



# *Index Students' Perception for Online Lectures Quality in Universities in Yogyakarta*

## Indeks Persepsi Mahasiswa Terhadap Kualitas Kuliah Online Pada Perguruan Tinggi di Yogyakarta

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**Abstract** - The World of Education during the Covid-19 outbreak had to take a solution or problem solving by carrying out Teaching and Learning Activities online. Schools, campuses and even informal education facilities must go on online as a security solution while continuing to carry out learning activities in the midst of this epidemic. This study looks at the extent to which students' assessments of the quality of online lectures in Yogyakarta. 100 students as respondents from 14 Universities in Yogyakarta participated in this survey. This study uses a quantitative method with reference to, quality assessment in the 2019 SPADA Learning Object Development Guide from the Directorate General of Learning and Students Affairs, Kemristekdikti, 2019. From the results of the study, it was found that the learning plan indicator had the highest average percentage of items is 35,5%, then the media and technology indicators have the highest percentage of items at 37,63% and the assessment and evaluation indicators have an average percentage of items is 45% which all the percentage indicators are on a pretty good rating scale. This shows that the student's assessment of the quality of online lectures in Yogyakarta during the Covid-19 outbreak was quite goods in its implementation.

**Keywords:** Perception, Quality, Online Lectures, Higher Education, Yogyakarta.

*Abstrak - Dunia Pendidikan selama wabah Covid-19 harus mengambil sebuah solusi atau penyelesaian masalah dengan melaksanakan Kegiatan Belajar Mengajar (KBM) secara daring. Sekolah, kampus, bahkan fasilitas pendidikan informal pun harus menempuh jalan daring sebagai solusi keamanan dengan tetap menjalankan aktivitas pembelajaran sebagaimana mestinya ditengah wabah ini. Penelitian ini melihat sejauh mana penilaian mahasiswa terhadap kualitas kuliah daring di Yogyakarta. 100 mahasiswa sebagai responden dari 14 Perguruan Tinggi di Yogyakarta turut berpartisipasi dalam survei ini. Penelitian ini menggunakan metode kuantitatif dengan acuan penilaian mutu dalam Panduan Pengembangan Objek Pembelajaran SPADA 2019 dari Ditjen Pembelajaran dan Kemahasiswaan, Kemristekdikti,. Hasil penelitian diperoleh bahwa indikator rencana pembelajaran memiliki rata-rata prosentase item tertinggi sebesar 39,25%, indikator konten memiliki rata-rata prosentase item tertinggi sebesar 35,57%, indikator proses dengan rata-rata prosentase item tertinggi sebesar 35,5%, kemudian indikator media dan teknologi memiliki rata-rata prosentase item tertinggi sebesar 37,63% dan indikator asesmen dan evaluasi memiliki rata-rata prosentase item tertinggi sebesar 45% yang mana semua prosentase indikator tersebut berada pada skala penilaian cukup baik. Hal tersebut menunjukkan bahwa penilaian mahasiswa terhadap kualitas kuliah daring di Yogyakarta selama wabah Covid-19 sudah cukup baik dalam pelaksanaannya.*

**Kata Kunci :** Persepsi, Kualitas Kuliah Daring, Perguruan Tinggi, Yogyakarta

### INTRODUCTION

Covid-19 outbreak has made all parties and all societies are asked to collectively follow the government appeal as an effort to cut the spread of this outbreak. The education sector is also not an exception to the action to avoid the spread of Covid-19. After all the consideration of the government appeal of social and physical distancing, also to considerate the risks that might appear during Learning and Teaching

Activity by face to face in the middle of an outbreak, and so learning activity must to be done online. Online lectures have systemically been a modern learning based information technology and communication by utilizing the internet platform and have a tra it as flexible in the meaning accessible whenever and wherever with proper internet availability. Mustofa et al. (2019 : 15) states that one of the steps in utilizing the web technology and information technology for learning system development in universities in online

courses system among universities. One of the initiators of the idea is the Ministry of Education and Culture of Republic of Indonesia.

Online lectures become the solution to the problems for college institutions during Covid-19 outbreak. The usage of learning studies platform and communication in online forced students and the institutional parties to use and maximize the technology itself. It is possible for college institutions which already been applying online lectures are used to this situation, but there are many which not ready yet to the shifting towards online lectures. There are still many considerations and readiness from the college institutions to be able practicing online lectures during Covid-19 outbreak. College students as the stakeholders toward institution are expected to adapt with the policies from each institution they are in during the online lectures and most importantly the institutions are expected to keep the quality learning during this time of online lectures effectively. The online lectures is not the only thing done during quarantine, but also almost all the other academic activities are needed to be done in online to keep the cycle of lectures be done as how it's supposed to be. Academic services by online is also improved continuously by universities to always give the best services to all the stakeholders whom in this case is students.

There is a big possibility that universities would still be doing online lectures until the end of year 2020 with still online lectures or mixed system from both online and 'face to face' classes with keeping the health protocol during the new normal era. This fact has become the task for the management of universities could give all the academic service most importantly about online lectures in the most optimal way based on the standard given by the Directorate of High Intitutions, Ministry of Education and Culture. Yogyakarta as one of the education centers in Indonesia, has more than 80 campuses. This is of course a problem in itself for local governments in Yogyakarta if they have to accept the arrival of hundreds of thousands of students from all over Indonesia. Thus, all universities in Yogyakarta end up conducting online lectures during this pandemic.

E-learning based on Ryan (2001) in (L. Smart & J. Cappel, 2006) could be implemented in many ways, such as the use of the independent study unit, interactive session asynchrony (whereas the participants are interacting in different times) or the

synchrony interactive setting (whenever students meet in real time). Several campuses in Yogyakarta already have online learning systems and are used in both mixed learning systems and full online learning. However, there are still more universities that are not ready with this online learning system, so when it comes to implementing online learning, it experiences several obstacles.

As stated by Huss & Eastep, when our online education experience was in its infancy, much of our focus and preoccupation dealt with the efficiency of the technological platforms from which the course modules were stored and launched. Furthermore, Huss & Eastep conveyed that advances in communication and information technology, coupled with increased stakeholder trust in the implementation of online lectures, will help facilitate this initial procedure (Huss & Eastep, 2013).

In Indonesia, online lectures have its policies, components, learning principles, learning process, learning syllabus, development, and quality assessment reference to be followed based on the quality policy from Ristekdikti. Indicators are supposedly to be counted and given maximum during the time of full e-learning nowadays. Universities and lecturers as the developer and the ones who deliver online learning need much more understanding on how students look and react to the e-learning's features (because perception and students' attitude is important for the motivation and learning process) altogether with how is the most effective way possible to apply this approach for maximizing the learning process (Koohang & Durante, 2003).

Some other things to be focused on is during the online learning are for example the use of communicative language, greet the students with scientific language and not everyday language and also to consider the consistency on terms used by lecturers, giving pictures and other learning sources by considering the correct copyright ethics and shared videos to support online learning. Armstrong, in his research found that some things that determine the online learning are the role of communication in conducting perception and student's action, how the technology used, the role of organization for student's achievements, and the study approach made by students' perception likewise students determine academic quality (Armstrong, 2011).

Students' perception on the online lectures has become important to be known as they hold the highest

position as the main stakeholder in the high institution. Ward said that perception is a process to recognize (realize), managing (collecting and storing), and interpret (holding the knowledge) sensory information (Ward et al., 2020). Students' perception when given the online lectures is different to when they were in the 'face to face' with lecturers in class. Bejerano (2008) in (Platt et al., 2014) conveyed that students are losing the chance for interaction in the online learning and it shows that the low level interaction would most probably caused the academic integration decreased and social on online lectures.

Moreover, Ward stated the main approach to study on perception. It is related to measurement, and the other is models. Measurement can help in the model development, and in its turn, while models can help to predict the result in the future, which the measurement would be used for validating models (Ward et al., 2020). Relating to the perception measurement towards online learning, Platt did perception measurement of online learning with some components of flexibility, interaction, and knowledge received by students (Platt et al., 2014).

This research will focus on perception of Yogyakarta students on online learning during Covid-19 pandemic. As we know that Yogyakarta known by society as the city of learners. The label is put to the city of Yogyakarta because of many public and private universities with good quality, with a good facility and competent graduates and most important is the willingness to learn in this city is still high. Some things became a consideration for researcher in conducting the research on student's perception towards the online learning during study from home applied at the time of quarantine caused by a Covid-19 outbreak. As for the theoretical framework for the research Students' Perception on Online Lectures Quality in Yogyakarta is using components from 2019 SPADA Learning Object Development Guide (Directorate General and Student Affairs, and Ministry Of Research And Technology 2019).

There is some research related to the perception on online learning. Waldman et al. For example, did some research by seeing perception of student towards the process of online courses. Waldman found that some factors determines student's perception on online learning such as the whole quality of online courses, commitment to time allocation, personal satisfaction in online courses, sufficient support by institutions and

instructor, and problems to be faced with online learning (Waldman et al., 2009).

In their research, Waldman et al sought answers to several related questions, like experienced and first time online students' perceptions differ regarding the quality of online courses as compared to traditional courses. Also, do they have received good support from their instructor and school and encountered the same types of problems with online courses. Waldman research uses four indicators, that is quality perception, time requirements, satisfaction indicators, and support level. Based on the results of Waldman study, instructors of online courses should be ready to provide additional support to students new to distance learning. Additionally, they should ensure that adequate avenues for communication be utilized in their courses. In planning online courses, faculty should incorporate communication channels in all directions and not just include faculty-to-student communication (Waldman et al., 2009).

Research from Dupin-Bryant (2004) entitled Pre-entry Variables Related to Retention in Online Distance Education. In his research, Dupin-Bryant identified pre-entry variables related to course completion and noncompletion in university online distance education courses with four hundred and sixty-four students who were enrolled in online distance education courses as research participant in the study. Research results indicate prior educational experience and prior computer training may help distinguish between individuals who complete university online distance education courses and those who do not. Dupin-Bryant state that prior distance learning experience was related to online course success, but the students in this study with prior online learning experience showed no difference in their assessment of the quality of their online courses from those without such experience (Dupin-Bryant, 2004).

Study from John A. Huss and Shannon Eastep that explore the attitudes and perceptions of students at a Midwestern University who were enrolled in at least one online-only course during the fall 2012 semester (Huss & Eastep, 2013). Their research uncovering the concrete issues that are important to students and using the explicit feedback to strengthen the course design and course delivery. The research result is students did not directly express anxiety or apprehension about online education in general, but chose rather to emphasize course design, course organization, and

instructional presence as the important aspects of distance education.

Research from Sadikin and Hamidah (2020) with the title Online Learning in the Middle of the Covid-19 Outbreak concerning the implementation of online learning at Jambi University has similarities to this research. In their research, Sadikin and Hamidah conducted research using the interview method. Their research results indicate that students already have the basic facilities needed to take part in online learning. In addition, online learning has flexibility in its implementation and is able to encourage independent learning and motivation (Sadikin & Hamidah, 2020).

This study is different from some of the studies above, because it has different methods and approaches. This research was conducted to get an initial picture of students' perceptions in Yogyakarta regarding the implementation of online lectures during the Covid-19 pandemic.

This study, based on online learning in higher education in Yogyakarta, Indonesia uses a tool consisting of the Basic Concepts of Lecture Models Through Online and Online Learning Quality Assessment Guidelines from the Directorate General of Learning and Student Affairs, Indonesian Ministry of Research and Higher Education, 2019.

#### 1. Basic Concept of Online Lectures Model

Through advancement of information technology and communication in which its role became stronger in Education sector. From the role of technology in Education, it is expected to increase the quality of Education and as one of the foundations to Education (2004 : 1). Online or "on the line" is one of the methods of online learning or done through internet system. This system is developed by the Ministry of Education and Cultural Affairs of the Republic of Indonesia by Indonesian Open and Integrated Online Lectures Program (Mustofa, dkk, 2019:153).

There are six principles in e-learning studies from 2019 SPADA Learning Object Development Guide (Directorate General and Student Affairs, and Ministry Of Research And Technology 2019), which are: Learning is open; Learning is social; Learning is personal; Learning is augmented; Learning is multirepresented; Learning is mobile.

#### 2. Online Learning Quality Assessment Reference

As for quality assessment reference in the online learning from 2019 SPADA Learning Object Development Guide (Directorate General and Student Affairs, and Ministry Of Research And Technology

2019), there are some components of the online learning or e-learning itself, which are: Learning Plan; Content; Process; Media; Assessment and Evaluation; Technology.

### RESEARCH METHODOLOGY

This research uses a quantitative approach and the research method used is a survey method. The data collected in this research is done by using questionnaire to know Yogyakarta students' satisfaction toward the online learning quality of assumption test using the normality test, multicollinearity test, heteroscedasticity test, and linearity test.

Population and sample of this research are students from the College Institution in Yogyakarta. The sampling of this research is using the simple random sampling technique that takes sample based on criteria which is students of College Institutions in Yogyakarta

The amount of population in this research is many and the exact number is impossible to be known, because the population of this study are active students on all campuses in Yogyakarta who are taking online lectures. The number of public and private universities in Yogyakarta Province is 127 institutions based on data from BPS in 2019, with a total number of students of 405,580 people (BPS, 2019). While the number of students in Yogyakarta who actively registered in 2020 and took part in online learning during the Covid-19 pandemic had no exact data. The sample taken in this research would be determined by using the formula, as follows (Rao, 2014) :

$$n = \frac{Z^2}{4(Moe)^2}$$

Whereas:

n	= Sample size
Z	= 1,96 score on the certain level of significance (fixed degree of assurance 95%)
Moe	= Margin of error, maximum level of mistake is 10%

By using the formula above, the result is as below:

$$n = \frac{(1.96)^2}{4(10\%)^2}$$

$$n = 96.04 \approx 97 \text{ or be rounded } 100$$

Therefore, the number of samples to be taken is 100 college students in Yogyakarta.

In order to limit the influence from course content or format of the result, respondents are ordered to consider their general experience related to only online

learning happened during Covid-19. And then, participants answering the questions presented from Google Form. Respondents who are interested would be linked to the online survey. The first page of the form is the form of agreement if they are willing to participate in it, students were answering question test their perception about the study plan, content, process, media, assessment and evaluation, and technology.

**Validity Test**

Validity Test is used to find out whether or not the questionnaire is valid, accuracy of items from the research tool in doing its function. The level of validity can be measured by comparing the value of counted *r* with the value of *r* table of the degree of freedom *degree of freedom*  $df = n - k$  with  $\alpha = 0.05$ , if the value of counting *r* is bigger than *r* tabulated, thus the questionnaire is valid. And so, to test the validity of the instrument, would be used correlation product moment formula by Pearson as below:

$$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\} \{N \sum Y^2 - (\sum Y)^2\}}}$$

With the value of coefficient correlation *r* product moment based on Table 1.

Based on the testing criteria, if the correlation among questions with total score more than 0.3, so the instrument declared as valid or otherwise if the total score less than 0.3 then the instrument is not valid. If *r* counted > *r* table with  $\alpha = 0.05$ , therefore the coefficient correlation is significant.

**Table 1** Validity Interpretation

Coefficient Correlation	Validity Criteria
$0,80 < r_{xy} \leq 1,00$	Very High
$0,60 < r_{xy} \leq 0,80$	High
$0,40 < r_{xy} \leq 0,60$	Average
$0,20 < r_{xy} \leq 0,40$	Low
$0,00 < r_{xy} \leq 0,20$	Very Low

Coefficient correlation product moment or counted *r* between each questions higher than *r* counted 0.361, so, it can be concluded that each question about the scale measurement is valid and can be used for the research.

**Reliability Test**

Calculation to find an instrument of reliability is based on the statement by Arikunto (2007 : 134) that to count reliability the alpha formula to be used is:

$$r_{11} = \left( \frac{n}{n-1} \right) \left( 1 - \frac{\sum \sigma_1^2}{\sigma_t^2} \right)$$

Whereas :

*r*<sub>11</sub> = reliability needed to be found

$\sum \sigma_1^2$  = the amount of variance each item

$\sigma_t^2$  = total variance

This research, reliability test is using statistic test Cronbach Alpha. Whereas, a variable said to be reliable if given Cronbach Alpha score higher than the expected standard score which is 0.16. The reliability test would be gotten with Cronbach Alpha method counted based on the scale 0 until 1. If Cronbach close to 1 so the respondent’s answer would be likely the same even though is given to other people with different type of question. If the scale to be classified into 5 classes with the same interval, so the stability measurement *alpha* can be interpreted into this;

The reliability test had done to 30 respondents with result as follow in Table 2.

The result on reliability test towards the instrument on two variables, free (X) and bound (Y) founded reliable result. The result can be seen from the score of Alpha Cronbach which bigger than 0.60 so the two variants included in the level of very reliable because of its value is higher than 0.80.

**Table 2** Reliability Test Results N = 30

Variable	Cronbach’s Alpha	N of Items
Learning plan	0,895	4
Content	0,865	7
Process	0,903	10
Media and Technology	0,855	8
Assessment and Evaluation	0,807	4

**RESULTS AND DISCUSSION**

This research is conducted during the quarantine of Covid-19, so the research instrument is made and given out by online to 100 respondents who are higher education students from 14 different universities in Yogyakarta.

By answering 33 questions, students from various regions in Indonesia who is a college students are asked to give their score to the learning plan, lecture material, lectures process, media and technology being used during lectures, and online lectures evaluation towards students’ satisfaction during online lectures.

Based on the collected data for each indicator, it can be seen that the percentage of dominant answer is on the scale ‘pretty good’ and ‘good’. In the period of responsive of Covid-19, college institutions are focused on the learning plan quality and the quality of

the online learning plan, also to keep giving academic services to college students and all the parties effectively. The study plan as the quality assessment reference focused on some point like (1) targeted compatibility or also known as learning outcomes, (2) learning's feature completion, (3) clarity on core and basic competence, (4) competence consistency, (5) material consistency, (6) evaluating on study plan, (7) giving illustration or correct source examples, and also (8) pedagogical aspects which support the study plan. Based on the collected data, 39.25% Yogyakarta higher education students rate the online learning plan on the scale of pretty good, 34,5 % good, and 15,5 % very good. This data indicates that the lectures in various universities have a good plan in online learning. Then, for the content category or the lecture on online need to pay attention to, (1) truth substance content given by the lecturer, (2) how the scope of course material is sufficient and also the depth of from the course given, (3) the novelty of the material and (4) the completeness of material sources given. Based on the result, 35.57% college students of Yogyakarta felt that the lecture content and material they got during online lectures at the time of the Covid-19 outbreak is pretty good and are 34.86% is on the good scale. This result shows that the content or material given by lecturers during Covid-19 outbreak is well-accepted by college students in which, lecturers are fast enough in adapting the method of material to be given through e-learning lectures. It is clear to say that some learning quality policies in each college institution need to be modified to support this online learning quality.

**Table 3** Respondents' University (N = 100)

Respondent's University	Frequency (f)	Percentage %
AA YKPN	1	1,0%
Amikom	1	1,0%
ISI Yogyakarta	2	2,0%
UAD	1	1,0%
UAJY	10	10,0%
UGM	9	9,0%
UII	15	15,0%
UMBY	39	39,0%
UMY	2	2,0%
UNRIYO	3	3,0%
UNY	1	1,0%
UPN	4	4,0%
USD	11	11,0%
UTY	1	1,0%
<b>Total</b>	<b>100</b>	<b>100%</b>

The next online learning object guide is processed. In the process of online lectures, there are some things are needed to be counted by lecturers such as (1) the clarity of the content during the learning teaching activity, (2) to determine the strategy on studying whether it would be individual, groups or others, how far (3) interactivity between lecturers and students, (4) able to create some motivation in the process of learning, (5) develop the spirit of creativity and even bring up new ideas, (6) paying attention to ethical while using the internet and also lecturers need to utilize it, (7) the principle of effective communication, for example, direct to the point (to the point) with the communicator, being able to engage students with the material and learning process, give challenging online schoolwork, give actual and factual information, lecturers are expected to present a good and appealing illustration on the material and also give problem solving on every material had been given as a part of the learning process. Based on the result of this research, the online learning process has percentage as much 35.5%, which on the pretty good scale and followed by 33.9% on the good scale.

**Table 4** Item Percentage Mean (N=100)

Variable	Indicator	Item Percentage Mean				
		Very Poor	Poor	Pretty Good	Good	Very Good
Online Course Quality	Learning Plan	1,5%	9,25%	39,25%	34,5%	15,5%
	Content	1,14%	12,86%	35,57%	34,86%	15,57%
		3,3%		35,5%	33,9%	13,7%
	Process	1,13%	13,6%	37,63%	37%	15,38%
	Media & Technology	2,25%	8,88%	45%	30,75%	8,5%
Assessment and Evaluation		13,5%				

Media and technology being used in the e-learning has the positive side to support online lectures, but also become the obstacle for it. It is because during the quarantine and government appeal to stay at home had forced students to make and receive an online course from home and it was done in all regions in Indonesia. There are limits and hardship for accessing e-learning in each region also happened to students when e-learning media utilization is on the quality online learning reference. There are some things need to be fulfilled on the media indicator itself like, (1) effective usage computer/IT skills, (2) the material given by lecturers also able to use multimedia based source such as videos, animation, and others, on the other hand the used e-learning media also had the skill, (3) hyperlink

with many sources and also (4) simulation related to material given by the lecturer.

From a technology point of view, there are things needed to be counted by the University based on the e-learning quality reference, for example, (1) a standard technology for students who had easy access to the material given by the lecturer (2) the availability of navigation to various domains of material online source that easy-operated or user friendly, (3) variety of synchronous and asynchronous, (4) use multimedia technology to give interesting illustration and engage student to be curious to the studies, (5) gives sources or copyright in clear and lastly (6) consider fast and easy access to students and lecturers (access system to PDITT\*). Based on the result from the research, the use of media and technology on online learning got a quite good response from students in 14 Universities in Yogyakarta with percentage 37.63% and only 8.88% who answered poorly.

Lastly is for assessment and evaluation of online lectures, approximately, have five things to be referenced, which are (1) types and assessment variation, (2) self-assessment or personal rating by students themselves, (3) feedback between students and lecturers, (4) lecturers give scoring or grading for online schoolwork and (5) subject evaluation by students. The result shows that for 45% student rate for assessment and evaluation during the quarantine is pretty good.

Although overall the data shows that students assess the elements of the online learning process quite well, but from the results of the data analysis above, there is still dissatisfaction from students in Yogyakarta with online learning. There are some students who think they are not good with the assignments given by the lecturers to students during this online lecture. This is of course an evaluation for the campus and lecturers to review student assignments during online lectures, especially if the pandemic emergency period will still last several months.

## CONCLUSION

Based on the results of this study and the literature cited, the online learning method in the time of the Covid-19 outbreak has become the solution for the Education sector, especially for higher education institution to keep doing the learning program and also academic service for students. This finding shows that the quality of the online learning method with a full e-learning concept at this time is important as to be a

guideline and evaluating in the future for college institution to foresee their readiness in the development of e-learning study.

From this research, Yogyakarta higher education students had given their assessment on the quality of online lectures during the Covid-19 outbreak using indicator from Learning Object Development Guide in learning development had been pretty good. The research results can be used as the material for evaluation by universities in Yogyakarta to optimize the online lectures quality during Covid19 and as a strategic plan for coring grade reference for Universities themselves to the system and e-learning methods.

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