

The effectiveness of online learning to student learning activities of fkip Universitas Veteran Bangun Nusantara Sukoharjo (case study: covid-19 emergency disaster 21 march-31 may 2020)

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ABSTRACT

This study aimed to discover: (1) The effectiveness of online learning to student learning activities of the Faculty of Teacher Training and Education in Universitas Veteran Bangun Nusantara Sukoharjo during the COVID-19 disaster response period of 2020. (2) The readiness form of FKIP & The Univet Institution in online learning utilization during the COVID-19 disaster response period of 2020. The method in the study was qualitative descriptive and the sampling technique used was Proportionate Stratified Random Sampling. The data collection technique used was using observations, questionnaires, and documentation. The data analysis technique used was qualitative data analysis. Based on the study, it can be concluded that: (1) The online learning utilization to student learning activities in the Faculty of Teacher Training and Education has been effective, but it still needs improvement or refinement in several aspects. (2) The Faculty of Teacher Training and Education's lecturers using online learning during the COVID-19 disaster response period were mostly ready, but need gradual training to be professional lecturers. (3) The presence of multimedia components and sufficient e-learning procurement by the institution of Universitas Veteran Bangun Nusantara Sukoharjo for online learning during the COVID-19 disaster response period.

KEYWORDS

Effectiveness
Online learning
Learning activities

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1. Introduction

The coronavirus, currently a worldwide pandemic, is called a non-natural disaster. This virus was initially discovered in Wuhan, China, at the end of 2019. The spreading of this antidote-absent virus is uncontrollable. Over 200 countries worldwide reported cases of coronavirus exposure, including Indonesia. Data up to 28 March 2020 showed that the virus spreading reached 200 countries with a total case of 593,656, with 132,526 cured cases and 27,215 deaths. The same data up to the same day in Indonesia showed 1,155 cases, 944 hospitalized, 102 deaths, and 59 cured.

In Indonesia, the case was first discovered in two residents of Depok, West Java, at the beginning of March. Data up to Saturday, 28 March 2020, stated that a positive population reached 1,155, and 102 were dead. According to the government's spokesperson for COVID-19 handling Achmad Yurianto, the rapid spread of this virus in Indonesia was due to the massive amount of the community who ignored the government's appeal to stay at home. National Disaster Management Authority (BNPB) stated that the coronavirus (COVID-19) emergency response period was extended from 21 March – 31 May 2020 due to the extensive scale of spreading. COVID-19 was not only affecting the social, economic, and cultural sectors but also on education. Countries affected by COVID-19 issued the lockdown or quarantine policy that impacted educational institutions.

Based on the Circular Letter of the Ministry of Education and Culture No. 4 of 2020 regarding the education policy execution during the emergency period of coronavirus diseases (COVID-19), students should not go to school or universities are closed up to indefinite time because the government attempts to slow down the COVID-19 spread. The lockdown policy tries to stop the coronavirus spread and faces

people to the new reality, the virtual realm. We are moving to the virtual realm by reducing social interactions in the real world. Those who were not familiar with online learning or homeschooling are now forced to do it, and perhaps many enjoy it.

In Indonesia, several universities in Solo City such as Universitas Muhammadiyah Surakarta, Universitas Sebelas Maret, STMIK Sinar Nusantara, Universitas Slamet Riyadi, Universitas Islam Batik Surakarta, IAIN Surakarta, Universitas Duta Bangsa Surakarta, UTP Surakarta, Stikes 'Aisyiyah Surakarta, ITB AAS Surakarta, and Universitas Surakarta started implementing the long-distance learning or online learning activities (announcement attached). Long-distance or online learning is one of the information technology as a means to conduct the education process, including to help the teaching and learning process which also includes searches for references and information sources (Wekke & Hamid, 2013). Universitas Veteran Bangun Nusantara Sukoharjo is one of the universities implementing long-distance or online learning according to the Circular Letter of Rector No: 163/A/B.1/Univet.Btr/III/2020 regarding the vigilance and prevention actions of the COVID-19 spread. Usually, learning processes in Universitas Veteran Bangun Nusantara Sukoharjo are carried out face-to-face in classes. However, due to the continuously increasing coronavirus spread, online learning is applied using several applications, e.g., zoom meetings and Edmodo. They are alternatives to maintain the learning processes of students from home.

According to The United Nations Educational, Scientific, and Cultural Organization (UNESCO) data, at least 290.5 million students worldwide encountered troubles in their learning activities due to the closed schools. Based on this problem, the present study formulated problems of (1) How is the effectiveness of online learning to student learning activities of FKIP Universitas Veteran Bangun Nusantara Sukoharjo during the COVID-19 disaster response period, (2) How is the readiness of FKIP lecturers in using online learning during the COVID-19 disaster response period, and (3) How are the readiness of FKIP & The Univet Institution during the COVID-19 disaster response period.

The study contributes to give perspective about the condition on the learning process in FKIP environment particularly during this pandemic era. The result of this research can be used as the basic information for the institution to improve the effectiveness and the quality of online learning activity.

2. Method

The study was conducted at Universitas Veteran Bangun Nusantara Sukoharjo, located in Letjend Sujono Humardani Street No. 1, Jombor Village, Bendosari Sub-District, Sukoharjo Regency during March 2020 – July 2020. The study used a qualitative descriptive method. According to Bogdan and Taylor (in Moleong 2017: 4), a qualitative descriptive method is a study procedure generating descriptive data in forms of written or verbal words from observed community and behavior.

The study population was all lecturers of FKIP and active students of FKIP in Universitas Veteran Bangun Nusantara Sukoharjo, who were involved in online lectures during the COVID-19 disaster response period. A total sample of 49 FKIP lecturers and 184 FKIP students was obtained using the Proportionate Stratified Random Sampling technique, i.e., a technique used due to the non-homogeneous members of the population. In this case, the different number of members in each study program of the Faculty of Teacher Training and Education (Sugiono, 2017: 82).

If less than 100 is better to be taken all. If the number of subjects is large, it can be taken between 10-15% or 25-50% (Arikunto, 2013; 116):

The researcher abilities from time, energy, and fund.

Narrow or broad area of observation for each subject because this links to the quantity of fund.

Easier in the questionnaire distribution

Therefore, to determine FKIP student samples, it can be seen from the FKIP active student population of 2,002 students. This study used 10% of a sample of 2,002 active students, i.e., 200 students from the population members were sampled.

Meanwhile, to determine the sample of FKIP lecturers, this study used the Slovin formula calculation:

$$n = N / (1 + Ne^2)$$

Note :

n = Sample

N = Population

e = Error level or critical value

From the population of FKIP lecturers of 96, the sampling was carried out at a confidence level of 90% or a critical value of 10% so that the sample size could be calculated as follows:

$$n = 96 / (1 + 96 \cdot [(10\%)^2])$$

$$n = 49$$

In Sugiyono (2017: 90), determining the number of samples for each study program was calculated proportionally by using the formula:

$$s = n / N \times S$$

Note :

s = The number of samples per unit proportionally

S = The number of all samples obtained

N = The number of population

n = The number or each population unit

Based on the formula above, the number of samples for each study program was obtained for lecturers (Table 1) and students (Table 2).

Table 1. Table 1. Distribution of study sample units for FKIP lecturers

No.	Study Program	Popula tion Unit	$s = \frac{n}{N} \times S$	Samp le Unit
1	English Education	9	$9/96 \times 49$	4
2	Indonesian Language and Literature Education	10	$10/96 \times 49$	5
3	Local Language and Literature Education	11	$11/96 \times 49$	6
4	Biology Education	8	$8/96 \times 49$	4
5	Geography Education	9	$9/96 \times 49$	5
6	Mathematics Education	10	$10/96 \times 49$	5
7	History Education	7	$7/96 \times 49$	4
8	Pancasila and Civic Education	10	$10/96 \times 49$	5
9	Elementary School Teacher Education	9	$9/96 \times 49$	4
10	Guidance and Counseling	7	$7/96 \times 49$	4

11	Educational Technology	6	6/96 x 49	3
Total		96		49

Table 2. Tabel 2. Distribution of study sample units for FKIP students

No.	Study Program	Populasi Unit	$s = \frac{n}{N} \times S$	Sampel Unit
1	English Education	195	195/2002 x 200	20
2	Indonesian Language and Literature Education	96	96/2002 x 200	10
3	Local Language and Literature Education	69	69/2002 x 200	7
4	Biology Education	64	64/2002 x 200	6
5	Geography Education	51	51/2002 x 200	5
6	Mathematics Education	196	196/2002 x 200	20
7	History Education	43	43/2002 x 200	4
8	Pancasila and Civic Education	35	35/2002 x 200	4
9	Elementary School Teacher Education	766	766/2002 x 200	77
10	Guidance and Counseling	282	282/2002 x 200	28
11	Educational Technology	22	22/2002 x 200	3
Total		2002		184

The study data were collected through observation, questionnaires, and interviews. Observation and online questionnaire methods using Google form were carried out to analyze how FKIP students and lecturers' activities as students and educators in e-learning. Interviews were used to obtain information about the readiness of The Univet Institution.

The study data were analyzed using qualitative data analysis techniques. According to Bogdan and Biklen (in Moleong, 2017: 248), qualitative data analysis is an effort made by working with data, organizing data, sorting it into manageable units, synthesizing it, looking for and finding patterns, finding what is essential and what to learn, and deciding what to tell others.

3. Results and Discussion

The researcher's data analysis method was the descriptive data method because the study aimed to describe or illustrate the Effectiveness of Online Learning to Student Learning Activities of the Faculty of Teacher Training and Education in Universitas Veteran Bangun Nusantara Sukoharjo during the COVID-19 disaster response period of 2020. The study was carried out using questionnaires of Google form and interviews as data collection instruments for 217 respondents consisting of 28 lecturers, one staff, and 184 students. The results are explained as follow:

3.1. The effectiveness of online learning to student learning activities of the Faculty of Teacher Training and Education

Student learning activities are activities conducted during learning between students and lecturers/tutors. These activities include learning processes. A learning process is a preparation designed in a learning situation to ease students to learn, save (the power to remember information), or transfer knowledge and skills.

Data collected from online questionnaires were used to elaborate on the Effectiveness of Online Learning to Student Learning Activities of the Faculty of Teacher Training and Education, which is presented Fig. 1.



Gambar 4.1 Bagan Grafik Hasil Tanggapan Angket dan Mahasiswa

Keterangan :

- 1 = Adanya perkuliahan online membuat mahasiswa lebih fleksibel mengatur waktu karena dapat diakses kapanpun dan dimanapun.
- 2 = Adanya perkuliahan online membuat mahasiswa lebih hemat biaya cetak (print) atau fotocopy tugas-tugas kampus.
- 3 = Saya merasa kesulitan memahami mata kuliah yang seharusnya disertai praktek namun hanya dijelaskan secara teori saja.
- 4 = Adanya perkuliahan online membuat penggunaan kuota data mahasiswa lebih banyak dari pemakaian biasanya / sehari-hari.
- 5 = Adanya perkuliahan online membuat mahasiswa lebih hemat dalam biaya transportasi sehari-hari ketika berkegiatan di kampus.
- 6 = Kondisi koneksi internet atau jaringan internet sudah memadai di tempat saya untuk mengikuti kegiatan perkuliahan online.
- 7 = Adanya perkuliahan online membuat mahasiswa lebih hemat dalam biaya makan siang.
- 8 = Saya sudah memiliki perangkat laptop dan smartphone (HP) sehingga aplikasi pembelajaran daring memudahkan diakses.
- 9 = Dosen selalu online untuk memberikan materi dengan jelas serta arakan kepada mahasiswa untuk ikut berpartisipasi dalam forum diskusi.
- 10 = Kondisi/suasana saat dirumah sudah kondusif tanpa ada gangguan (terdapat suara berisik/keadaan yang tidak memungkinkan untuk perkuliahan).

Fig. 1. Chart of Questionnaire Response Results from Students

Based on the analyses results of the online questionnaire and observations made by the researcher, it can be concluded that during the Covid-19 pandemic, the use of online learning to the learning activities of FKIP students at Universitas Veteran Bangun Nusantara Sukoharjo was effective, but still required improvement in delivering material and others. As in Fig. 1. In terms of lecturers' delivery to students according to students, the lecturers had delivered lecture materials well, but the material described was still not understandable or unclear and for the form of learning content, according to students, it was challenging to understand the course material, which should be accompanied by direct practices, but only explained in theory because not all courses could be delivered online as well as in terms of using the internet for students, it would be better if there was a provision of gradual subsidized internet package assistance for students who were overwhelmed due to the wastage or excessive data usage.

The distribution of the FKIP Veteran Bangun Nusantara Sukoharjo students' domicile during the pandemic can be presented in Fig. 2.

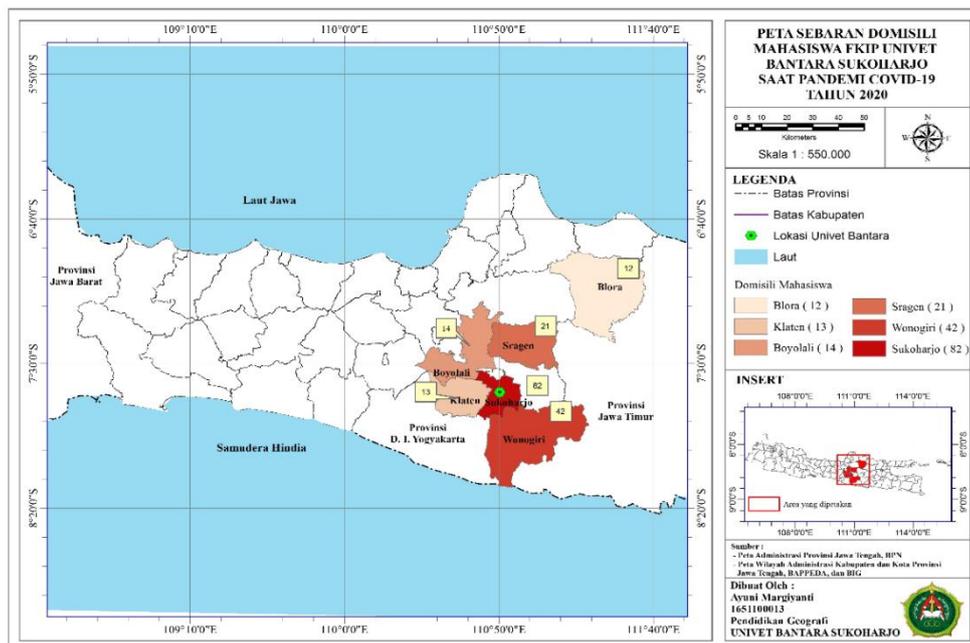


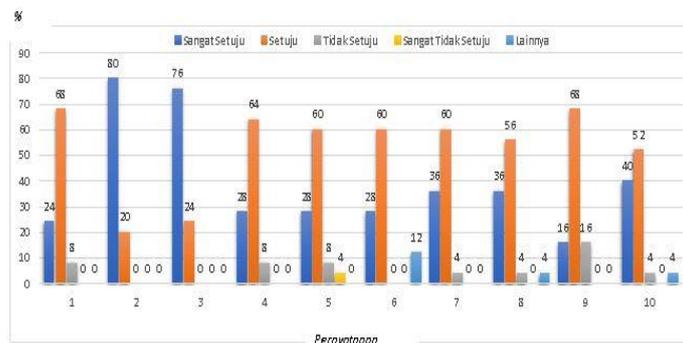
Fig. 2. The distribution map of the FKIP Veteran Bangun Nusantara Sukoharjo students' Domicile

The map shows that FKIP Universtas Veteran Bangun Nusantara Sukoharjo students' domiciles during the COVID-19 pandemic were in six regencies in the Central Java Province, i.e., Blora Regency, Klaten Regency, Boyolali Regency, Wonogiri Regency, Sukoharjo Regency, and Sragen Regency.

3.2. The readiness of FKIP lecturers in using online learning during the COVID-19 disaster response period

Distance learning or online lectures, which is one of the information technologies as a medium in carrying out the educational process, includes helping the teaching and learning process, including finding references and information sources (Wekke & Hamid, 2013). To condition lecture activities to continue during the COVID-19 pandemic response, online learning was conducted. Therefore, the readiness of educators (lecturers) was also needed, and this could be shown from the ability of lecturers to use online, the availability of multimedia devices, the form of learning content provided, and the process when learning took place.

Data were collected from online questionnaires to describe the readiness of the Teaching and Education Faculty Lecturers for online usage that can be seen in Fig. 3.



Gambar 4.2 Bagan Grafik Hasil Tanggapan Angket dari Dosen FKIP

Keterangan:

- 1 = Semua Dosen Fakultas Keguruan dan Ilmu Pendidikan sudah mendapatkan pelatihan tentang penggunaan Sistem Pembelajaran Daring (SPADA).
- 2 = Saya sudah melakukan penelitian dan publikasi ilmiah sebagai peningkatan kompetensi diri untuk dosen profesional.
- 3 = Sudah tersedia Hardware / perangkat laptop dan smartphone (HP) yang memadai untuk kegiatan pembelajaran daring.
- 4 = Sudah menyediakan modul dan evaluasi yang mudah diakses dan disesuaikan dengan pembelajaran daring (kuliah online).
- 5 = Adanya pembelajaran daring, membuat penggunaan kuota data lebih banyak dari pemakaian biasanya/sehari-hari.
- 6 = Komunikasi online dengan pembelajaran daring membuat proses mengajar menjadi lebih efektif ditengah masa tanggap darurat Covid-19.
- 7 = Di tempat saya, kondisi koneksi internet atau jaringan internet sudah memadai untuk melakukan kegiatan pembelajaran daring.
- 8 = Ketersediaan perangkat software / aplikasi yang digunakan oleh dosen sudah memadai untuk pembelajaran daring.
- 9 = Dosen lebih sering berinteraksi dengan mahasiswa dalam pembelajaran daring dibandingkan dengan perkuliahan konvensional (tatap muka).
- 10 = Mahasiswa disetiap mata kuliah yang saya ajar sudah siap dalam menghadapi pembelajaran daring.

Fig. 3. Chart of Questionnaire Response Results from FKIP Lecturers

Based on the analysis results of the online questionnaire and interviews conducted above, lecturers' readiness to use online is shown in Fig. 3. It can be interpreted that some lecturers still needed to gradually increase their online learning training so that they become professional educators because the teaching staff is a very definitive factor and their skills motivate students to learn. Lecturers or teaching staff must be competent in their fields to carry out tasks professionally to achieve learning goals effectively and efficiently.

3.3. The readiness of FKIP & the Univet Institution in online learning usage during the COVID-19 disaster response period.

Based on the Circular Letter of the Ministry of Education and Culture No. 4 of 2020 regarding the education policy execution during the emergency period of coronavirus diseases (COVID-19), students should not go to school or universities are closed up to indefinite time because the government attempts to slow down the COVID-19 spread. Therefore, several educational institutions are required to conduct online learning to continue learning activities. One of which is the Universitas Veteran Bangun Nusantara Sukoharjo, which already has e-learning developed by an institution at the Veteran Bangun Nusantara Sukoharjo University called the Online Learning System (SPADA). During the Covid-19 disaster response period, SPADA's existence can help online learning at Universitas Veteran Bangun Nusantara Sukoharjo. SPADA is one of the programs of the Directorate General of Learning and Student Affairs of the Ministry of Research, Technology and Higher Education to increase equal access to quality learning in Higher Educations and as an information system for learning media and self-development without being bound by a schedule and place which includes: course materials, discussions forums, upload assignments, and more. The form of Univet Institution readiness to use online is concluded as ready because of multimedia components' availability. The management of e-learning procurement, i.e., SPADA, could be operationalized by lecturers and students of Universitas Veteran Bangun Nusantara Sukoharjo, as shown in the interview results. The IT party as SPADA web management suggested that "Procurement of SPADA as e-learning developed at Universitas Veteran Bangun Nusantara Sukoharjo has complied with international standards. Overall, in terms of features, it includes everything, even beyond the government's PPG system. For SPADA optimization, it is seen

from the server provider to the belmawa Dikti to ask for criticism and suggestions” (Interview note on Thursday, 14 May 2020).

Expert SPADA lecturer said, “SPADA has followed the Moodle platform's standards and was only developed in September-December 2019 at Universitas Veteran Bangun Nusantara Sukoharjo. In February 2020, it was socialized with a three-stage target for three years, with around 50 lecturers for each stage, and completed in the next three years. At Universitas Veteran Bangun Nusantara Sukoharjo, online learning training has only been conducted once with about 60 participants” (Interview note on Thursday, 14 May 2020).

It shows that FKIP lecturers' readiness to use online learning SPADA still required more training in stages because SPADA training has only been conducted once and has not met the institution's target for three years of implementation and training. SPADA does not resemble other simple e-learning platforms. SPADA is very complex and must continue to be developed in terms of courses, content, quizzes, etc. For the most part, all lecturers had done or received online learning training, but the percentage was not 100% because each lecturer with their character and abilities did not entirely well-master online learning.

This obstacle arose because the institution had not finished providing socialization and conducting further training to all lecturers due to the COVID-19 pandemic response period. It burdened the development team and had to teach how to use it to lecturers who did not understand. The Universitas Veteran Bangun Nusantara Sukoharjo Institution did not oblige SPADA utilization. As stated by the Institution, “Online learning media have various forms, adjusted to what is known by each lecturer. It might be SPADA and may not be. Some even use simple e-learning, which the average lecturer knows. One of them is WhatsApp because this application is easy to use by the lecturer concerned” (Interview note on Tuesday, 19 May 2020).

Therefore, for some lecturers, it is expected that there will be a development of their abilities and self-knowledge to explore all the features exist in online learning media from institutions and other application media.

4. Conclusion

1. The online learning usage for learning activities at the Faculty of Teacher Training and Education students in the Universitas Veteran Bangun Nusantara Sukoharjo was effective but required improvement or improvement in several aspects.
2. The Faculty of Teacher Training and Education lecturers' readiness to use online learning during the COVID-19 disaster response was mostly ready but still needed to gradually increase their training to become professional educators.
3. From the availability of multimedia components and the management of e-learning procurement developed by the Universitas Veteran Bangun Nusantara Sukoharjo, i.e., SPADA, the Universitas Veteran Bangun Nusantara Sukoharjo institution was ready. However, for FKIP readiness, seen from the FKIP lecturers or teaching staff, they still needed to develop self-knowledge skills to explore all the features available in online learning media.

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