Integration of the Use of Digital Technology in the PKN Learning Process in the Era of the COVID-19 Pandemic

Aulia Utami Putri¹, Gatot Budiarto², Ermanovida³, Syarifuddin⁴, Retna Mahriani⁵

^{1,2,3}Department of Public Administration, Faculty of Social and Political Sciences, Universitas Sriwijaya, Indonesia ⁴Department of Historical Education, Faculty Teacher Training and Education, Universitas Sriwijaya, Indonesia ⁵Department of Communication Sciences, Faculty of Social and Political Sciences, Universitas Sriwijaya, Indonesia auliautami@fisip.unsri.ac.id

Abstract

This research aims to provide an analysis of the use of digital technology in the PKN learning process in the era of the COVID-19 Pandemic as well as what factors are supporting and inhibiting lecturers in the online learning process for PKN course lecturers. This research uses qualitative methods through a descriptive approach. The data collection techniques used in this study are in the form of interviews, questionnaires or questionnaires, and documentation. The type of interview used in this study was a semistructured interview. The type of questionnaire used in this study is an open questionnaire and problem analysis is done through interviews to the coordinators of PKN courses, PKN lecturers, and students. There is a major problem in the integration of digital technology, namely the need to strengthen digital technology in PKN learning so as to reduce the obstacles felt by students and lecturers such as signal constraints, server down, do not have supporting infrastructure facilities such as laptops and handphone and increase the creativity and innovation of lecturers in teaching using digital technology so that lessons do not cause saturation of students with the materials provided and solutions provided to increase the content and activities of e-learning, facilitating lecturers' subjects for the learning process.

Keywords

Integration; digital technology; PKN learning; COVID-19



I. Introduction

One of the important factors to achieve educational goals is the learning process carried out (Widoyoko, 2009). Educator programsthat are considered development actors are required to continue to develop in order to be able to produce a generation that is mature, qualified and sensitive to various problems that will be encountered in the future. (Wirayudha et al., 2021). Now in the field of education is required to dotechnology development to prepare graduates who can have qualified human resources. Education management policy in Indonesia currently encourages all levels of education Danim (2019) especially higher education to take advantage of the advancement of digital technology and computing education (Syamsuar and Reflianto, 2019). The development of this super-fast technology requires to apply media and technology in the learning process, so that learning that has been considered as boring learning using conventional media, such as whiteboards and learning methods, mostly with lectures, can transform according to the demands of today's era (Mahbuddin, 2020).

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Online learning is an effective solution to enable classrooms even though schools have been closed because of the time and place at risk in this pandemic period (Masitoh and Kurnia, 2022). The COVID-19 crisis is a game changer for public administration as it reveals the demand for strong governance strategies to deal with volatile issues and demonstrates the need for a public sector transformation to support strong governance. The COVID-19 pandemic has changed the order of the education process that was originally face-to-face in schools to virtual face-to-face, namely online learning carried out from home (Herliandry et al., 2020; Santoso et al., 2021). Sihombing (2020) state that Covid-19 pandemic caused everyone to behave beyond normal limits as usual. The outbreak of this virus has an impact especially on the economy of a nation and Globally (Ningrum, 2020). The problems posed by the Covid-19 pandemic which have become a global problem have the potential to trigger a new social order or reconstruction (Bara, 2021).

Currently online learning at Universitas Sriwijaya has entered 4 semesters and uses online learning media in the form of learning management system university, many problems and opportunities experienced by lecturers as educators and students as learners. Problems experienced by students, among others; aspects of ease of internet network access, readiness to learn with virtual, difficulty receiving learning materials so that it is less optimal in the mastery of the material. Obstacles experienced by lecturers, among others; difficulty accessing the internet network, a busy schedule every day so that you have difficulty arranging a schedule, not knowing the activities of students' learning during the implementation of virtual lectures, the choice of learning methods that vary to motivate student learning, the problem is also felt with students and lecturers at Universitas Sriwijaya. However, there are other problems that there are still many lecturers and students who have not mastered digital technology, digital technology that includes new information and communication technologies such as the Internet, the world of online games, artificial intelligence, robotics, and 3-dimensions printing. Media and learning methods become problems that quite impact the optimaly of teaching and learning, especially in this pandemic period, inadvertently forcing the world of education to move quickly utilizing technology in learning. Problems and obstacles in online learning are also experienced in the learning process in the Citizenship Education Course, so there needs to be integration between the ability to manage learning media by utilizing digital technology and the ability of lecturers to apply in everyday learning (Mahpudz et al., 2021).

II. Research Methods

This research uses qualitative methods through a descriptive approach. Qualitative methods are methods that is descriptive and tends to use analysis (Asyraini et al., 2022; Pandia et al., 2018). Process and meaning are highlighted in qualitative research (Pandiangan, 2015; Octiva, 2018). The theoretical basis is used as a guide so that the research focus is in accordance with the facts on the ground (Pandiangan et al., 2021; Pandiangan et al., 2022). Descriptive approach is a type of research whose purpose is to present a complete picture of a social setting or is intended to explore and clarify a phenomenon or social reality, by describing a number of variables related to the problem and the unit under study between the phenomena being tested (Octiva et al, 2018).

The research subjects used in this study are PKN MPK course coordinator, PKN course lecturer, and students at Universitas Sriwijaya. In selecting the study subjects, researchers used purposive sampling techniques. Purposive sampling techniques, also known as judgmental, selective, or subjective sampling, is a form of non-probability sampling in which researchers rely on their own judgment when choosing members of the population to participate in their surveys (Pandiangan et al., 2018). The selection of the subject was motivated because the purpose of this study is how the use of digital technology in the PKN learning process in the era of the COVID-19 pandemic and what factors are the supporters and obstacles of lecturers in the online learning process for pkn course lecturers.

The instruments used in this study in the form of interview guidelines, questionnaires, and documentation provided to lecturers of PKN. Data collection techniques are an activity carried out by researchers to obtain data used in research (Pandiangan, 2022). The data collection techniques used in this study are in the form of interviews, questionnaires, and documentation. The type of interview used in this study was a semistructured interview. The type of questionnaire used in this study is an open angket. Open box is a questionnaire that contains questions or statements that can be filled freely by respondents. A document is a record of an event that has passed. Documents can be in the form of writings, drawings, or monumental works of a person (Octiva et al., 2021; Pandiangan, 2018).

After the data is obtained, researchers compile the data descriptively and in depth so that the data that has been obtained can be studied properly. The stage of data analysis, in qualitative research the data obtained comes from various data sources collected through various data collection techniques, and is carried out continuously until the data is saturated (Tobing et al., 2018).

Data analysis conducted by researchers is processing data that has been collected and obtained while in the field both in the form of informants and documents in the previous stage, then compiled into a study.

III. Discussion

3.1 PKN Learning in MPK Era COVID-19 Pandemic

Learning in Universitas Sriwijaya, including in the mpk environment of Universitas Sriwijaya during the COVID-19 pandemic was carried out online by using zoom meetings, google classroom, LMS Universitas Sriwijaya, and intensive communication with WhatsApp media group. This is done as a form of the implementation of policies issued by the Rector of Universitas Sriwijaya responding to the increase in cases of the COVID-19 pandemic.

Based on the results of the study obtained from open questionnaires and semi-structured interviews conducted online. Angket is distributed online through WhatsApp, while for interviews conducted in person. The results of the research obtained in this study are as follows.

3.2 Questionnaire

Angket is distributed to PKN course lecturers in MPK. The questionnaire used in this study is a type of open questionnaire, where the open questionnaire is a questionnaire whose answer is filled by respondents. The use of this questionnaire aims to get information in the form of the use of digital technology in the PKN learning process in the era of the COVID-19 pandemic as well as what factors are supporting and inhibiting lecturers in the online learning process for PKN course lecturers.

Here is the answer given by the respondent.

1. How does the influence of digital technology on students, especially Universitas Sriwijaya (UNSRI) students?

"Well, the students of the youth generation are certainly very familiar with technology" (ST Lecturer PKN)

"I think that students are more able to respond and pay more attention about this online learning, and they learn more about this online learning" (H Dosen PKN).

- 2. What media (applications) are most effective in the online learning process?
 - "Duringthis time zoom media is more effective." (ST Lecturer PKN).

"Ifin my opinion, what i use in this learning process is e-learning and the media applications that I use are zoom, google meet and wa groups where it re-adjusts also to the circumstances of which students they can use." (H Lecturer PKN)

3. What are the benefits of online learning systems by utilizing digital technology?

"More practical and flexible by utilizing technology with interesting video, photos or audio. It can save costs and time, be more practical and flexible, a more appropriate approach, a fun learning experience, more personal, easy to document, environmentally friendly because it can reduce paper use, and lastly alternatives during social distancing." (ST Lecturer PKN).

"Many benefits that can be taken where lecturers learn a lot about the online teaching system itself how to upload material, how to review student work and list student attendance in e-lerning, can increase the creativity of lecturers, can help the government in minimizing the spread of COVID-19, so that it becomes the attention of lecturers and students to take care of each other's health." (H Lecturer PKN).

3.3 Interview

The interview in this study consisted of 7 main respondents, namely PKN course coordinator, PKN course lecturer and student.

Interviews are conducted to deepen data obtained from questionnaires, and other questions related to online learning.

Based on the results of interviews with several informants that this online learning policy has been made as well as possible and has followed the directions of the Ministry of Education and Culture but there are several things that are a problem of the policy so that it has not been implemented to the maximum:

- 1. Requires facilities and infrastructure such as laptops, mobile phones, quotas, and in addition also requires adequate network access.
- 2. Less interaction and less clear of receiving material in the implementation of online learning.

Input during the online learning period there is a positive input in the form of learning becomes more flexible, practical and also students have a more independent ability to master microsoft office technology and capabilities and can find various references.

The method used during this period of emigrants is a varied method, where in these 16 meetings on average using blended learning, discussion methods or discussion forums in elearning. While with virtual more use the problem based learning method where students were previously assigned to look for cases and the next week will be discussed and discussed through the virtual.

It is a big obstacle, because it is very influential on online learning that is implemented, and also networks that cannot manage it. Networking is the main key of learning conducted online, but in fact there are still many students who are constrained by networking because not all students live in urban areas.

The solution provided so that online lectures can be implemented better. There are still improvements, the better e-learning depends on creativity and innovation from lecturers, but still needs improvements, namely in improving e-learning content and activities so that more

people are interested in seeing e-learning. Online lectures are only temporary as a solution in the pandemic period.

3.4 Strengthening Digital Technology in PKN Learning at MPK Universitas Sriwijaya

The use of learning media that is not interactive, not dancing will make it difficult for learners to increase their learning motivation, then interactive and interesting learning media to produce good student achievement. The special concern in the implementation of distance learning, such as in remote areas or areas that do not get an internet connection and limited ownership of technology must be a big obstacle because educators and schools do not have facilities and facilities that are for the process of distance learning. Therefore, the development of learning media is very influential on learning.

Based on the results of the interview of the coordinator of pkn courses that: The application used is e-learning or LMS University. Especially in mpk itself in each study coordinator must make e-learning so that the learning process runs. In each study coordinator each create an e-learning room to facilitate lecturers for the learning process so that in the room the teaching lecturers just add material, video or zoom links and make it easier for students to each enter the study room they choose in this online learning process.

As for the results of interviews with students who master PKN courses stated that each lecturer uses different media, there are google classroom, zoom, google meet, and also elearning (bigbluebotton), all these media have their own advantages and disadvantages. For me personally that I feel during this lecture for bigbluebotton provided by elearning UNSRI it is not effective if used, because it requires a really strong network, and that every lecture using BBB there must be obstacles, such as there are only a few students who can attend the lecture, because maybe many access so that the server is down.

Another obstacle is also said that this online lecture forces that all students have the same background, both from low, middle, to above economy is required to have the same economic background, and also in this online lecture requires facilities and infrastructure such as laptops, mobile phones, quotas, and in addition also requires adequate network access.

The use of virtual learning can be used one of them with the zoom application. This application is done as if it occurs in classroom learning, the use of applications that are easy to use, but often lately there is data theft in users so that it is less safe to use and its use requires a large internet connection. Not too much of an obstacle, because in this online learning I use campus facilities, especially for signals of course in MPK itself the signal is very supportive for this online learning. Unlike other lecturers who are at home with bad signal obstacles or due to bad weather.

From some of these statements it can be concluded that the need to strengthen digital technology in pkn learning so as to reduce the constraints felt by students and lecturers such as signal constraints, server down, do not have supporting infrastructure facilities such as laptops and H and increase the creativity and innovation of lecturers in teaching using digital technology so that lessons do not cause saturation of students with the material provided. Therefore, the research team provides a solution as an alternative that can be used in the online learning process, namely by using animated videos. Here the material to be studied in the lecture is made in the form of videos that use animations so that the material taught can be easily understood by students and also students can easily access the video anytime and anywhere.

V. Conclusion

Learning that integrates the use of digital technology in PKN Learning in Higher Education has been implemented in the era of the COVID-19 pandemic at MPK Universitas Sriwijaya. This learning is an intensive online interaction process between lecturers and students using various learning facilities and media. Online learning conducted during the COVID-19 pandemic is a drastic change and is required to be done in all limitations to support the government in efforts to reduce the spread of COVID-19.

However, online learning has indeed been applied before the pandemic at Universitas Sriwijaya, namely by blended learning methods. But after the COVID-19 all teaching activities using online so that the ability of lecturers and students in using digital technology is very influential in order to create optimization in learning.

Integration of the use of digital technology in PKN learning carried out during the COVID-19 pandemic not only aims to develop the ability to use digital technology but also directed to develop innovation and creativity and find effective ways that must be done so that online learning becomes effective and optimal.

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