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**BLENDED LEARNING ORIENTED KKNI TOWARDS STUDENTS
CRITICAL THINKING**

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ABSTRACT

This study aims to determine: The Effect of KKNI-Oriented Blended Learning Models on Students' Critical Thinking Ability. The research method used in this study is a quasi-experimental pattern with nonequivalent control group design. In this study used test and non-test data collection tools. Tests were used to collect data about students' critical thinking skills in the educational philosophy course. The tests used were written tests. Pre-test and post-test are given to the experimental and control classes to measure the students' critical thinking skills. The results showed that there was a significant influence using blended learning to the students' critical thinking skills. Thus it is recommended that lecturers use the blended learning model.

Keywords: Model, Blended Learning, critical thinking

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INTRODUCTION

Advances in information and communication technology provide benefits that are very important to the world of education. An innovative learning model called e-learning. E-Learning is able to change the one-way learning process in the classroom into student-centered learning. E-learning is an online learning model that is expected to be able to replace the conventional learning model. Blended learning has three meanings, including: 1) integration of traditional learning with an on-line web-based approach; 2) a combination of media and equipment used in e-learning environments, and 3) a combination of a number of learning approaches regardless of the technology used.

Medan State University has implemented a curriculum and

learning achievement based on the Indonesian National Qualification Framework (KKNI) that has been implemented. Students have 6 assignments, namely: 1) routine tasks; 2) critical journal; 3) critical book review; 4) engineering ideas; 5) mini research; and 6) project assignments. Including the Philosophy of Education course is a subject that has a weight of 2 credits and is carried out in odd semester in the KKNI curriculum. The course must be taken by students who are majoring in education. According to Fadhil (2017). philosophy of education is a branch of philosophy that studies the nature of education. Educational philosophy views educational activities as objects that need to be studied. Philosophy of education aims to make students able to think as deeply as possible, as

wide as possible and as high as possible or students are required to think critically.

The phenomenon of students say that courses in educational philosophy are subjects that are difficult to understand. Students are still lacking in critical thinking where the indicators contained in teaching philosophy of education students are required to explain. To overcome these problems in the philosophy of education at Unimed already has wifi facilities and infrastructure in each faculty. Blended learning is learning that combines conventional learning with e-learning learning that utilizes information and communication technology. Through blended-learning the learning system becomes more flexible and is able to improve students' critical thinking skills and independence. Teacher professional competence is needed to fulfill specifications in carrying out educational tasks (Sagala (2009).

Critical thinking is a cognitive activity related to the use of reason. Learning to think critically means using mental processes, such as paying attention, categorizing, selecting, and valuing. Marzano, (Slavin (2012) One key objective of schooling is enhancing students' abilities to think critically and make rational decisions about what to do or what to believe. Halpern dalam Santrock (2003). Critical thinking as thinking reflectively and productively and evaluating the

evidence. People who think critically grasp the deeper meaning of ideas, keep an open mind about different approaches and perspectives, and decide for themselves what to believe or do.

Critical thinking is an organized process that allows students to evaluate the evidence, assumptions, logic, and language that underlies the statements of others. Johnson (2009). Ennis in Tilaar (2011) said that critical thinking is a process of reflective thinking that focuses on deciding what is believed to be done. Coleman and Hammen in Dennis (2009) creative thinking is a way of thinking that can produce something new in a concept, understanding, discovery, and artwork. According to Fisher (2009) that critical thinking is a skilled activity that can be done better or vice versa, and good critical thinking will meet a variety of intellectual standards, such as clarity, relevance, adequacy, coherence, and others. In modern education critical thinking is an important thing to develop. According to Tilaar in Kowiyah (2012), there are 4 reasons why critical thinking needs to be developed in modern education, including: (1) developing critical thinking in education means that lecturers can give awards to students as individuals; (2) critical thinking is an ideal goal in education because it prepares students for their adult life; (3) The development of critical thinking in the education process is a

traditional ideal such as what is to be achieved through the study of exact sciences; (4) critical thinking is something that is really needed in democratic life, so critical thinking must be developed.

The development of information technology greatly impacts the learning process, learning will be increasingly directed towards effective and efficient learning. The effectiveness of learning is often measured by the achievement of objectives, or speed in managing a situation. Effectiveness is 1) system that is done through the stages of planning, development, implementation, assessment, and improvement. 2) be sensitive to the needs of student assignments and the needs of learners. 3) clarity of objectives can therefore be collected by efforts to achieve them. 4) starting from the ability or strength of students, educators, the community, and the government. Miarso (2013). Dabbagh and Ritland (2005). defining, online learning is an open and distributed learning environment that uses pedagogical tools, made possible by internet and web-based technology, to facilitate learning and build knowledge through meaningful actions and interactions. Furthermore, the two experts above explain about supporting learning and communicating that support, there are three key components that support reciprocity. The three components include: 1) pedagogic models or constructs, 2) learning and

learning strategies, and 3) learning technology. Mosa (Rusman, 2011) said that mixed learning patterns are the two main elements of learning in the classroom with online learning. In online learning there is learning using internet networks in which there is web-based learning. Blended Learning is a combination of multimedia technology, video streaming, virtual classrooms, e-mail, voicemail and others with traditional forms of classroom training and training for whatever they need. Ismaniati (2015) says that the blended learning model is a flexible learning model because it combines synchronous and asynchronous learning settings appropriately in order to achieve learning objectives. Blended learning is a combination of face to face learning and online learning. Cheung & Hew (2011) Meanwhile, according to Uwes A. Chaeruman (2011) explains "Blended learning as learning that combines synchronous and asynchronous learning settings precisely in order to achieve learning objectives. Blended learning is the main focus of students. Learners must be independent at certain times and be responsible for their learning. Blended Learning does not mean replacing conventional learning models in the classroom, but it strengthens the learning model through the development of educational technology.

Roy Killen cited by La Iru (2012) Direct instruction refers to various expository learning

techniques. Direct learning model according to Arends (Trianto, 2011) is one of the teaching approaches specifically designed to support student learning processes related to declarative knowledge and well-structured procedural knowledge that can be taught with a pattern of gradual, step-by-step activities. Widaningsih, Dedeh (2010) that procedural knowledge is knowledge about how people do things, while declarative knowledge, namely knowledge about something. While Arend, quoted by Kardi (2000), writes direct teaching often referred to as the active teaching model, active training model, mastery teaching, and explicit instruction. In this study, the author emphasizes more on the attitude driven learning model adapted from Zam zani, et al (2018) and then developed again according to learning needs. This study combines traditional classroom-based learning with online collaborative learning that is content in which results are desired in learners for the development of attitudes and behaviours.

METHOD

²⁵ The study was conducted at PGSD FIP UNIMED, Jln. William Iskandar Pasar V Medan Estate when the implementation began in August - December 2017. The population in this study were 315 people. Samples were taken as many as two classes totaling 60 people. The research method used in this study is a quasi-

experimental pattern with nonequivalent control group design. The description of the nonequivalent control group design (Sugiyono, 2007: 116) is as follows: In this study two test and non-test data collection tools were used. The test was used to collect data on the students' critical thinking skills in the educational philosophy course. The tests used were written test. Tests are given at the pre test and post test. Pre-test and post-test is given to the experimental class and the control class to measure students' thinking skills. Observation, in this study also conducted observations as part of non-test data collection. The purpose of observation is to describe the settings being studied, the activities taking place and the people involved in the activity.

RESULTS AND DISCUSSION

Results

1. Pretest value of Experiment Class and Control Class

Pretest data in this study were taken from critical thinking skills in UNIMED undergraduate students. In this study, the data taken came from 2 samples that had been selected. Where ²⁶ the experimental class is a group of students who are treated with the blended learning model and the comparison class which in this study is called the control class is treated with a direct instruction model.

Learning outcomes of critical thinking skills in the table above can

be seen, that the average value of pretest in the philosophy of education courses in the experimental class was 42.46 with a standard deviation of 5.49 while the control class was 43.76 with a standard deviation of 5.78 . From the results of learning the value of this critical thinking ability pretest can be concluded that the average value of the experimental class pretest is higher than the control class

2. Post-score Group Blended Learning Model and Direct Interaction Model

After being taught with the blended learning model in the experimental class and treatment with direct instruction in the control class, then posttest was done to both classes of the research sample.

Learning outcomes of critical thinking skills in the table above can be seen, that the average posttest score of the blended learning model group in the philosophy of education subject is 78.74 with a standard deviation of 6.88 while the Direct Interaction model group in the philosophy of education subject is 71, 30 with a standard deviation of 6.95. From the results of learning the value of this critical thinking ability can be concluded that the average value of the blended learning model group is higher than the Direct Interaction model group.

A conventional learning approach is no longer fully reliable in helping to improve critical thinking skills at the school or college level amidst current technological

advances. Thus it is necessary for an educator to provide an alternative method of learning that is appropriate and up to date. The expected learning process must certainly take advantage of a variety of media information and sources by not leaving the pattern of direct guidance from a teacher and the use of learning resources in accordance with the times Blended learning is a learning model that is developing in the 21st century. The blended learning model is very compatible with the development of the globalization era which is increasingly growing rapidly. This blended learning model can also be combined with current developments in information technology. Therefore this model is very helpful for students to achieve success in accordance with predetermined learning outcomes.

In this study, researchers applied the blended learning model and direct instruction in two sample classes with the same initial ability. After being treated with a different learning model, a significant effect is obtained. The posttest critical thinking ability also concluded that the critical thinking ability of students taught with the blended learning model was better than students taught with the Direct Interaction model. The results of this study are in line with Fisher's research (2017: 78-86) where the conclusion obtained is that there is a significant influence and better learning outcomes with the

application of the blended learning model. In line with that, Vernadakis research (2012)²⁰ also obtained research results that, students who attended blended instruction had higher performance scores than those who attended traditional instruction

In addition to providing a significant influence through the ability to think critically, the learning process clearly shows the activeness and learning characteristics of the students themselves. It also forms an independent attitude and student motivation in learning as a positive character that is formed from the learning process with a blended learning model. This is in line with the results of research conducted by Kintu, et al (2017), namely: An effective blended learning environment is necessary in undertaking innovative pedagogical approaches through the use of technology in teaching and learning. An examination of learner characteristics / background, design features and learning outcomes as factors for effectiveness can help to inform the design of effective learning environments that involve face-to-face sessions and online aspects . Furthermore, the results of research Fazriah, N. (2015), there is an interaction effect between the ability to think critically on Natural Sciences subjects of students who are given an thematic integrative learning model of learning outcomes. Based on the results of the above research the ability to think critically

can improve student learning outcomes.

The blended learning model is certainly a learning model that links learning to the latest nature, this is due to the learning process that is connected with the development of information technology. In addition, the blended learning model is a 21st century model and has been widely used by professional researchers both in college and school applications. Where, all research results with the application of the blended learning model have a positive influence, which can be seen from the results of research that has been carried out.

CONCLUSION

Based on the results of research and discussion it can be concluded that there is no effect of the treatment given to students or the initial ability of students alike. Furthermore, there is a significant influence with the application of the blended learning model to the critical thinking abilities of students in the philosophy of education subject of PGSD S1 students.

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