online lectures	College student	14.4%	46.9%	34.9%	3.8%
	Lecturer	44.1%	50%	4.4%	1.5%
There are technical service and online lecture complaints	College student	21.1%	49.8%	26.3%	2.9%
	Lecturer	50%	45.6%	4.4%	-

The results of Table 6 above can be interpreted that students and lecturers have received proper lecture support facilities. These supports include the existence of a platform, appropriate devices, a smooth and quota-free internet network, and various applications during online lectures. Unfortunately, in its implementation it was found that; students are still not satisfied with the online learning support platform. Then followed by outdated devices so that it will become an obstacle in online learning. It is also relevant to the internet network and the number of different applications so that students experience confusion due to the inconsistency of using learning applications.

Table 6. Results of lecturer and student responses on aspects of lecture support facilities

Statement	Respondents	SA	A	D	SD
There is an online lecture support platform	College student	19.6%	68.9%	10.5%	1%
	Lecturer	54.4%	45.6%	-	-
There is a proper device during the online lecture	College student	15.3%	69.9%	13.4%	1.4%
	Lecturer	42.6%	52.9%	4.4%	-
There is a good and smooth internet network during online lectures	College student	19.1%	43.5%	31.1%	6.2%
	Lecturer	67.6%	23.5%	8.8%	-
There is quota-free internet access during online lectures	College student	26.3%	38.8%	24.9%	10%
	Lecturer	66.2%	17.6%	14.7%	1.5%
In each course, a different supporting application is required during online lectures	College student	19.6%	59.3%	20.1%	1%
	Lecturer	41.2%	51.5%	7.4%	-

#### 4. DISCUSSION

From the results of this study, the six aspects used to measure the perceptions of lecturers and students about online learning problems are not sufficient to cause continuous problems. The point of the problem that occurs lies in the assumption that online learning is not effective enough to carry out lectures.

Face-to-face meetings are more satisfying for students in general. However, this is not in line with the response of the lecturer who denied the students' assumptions. For lecturers, students must be familiar with the current digital era. Technology has become a part of human life today. Information technology is the development of information systems by combining computer technology with telecommunications [19]. Humans are greatly influenced by the development of science and technology [20]. The existence of technology helps students to acquire skills in a professional manner and improve their abilities [21]. Technological developments in the era of globalization cannot be avoided by the world of education. The world of education must constantly adjust to technological developments, especially in improving the quality of education, adjusting its use for the world of education, and the learning process [22]. The use of technology in education has been proven by many previous researchers. The use of technology is also not only beneficial in the learning process, but technology can be used in several general studies, such as those conducted by Balakrishnan and Gan [23].

Also, another problem regarding the services and facilities to support lectures has not received a good response from students. So far, students feel that they are burdened materially, such as money to buy an excess quota. Especially at this time of the pandemic, where some parents had to work from home or had to be sent home due to unstable economic conditions. The COVID-19 virus has become a crucial pandemic for all corners of the world, including Indonesia. With this condition, students are less able to interact with lecturers [24]. As a result, students do not master the material well and lack concentration [25]. Worse, if the lecturer is less skilled in operating online applications. What happens is that students are getting bored of attending lectures and less motivated to learn [26]. Several other things have become common as a result of online learning, such as the need for clear information regarding the material or assignment given. Students must be familiar with these conditions. Based on this discussion, it can be concluded that the perceptions of students and lecturers regarding online learning problems during the pandemic period are viewed from six important aspects where these six aspects show quite positive results. This means that there are no significant problems.

## 5. CONCLUSION

Based on the results of the research and discussion, it can be concluded that the perception of lecturers and students on online learning problems during the pandemic consists of six aspects, namely: lecture plans, online lecture activities, recording and evaluation of online lectures, lecture assistance, services, and educational support facilities. From these six aspects, it can be said that the perceptions of lecturers and students are still in the general range. Lecturers and students feel that what happens during online learning lies in effective implementation because there are many directions of communication and discussions between lecturers and students, obstacles experienced by students can still be controlled such as internet access funds and solutions in the form of internet funding assistance. Online learning has flexibility in learning time and lecturers provide time for discussion by recording, so that it can be reused. Hopefully, lecturers are varied material to increase student motivation (such as variation in the form of material in terms of learning design and learning methods used).




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