

The Implementation Of Online Learning During Covid-19 Pandemic: Student Perceptions In Areas With Minimal Internet Access

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ABSTRAK

Penerapan pembelajaran dalam jaringan (daring) dilakukan secara massif di masa pandemi Covid-19. Implementasinya tentu memunculkan banyak hal-hal baru khususnya untuk wilayah yang minim akses internet. Untuk itu, perlu dilakukan kajian bagaimana pandangan mahasiswa dalam melaksanakan pembelajaran daring. Penelitian dilakukan untuk mengetahui persepsi mahasiswa dalam implementasi pembelajaran daring di masa pandemi Covid-19 pada wilayah yang minim akses internet. Jenis penelitian ini adalah penelitian deskriptif kualitatif, dimana subjek penelitian adalah mahasiswa di salah satu perguruan tinggi swasta di Nusa Tenggara Timur, Indonesia. Penelitian ini dilakukan melalui empat tahapan, yaitu (1) pengumpulan data, (2) reduksi data, (3) penyajian data, (4) penarikan kesimpulan. Instrumen yang digunakan adalah angket/kuesioner yang terdiri atas 21 butir pertanyaan. Analisis data dilakukan secara deskriptif. Hasil penelitian menunjukkan bahwa mahasiswa mempunyai persepsi yang beragam terhadap penyelenggaraan perkuliahan daring. Persepsi tersebut meliputi persepsi infrastruktur pembelajaran daring sebesar 57%, keterampilan pembelajaran daring sebesar 53%, persepsi kualitas interaksi akademik secara online sebesar 69%,

manfaat pembelajaran daring sebesar 53%, kendala yang dihadapi sebesar 42%, faktor pendukung pembelajaran daring sebesar 38%, dan harapan pembelajaran daring di masa mendatang sebesar 54%. Simpulan dari penelitian ini adalah terdapat beragam persepsi mahasiswa dalam pembelajaran daring selama masa pandemi Covid-19 mulai dari infrastruktur, kualitas interaksi, dan kebermanfaatan yang diterima oleh mahasiswa.

ABSTRACT

The application of online learning was carried out massively during the Covid-19 pandemic. Its implementation certainly raises many new things, especially for areas with minimal internet access. For that, it is necessary to conduct a study of how students perceive online learning. The study was conducted to determine students' perceptions of implementing online learning during the Covid-19 pandemic in minimal internet access areas. This type of research is a qualitative descriptive study, where the research subjects are students of a private university in East Nusa Tenggara, Indonesia. This research was conducted in four stages, namely (1) data collection, (2) data reduction, (3) data presentation, (4) concluding. The instrument used was a questionnaire consisting of 21 questions. Data analysis was carried out descriptively. The results showed that students had different perceptions of the administration of online lectures. These perceptions include perceptions of online learning infrastructure by 57%, online learning skills by 53%, perceptions of the quality of online academic interactions by 69%, benefits of online learning by 53%, obstacles faced by 42%, supporting factors for online learning by 38%, and future online learning expectations of 54%. This study concludes that students' various online learning perceptions during the Covid-19 pandemic, starting from infrastructure, quality of interaction, and students' benefits.

Introduction

Indonesia is currently under the Corona virus pandemic. This situation forces all levels of society to experience changes in their way of life. The Covid-19 pandemic has caused changes in the order of human life in all fields (Chang et al., 2020; Mokter, 2020; Remuzzi & Remuzzi, 2020; Wong et al., 2020). One area that has been heavily influenced is education (Panesar et al., 2020). Students have greatly felt the pandemic's impact, both elementary school, junior high school, senior high school, and college. The learning process carried out face-to-face must be shifted to online learning to prevent the spread of Covid-19. (Khachfe et al., 2020) All activities such as seminars, workshops, conferences, and other activities were postponed or even cancelled (Mishra et al., 2020; Oyedotun, 2020; Patricia, 2020; Sahu, 2020). It was done to prevent the spread of Covid-

19 from spreading. Online learning is learning carried out with the internet synchronously and asynchronously, providing opportunities for student interaction with learning resources both educators/environment and their peers (Dong et al., 2020). Online learning provides students opportunities to share opinions, learn to be more independent without any time limit and more flexible space (Hwang et al., 2020; Kkese, 2020; Lage-Cala et al., 2020). Online learning requires educators' and students' ability because the ability to use technology will greatly help create a more conducive learning atmosphere so that good social interaction is formed. (Andel et al., 2020). In addition to the ability, online learning must also pay attention to students' financial condition and the facilities and infrastructure that support online learning (Rusli et al., 2020).

In principle, the application of online learning is inseparable from the rapid development of ICT. Entering the era of Information and Communication Technology, there is a great need for the importance of improving the quality of learning (Zhafira et al., 2020). We can improve the quality of learning through educational technology by opening wide access to knowledge and providing quality education, especially the application of high tech and high touch approaches. Information technology systems in education provide a broad, fast, effective, and efficient coverage of disseminating information to various parts of the world. Information technology develops in line with the development of communication theory and technology that supports learning activities. Multimedia-based learning, such as computer line learning, web line learning (e-learning), is a form of ICT utilization that needs to be implemented in today's education world.

Along with the development of educational technology and its supporting infrastructure, efforts to improve the quality of education above, among others, can be made through the use of educational technology in learning activities. Educational technology is a system that can facilitate educators and students to learn more widely and also varied. Students can study independently, anytime and anywhere, without being limited by space and time through the system's facilities. The material they can learn is also more varied, not only in the form of a presentation of words but also richer with variations of text, visuals, audio, and animation (Hasibuan, 2016).

By utilizing ICT, students fully carry out online learning by accessing and studying teaching materials, doing exercises, discussing and sharing knowledge and experiences with other student learners. During the learning process, students are guided and facilitated online. These various advantages make online learning the main choice today (Mustakim, 2020). To be able to carry out online learning, lecturers must prepare learning modules. Modules prepared by lecturers must meet the following requirements: (1) have clear, specific, observable, and measurable learning objectives to change learner behavior and (2) the content in the module is relevant to the needs of learners, society, the world of work, or the world of education. However, many other variables affect online learning's effectiveness and efficiency (Pratiwi, 2020).

These variables include the readiness of infrastructure, educators' readiness, the readiness of learning resources, and online learning's usefulness. These various variables will be perceived differently by students. Students who are in areas with minimal internet, for example, in eastern Indonesia, especially in East Nusa Tenggara. The internet has not fully reached this area. Many areas do not feel the internet network in their daily activities (Aminah, 2019).

Students as learning objects feel the greatest impact of implementing online learning. For this reason, it is necessary to conduct a study of how students perceive this online learning. Through this opportunity, research was conducted to determine students' perceptions in implementing online learning during the Covid-19 pandemic. Perception itself can be defined as the process of knowing or recognizing objects and events with senses, awareness of organic processes, a group of sensing with the addition of meanings that come from past experiences, variables that prevent or interfere with the ability of the organization to make a distinction between stimuli, and an intuitive awareness of direct truth or immediate belief about something (Chaplin, 2008). Perception is considered a transaction in which the environment, observers, and perceptions depend on each other (Agarwal & Kaushik, 2020). Knowing students' perceptions of online learning implementation, especially in areas with minimal internet, can be used as a foothold in making policies. In addition, it can be used as study material in developing the most appropriate form of online learning in various existing conditions.

Method

This research is a qualitative descriptive study. With this research approach, it is expected that students' perceptions of online learning can be described more thoroughly and deeply. This research was conducted on STKIP Citra Bakti students. The object of research is students' perceptions regarding the implementation of online learning during the Covid-19 period. This research was conducted in four stages, namely (1) data collection, (2) data reduction, (3) data presentation, (4) concluding. Data collection was carried out using two research instruments, namely questionnaires and interview guides. Data reduction in this study will be carried out continuously and continues after field research until the information is complete. Data presentation is carried out to display descriptive data from the results of the questionnaire given. The conclusion stage is the final stage of research to answer how students perceive online learning implementation during the Covid-19 period. The

instrument used was a questionnaire that consisted of 7 perceptual indicators, which were scattered into 21 questions. These perception indicators are perceptions of online learning infrastructure, online learning skills, perceptions of the quality of online academic interactions, benefits of online learning, obstacles faced, supporting factors for online learning, and expectations of future online learning. Details of the research instruments are presented in Table 1.

Table 1. Perception Research Instruments

No	Perception Indicators	Question Points	Answer Form
1	Perceptions of online learning infrastructure	Do you have a gadget (computer or smartphone) sufficient for online lectures?	Objective
		Do you have adequate internet access every time you take online learning?	Objective
		Does information technology make the learning process more effective?	Objective
		Does the lecturer prepare all online learning materials properly?	Objective
2	Online learning skills	I can find various sources of information on the internet	Skala 1-5
		I can use various applications on the computer to complete tasks	Skala 1-5
3	Perceptions of the quality of online academic interactions	Do you interact more often in online learning than face-to-face learning?	Objective
		Are lecturers quick to respond / feedback on online learning?	Objective
4	Benefits of online learning	Online learning can be done anytime and anywhere	1-5 scale
		Online learning makes the learning process more organized	1-5 scale
		Online learning costs less than face-to-face	1-5 scale
5	Obstacles encountered	Not all students have internet access	1-5 scale
		Students are not able to use technology	1-5 scale
		The delayed response from the lecturer made students lazy to attend lectures	1-5 scale
6	Supporting factors for online learning	Government policy as a supporting factor for using online learning	1-5 scale
		The younger generation now prefers online learning	1-5 scale
		The technology, information and communication infrastructure in my area support online learning	1-5 scale
		Increasingly lower prices for gadgets support the use of online learning	1-5 scale
7	Expectations for online learning in the future	The various learning resources on the internet provide bright prospects for online learning	1-5 scale
		I would recommend online learning to other fellow students	1-5 scale
		What do you think about online learning during the Covid-19 pandemic	Essay

Data analysis was carried out descriptively. Data analysis was carried out by examining the meaning contained in it. Data categories, criteria for each category, analysis of relationships between categories, are carried out by the researcher before making interpretations. Data analysis in descriptive research was carried out during data collection and after completing data collection within a certain period.

Result and Discussion

Result

This research was conducted by involving 97 respondents from private campuses in East Nusa Tenggara. The results showed a variety of student perceptions regarding the application of online learning during the pandemic. These perceptions include perceptions of online learning infrastructure, online learning skills, perceptions of the quality of online academic interactions, benefits of online learning, obstacles faced, factors supporting online learning, and expectations of future online learning.

Students' perceptions regarding online learning infrastructure, including gadgets, internet access, ICT, and lecture materials, are 57%. It means that the infrastructure for online learning is not good. Meanwhile, in terms of student skills in finding sources and using online learning applications, only 53%. It means that students are not yet skilled in online learning.

Students' perceptions of the quality of online academic interactions are only 69%. This quality includes two things: the intensity of the interaction and the speed of the response/feedback. In the research, only 53% of online learning provided benefits in terms of the learning process, the learning time, and the costs required. The obstacles faced were seen from internet access, students' ability to use technology, and delayed responses from lecturers perceived by 42% by students.

Meanwhile, there are four supporting factors in online learning. The four factors are government policies, habits in implementing online learning, support for technology infrastructure, information and communication in the regions, and low gadget prices. It turns out that the percentage of support for these factors in online learning is only 38%. However, 54% of students still have hopes of online learning in the future. A complete summary of students' perceptions of online learning is presented in Table 2.

Table 2. Summary of Perception Research

No	Perception Indicators	Descriptions of Student Perceptions	Percentage	Percentage Mean
1	Perceptions of online learning infrastructure	Students have adequate gadgets (computers or smartphones) for online learning	66%	57%
		Students have adequate internet access every time they carry out online learning	32%	
		Information technology makes the learning process more effective	49,5%	
		Lecturers prepare all online learning materials properly	81,4%	
2	Online learning skills	The ability of students to find various sources of information on the internet	58,7%	53%
		The ability of students to use various applications on the computer to complete assignments	46,4%	
3	Perceptions of the quality of online academic interactions	The intensity of student interaction in online learning compared to face-to-face learning	57,7%	69%
		The speed at which lecturers respond/feedback on online learning?	79,5%	
4	Benefits of online learning	Online learning can be done anytime and anywhere	82,4%	53%
		Online learning makes the learning process more organized	53,6%	
		Online learning costs less than face-to-face	21,7%	
5	Obstacles encountered	Not all students have internet access	47,5%	42%
		Students are not able to use technology	26,8%	
		The delayed response from the lecturer made students lazy to attend lectures	51,5%	
6	Supporting factors for online learning	Government policy as a supporting factor for using online learning	48,5%	38%
		The younger generation now prefers online learning	27,9%	

No	Perception Indicators	Descriptions of Student Perceptions	Percentage	Percentage Mean
		Regional technology, information and communication infrastructure support online learning	39,1%	
		Increasingly lower prices for gadgets support the use of online learning	35,1%	
7	Expectations for online learning in the future	The various learning resources on the internet provide bright prospects for online learning	60,8%	54%
		Students will recommend online learning to other fellow students	47,5%	

Meanwhile, student responses regarding online learning during the Covid-19 pandemic are as follows.

1. Online learning is good. The only obstacles are the cost to buy a data package, do not have a laptop/cellphone, difficulty understanding every subject matter given by lecturers, too many assignments, and frequent network disruptions.
2. Online learning or online lectures are currently quite good and allow students to ask questions more actively. Then, online we can do this anywhere as long as the network supports it.
3. Online learning requires sufficient data packages and forces students to search for information on the internet on their own. However, the positive is that students can learn independently. Students can be seen as active in conveying their arguments.
4. In my opinion, online learning during the Covid-19 pandemic has both good and bad sides. The good thing is that all information about the courses we take can be accessed via the internet, we can also study anywhere and anytime. We are also more courageous to ask each other in the learning process. However, what became an obstacle for us was the data network that was not very good, so it was difficult for us to do the learning well. Data packages are also very important in online learning. Therefore, it was very difficult for us to purchase a data package. Because during this pandemic, it was not easy for our parents to earn money to meet family needs.
5. Online learning is very good because students can interact with lecturers and other students, and students play a more active role when attending lectures.
6. On the positive side, it can save time. Making students independent when looking for their learning resources and complete assignments makes students even better at learning using technological equipment such as laptops. The interaction between lecturers and students is more active than in face-to-face lectures. However, on the other hand (the negative side), online lectures cause much unrest among students. Students have to think about finances to buy a data package to follow the lecture process. Moreover, when the network is disrupted and the electricity goes out, it will hinder the lecture process.

Discussion

Visual perception plays a very important role because this process shows a person's ability to follow, realize, selectively absorb the meaning or meaning of the visuals around him. He also believes that humans are accustomed to thinking visually or having visual images in their brain, even though the information received is verbal. Visual perception can affect imagining forms in his mind influenced by previous knowledge and experience even though the verbal message is conveyed (Abbasi et al., 2020). To be able to carry out online learning, lecturers must prepare learning modules. Modules prepared by lecturers must meet the following requirements: (1) have clear, specific, observable, and measurable learning objectives to change learner behaviour and (2) the content in the module is relevant to the needs of learners, society, the world of work, or the world Education (Pratiwi, 2020).

Of course, the modules compiled by the lecturers are following the curriculum and syllabus. The design of the lecture is the same as the design of a face-to-face lecture. For example, it takes 16 weeks for one semester, including two weeks for midterm and final semester exams. The online mode learning design is the same as the face-to-face mode. Only the difference is that online mode learning uses internet media (Pratiwi, 2020). Online mode learning is the use of internet networks by students in the learning process. The online mode learning approach has the following characteristics: (1) requires learners to build and create knowledge independently (constructivism), (2) learners will collaborate with other learners in building their knowledge and solving problems together (social constructivism), (3) forming an inclusive community of learners, (4) Utilizing website media that can be accessed via the internet, computer-based learning, virtual classes, and digital classes; (5) Interactivity, independence, accessibility, and enrichment (Ditjen GTK Kemendikbud, 2016).

Through online mode learning, students have the flexibility to study time. Students can study anytime and anywhere. Students can interact with lecturers synchronously - learning interactions simultaneously, such as

video conferencing, telephone or live chat, and asynchronous learning interactions through learning activities provided electronically. (Agung & Surtikanti, 2020).

The online learning infrastructure has various perceptions related to the problem of limited gadget facilities and data pulses. The supporting factors for online learning from these findings are perceived as still limited to government policies, the implementation of which has not yet reached students. It is in line with the studies conducted Rusdiana & Nugroho (2017), which states that the most important tertiary institutions play a role in providing the supporting infrastructure. Then, lecturers also play a role in providing and preparing appropriate teaching materials. These two factors greatly influence the achievement of the implementation of distance and online learning well. Furthermore, Arizona et al., (2020) argued that the use of supporting media also needs to be considered. The supporting media must have strategic synergy in its use method.

On the other hand, students' perceptions about online lectures in the context of the Covid-19 outbreak are the emergence of an assumption that views online lectures as quite effective. Online learning carried out during the pandemic was considered quite effective in reducing the spread of the Covid-19 virus (Wijayanengtiyas & Claretta, 2020). These findings indicate that students' perceptions regarding the effectiveness of lectures are not optimal.

However, various student perceptions indicate that online learning has not been fully implemented in this pandemic era. It is in line with the findings Agarwal & Kaushik (2020), which states that there are various online learning perceptions. These perceptions include the inadequate infrastructure, the unpreparedness of lecturers and students in preparation for learning, the difficulty of giving an authentic assessment, and assessing the skills aspect.

Other findings also corroborate the findings of this study, Syauqi et al., (2020) found that there were different perceptions of online learning students. These perceptions, among others, were that only some educators gave clear responses and feedback during learning, only a small proportion stated that online learning made learning outcomes better, and learning materials were not easily accessible. It is in line with the findings in this study that state that the interactions' quality during lectures is not optimal.

However, the implementation of online learning is not automatically responded to negatively by students. In other studies, students/students gave positive responses about online learning if it was properly implemented and prepared. Findings by (Cakrawati, 2017; Maudiarti, 2018) show that students positively respond while using various online learning platforms. Positive things have also been shown in various studies regarding the perception of implementing online learning from various perspectives, both students, teachers, and parents (Simanjuntak et al., 2020; Sujarwo et al., 2020).

Conclusion

The results of the research conducted show that students have different perceptions of the administration of online lectures. These perceptions include perceptions of online learning infrastructure by 57%, online learning skills by 53%, perceptions of the quality of online academic interactions by 69%, benefits of online learning by 53%, obstacles faced by 42%, supporting factors for online learning by 38%, and future online learning expectations of 54%. The positive side obtained from student statements is the ease in carrying out lectures, maximum interaction, good feedback given by the lecturer. However, there are negative sides, including limited network usage, expensive quotas, and network electricity that is often interrupted. From this research, several studies were found to be used as a reference in researching the future. Suggestions given from the findings of this study are: (1) It is necessary to research the effectiveness of the implementation of online learning, especially for students in areas with minimal internet, (2) From the perceived constraints of students, it is necessary to carry out development research to develop the best learning mode in minimal internet situations.

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