# Analysis of the Online Learning Process for Early Childhood Education Students, Faculty of Education, Universitas Negeri Medan during the Covid-19 Pandemic

# Suri Handayani Damanik<sup>1</sup>, Isa Hidayati<sup>2</sup>, May Sari Lubis<sup>3</sup>

<sup>1,2,3</sup>Universitas Negeri Medan, Indonesia

#### **Abstract**

The purpose of this study is to describe the online learning process for early childhood education students, faculty of education, Universitas Negeri Medan and Learning Plans as the product development. This research is a quantitative descriptive using survey method which is collected online. The research variable studied was the online learning process of students. The measuring aspects studied in this study include aspects of learning planning, learning activities, learning strategies, learning media and technology, learning assistance services. The data collection method used purposive sampling technique. The instrument used is in the form of a questionnaire using the scale method. Based on the results of data analysis, it was concluded that more than 50% of the students gave very good assessments of the 5 aspects assessed.

Keywords online learning; students; covid-19 pandemic



### I. Introduction

The emergence of the Covid-19 outbreak which has hit 215 countries in the world, presents its own challenges for educational institutions, especially universities. To fight Covid-19, the government has banned crowds, social distancing and physical distancing, wearing masks and always washing hands. Through the Ministry of Education and Culture, the Government has prohibited universities from conducting face-to-face (conventional) lectures and ordered them to hold lectures or online learning (Surat Edaran Kemendikbud Dikti No. 1 tahun 2020).

The outbreak of this virus has an impact of a nation and Globally (Ningrum *et al*, 2020). The presence of Covid-19 as a pandemic certainly has an economic, social and psychological impact on society (Saleh and Mujahiddin, 2020). Covid 19 pandemic caused all efforts not to be as maximal as expected (Sihombing and Nasib, 2020).

Online learning is learning that uses the internet network with accessibility, connectivity, flexibility, and the ability to bring up various types of learning interactions (Moore, Dickson-Deane, & Galyen, 2011). Research conducted by Zhang et al., (2004) shows that the use of the internet and multimedia technology is able to change the way knowledge is conveyed and can be an alternative to learning carried out in traditional classrooms. Online learning is learning that is able to bring together students and lecturers to carry out learning interactions with the help of the internet (Kuntarto, E. (2017).

The principles of online learning are a set of basic foundations that are intrinsically a requirement to make the online learning process happen. The principles of online learning are applied in five aspects of the online learning process, namely learning design, learning activities, delivery/delivery strategies, learning media and technology, and learning assistance services. These five aspects influence each other, so there is no aspect that can be omitted to carry out the online learning process.

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Learning design is realized in the form of program maps, learning outlines, syllabus and or lesson plans, learning materials, and learning management rules. Learning design must be carried out comprehensively and thoroughly long before the learning process begins. The principle of learning design is based on the student centered learning paradigm (student-centered learning), based on a complete learning philosophy, oriented to independence, autonomy, activeness, creativity, and student innovation, the learning process as an interaction between students and teaching materials, media, time, and learning strategies.

Online learning activities are designed with several indicators, focusing on student learning and student independence, not teaching lecturers; designed to equip students with the skills, knowledge, and experiences that help students achieve defined learning outcomes; facilitate meaningful interactions between students and students, students and lecturers, and students with learning materials; learning materials are arranged sequentially and structured so as to enable students to achieve learning outcomes gradually according to the style and pace of student learning; in choosing learning resources, lecturers need to pay attention to copyright issues and the application of related laws and regulations; lecturers must monitor and evaluate the implementation of learning, as well as ensure the quality of learning.

Delivery strategy or delivery is a very important component in the context of online learning. The following are some principles for delivery/delivery strategies, namely delivery of learning is carried out using a variety of media and technology in an integrated or separate way to achieve learning outcomes; the learning process must reflect the philosophical foundation of online learning and the 21st century educational paradigm; delivery of learning facilitates students to learn actively and lecturers act as facilitators; and so forth.

Media and learning technology must provide information that supports the learning process, it is necessary to design an "interface" (user interface with the system); multimedia learning technology is used in accordance with learning outcomes. Academic information services, academic administration, as well as ICT technical assistance must be obtained anywhere, anytime, by any student (not hindering the student learning process).

As a form of implementation in observing and responding to the situation of the spread of Covid-19 which has not been controlled. Universitas Negeri Medan issued a policy through Circular No. 000809 of 2020 concerning Academic and Non-academic Policies Related to Anticipating the Spread of the Corona Virus (Covid-19), one of the policies is the application of online lectures/learning. This means that Universitas Negeri Medan has implemented online learning due to the impact of the spread of Covid-19 in the campus environment including the Early Childhood Education Program.

Regarding this background, researchers are interested in analyzing the online learning process of early childhood education students during the Covid-19 pandemic. It is hoped that from the findings, it can produce a policy in early childhood education study programs to develop appropriate online education programs in encouraging the effectiveness of online learning for students in early childhood education at the faculty of education Universitas Negeri Medan.

#### II. Research Method

This research is a quantitative descriptive study using a survey method conducted with online system. Quantitative descriptive research is research conducted to determine the value of independent variables, either one or more variables without making comparisons, or connecting with other variables (Saputro, 2016). The procedure for solving this method is to describe the research at the present time based on the facts as they are, then analyzed and interpreted, in the form of a survey.

The measuring aspects studied in this study include aspects of learning planning, learning activities, learning strategies, learning media and technology, learning assistance services. While the sample in this study was 181 students of early childhood education for the 2020/2021 academic year. The data collection technique used is a questionnaire (questionnaire). The data analysis technique used in this research is quantitative descriptive analysis. Analyzing data by describing or describing the data that has been collected as it is without the intention of making conclusions that apply to the public or generalizations (Sugiyono, 2019).

#### III. Results and Discussion

This study uses an online learning effectiveness questionnaire that has been filled out by 181 respondents from the 2018, 2019, and 2020 students in the Early Childhood Education Study Program, Faculty of Education. Details of the data distribution of respondents can be seen in the following figure:

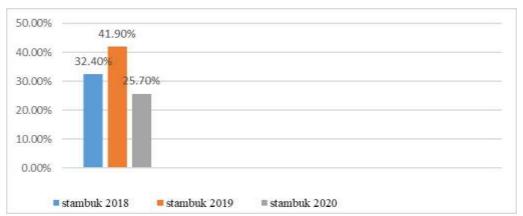


Figure 1. Distribution of Research Respondents

The effectiveness of the online learning process in the early childhood education study program at the Faculty of Education Universitas Negeri Medan is reviewed through five aspects are learning planning, learning activities, delivery strategies, learning media and technology, and online learning assistance services. Details of the data from the five aspects of the questionnaire can be seen in the following figure:

# 3.1 Lesson Planning

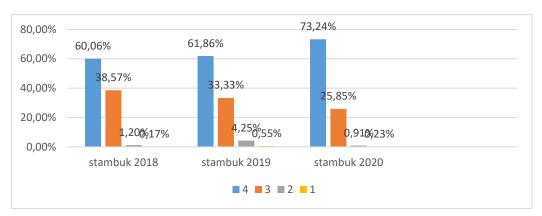
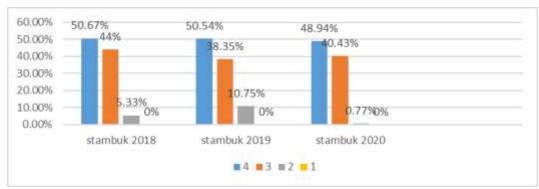


Figure 2. Respondent Data on the Aspect of Learning Planning

Based on the data obtained, it can be seen that as many as 60.06% of 2018 student respondents, 61.86% of 2019 class students, and 73.24% of 2020 class students stated that online learning planning in early childhood education study programs is very good. An average of 32.58% of respondents stated that online learning planning is included in the good category.

Lecturers in the early childhood education study program have included information about the identity of the course, the learning outcomes that students want to achieve, material maps or competency maps, competency standards, systematic learning division sequences, as well as regulations for evaluating learning outcomes and their weighting in the lesson plans semester. Aspects that still need to be improved are the quantity and quality of reference content for books or journals and the need to include external links (website links) from various learning sources.

#### 3.2 Learning Activities



*Figure 3.* Respondent Data on the Aspect of Learning Activities

Based on the data that has been obtained, it can be seen that, 50.67 in the 2018 stamp stated that the learning activities were going very well. Then, 50.54% of the 2019 stamp said it was very good and 48.94% of the 2020 stamp said it was good. From the data obtained above, it can be seen that each stamp has a different number of presentations. One of them is in the 2020 stamp which gives a good rating at the percentage of 48.94%.

Learning activities carried out by lecturers of the early childhood education study program are basically in accordance with the needs of online learning, where the lecturer

facilitates the availability of instructions on how to learn the material using various learning resources, interesting ways of learning using various applications and others. In addition, Presentation allows students to learn interactively independently, as well as providing feedback that allows students to know their learning achievements. From the learning activities above, the weakness that shows that the class of 2020 students only gives a good category is due to the fact that not all of the Stambuk 2020 students are able to enjoy online learning activities in the hope that offline learning is more interesting.

# 3.3 Learning Strategies



Figure 4. Respondent Data on Learning Strategy Aspects

Based on the data obtained, it can be seen that 59.44% of the 2018 class students said they were very good, 55.38% of the 2019 class students said they were very good, 68.38% of the 2020 class students said they were very good. This means that from the data obtained above, more than 50% of early childhood education students from the 2018 2019 and 2020 batches stated that the online learning strategy carried out by the lecturers was going well.

In online learning strategies, early childhood education study program lecturers facilitate a variety of learning strategies, both independent, group and guided. In addition, the online learning strategy carried out by lecturers of the early childhood education study program also encourages the growth of new ideas (not single answers) in the form of critical questions, illustrations, actual issues, problems that require further thinking/creative solutions. Then, encouraging the growth of new ideas (not single answers) in the form of critical questions, illustrations, actual issues, problems that require further thinking/creative solutions and Presentation of learning objects in a systematic way using a certain pedagogic approach. From the online learning strategy described above, that the online learning strategy carried out by the lecturer is going well, it's just that the weakness of this online learning strategy is the form of strategy in group practice learning activities that have not been maximized.

# 3.4 Learning Media and Technology



Figure 5. Respondent Data on Media and Learning Technology Aspects

Based on the data obtained above, it shows that the media and learning technology are implemented quite well. It can be seen, 51.11% of the class of 2018 students said it was very good, 56.55% of the 2019 stamp said it was very good, 60.19% of the class of 2020 students said it was very good. The above data obtained from students of the 2018 class, 2019 and 2020 shows that more than 50% of online learning media and technology are running very well and students can follow the procedures for teaching lecturers to use interesting learning media and technology in online learning.

In the application of online learning carried out by early childhood education lecturers, learning media and technology have been in accordance with online learning needs, where the form of media and learning technology implemented by early childhood education lecturers is the use of diverse learning media that allows students to more easily understand learning materials, Use of visual media and other media related to the material presented (meaningful) and Selection of learning media using easily accessible formats such as how to access Scopus indexed journals. From what has been described above as well as the results of the survey conducted, it is proven that the media and learning technology implemented by early childhood education lecturers while online are running very well and students can accept and understand the learning material presented.

#### 3.5 Online Learning Assistance Service



Figure 6. Respondents' data on the aspect of Online Learning Assistance Services

Based on the data obtained above regarding study assistance services, it shows that 51.67% of 2018 class students said it was good, 52.23% of 2019 class students said it was very good, 59.56% of 2020 class students said it was very good. From the percentage above, it shows that the learning assistance services provided by early childhood education lecturers are still in a good stage.

Learning assistance services provided by early childhood education lecturers are Availability of academic and administrative information services, Availability of remote and independent tutoring, Availability of access to digital learning resources in libraries and Availability of technical assistance and complaints. Learning assistance services provided by early childhood education lecturers aim to open insights and explore the potential of students to be more independent in the online learning process during this pandemic.

#### IV. Conclusion

Based on the results of the Online Learning Process Analysis of early childhood education students at the faculty of education during the Covid-19 Pandemic, which was distributed using a questionnaire, it shows the online learning effectiveness questionnaire that has been filled out by 181 respondents from students of the 2018 and 2020 batches and 2019 batches has the highest percentage. The analysis of the online learning process of early childhood education students through the effectiveness of the online learning process in the early childhood education study program is reviewed through five aspects, namely learning planning, learning activities, delivery strategies, learning media and technology, and online learning assistance services.

The results of this study conclude that these five aspects in supporting the online learning process of early childhood education students are very effective. This can be seen from the results of the five aspects which show that the achievement of the effectiveness of the online learning process in the early childhood education study program is going very well with a very good percentage gain. That is, the results of the questionnaire can be used as a reference for the achievement of the online learning process of early childhood education students.

In general, it can be said, where more than 50% of the 2018 and 2020 batch students gave a very good assessment of these five aspects and can be used as a reference in drafting the online learning plan format policy.

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