IKIP Siliwangi student’s perceptions of online teaching and learning process during COVID-19 pandemic?

L Nuraeni\textsuperscript{1}, R Purwasih\textsuperscript{1} and J Mutakim\textsuperscript{2}

\textsuperscript{1}Institut Keguruan dan Ilmu Pendidikan Siliwangi, Jl. Terusan Jenderal Sudirman, Cimahi 40526, Indonesia
\textsuperscript{2}Universitas Negeri Jakarta, Jl. R. Mangun Muka Raya, Jakarta Timur 13220, Indonesia

Email: ratnipurwasih@ikipsiliwangi.ac.id

Abstract. Covid-19 pandemic in Indonesia has an impact on various fields of life, especially higher education. The online lecture system in higher education is an effective solution and has been applied in the lecture process. This study aims to determine student perceptions about online lectures, to find out the forms of an application used in online lectures and to find out the supporting factors and inhibiting factors in online lectures. This research was conducted with a descriptive survey research method, the sample in this study were students majoring in mathematics education, PGPAUD, and Counseling Guidance, PGSD, Community education and Indonesian with a total number of students 183. The data analysis technique used in this study is to calculate the percentage of data from each indicator, then interpret the score presentation of the data and analyze each indicator. The research instrument uses a question questionnaire sent via the google form application. The results obtained are students’ perceptions of online lectures that students prefer face-to-face lectures compared to online lectures, supporting factors for online lectures are students have free opportunities to learn and find sources of information, availability of data packages, cellphones, laptops and internet networks that support. An inhibiting factor in the online lecture process is the lack of data packages and the internet. This research is expected to be an evaluation of various parties in conducting online learning in tertiary institutions and as study material for other researchers in analyzing and developing students’ perceptions in online learning during emergencies in tertiary institutions.

1. Introduction
The development of COVID-19 has influenced the world of education in Indonesia, especially in the learning process. One indication of this phenomenon is a shift in the learning process where interaction between educators and students is carried out with communication media such as computers, the internet, and so on. The spread of the coronavirus had a profound impact on the financial world, which was starting to fade, but now the impact is also being felt by the world of education. The policies taken by many countries including Indonesia by dismissing all educational activities make the government and related institutions must present alternative educational processes for students and students who cannot carry out the educational process in educational institutions. Face-to-face lectures become distance learning, to prevent the spread of COVID-19 (Coronavirus) in the campus environment, Online learning is one of the solutions needed by educators and students during this pandemic [1]. On the other hand, the policy of temporary closure of educational institutions with various supporting facilities in the short and medium-term has made many students affected, especially those who have lived in areas with limited infrastructure and other carrying capacity, further expanding the digital divide. Temperature
argued that the COVID-19 pandemic became a multidimensional problem facing the world, it also felt its impact in the education sector which caused a decrease in the quality of learning for students [2]. Online learning has been carried out in many tertiary contexts, as evidenced by several studies that explain this [3,4], online learning provides benefits in helping provide access to learning for everyone, thereby removing physical barriers as a factor for learning within the scope of the classroom [5,6], even it is seen as something effective to apply especially in tertiary institutions, but it cannot be denied that not all learning can be transferred into the learning environment as an online [7].

This research explores and discovers several educational problems triggered by the rapid change towards online learning by reflecting on some lessons that might be learned from this crisis period for the world of education, including the need to address problems of access and functionality, teacher skills, student competence, resource sharing and global collaboration to educate a better world [8]. In fact students are not fully accustomed to learning through virtual classes. Students are still not proficient in learning and teaching through online media, especially those in the area. However, online learning has been carried out in many tertiary contexts, as evidenced by several studies that explain this [3]; online learning provides benefits in helping to provide access to learning for everyone [4], thereby removing barriers physically as a factor for learning within the scope of the classroom [5], even it is seen as something that is effective to be applied especially in universities, but it cannot be denied that not all learning can be transferred into the environment online learning [7]. Student activities in online learning have characteristics, namely, the spirit of learning, literacy towards technology, intrapersonal communication skills, collaboration and independent learning skills [9]. Online lectures are model lectures that utilize the internet network by students in the lecture process [10]. Characteristics of online learning include Constructivism, Social constructivism, Community of learners, virtual classes, and interactivity, independence, accessibility and enrichment behaviour [11]. Online learning that is guided by lecturers or instructors is designed according to the planned syllabus. Thus, this online class forms a group that meets in a virtual class to achieve learning objectives. Online learning communities are learning groups that are based on shared commitment and interest to collaborative learning with facilitated virtual learning environments [12]. Based on this, this study wants to find out how students' perceptions of online learning and find out the supporting factors and obstacles to online lectures during the COVID-19 pandemic.

2. Method
This research was conducted with a descriptive survey research method, and this method is almost the same as the descriptive method. The difference, the explanatory survey method, emphasizes the search for causal or causal relationships between the variables studied. The survey method is a study where the main data and information sources are obtained from respondents as research samples using questionnaires or questionnaires as data collection instruments. The sample in this study were 6 IKIP Siliwangi students, namely, PGPAUD, mathematics education, Counseling Guidance, Indonesian Language, Community Education, PGSD with a total number of respondents 183. Technique data collection using interview and questionnaires. The survey is done in a google form so that it is easily accessible by students. The data analysis technique used in this study is to calculate the percentage of data from each indicator, then interpret the data presentation score and analyze each indicator in depth.

3. Result and Discussion
Based on research results and data that have been collected descriptively. Descriptively, the results of the research that have been collected will be used to describe students 'online learning activities which include: students' perceptions about online lectures, applications used in online lectures, and supporting factors and inhibiting factors in online lectures. These result can be seen in Table 1 that of the respondent's questionnaire regarding the perception of online lectures at IKIP Siliwangi.
Table 1. Where Students Study Online

| No | College student | Percent% | The answer |
|----|----------------|----------|------------|
| 1  | 169            | 92.3     | Home       |
| 2  | 4              | 2.2      | Cafe       |
| 3  | 17             | 9.3      | garden     |
| 4  | 32             | 17.5     | Corner Corner |
| 5  | 27             | 14.8     | Other      |

In Table 1 it appears that students are asked where the usual place to study online. Of 183 students as many as 169 or 92.3% and the smallest percentage of students studying at internet cafes was 2.3%. IKIP Siliwangi Students’ Perception of Online Lectures in the COVID Pandemic Period 19 that students still experience difficulties in attending online lectures caused by their living conditions that have not yet got an internet network, so that there are still students who must study in the garden and even have to find a family home to can lecture online running smoothly and a good internet signal.

Table 2. Learning Support Applications

| No | College student | Percent% | The answer |
|----|----------------|----------|------------|
| 1  | 14             | 7.7      | E-Learning |
| 2  | 170            | 92.9     | Google Classroom |
| 3  | 90             | 49.2     | zoom       |
| 4  | 14             | 7.7      | Google hangout |
| 5  | 63             | 34.4     | Google Meet |
| 6  | 115            | 62.8     | whatsapp   |
| 7  | 5              | 2.7      | Other      |

Table 2 shows the results of respondents from the application questions supporting online interactive lectures used by IKIP Siliwangi lecturers (maybe more than one answer). Based on the questionnaire questions, online lecture applications that are often used in a row are google classroom, Whatsapp, Zoom, google meet, google hangout and e-learning IKIP Siliwangi. From the graph above it can be seen that the electronic devices used by students to attend online lectures are cellphones and laptops, whereas many as 58 or 96.6% of students use mobile phones to attend online lectures and as many as 2 or 3.4% of students use laptops to attend online lecture.

Figure 1 shows the results of respondents from the questionnaire statement about perceptions of learning online. The first statement, the online learning system (online) provides learning content in accordance with the lecture contract/needs. Respondents answered agree 76% and disagree 24%. The second statement, the online learning system provides material that is quite complete, up-to-date and
easy to understand. The results showed 57.4% agreed and 42.6 disagreed. Third statement, testing methods such as assignments and examinations through the online learning system are easily understood, which answers 53% agree, and 47% disagree. Testing methods such as assignments and examinations through the online learning system are fair and transparent, respondents who agree 67.8% and 32.2% disagree. Respondents who agreed 63.9% and 36.1% disagreed, this result relates to statements about the online learning system supporting me learning the material that I need and what I want to learn. The online learning system makes it easy for me to discuss and access material to other students through the learning community (example: social media groups or other e-learning applications), 71.6% agree and disagree 28.4%. This shows that students easily access material shared by lecturers through the online application. The online learning system makes it easy for me to discuss questions with lecturers or education staff, 51.4% answered agree and 48.6 disagree. Respondents who answered agree and disagree for this statement An interactive learning through online learning system helps mastery of learning materials was 56.8% and 43.2%. As for statements about the interactivity of learning through online learning systems giving a sense of comfort/closeness between lecturers and students and fellow students, 38.2% said they agreed, and 61.8% disagreed.

The results of the study are presented in the form of percentage diagrams on each item questionnaire. Students' perceptions of online learning is the media online used lecturer is google classroom to facilitate discussion because there is a menu of tasks, assessment and timing. The advantages of using Google classroom in online learning because of assignments (tasks), ivory (measurements), communications (communication), time-cast (saving time), archive courses (document archives), mobile applications (application in hand), and privacy (safe) [13]. A house is a favourite place of respondents in conducting lectures. Students agree that lectures in the COVID 19 pandemic era will be held online. Online lecture obstacle factors are the problem of signal and quota packages that run out quickly, it is difficult to digest material because there are no face-to-face meetings, unstable internet connections, tasks that are given fish with little time, cognitive assessment only, lecturers find it difficult to distinguish between the tasks that are done independently with the tasks done by others. In addition, technical lectures related to the assignment. The majority of respondents experienced control of completing the task in short working time. Model assignment lectures and material with assignments. If it is accumulated with all the lecturers giving the material, then they can imagine the assignment received by students. This also has an impact on the quota burden for students because it is used in work assignments. With a very heavy student burden with short turnaround time, it has an impact on learning motivation and attending online lectures.

There were several problems encountered in online learning; teaching materials, learning interactions, and learning environments [4,14,15].

In the current era of globalization where mobility and human activities are very high, an internet connection becomes very necessary and difficult to separate in human life to help various activities such as the learning process. In the revolutionary era, 4.0 people were led to be able to master the development of science and technology. But in the world of education, especially in the teaching and learning process sometimes has not become something that must replace the face-to-face lecture process with lectures that use applications. This can be seen from the response of students to questions preferring face-to-face lectures or online lectures, and then all students answered choosing face-to-face lectures, the results showed 83.6% of students answered face-to-face lectures. Some of the reasons are that face-to-face lectures can focus on discussions, questions and answers and understand lectures well. Lectures face to face also students can meet each other with friends on campus, stories with friends and can also share with friends. Lectures must be planned regularly and scheduled so that students can prepare for the lecture are scheduled as well. Related to the assignment lecture model, lecturers should not provide the relevant time period for completing assignments so that students can be enthusiastic and motivated to do it [16]. The supporting factors for online lectures are students have the opportunity to freely learn and look for sources of information, the availability of data packages, cellphones, laptops and internet networks that support. Online learning allows students to have free time to study so they can study whenever and wherever [15]. In addition, students can interact with lecturers using several applications such as e-classroom, video conference, telephone or live chat, zoom or through Whatsapp groups. An inhibiting factor in the online lecture process is the lack of data packages and the internet. Students prefer lectures face to face compared to online lectures because the interaction between lecturers and
students can be done in the classroom and does not require applications. There are some Notes that must be considered so that online learning remains optimal, which is related to the readiness of learning including confidence in the use of computer or internet, independent learning, student control, motivation for learning, and self-confidence towards online communication [15].

4. Conclusion

Based on the results of data analysis that has been explained that the online media that are used the most by lecturers is google classroom. Perceptions of students to online learning include, among others. The student is more like college face to face; the time to complete the assignment of lecturers short and rating are given against the students is cognitive alone. Factors constraints of online learning is problem signal and packet quotas are quickly exhausted difficult to digest the material because not their face to face, connection internet which is not stable, the task of which is given by the time the little, ratings in a cognitive course, learn difficult distinguish between task are performed by independently with the task that is done the same that the others. While the factors for online learning are students having the opportunity to freely learn and look for sources of information, the availability of data packages, HP, Laptops and internet networks.

5. References

[1] Watnaya A kusnayat, Muiz M hifzul, Nani Sumarni, Mansyur A salim and Zaqiah Q yulianti 2020 Pengaruh Teknologi Pembelajaran Kuliah Online Di Era Covid-19 Dan Dampaknya Terhadap Mental Mahasiswa EduTeach J. Edukasi dan Teknol. Pemelajaran

[2] Fitriyani Y, Fauzi I and Sari M Z 2020 Motivasi Belajar Mahasiswa Pada Pembelajaran Daring Selama Pandemik Covid-19 J. Kependidikan J. Has. Penelit. dan Kaji. Kepustakaan di Bid. Pendidikan, Pengajaran dan Pemelajaran 6 165–75

[3] Crews J and Parker J 2017 The Cambodian experience: Exploring university students’ perspectives for online learning Issues Educ. Res. 27 697–719

[4] Mather M and Sarkans A 2018 Student Perceptions of Online and Face-to-Face Learning Int. J. Curric. Instr. 10 61–76

[5] Ahmed R 2018 Effects of Online Education on Encoding and Decoding Process of Students and Teachers. Int. Assoc. Dev. Inf. Soc.

[6] Irfan M 2015 Pemanfaatan Gadget Dalam Pembelajaran Matematika serta Pengaruhnya Pada Mahasiswa yang Mengalami Math-Anxiety Di Universitas Sarjanawiyata Tamansiswa pada Mata Kuliah Persamaan Differensial Sci. TECH J. Ilm. Ilmu Pengetah. dan Teknol. 1

[7] Pilkington O A 2018 Active Learning for an Online Composition Classroom: Blogging as an Enhancement of Online Curriculum J. Educ. Technol. Syst. 47 213–26

[8] Cook L A, Bell M L, Nugent J and Smith W S 2016 Global collaboration enhances technology literacy Technol. Eng. Teach. 75 20

[9] Dabbagh N 2007 The online learner: Characteristics and pedagogical implications Contemp. Issues Technol. Teach. Educ. 7 217–26

[10] Isman M 2016 Pembelajaran Moda Dalam Jaringan (Moda Daring)

[11] Kemendikbud D G T K 2016 Petunjuk Teknis Program Peningkatan Guru Pembelajar Moda dalam Jaringan (Daring)

[12] Ke F and Hoadley C 2009 Evaluating Online Community Learning Educ. Tech Res. Dev 57 487–91

[13] Wicaksono V D and Rachmadyanti P 2017 Pembelajaran blended learning melalui google classroom di sekolah dasar

[14] Anhusadar L 2020 Persepsi Mahasiswa PIAUD terhadap Kuliah Online di Masa Pandemi Covid 19 KINDERGARTEN J. Islam. Early Child. Educ. 3 44–58

[15] Hung M-L, Chou C, Chen C-H and Own Z-Y 2010 Learner readiness for online learning: Scale development and student perceptions Comput. Educ. 55 1080–90

[16] Widiyono A 2020 Efektifitas Perkuliahan Daring (Online) pada Mahasiswa PGSD di Saat Pandemi Covid 19 J. Pendidik. 8 169–77
