Implementation of distance learning during the COVID-19 in Faculty of Education and Teacher Training

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Abstract

During the prevention of the spread of the virus the COVID-19 pandemic, change took place suddenly of learning. Distance learning is a good alternative when face-to-face courses are no longer feasible. The purpose of this study was to reveal the implementation of distance learning that was carried out suddenly as a result of Covid-19 and assessed by the learning process, learning facilities and infrastructure, as well as the psychological aspects of FKIP students towards distance learning. The data were collected through a survey using the google form application and respondents were N = 750. The descriptive statistical approach was used for data analsysis. The instrument is a questionnaire electronic, anonymous, and self-administered using three to five answer options. The results of the research showed that students prefer face-to-face learning rather than distance learning. Students faced many difficulties during distance learning and worried for achieving learning outcomes. In conclusion, distance learning is a good alternative when classroom learning is suspended during the COVID-19 pandemic period. It is also important to recognize that, distance learning cannot replace the need for on-site and face-to-face learning, but can complement existing traditional classroom-based learning models. Distance learning has an impact on changes in individual learning readiness and the preparation of institutional facilities to blended learning.

Keywords: COVID-19; distance learning; implementation; and impact.

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1. Introduction

The World Health Organization (WHO) has declared the COVID-19 pandemic as a public health emergency of international concern. COVID-19 is the greatest challenge that these expanded national education systems have ever faced. Many governments have ordered institutions to cease face-to-face instruction for most of their students, requiring them to switch, almost overnight, to online teaching and virtual education. Campus class suspension is a precautionary measure for COVID-19, thus the need to create effective online distance learning is paramount. Although the online instruction is not a new concept, it is a shift away from the traditional classroom teaching model and has come with significant challenges for the educators.
Efforts to Prevent the Spread of Covid-19 in Islamic Religious Universities. As of April 2020, it is reported that 95% of universities in Indonesia have implemented distance education (Republika, April 2020).

The Covid-19 pandemic has an impact on various sectors of human life, one of which is the education sector. The State Islamic Higher Education in Indonesia is the education sector under the guidance of the Ministry of Religion. The Covid-19 pandemic forces the State Islamic Higher Education in Indonesia to disrupt the learning system from face-to-face to distance learning.
So far, using the traditional pure face-to-face learning system, it is believed to be very effective in achieving maximum educational goals. However, with the Covid-19 Pandemic early March 2020, the State Islamic Higher Education in Indonesia must change the learning paradigm and apply online learning or e-Learning which requires students' readiness to study independently, individual learning, readiness of online learning facilities, and psychological preparedness for changes in distance learning patterns.

Meanwhile, based on reports on the results of previous studies (Rezaei, 2009; Mapuva, 2009; O'Donoghue et al., 2004; Christo-Baker, 2004; Mathew & Ebelelloanya, 2016; Bower, 2001; Musingafi et al., 2015; Kebritchi et al. al., 2017; Fojtik, 2018), the implementation of distance learning still has many challenges and these challenges are caused by various aspects. The implementation of effective and successful distance education is strongly influenced by aspects of student readiness, aspects of learning management systems, aspects of infrastructure support, and institutional commitment (Markova et al., 2017).

The last 50 years have seen huge growth worldwide in the provision of education at all levels. Distance learning, also called distance education, e-learning, and online learning, form of education in which the main elements include physical separation of teachers and students during instruction and the use of various technologies to facilitate student teacher and student-student communication. Distance learning traditionally has focused on non-traditional students, such as full-time workers, military personnel, and non-residents or individuals in remote regions who are unable to attend classroom lectures.
Maulana Malik Ibrahim State Islamic University, Malang, Indonesia is one of top higher educational institutions. Due to COVID-19 pandemic, traditional classroom learning was shifting to distance learning. The aim of this study is to be to reveal the implementation of the distance education process at State Islamic Higher Education in Indonesia in Indonesia as a result of the Covid-19 Pandemic. to assess the learning process, learning facilities and infrastructure, and students' psychological aspects of students in Faculty of Education and Teacher Training towards distance learning.

2.   Literature review

Distance education is defined as formalized instructional learning, where time and geographic situations that limit learning between educators and students cannot be in direct contact (King et al., 2001). The educational process, all or part of the teaching is carried out separately in time and space, through artificial electronic or print media (UNESCO, 2002, p.22). Institutional-based formal education separately between educators and students with telecommunications media in the learning process (Simonson et al., 2006; Schlosser & Simonson, 2009, p.1). As planned teaching and learning, where teaching occurs in a different place between the educator and student, the communication media is through technology that is specifically organized by education providers (Moore & Kearsley, 2011, p. 2). An organized learning program, where the educator and student are physically separated (Newby et al., 2000, p.210). Referring to Blaschke (2012), distance education is more appropriate in the form of Heutagogy learning theory, because students are required to determine learning outcomes independently. He also stated that in a distance education environment, students need to understand that the distance education learning environment is different from the traditional learning environment. In a heutagogical approach to learning, learners are highly autonomous and self-determined and emphasis is placed on development of learner capacity and capability with the goal of producing learners who are well-prepared for the complexities of today's workplace.

Distance education has been discussed by experts from various perspectives, including challenges perspectives (Rezaei, 2009; Bower, 2001; Moodley, 2002; Mapuva, 2009; Wang, 2015; Musingafi et al., 2015; Rosenblit, 2013; Ramírez, 2013; Huang et al., 2020; Kebritchi et al., 2017; Mathew & Ebelelloanya, 2016; Fojtik, 2018). Advantages and disadvantages perspectives (Pardanjac et al., 2009; Pishvanova et al., 2015; Vlanseko & Bozhok, 2014; O'Donoghue et al., 2004; Oliveira et al., 2018; Dumford & Miller, 2018; Arkorful & Abaidoo, 2015). Student's perception and satisfaction perspectives (Messo, 2014; Martens & Kirschner, 2007; Nwankwo, 2015; Kutluk & Gulmez, 2012; Markova et al., 2017). The implementation perspective (Dirani & Yoon, 2009; Nsamba, 2016). Distance education as a catalyst to change perspectives (Christo-Baker, 2004)

From these various studies, issues arise from the challenges of implementing distance education, including the need for a change in learning culture, technical improvements, and a need for strong budget support (Rezaei, 2009). Re-adjust, re-organize, re-strategy, re-align with educational goals (Mapuva, 2009). Discrimination against people who are less well off, both intellectually and financially, if distance education is carried out in full (O'Donoghue et al., 2004). Distance education is still vague and ineffective, there needs to be a philosophy and adjustment of the learning structure (Christo-Baker, 2004). Unequal access to technology, less reliable internet access, high cost of internet bandwidth, technophobia, and lack of pedagogic educator skills (Mathew & Ebelelloanya, 2016). There needs to be a change in the learning system, it requires new skills for educators and students, there is a paradigm shift in the learning process, there is a shift in the learning centre, there is a change in the administrative system at the faculty (Bower, 2001).

As an individual student, motivation and learning ability are low, access to technology is weak, financial constraints, and study time. Instructional, namely less effective learning process. Institutionally, there was a change in service and learning administration system (Musingafi et al., 2015). From the student aspect, the challenges are related to learning preparation, learning styles, technical skills, participation, and expectations. From the educator aspect, it deals with changing roles, transitioning learning models, learning styles, and the learning process. From the aspect of content management, it relates to content

development, learning management systems, and technology support. Finally, institutional challenges are related to the professional development of educators, training for students, and infrastructure support (Kebritchi et al., 2017). The certainty of learning outcomes is strongly influenced by the place, environment and time of study. Which, place, environment and time of study are determined by the student himself. Educators cannot control ethics, attitudes, behaviour, and learning progress. Feedback and educational philosophy do not occur (Wang, 2015). The role of educators in education is lost and it is necessary to prepare learning materials properly (Fojtik, 2018).

3. Methods and Materials

3.1 Study design
This research design has a quantitative paradigm with a survey approach conducted at the State Islamic Higher Education in Indonesia. Catering data will be carried out in June 2020 after the end of the even semester of the 2019/2020 academic year. Primary data source data through a survey with an instrument in the form of a questionnaire. There are 39 close-ended statements and 6 open-ended questions. The questionnaire design uses Google Form and its distribution is through the WhatsApp application groups. The measurement scale consists of a nominal scale and a Likert scale (1 = strongly disagree to 5 = strongly agree). For a nominal scale, data analysis uses the formula p = (∑f / ∑N) x 100% (Riduwan, 2014, p.28). While the Likert scale uses the formula p = ((5xn) + (4xn) + (3xn) + (2xn) + (1xn) / (5xN)} x 100% (Sugiyono, 2002, p. 35)
A post-test design was applied to assess the learning process, learning facilities and infrastructure, and students' psychological aspects of students in Faculty of Education and Teacher Training towards distance learning.
3.2 Participants
A total of 750 active students of Faculty of Education and Teacher Training, Maulana Malik Ibrahim State Islamic University, Malang, Indonesia during 2020 academic years were enrolled in this study.
Distance learning platform
Distance learning was supported by several platforms, such as Google Classroom, Google Hangout, Google Meet, Zoom, and Jitsi Meet (https://vmeet.uin-malang.ac.id/). Jitsi Meet is a learning platform that various distance learning can be held and accessed for all lecturers and students of Maulana Malik Ibrahim State Islamic University.
3.3 Data collection
An electronic, anonymous, self-administered questionnaire was handed out through Google Form. Students who agreed to participate in the study completed and submitted the questionnaire. Items in questionnaire used three to five answer options.

4. Results

4.1 Learning process
In this section, we gave five questions related to learning process, i.e learning format, learning preferential, distance learning platform, and learning time. Learning format in distance learning was seen in Figure 1a. The majority of students preferred combination learning format (discussion, group project, and paper task) then 319 respondents chose the form of discussion or presentation learning. While the smallest data shows that 52 respondents chose the form of assignment / project learning and only 21 people chose the form of learning by making scientific papers.
Student's learning preferential was shown in Figure 1b. Most of students preferred attending to face to face classroom (492). In contrast, only 40 students chose distance learning. Due to COVID-19 pandemic,

all of the lecture activities must be implemented using distance learning. Learning platforms that mostly used for distance learning were Google Classroom, then continued with Google Meet, Google Hangout, Zoom, and Jitsi Meet (Figure 1c). Based on our study, 665 students preferred to have the same learning time of distance learning with classroom learning (Figure 1d). It showed that students willing to have the same situation with classroom learning while doing distance learning.

Figure 1a – 1d. Charts related to learning process (n=750)
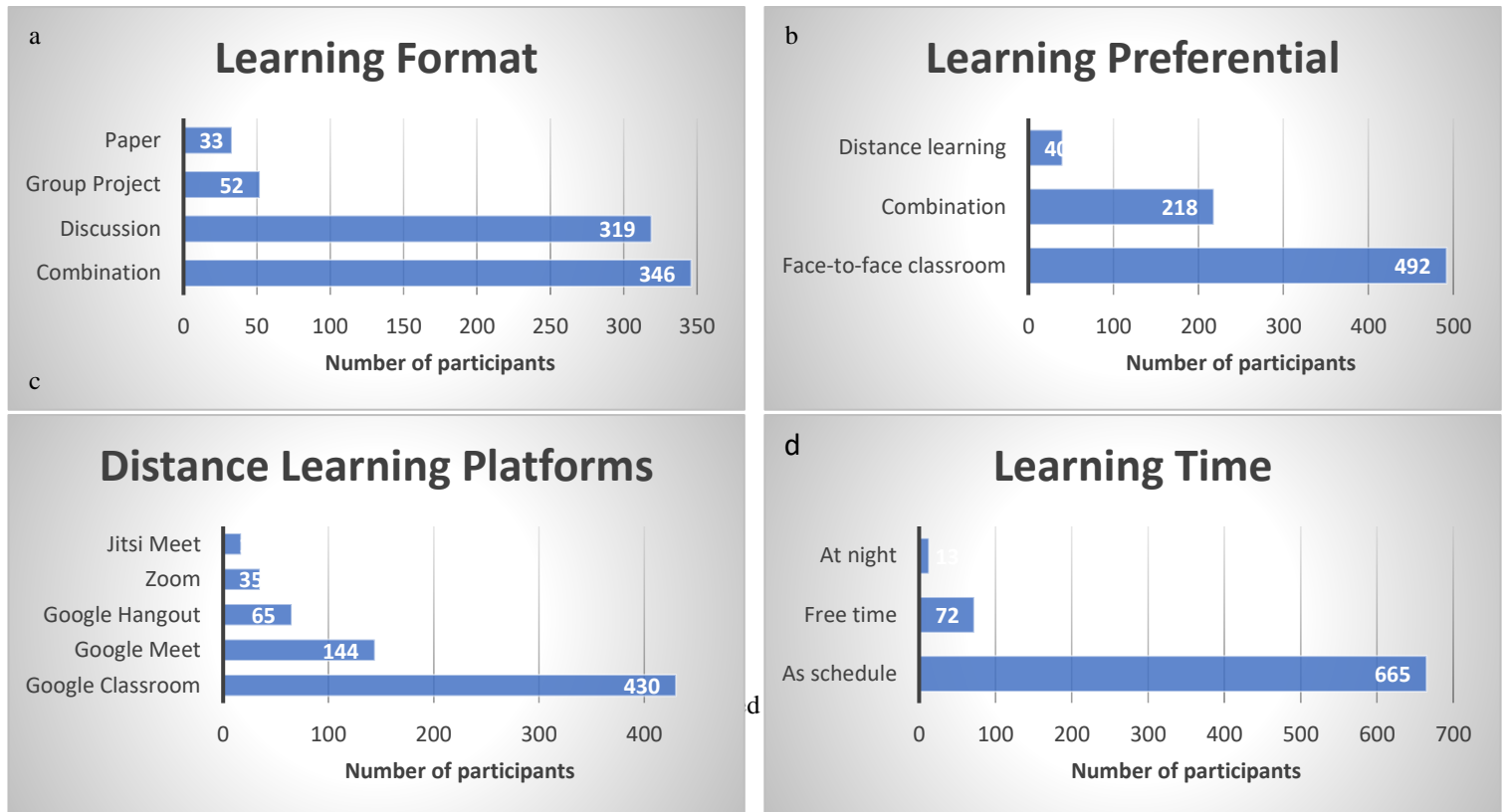
4.2 Learning facilities and infrastructures

The implementation of distance learning will take place optimally when the facilities and infrastructure are met. This survey used a Likert scale (scale 1-5) where 1 was 'Not at all important' or 'Strongly disagree' and 5 was 'Very important' or 'Strongly agree' (**Figure 2**).

Figure 2. Chart of learning facilities and infrastructures
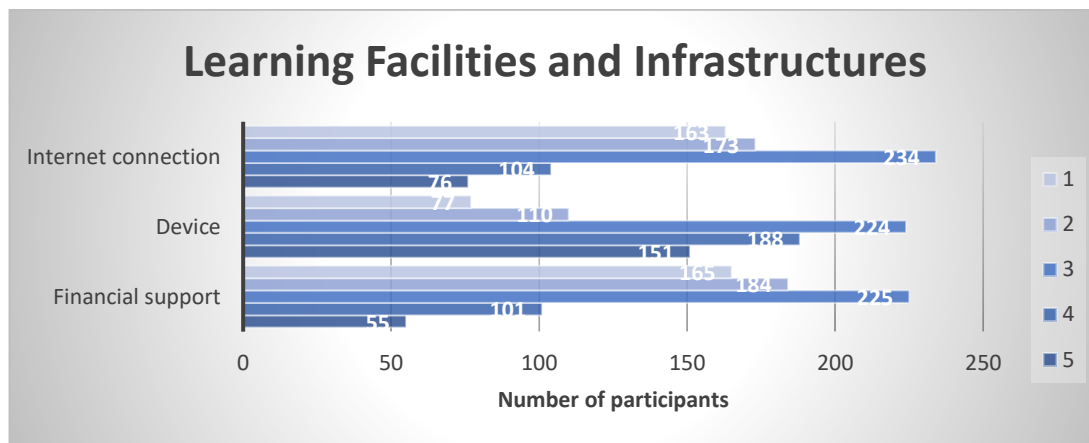
For distance learning, device / gadget is a must have item to support the learning process. From our participants, it showed that more than half of participants have good enough device for distance learning while 77 participants didn't have good device. Based on our study, 234 participants have quite good of internet connection while almost half of participants have poor internet connection. This result is related to financial support aspect, which shown almost half of participants didn't have enough financial support as well.

4.3 Psychological aspects

The psychological aspect is the main aspect in evaluating the educational process during distance learning because the psychology of students is possibly different than during face-to-face learning. This survey used a Likert scale (scale 1-5) where 1 was 'Not at all important' or 'Strongly disagree' and 5 was 'Very important' or 'Strongly agree' (Figure 3).

Figure 3. Chart of psychological aspects of students during distance learning
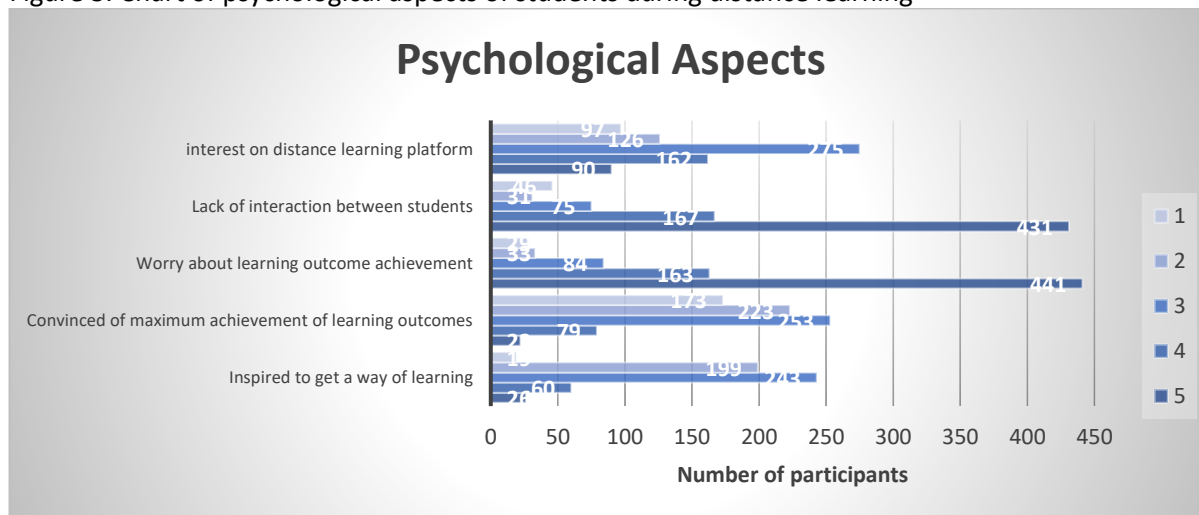
Based on the survey analysis, it showed that out of 750 respondents, 275 respondents stated that they were quite interested in trying distance learning features of the platforms. Negative impacts of distance learning were showed from 431 respondents that stated distance learning made students unable to interact or discuss maximally with classmates. There were 441 respondents stated feel worried as well

about couldn't achieve the learning outcomes. Even though 253 respondents stated that they were quite enthusiastic that they could achieve learning outcomes through distance learning. Their enthusiasm can be seen in the responses of 243 respondents who stated that they got new creativity in distance learning and feel more comfortable studying or doing assignments online.

5. Discussion

Distance learning, also called distance education, e-learning, and online learning, form of education in which the main elements include physical separation of teachers and students during instruction and the use of various technologies to facilitate student teacher and student-student communication. Distance learning traditionally has focused on non-traditional students, such as full-time workers, military personnel, and non-residents or individuals in remote regions who are unable to attend classroom lectures. However, distance learning has become an established part of the educational world, with trends pointing to ongoing growth.

The COVID-19 pandemic has disrupted the lives of students in different ways, depending not only on their level and course of study but also on the point they have reached in their program. This pandemic make distance learning is a well alternative when face-to-face course can no longer be carried out. Online platforms provide the distance learning technologies to expand traditional classrooms into virtual classrooms. Lectures are broadcast in both live and archived format to students. For students, the strength of learning from the online format was their ability to control the instructional pace of online lectures and to complete course events asynchronously at their convenience.[8] However, it should not be assumed that students familiar with online environment will transition easily from onsite to online learning model. The transition requires a gradual and adaptive process for both instructors and students.

An unexpected fully online learning due to the COVID-19 pandemic inevitably has its weaknesses, as previous study reported that students feel less engaged by instructors and are more distracted by their surroundings in the online format. The absence of hands-on activities and the inapplicability to some students lacking self-discipline are also concerns of online instructors. This may explain why students preferred a face-to-face classroom learning and the similar reaction also was reported by previous studies. In the post-COVID 19 eras, a hybrid learning model that combines classroom learning and online learning to provide a synergistic and complementary instruction would be more desirable.

Today's distance education is confronted with many challenges. Online course can be considered as an exploration for appropriate learning models during COVID-19 pandemic. In this study, several key areas of learning process, learning facilities and infrastructures, and students' psychological aspects towards distance learning were assessed, whereas their feeling of difficulty during distance learning and worrying about learning outcomes achievement have also increased. The reasons for the increased barriers they reflected are multifaceted. First, obstacles in internet connection, devices, and even financial support which greatly support the success of distance learning. Second, some students might lack confidence in their learning capabilities. Third, lack of social interaction with the lecturers and friends. Accordingly, for lecturers to meet learner's need, it is important to make the obscure theories accessible, strengthen student instructor communication, and provide a better integration of theory and practice.

The effective use of technology in education, however, is not instantaneous and must take into account that it must be used with thoughtful planning, design, reflection and testing. A teaching and learning strategy using Information Communication Technology (ICT), regardless of its potential, is, in some cases, untested and lacks planning and design. To be enhancive and effective, the teaching and learning (TL) strategies that use ICT must be directly linked with the student-centred orientation to teaching. The

teacher should reflect on the impact that a specific strategy has on the learning experience and orient practices to the student needs. Student-centred learning foundations reflect a more user-centred view about the nature of knowledge and the role of the learner that has to be more active in the pursuit of knowledge. Thus, this more active role of the student in the learning process engages in constructivism and connectivism paradigms that sustain that the learner determines what, when, and how his/her learning will occur. Course design has to promote forms of active learning since the more active a student is in the learning process, the more student-centred the learning process is.

Distance learning environment can be effective when it encourages: (I) contact between students and faculty members, (ii) reciprocity and cooperation between students, (iii) prompt feedback, (iv) time on task, (v) active learning techniques, (vi) communication of high expectations and (vii) respect diversity and ways of learning from each student. The importance of active learning techniques suggesting (i) problem-based learning, (ii) collaborative and cooperative learning and (iii) role-play simulation as relevant techniques for promoting active learning in online environments.

6. Conclusion

Distance learning is a good alternative when classroom learning is suspended during the COVID-19 pandemic period. It is also important to acknowledge that, distance learning cannot replace the need for onsite and face-to-face learning, but may complement existing traditional classroom-based learning model. Distance learning has an impact on changes in individual learning readiness and the preparation of institutional facilities to blended learning.

Suggestions

Distance education is confronted with many challenges during COVID-19. Online course

The learning process, learning facilities, infrastructures, and students' psychological aspects towards distance learning will be assessed, whereas their feeling of difficulty during distance learning and worrying about learning outcomes achievement will be also increased. The development of learner capacity and capability with the goal of producing learners who are well-prepared for the complexities of today's workplace.

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