



# Perceptions of Lecturers and Students about Implementation of Online Learning During the Covid-19 Pandemic in Automotive Engineering Department Universitas Negeri Padang

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**Abstract.** Learning exercises are for the most part as it were carried out confront to confront between speakers and understudies in classrooms. Be that as it may, within the middle of the COVID-19 widespread that's right now inundating the domain of Indonesia, numerous learning exercises are carried out online. The execution of online learning certainly has numerous deterrents, but the learning framework must be actualized within the middle of the covid-19 widespread, so the government policy has been set, namely the current new normal era. Based on a circular letter from the Chancellor of the Universitas Negeri Padang regarding campus activities for the January–June 2021 semester, in the context of being aware of the COVID-19 pandemic, several policies have been set with the conclusion that campus activities must be carried out online. Therefore, for now, Universitas Negeri Padang is running lectures with an online system which will hereinafter be referred to as online. This study discusses the perceptions of lecturers and students about the implementation of online learning amid the covid-19 pandemic in the Department of Automotive Engineering, Faculty of Engineering, Universitas Negeri Padang. This study aims to determine the perceptions of lecturers and students about the implementation of online learning in the midst of the covid-19 pandemic in the Department of Automotive Engineering, Faculty of Engineering, Universitas Negeri Padang from the factors of learning models, learning methods, and learning media. The type of method used in this study is a quantitative descriptive method. The results showed Lecturers' Perceptions about the Implementation of Online Learning with an average score of 4.19 in the Good category, while for students with an average score of 4.10 in the Good category.

**Keywords:** Perceptions · Covid-19 · Online Learning

## 1 Introduction

The learning process in the world of education is one area that is facilitated by the development of technology and information. Learning activities are generally only carried out

directly/face to face between lecturers and students in classrooms. However, in the midst of the Covid-19 pandemic that is currently hitting Indonesia, many learning activities are currently being carried out online. The implementation of online learning certainly has many obstacles, but the learning system must be implemented in the midst of the Covid-19 pandemic, so a government policy has been established, namely the current new normal era.

In this modern typical arrangement, all individuals are required to be able to live side by side with the Covid-19 widespread, but we must pay consideration to all angles of wellbeing conventions. The Wellbeing Convention to anticipate transmission of Covid-19, modern propensities are actualized, specifically wearing covers, washing hands, and keeping up separate. This modern propensity is for a more beneficial and cleaner life so as not to contract the spread of Covid-19 and particularly within the field of instruction, teachers and instructive members moreover apply health protocols, of course it'll be secure when the learning prepare is carried out.

Based on the circular letter from the Chancellor of Universitas Negeri Padang number 6307/UN35/AK/2020 regarding campus activities for the semester January–June 2021 in the framework of the Covid-19 pandemic precautions, several policies have been established with the conclusion that campus activities must be carried out online. Therefore, for now, Universitas Negeri Padang is conducting lectures with an online system which will be called online.

Based on interviews conducted by researchers with several Automotive Engineering students at Universitas Negeri Padang, online learning is still far from the goal of learning, students who are not used to carrying out the online learning process. Students are starting to feel bored with online learning, learning is only theory. As a result of online learning, students lack understanding due to only taking notes and a lack of awareness to understand and re-read the material that has been given.

Supporting factors in online learning also need to be considered, because there are still many obstacles in the field caused by supporting factors such as: 1) network conditions in the residence of each student and lecturer are not the same, there are still many students experiencing difficulties in accessing the platforms used in the learning process due to poor network conditions. 2) The learning platform sometimes experiences technical problems so that it cannot be accessed for the learning process. 3) lecturers and students who are not used to doing online learning have difficulty using platforms or learning media provided by the campus, so that they can hinder the learning process. 4) The condition of costs in online learning activities is also an inhibiting factor, because in accessing learning platforms and media you have to use an internet connection and need a quota, many students are constrained by this problem because they experience financial difficulties to buy quotas [1].

Based on the results of the interviews, it can be concluded that there is still a lack of knowledge among students, students are also not used to doing online learning so that students start to get bored, and students are confused about combining theory and practice so that it is not optimal, and students have difficulty carrying out learning methods from home and having network problems. Because this learning model has just been implemented, there are differences of opinion and student understanding of the online learning model.

**Table 1.** Differences in learning models

No	Proportions container send in a manner <i>on line</i>	Type learning	Description every type
1	0%	Traditional	Learning with content sent no in a manner <i>online</i> , submitted in form deaf -san or oral
2	1–29%	Web-facilitated	Facilitate something really _ important in learning stare face. Use a <i>courses management system</i> (CMS)/management system lectures or web pages, for example post syllabus and questions/materials exam.
3	30–79%	<i>Blended</i>	Learning with blend system <i>online</i> and stare face. Proportion substance content using _ discussion <i>online</i> , and sometimes use meeting n stare advance
4	>80%	<i>Online</i> (Online)	A similar learning _ big or even entirely use system <i>online</i> e. Type this no use stare advance same once.

According to [4] the learning model is a plan that is carried out for a learning process in order to achieve a certain change in student behaviour. The learning model is a teaching strategy by the teacher so that learning objectives are achieved.

There are different kinds of learning models, namely (Table 1):

According to [5] it can be seen from the table over that the program is online in case more than 80% of the program substance is conveyed online and on the off chance that it is said to be a blended program, in case 30% to 79% at that point the program substance is conveyed online.

## 2 Research Methods

According to Sugiyono the research method aims to obtain information and data that can be used for certain things. In this study using quantitative descriptive research [17]. Quantitative descriptive is a systematic and precise description of the actual situation and also reveals the existing reality and describes the condition of a particular population.

Information and data were collected by using a questionnaire to respondents, which aims to find out the perceptions of lecturers and students class of 2019 majoring in Automotive Engineering Department, Faculty of Engineering, Universitas Negeri Padang in implementing the learning and teaching process online.

According to [17] population is an object/subject that has the characters and qualities that have been determined by the researcher. In this study the population was lecturers

**Table 2.** Likert Scale

No	Choice answer	Weight
1	Very agree	5
2	Agree	4
3	Doubtful	3
4	Not agree	2
5	Very no agree	1

and students from class of 2019 who entered the Department of Automotive Engineering, Faculty of Engineering, Universitas Negeri Padang. Class of 2019 students were included as a population in this study because judging from the learning process they had gone through, these 2019 class students took the longest online learning process compared to other students who entered.

The sample is the larger part of the populace. In case the populace is as well expansive, it isn't conceivable for analysts to ponder all of the populace. Analysts discover tests by utilizing share inspecting (non-probability sampling). Quota sampling could be a method for determining tests from populaces that have certain characteristics until the required number (standard) is met. The think about populace comprised of 120 understudies and 30 speakers, so the sample measure was decided utilizing the Slovin equation by calculating the test estimate based on 10% mistake and 90% certainty within the populace. Calculation of the student sample and lecturer samples.

$$n = \frac{N}{1 + Ne^2}$$

Based on the calculation above, 56 respondents will be taken from 124 student populations and 24 respondents from 30 lecturer populations based on an error of 10% with 90% confidence in the population.

This inquire about will be carried out online since it does not permit for face-to-face interviews. The survey will be made on the Google Shapes stage, and disseminated through social media applications such as Whatsapp, Instagram, and Wire. Concurring [17], said that the instrument is as a instrument to degree the watched normal or social wonders. In this consider, analysts utilized a survey. Agreeing to [17] a survey may be a information collection method that's carried out by giving a set of questions or composed explanations to respondents to reply, the survey utilized in this think about was a closed survey. The instrument utilized was a survey which was defined based on the Likert scale show. Concurring to [18] says the Likert scale is utilized to control demeanours, conclusions, and recognition of a individual or bunch of individuals (Table 2).

This instrument is structured according to indicators, and in this study there will be two research instruments consisting of instruments for students and also instruments for lecturers. Researchers also continue to seek or consider convenience in filling out questionnaires by respondents. As for the several grids in the preparation of the research instrument (questionnaire) can be seen in the Table 3.

**Table 3.** Data research instrument grid

Variable	Indicator	Sub-indicators	Amount grain Items
Online learning	Model	<i>On line</i>	10
	Method	Lecture	2
		FAQs _	3
		Giving Task	3
		Discussion	3
		practice	3
	Media	Print	5
		Digital	5
Amount			34

### 3 Results and Discussion

#### 3.1 Data Description

Require and reply questions almost the focuses to depict the acknowledgment of speakers and understudies around the usage of online learning within the covid-19 spread environment, based on the test of instructor and understudy acknowledgment of the utilization of online learning within the covid-19 spreading environment, gotten data from filling out the study.

#### 3.2 Validity Test

A substantial instrument implies a measuring instrument utilized to get (degree) substantial information. In this think about the theory that the conclusion is redress is 95% (5% importance esteem) with a test of 30 respondents, so the esteem of r table is 0.361.

#### 3.3 Reliability Test

The comes about of the unwavering quality test gotten Cronbach's Alpha of 0.927, it can be concluded that the esteem of Cronbach's Alpha is more prominent than 0.361. Hence the respondents' answers can be utilized for investigate information. The unwavering quality test in this consider utilized the r table esteem dissemination with a centrality of 5% with a esteem of 0.361.

#### 3.4 Research Discussion

Research data regarding the implementation of online learning (Y), the following research discussion will present an overview of the data seen in the indicators: 1) Online Learning Models 2) Online Learning Methods, 3) Online Learning Media.

In the following, the author will present an overview of the results of this research, namely regarding the perceptions of lecturers and students in the 2019 entry year regarding the implementation of online learning in the midst of the Covid-19 pandemic at the Automotive Department, Faculty of Engineering, Universitas Negeri Padang.

### **3.5 Online Learning Model**

#### **a. Lecturer Perception**

The data described that the highest average score of the online learning model is that the online learning model is clear to be well understood and detailed by lecturers with an average score of 4.71. Meanwhile, the lowest average score, namely the online learning model, can be used to help student's master practical competencies with an average score of 3.75.

Possible causes of the low average score in the online learning model statement can be used to help master practical competence in students because during the online learning process the practice cannot be carried out so that students cannot master material about practical learning. The solution that can be done is to give assignments to students in the form of observing the workshop or field according to the material being studied.

With respect to the by and large recognition of teachers approximately the usage of online learning, it can be seen that the online learning show gets an normal score of 4.19. This score is within the Great category. This implies that the lecturer's discernment of the execution of online learning, seen from the online learning show, can be said to be great.

#### **b. Student Perception**

Online learning models are effective and efficient for mastering theoretical competencies so as to complement learning activities with an average score of 4.4. Meanwhile, the lowest average score, namely the online learning model, can be used to help student's master practical competencies with an average score of 3.44. Possible causes of the low average score in online learning statements can be used to help master practical competencies in students because when the online learning process is practically not carried out so students cannot master material about practical learning.

The arrangement that can be done is to donate assignments to understudies within the shape of watching the workshop or field concurring to the fabric being considered with respect to the generally understudy discernment of the usage of online learning, it can be seen that the online learning show gets an normal score of 4.04. This score is within the Great category. This implies that students' discernments around the execution of online learning seen from the online learning show can be said to be great.

### **3.6 Online Learning Methods**

#### **a. Lecturer Perception**

The data described the highest average score of the online learning method is practicum carried out to increase students' understanding of learning material with an average score of 4.47. While the lowest average score is by using online learning, practicums are still carried out according to the schedule that has been determined during the Covid-19 pandemic with an average score of 3.83.

Possible causes of the low average statement score. By using practicum online learning it is still being carried out according to the schedule that has been determined during the Covid-19 pandemic, resulting in a lack of understanding of students in practicum competencies from the material they have learned and only getting theoretical material so that the goals practical learning is not achieved. The solution that can be done is to continue to carry out practicum activities with a rotating system so that students can achieve mastery of practical competencies.

Regarding the overall perception of lecturers regarding online learning, as seen from the online learning method, it gets an average score of 4.06 in the Good category. This means that the lecturer's perception of online learning seen from the online learning model can be said to be good.

#### b. Student Perception

Information on understudy recognitions of the usage of online learning within the center of the covid-19 widespread, seen from the learning strategy, the most noteworthy normal score for online learning strategies is that the teacher clarifies the fabric amid the instructing and learning prepare utilizing the zoom application with an normal score 4.29. While the lowest average score is by using online learning the practicum is still being carried out according to the schedule that has been determined during the Covid-19 pandemic with an average score possible causes of the low average statement score by using practicum online learning it is still being carried out according to the schedule that has been determined during the Covid-19 pandemic, resulting in a lack of understanding of students in practicum competencies from the material they have learned and only getting theoretical material as until the objectives of practical learning are not achieved.

The solution that can be done is to continue to carry out practicum activities with a rotating system so that the mastery of practical competencies in students can be achieved.

Regarding the overall perception of lecturers regarding online learning, as seen from online learning methods, an average score of 4.1 is in the Good category. This means that the lecturer's perception of online learning seen from the online learning model can be said to be good.

### 3.7 Online Learning Media

#### a. Lecturer Perception

That the most elevated normal scores of online learning media is the utilize of innovation media (computers, portable workstations and smartphones) within the learning handle hypothesis when online learning with an normal score of 4.25. In the mean time, the most reduced normal score is that print media can bolster the learning handle by utilizing online models with an normal score of 3.95.

**Table 4.** Recapitulation of lecturers' perceptions about implementing online learning.

No	Indicator	Average	Criteria
1	Online Learning Models	4,19	Well
2	Method Online learning	4.06	Well
3	Online Learning Media	4,18	Well
Average		4,14	Well

Possible causes of the low average statement score Print media can support the learning process by using online models resulting in print media having weaknesses, namely being slow in providing information so that students lack mastery of the material and lack of interest in reading among students. The solution that can be done is to provide attractive print media so that students can understand the information provided.

With respect to the by and large recognition of speakers with respect to the execution of online learning, seen from the online learning demonstrate, it gets an normal score of 4.18. This score is within the Great category. This implies that the lecturer's discernment of the usage of online learning seen from online learning media can be said to be great.

#### b. Student Perception

The highest average score of online learning media is Support for learning materials using technological media in learning using online learning models is sufficient with an average score of 4.22. While the lowest average score, namely the support of learning materials in learning using online models is sufficient, with an average score of 3.92. Possible causes of the low average statement score Support for learning materials in learning using online models is sufficient. As a result, students lack learning materials so that they experience difficulties in finding material sources. The solution that can be done is to provide sufficient teaching materials to students so that students can understand the material well.

With respect to students' recognitions of the usage of online learning as a entirety, it can be seen from the online learning show that it gets a normal score of 4.07. The score is included within the Great category. This implies those students' discernments of the usage of online learning seen from online learning media can be said to be great. Restatement of the comes about of the discernments of speakers and understudies with respect to the execution of online learning.

The comes about of handling the discernment information of teachers and understudies in 2019 with respect to online learning within the period of the Covid-19 Widespread can be seen from online learning models, online learning strategies, and online learning media (Tables 4 and 5).

The information portrayed in tables 16 and 17 over can be seen from the Recognitions of Speakers and Understudies in 2019 Passage Year approximately online learning within the middle of the Covid-19 Widespread in terms of online learning models, online learning strategies, and media online learning. Encompasses a score of 4.14 for the great



**Table 5.** Recapitulation of student perceptions about implementing online learning.

No	Indicator	Average	Criteria
1	Online Learning Models	4.04	Well
2	Method Online learning	4.10	Well
3	Online Learning Media	4.07	Well
Average		4.07	Well

category of teacher discernments, and a score of 4.07 for great category of understudy recognitions.

The most noteworthy normal score of Lecturers' Discernments approximately the Execution of Online Learning within the Centre of the Covid-19 Pandemic, is found within the online learning model with an normal score of 4.19 within the Great category, and the highest average score of understudy discernment with respect to the execution of online learning within the midst of the Covid-19 widespread is the online learning strategy with an normal score of 4.10 within the Great category, while the least normal score for speaker discernment is the online learning strategy with an normal score of 4.06 within the great category, and the least normal score for understudy discernment is the online learning demonstrate with an normal score of 4.04 included within the great category.

Hence the Recognitions of Teachers and Understudies on the Usage of Online Learning within the Time of the Covid-19 Widespread in terms of online learning models, online learning methods, and online media learning. This can be said to have been done properly according to the questionnaire filled out by the respondents. For this reason, changes are still required within the execution of online learning which is carried out until it comes to a great category and so that the execution of online learning is carried out legitimately.

## 4 Conclusion

The implementation of the online learning can be seen from online learning models, online learning methods, and online learning media. With this it can be said that it has been carried out well, this is proven according to the questionnaire filled out by the respondents. Lecturers' and student perceptions about the implementation of the online learning system can be concluded that it is running well, this is evident from the data analysis that the implementation of online learning seen from online learning models is in the Good category. The limitation of this research is that the data collection that was taken was not maximized because the filling out of the questionnaire still had the seriousness of the respondents in filling it out. Then this research is only limited to disclosing data about the learning process and does not cover all lecture activities.

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