Tracing Successful Online Teaching During Covid-19 Pandemic

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Abstract: The world of education dismisses students (studying at home) to reduce the spread of the coronavirus. In such conditions, teachers are challenged to apply all their abilities and expertise so that they can continue to teach students by transferring knowledge, pedagogic abilities, and their belief in successful online learning. This study aims to explore how lecturers can conduct teaching in the midst of the Covid-19 pandemic and what they use as a medium to conduct successful online teaching. In addition, researchers also want to know how lecturers can adjust the online teaching transition. The design of this research is qualitative research using deep interview tests to explore online learning that suits current needs. The research was conducted at the department of Office Administration Education Sebelas Maret University with the head of the study program as the key informant. The data validity test used source triangulation and method triangulation. The sampling technique was purposive snowball sampling, data collection techniques used observation, interviews and documentation, and data analysis techniques used interactive data reduction, data presentation, and conclusion drawing. The results show a good connection communication network of all students and lecturers is a major aspect that must be considered in lectures even though using simultaneously online social media, e.g. You Tube, Google Classroom, Google Meet, and WhatsApp. The Covid-19 pandemic is considered a challenge and an opportunity to conduct research in the field of information and communication technology (ICT) especially on digital classroom management. The outcomes of research that can be directly utilized by the user are the output targets research whose activities are manifested in the form of community service. Community Service Program (KKN) is a tangible form of student involvement in community service.

Keywords: Covid-19; interactive teaching; qualitative research; social media; teacher-student interaction

1. Introduction

The pandemic coronavirus disease-19 (Covid-19) which paralyzes aspects of economic and social life has never been predicted before. Almost all human activities have stopped due to the spread of this virus. The world of education dismisses students (studying at home) to reduce the spread of the coronavirus. In such conditions, teachers are challenged to apply all their abilities and expertise so that they can continue to teach students by transferring knowledge, pedagogic abilities, and their belief in successful online learning. With the rapid development of Information and Communication Technology (ICT), an innovative learning format will use a virtual learning environment in which the use of this media will greatly assist students in solving problems and stimulating student learning motivation (Schuster et al., 2016). In addition, digital technology is very suitable for classes with large numbers of students [1]. [2] stated that there are four developments in ICT in learning and teaching, especially in technical education, namely: "personal learning environments, flipped or inverted classrooms, portable devices, and online labs" (p.1).
The Office Administration Education (PAP) undergraduate program is a study program that is often related to practical courses. The vision of this study program is "to become a center for the development of the field of teacher training and PAP science with international reputation based on the noble values of the national culture". The objectives of learning in this study program are: (1) to produce graduates who have high competence in the field of PAP who are ready to become professional educators; (2) to produce research and development of PAP knowledge that are beneficial to society; and (3) to increase community service in the field of PAP science to help solving problems in society. The core subjects in the PAP study program are office automation, secretarial, and micro teaching office administration courses. The three courses are practical subjects. Office automation is a course that practices how to operate office machines properly, secretarial is about practicing secretariat work, and micro teaching is practicing how to teach office administration to students.

In the midst of the Covid-19 pandemic, lecturers must keep trying so that all courses in the PAP program can continue and be conveyed to students. What lecturers use as examples to deliver successful online teaching, how lecturers can adapt to the online teaching transition.

1.1 Coronavirus Disease-19 (Covid-19)

Coronavirus is a group of viruses that can cause disease in animals or humans. Several types of corona viruses are known to cause respiratory infections in humans ranging from colds to more serious coughs such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). A new type of coronavirus that was found was discovered to cause COVID-19 disease. This virus is a new virus and Covid-19 is a disease that was previously unknown before the outbreak in Wuhan, China, in December 2019. People can catch COVID-19 from other people who have the virus. COVID-19 can be spread from person to person through droplets from the nose or mouth that come out when a person with COVID-19 coughs or exhales. These sparks then fall on objects and surrounding surfaces. People who touch these objects or surfaces and then touch their eyes, nose or mouth, can catch COVID-19. COVID-19 transmission can also occur if people inhale the droplets that come out of the cough or breath of a person who has COVID-19. Therefore, it is important to keep a distance of more than 1 meter from infected people.

Data on https://www.covid19.go.id/ as of 19 October 2020 [21] shows that 365,240 people were positively affected with the coronavirus, 289,243 people were recovered, and 12,617 people died. Safety procedures to prevent the spread of the virus are recommended, such as wearing masks, social distancing, working from home, and worshiping at home. Large-scale Social Restrictions (PSBB) is imposed by the government to prevent the spread of disease in the red zone. The world of education has implemented learning from home since mid-March 2020. All of this has been done to prevent more victims from the coronavirus.

1.2 Online Teaching

In 2020 students will be delighted more in learning online. In 2008, 4.6 million students were involved in online teaching in more than one subject. In 2020 it is almost certain that all students will use the massive open online course (MOOC) due to large-scale social restrictions.

In addition to the high growth and demand for online teaching, the readiness of lecturers to keep up with technological developments and meet the demands of online teaching is worth exploring. Can the pedagogical aspect still be applied to online teaching, as it is in traditional teaching? Is simply sending a video recording of a lecture can be considered as online teaching? Archiving online teaching as done in traditional learning has been provided in the MOOC. The ability of lecturers in paying attention to pedagogical aspects, the depth of the material presented, and the transformation of online teaching to students need to be explored so that they can be categorized as a successful online teaching. Lecturers can not necessarily measure whether the online teaching that
has been done can be sure to be successful/ effective [3]. In more detail, McQuiggan revealed that
what works in traditional classrooms may no longer be reliable in online classrooms. New
teaching environment.

2. Research question

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often related to practical courses. The vision of this study program is "to become a center for the
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This study aims to explore the models used by lecturers as examples in online teaching and how
lecturers can adapt to online teaching transitions. Therefore, this study will discuss: (1) the reasons for
choosing the model used in learning; (2) what aspects should be considered in online learning during
the transition period; and (3) how online learning can be considered to be successful. Those three
questions are related to the learning objectives in the PAP study program, namely: (1) producing highly
competent graduates who are ready to become professional educators; (2) produce research and
development of PAP science; and (3) increasing community service to help solving problems in society.

3. Methodology

This research is a qualitative study with a case study approach. Qualitative methods are used to
describe the implementation of online teaching. "This research is descriptive qualitative in which
qualitative research leads to a detailed and in-depth description of the portrait of the condition of what
actually happens according to what it is in the field of study" [4]. The location of this research was
carried out in the Undergraduate Program of Office Administration Education, Sebelas Maret
University, Surakarta.

The interviewees and informants in this study were the Head of the Office Administration
Education Study Program as the Key Informant. In addition, researchers will use documents or archives
regarding online teaching during the Covid-19 pandemic in the Undergraduate Program of Office
Administration
The data validity test used source triangulation and method triangulation. The sample was taken by using purposive snowball sampling technique. Data collection was carried out using observation, interview and documentation techniques. Meanwhile, data analysis used interactive techniques, namely data reduction, data presentation, and conclusion [5].

4. Results and Discussion

4.1 Results

This study aims to explore the models used by lecturers as examples in online teaching and how lecturers can adapt to online teaching transitions. Therefore, this study will discuss: (1) the reasons for choosing the model used in learning; (2) what aspects should be considered in online learning during the transition period; and (3) how online learning can be considered to be successful. Those three questions are related to the learning objectives in the PAP study program, namely: (1) producing highly competent graduates who are ready to become professional educators; (2) produce research and development of PAP science; and (3) increasing community service to help solving problems in society.

Case vignette 1: Producing highly competent graduates who are ready to become professional educators

a. Reasons for choosing a learning model
In choosing a learning model, what needs to be considered during this pandemic is a learning model that can be used to communicate by all students and usually does not use video communication (video call / video conference) because video calls / video conferencing require large memory. As informant 2 stated that, "Because students of the Office Administration Education study program live in the suburbs/ rural areas, they sometimes cannot participate thoroughly. When using video, the connection is unstable. So we don’t know whether the student understands it or not." Informant 3 added that the media commonly used by lecturers and students will be very concerned about choosing a learning model. He added that “For this semester we have used Google classroom and used Google form for attendance list. Besides that we also use Google meet.” Learning targets in order to improve student competence in producing highly competent graduates who are ready to become professional educators is a learning that can prepare students’ competencies to be able to properly manage digital classrooms. As informant 1 stated that, "providing competence to students on how an educator can manage a digital class, but if they become a practitioner, they know about data banks, they know about their analysis which still leads to digital too."

b. Aspects that are considered in online learning during the transition period.
The issue of the mobile data that students have must be very much considered. If online lectures take place continuously, the data will quickly run out, the learning materials presented by the lecturer do not reach the students. So even though the media, facilities and infrastructure, the readiness of lecturers and others are all ready, the material is not conveyed to students because they do not have enough mobile data, it will be useless. As informant 1 explained that, “we want everything to be done like media, facilities and infrastructure, media, lecturers, and others. But there is an issue of the mobile data we have. If we study online 2 or 3 times, the data will quickly run out.” A similar statement was also conveyed by informant 2, “An aspect that needs to be considered is ensuring that they have a data package. Moreover, the government has budgeted for data package assistance for learning which is very helpful.” In addition to the connection, the lecture material to be delivered must also be considered in choosing a learning model whether the material to be discussed is suitable to be delivered or not. If it is not possible to
deliver it online, it is necessary to combine online and offline learning with a note of paying attention to health protocol. As informant 3 stated that, "Because in the last semester it was done suddenly so we are not ready. ....offline learning was held with health protocol and also by WA group."

c. How online learning can be said to be successful
Learning is said to be successful if the learning indicators are fulfilled. Informant 1 explained, "Learning is said to be successful if the indicators are fulfilled." Informant 2 mentioned that, "it is said to be successful if their grades are good." Regardless of the media used for the exam because the model and media really reflect the abilities of students. Informant 2 added a statement, "Although it is not infallible, because online learning cannot see their ability to receive the learning material or information we provide. In the test, we only use Google form and we cannot explore their abilities. Moreover, there are provisions during this pandemic, wherever possible, we give students a minimum grade of B. This makes us less aware of student’s competencies.” Meanwhile, informant 3 explained that, "It is said to be successful if there is interaction with users. Any suggestions, complaints and feedback show that the learning has been successful."

Case vignette 2: Produce research and development of Office Administration Education

In producing research and development of PAP science in the conditions of the Covid-19 pandemic, research is in the field of online learning. As informant 1 explained that, "in this field of research, it is a momentum for students to examine how the online learning process is everywhere, in vocational schools and in tertiary institutions, what the process is like, and what the obstacles are so that it can be a reflection for students.” Apart from leading to research on online learning, research and development of PAP science during the Covid-19 pandemic is IT-based research. This is in accordance with informant 3 who stated that, "During the pandemic it did not really have an impact on research and community service because of IT-based research problems, for example video learning research.” On the other hand, in the process of implementing research guidance, a combination of online and offline learning is needed. This is in accordance with the statement of informant 2 who stated that “Many research and community services are still carried out offline because they have never been or are not used to doing it online, then will use online.”

Case vignette 3: Increasing community services

Community service in the Office Administration Education Study Program during the Covid-19 pandemic is by collaborating between lecturers and students. As informant 1 stated that, "The dedication remains clear, lecturers who work with students as well as professors must involve students. We give our knowledge to society, especially the educator community. Our focus is how to manage digital learning with the simplest platform to the high-quality platform.” Aside from collaboration between lecturers and students, community service is also carried out by including students in Community Service Program (KKN) activities. This is in accordance with the explanation of informant 2 that "Student service is included in the Community Service Program.” Meanwhile, informant 3 gave a different explanation where research should be followed by dedication. He explained that “Research and service merge, the result of the research is for community service. The result of the research is for community service.” So if there is research, it is automatically followed by community service.
4.2 Discussion

The main objective of this study is to explore the selection of learning models used by lecturers in online teaching and how lecturers can adapt to the online teaching transition during the Covid-19 pandemic. By using a case study approach, researchers can explore in depth by paying attention to successful online learning from various colleges. Education at the university level has flexibility and autonomy to regulate and make criteria according to stakeholder demands. Therefore, the competence of graduates who are reliable and ready to become professional teachers needs to be measured so that they fit the needs of the stakeholders.

a. Choosing the model used by lecturers in online teaching

1) The results of research in the Office Administration Education Study Program indicate that the online learning model chosen by lecturers to be able to produce highly competent graduates who are ready to become professional teachers is an online learning model that allows communication between lecturers and all students involved in the learning. Communicative learning between teachers and students will make it easier for lecturers to measure students’ understanding of the subject being taught. The teacher can repeat the subject if it is not fully understood by students. The importance of interactive learning between teachers and students at the university level means that it can take three measurements: summative, formative, and motivational assessments. Summative assessment is used to find out whether students understand the material presented or not; formative assessment is used to direct students’ mental processes in the desired direction; and motivational assessments are used to keep students active and create a pleasant learning environment. When the teacher asks students to study in small groups, it is not only aimed at gaining quality knowledge but also aims to motivate students. The reaction of teachers and peers to the work done is highly anticipated by students.

2) The expected competence of students is the competence to manage digital classes. The meaning of managing a digital classroom is not limited to the use of online learning media but also pays attention to the pedagogical aspects of online learning [7], which divides e-learning pedagogy into four categories, namely associative, cognitive/constructivist, situative, and connectivity. Associative emphasizes the theoretical transmission of information learning as an activity through structured tasks, where the focus is on the individual with learning through association and reinforcement. The cognitive/constructivist aspect views knowledge as more dynamic and developing rather than objective and static. The main task here is to process and understand information and the world around it. The learning is often task-oriented. Situative defines learning as a social practice and learning through social interaction. Students have clear responsibility for their own learning. Connectivity means learning through a networked environment. Educators and students do not take place in a physical environment but learning through the web and the involvement of people in it are also learning themselves.

3) Apart from the pedagogical aspect, in digital learning it is also necessary to pay attention to the connectors that support digital learning. According to Banerjee, Belson, and Clugston [8] there are three “connectors” that are widely viewed as the foundation of digital education, namely an integrated digital education ecosystem, an integrated student learning cycle, and an integrated technology solution. An integrated digital education ecosystem includes parents, teachers, peers and administratos, and individuals outside the formal education system such as mentors and potential employers, forming collaborative networks to convey instruction and guide students in the ecosystem. The integrated student learning cycle offers a hands-on continuous learning experience from K-12 to the workplace. For this reason, educators and trainers must be able to connect learning in the classroom and the real world of work in a way that is tailored to the
needs, learning styles, enthusiasm and potential of each student. Integrated technology solutions mean that technology providers can take advantage of their respective technological strengths and competencies to partner and offer integrated solutions.

4) The impact of digital learning can have a positive effect on students. Stated that digital learning has a better positive effect on motivation and learning outcomes than traditional learning [9]. Although not all students in digital learning can complete their learning, they can at least support that learning during Covid-19 pandemic. Stated that there are reasons for students to leave online learning because they feel no different from face-to-face learning and because they are too busy working and have family responsibilities to spend their time in online classes [10]. On the other hand, students continue to follow online learning for reasons of flexibility, convenience, and the relevance of the program to their career and work. So, online learning should pay attention to input, content, and interactions that are consistently applied to online learning.

5) In the field of research, learning in the Office Administration Education Study Program leads to online learning research and information technology (IT) based research. During the Covid-19 pandemic, the opportunity to develop research in the field of online learning and IT did get a direct response from users because it was immediately applied to meet learning needs during this pandemic. This is in accordance with the opinion [11] who explained that the Massive open online course (MOOC) is the most researched e-learning modality, the Community of Inquiry and Technological The Acceptance Model is the most widely used theory, and case studies are the methodology that is most often used. Many aspects of online learning research that can be developed [12] stated that online collaborative learning (OCL) theory can use these following methods: exposition, demonstrative, interactive, and practical. Exposition deals with the presentation of theories, concepts and other information and is based on text enriched with animation; demonstrative is the script underlying scheme that demonstrates behavior; and practical means students interact with properly designed tools to practice and test their level of proficiency.

6) In the field of community service, the Office Administration Education Study Program students are included in the Community Service Program (KKN). The KKN that was being held at Sebelas Maret University during the Covid-19 period was different from the previous KKN. During the Covid-19 period, students carried out KKN in their respective hometowns. The type of activity is also based on information technology. Students provided an explanation of the dangers of the COVID-19 through social media and printed media, which explained the dangers of COVID-19, the media for spreading the virus, how to anticipate it and suggest a healthy lifestyle to the public so that they do not become infected with the virus. KKN activities include assisting people with the status of people in monitoring (ODP) with morning exercises, morning sunbathing, cleaning the environment, and socializing the importance of maintaining health protocols. In addition, they also carry out direct educational activities on how to wash hands properly, use masks and face shields [13].

b. Lecturer adjustments to online teaching transitions

Lecturers in the office administration education study program have a target that in adjusting the online teaching transition to produce highly competent graduates who are ready to become professional teachers is to combine several online learning media such as Google meet, Google classroom, WhatsApp, the Indonesian Online Learning System (SPADA), You Tube. The use of some of these online learning media is intended to help students’ access lecture materials and explanations so that they can understand the subject presented. This is in accordance with Diaz and Diniz [14] who stated that a multi-faceted learning scenario in a learning management system (LMS)
needs to be carried out, for example through increasing interactivity, encouraging the introduction of ICT users, and further training to facilitate blended learning. Stated that students, learning, and learning motivation need to be considered as separate variables in learning applications [15]. The structure of a pedagogical philosophy needs to combine instructivist and constructivist elements [16]. Choosing and combining several interactive online learning media, such as Web 2.0, will be able to facilitate self-understanding in learning as Sumuer [17] stated that the use of Web 2.0 in learning is a significant predictor of student independent learning in technology. Online learning needs to be supervised and controlled so that the quality of learning is maintained. Ellis and Calvo [18] explained that in preparing a quality assurance system of learning, it is necessary to pay attention to issues of leadership, staff development, and evaluation in the learning management system.

In the field of research and community service, the Covid-19 pandemic provides challenges and opportunities for students and lecturers in the Office Administration Education Study Program to conduct research in the field of ICT. The results of the research are awaited by education stakeholders to implement them. Stakeholders are always looking for the media that is most suitable to the conditions of students because there has not been found an online learning system that is confirmed to be the most appropriate media for all courses so far. The competency target that a subject wants to achieve makes it a uniqueness that cannot be met from just one learning system. [11] explained that the Massive open online course (MOOC) is the most studied e-learning modality. This indicates that the features needed in an online learning system are still being upgraded according to user needs. [19] proposed three research-based instructional design strategies including: the use of performance advancement tools, time management tools, and learning enhancement tools. The use of performance advancement tools serves to assist learners in developing metacognitive processes for planning learning, maintaining organizational levels, and monitoring their performance in coursework; The use of time management tools is the ability to develop behavior among students in an online learning environment; and the use of learning enhancement tools is useful for assisting online instructors in self-development among learners. Direct feedback from stakeholders and users from the application of a research result is an indicator of the success of a study. [20] said that in the Online Education Initiative (OEI), combining practical results between vendors, examples of successful online learning, user training, and forming working groups is the best way to implement and develop research results. The form of this direct reciprocity is a community service. Thus, to be able to produce research and development of PAP science, students and lecturers must be able to take advantage of the momentum of the Covid-19 pandemic to be able to design and develop an applicable online learning research, in the field of community service must be able to provide skills that can be directly utilized by stakeholders.

5. Future Trends and conclusion

Based on the results of the research and discussion above, it can be taken as follows:

Lectures in the Office Administration Education Study Program aim to produce highly competent graduates who are ready to become professional teachers with managing digital class competence. A good connection communication network of all students and lecturers is a major aspect that must be considered in lectures. The smooth connection in online learning cannot be separated from the availability of the data package the user has, the signal/internet connection that is in the user's place and the subject being studied.

Research in the field of online and information technology-based learning is a challenge and research opportunity in the Office Administration Education Study Program during the Covid-19 pandemic by paying attention to aspects of the e-learning pedagogy. The involvement of students in the KKN program at Sebelas Maret University and training that provides skills to stakeholders which can
be directly applied is a form of community service by students and lecturers of the Office Administration Education Study Program.

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