

Implementation of Inspector Training System Certification Learning Based On E-Learning in Palembang Aviation Polytechnic

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Abstract – The research entitled Implementation of E-Learning-Based Inspector Training System Certification at Palembang Aviation Polytechnic has the aim of optimizing future E-Learning-based Inspector Training System Certification learning at Palembang Aviation Polytechnic. The method used in this research is to use a qualitative approach method. This study uses a theory based on the Learning Management System (LMS) in which the researcher makes an exploration of learning Inspector Training System Certification using the E-Learning application and then looks at responses to see the effectiveness of learning achievement from the E-Learning application to students as application users. when doing lessons with researchers. The data collection technique used was observation. The results showed that the implementation of E-Learning-based Inspector Training System Certification at Palembang Aviation Polytechnic can be used as input in the effectiveness of learning at the Palembang Aviation Polytechnic which will be carried out in the future. This study concludes that from the results of E-Learning-based Inspector Training System Certification learning can be carried out effectively and efficiently. From the above conditions, E-Learning-based learning at the Palembang Aviation Polytechnic will be carried out well and the results of this research can contribute to the Palembang Aviation Polytechnic and in other institutions as an alternative to other learning options.

Keywords – Learning, Inspector Training System, Certification, E-Learning.

I. INTRODUCTION

Corona virus or Covid-19, the case started with pneumonia or mysterious pneumonia in December 2019. WHO stated that currently Europe has become the center of the Corona virus pandemic globally. Europe has more cases and deaths from Covid-19 than China. The total number of cases of the corona virus is now more than 136 thousand, at least 123 countries and regions. Of these, nearly 81 thousand cases were in mainland China. Italy, which is the European country affected by the worst Coronavirus, has now recorded more than 15 thousand cases (Widiyani, 2020).

The spread of the corona virus is believed to have originated from a "wet market" in Wuhan, China that sold live and dead animals, including fish and birds. Such markets

pose a higher risk of the virus passing from animals to humans because hygiene standards are difficult to maintain if live animals are raised and slaughtered on site. Usually, the market is also very dense so that disease can spread from one species to another (Rahmawati, 2020).

The Covid-19 outbreak has generated a variety of panics, including in the realm of higher education. Especially after the Government has responded with various actions such as setting alert status, disaster emergency, non-natural disasters, extension of disaster emergency status to large-scale social restrictions (PSBB). Since then, Covid-19 prevention efforts have been implemented in the form of social and physical distancing (Social & Physical Distancing) in various lines of life. This policy is based on the number of victims who are

increasing day by day and the spread of the virus is increasingly difficult to control throughout Indonesia.

The Covid-19 pandemic has an impact on the world of education including higher education. The existence of this corona virus outbreak hinders teaching and learning activities that usually take place face-to-face. Even so, the pandemic was able to accelerate the Education 4.0 Learning System carried out remotely by utilizing information technology (Apriana et al, 2019). The Corona outbreak has actually become a great catalyst that spurs the world of education, such as encouraging more use of information technology in distance learning activities. However, there are big challenges in implementing the distance learning model, one of which is that the academic community is not yet accustomed to using a blended and fully online learning system.

In the era of the industrial revolution 4.0, the world of higher education is facing challenges with various changes. In addition, the Covid-19 pandemic requires higher education to make adjustments in the provision of education. One of them is changing the face-to-face (offline) learning method to online during a pandemic.

This online learning method will still be implemented during a pandemic. Not only lectures are conducted online, but the same thing is also applied to practicum activities, implementation of final assignments and graduation. The digital era has had a considerable impact on people's lives. People seem to be forced to "migrate" from manual to digital media in living their lives, one of which is in the education sector. Digital-based learning or better known as e-learning is increasingly being used by the community. If the infrastructure is adequate, the application of e-learning can be a resource-efficient learning method. In addition, the application of e-learning can also build self-confidence and community independence. In the midst of the recent Covid-19 outbreak, implementing digital-based learning or e-learning is very useful to protect students from the spread of the Covid-19 virus. Moreover, the government has appealed to the public to be able to do activities at home as an effort of physical distancing or maintaining physical distance to reduce the spread of the virus.

The application of a learning model has one component that needs to be considered so that a learning model can have an influence in its implementation. Regarding learning and the use of information technology, in this case E-learning is needed in the conditions of the Covid-19 Pandemic. By utilizing E-Learning as a learning medium, it can be used for

learning activities, especially the Palembang Aviation Polytechnic.

In order to support various online activities, Palembang Aviation Polytechnic has prepared a Learning Management System (LMS) which is a Web-based learning tool. Through this system, lecturers can inspire learning materials, assignments and create learning communities. In addition, with this system lecturers and students can interact and have discussions together.

This research was conducted in order to measure the achievement of the effectiveness of E-Learning-based Inspector Training System Certification. In this study, researchers tested the Web-based Learning Management System application and evaluated learning through responses from students as users using the E-Learning application.

This study examines the implementation of the Inspector Training System Certification learning during the Covid-19 pandemic, whose scope is related to the Web-based Learning Management System (LMS) application. Meanwhile, other applications as online learning are not discussed in this study.

II. DEFINITION OF TERMS

Pandemic is an epidemic that has spread to several countries or continents, and generally affects many people. Meanwhile, epidemic is a term used for a sudden increase in the number of cases of disease in a population in a certain area. The term pandemic is not used to indicate the severity of a disease, but only the extent of its spread. In the current case, Covid-19 will be the first pandemic caused by the corona virus.

Learning is the process of interaction between students and educators and learning resources in a learning environment. Learning is an assistance provided by educators so that the process of acquiring knowledge and knowledge can occur, mastery of skills and character, and the formation of attitudes and beliefs in students. To increase students' understanding of learning, learning media are needed (Soleh, Tobari, & Kesumawati, 2019)

E-Learning is a system or education concept that utilizes information technology in the teaching and learning process. E-Learning in another sense is learning that is structured with the aim of using an electronic or computer system so that it is able to support the learning process (Amalia, 2019; Ivanova et al, 2020).

Inspector Training System is an integrated training program prepared as a guide for the development and guidance of flight inspectors starting from the first

appointment in the position as Flight Inspector until dismissal (Nugraha, 2019; Suryan, 2017; Septiani and Cahyono, 2019).

III. METHODS

This study uses a qualitative approach with a descriptive method, where the researcher makes an exploration of the Inspector Training System Certification learning using the E-Learning System and then sees the responses with a questionnaire on the E-Learning application to students as users of this application when learning with researchers. This research is exploratory in nature, so it does not aim to test hypotheses or make generalizations. The elements of this research design are based on the focus of the problem under

study, the suitability of the object of research with theoretical references, informants, instruments, data collection procedures and data analysis. Moleong (2013) argues that qualitative research is conducted to understand the phenomena experienced by research subjects by means of descriptions in the form of words and language, in a natural context and utilizing various scientific methods. The data validity was done by triangulating the source. Danim (2002) states that qualitative research requires in-depth study, not just hearing about what and how qualitative research is, but fully understanding so that the scientific work process can produce products that meet objective criteria.

Table 1 Indicators of Achievement

Indicators of Achievement	Information
Availability of Inspector Training System Certification curriculum	- An approved ITS Certification curriculum document
The level of conformity of the learning schedule with the Inspector Training System Certification curriculum	- Training Schedule - Record of Learning Process
Availability of E-Learning-based Learning Facilities	- E-learning application
Availability of E-Learning Materials	- Inspector Training System Certification Training Module
Learning Outcome Achievements	- Results of students' comprehensive examination scores
Evaluation of Learning Implementation based on E-Learning	- Student satisfaction with Inspector Training System Certification learning

This research is a qualitative research, so that used is research informants, research informants in this study were 21 (twenty one) students at Palembang Aviation Polytechnic. Data collection techniques used field observations with observation sheets from the E-Learning application that were made and questionnaire responses to users through the E-Learning application. The google form questionnaire is used to see the effectiveness of E-Learning-based online learning. The data analysis technique used in the analysis is an interactive model which includes three components of the analysis, namely reduction, data presentation, Miles and Huberman's (1989) conclusion, then analyzing the spreadsheet of the questionnaire results from the google form that was filled in by the user.

IV. RESULT AND DISCUSSION

The research data for the results of this study started from July to October 2020. The research stages started from the primary data collection and observation stages, the research work stages by observing and documenting. Researchers explored data on the E-Learning-based Inspector Training

System Certification learning model obtained from the results of research and observations in the field. At the documentation stage, I documented the results of observations in the form of photographs and data relating to the implementation of E-Learning-based Inspector Training System Certification Learning. With the aim of strengthening the observation data. The photo shown is in the form of the training process. The data obtained is the result of document collection and field observations. In this case the results of observations are primary data which is very important because they become a major part of data analysis activities while the results of notes are supporting data that the researcher makes to be further developed in research. The results of the data collection observations were obtained according to the indicators that influence the inside.

In this research, the stages of research results go through the following process 1) Observation of training preparation, The learning exploration effort of the Inspector Training System Certification using the E-Learning application is said to be successful if the objectives of the implementation of learning are achieved through processes carried out with the

following indicators Availability of E-Learning-based Inspector Training System Certification Curriculum, Availability of E-learning-based Learning Facilities, Availability of E-Learning Materials. 2) Observation of the Training Implementation, learning planning is basically a description of some of the activities and actions that will be carried out during the learning process. Thus, it can be concluded, E-Learning-based learning contains plans, estimates and an overview of learning activities by utilizing Web-based Learning Management System (LMS) Applications and Video Conference (Zoom) Applications. The scope of learning planning includes the main components, namely objectives, materials, teaching and learning activities and evaluation. The indicators implemented are the Fit of Learning Schedule with the Inspector Training System Certification Curriculum, Learning Outcome Achievements, Evaluation of E-Learning Based Learning Implementation.

From all observations of all indicators it can be concluded that the E-Learning-based Inspector Training System Certification learning model at the Palembang Aviation Polytechnic is very effective considering that students come from various regions throughout Indonesia so that distance learning and conditions during the Covid-19 pandemic, student responses related to E-Learning-based Inspector Training System Certification learning at Palembang Aviation Polytechnic based on the results of the evaluation of the implementation of the Inspector Training System Certification training is satisfactory and can be continued and applied for subsequent education and training.

The discussion of the research results on the implementation of E-Learning-based Inspector Training System Certification at Palembang Aviation Polytechnic was carried out based on Document Observation and Field Observation. Observations are made by referring to predetermined indicators. From the research results, the assessment of the Implementation of E-Learning-based Inspector Training System Certification has generally gone well, starting from preparation, implementation, and evaluation (Abdullah, 2020; Hartiwi et al, 2020).

The results of the implementation research carried out on E-Learning-Based Inspector Training System Certification at Palembang Aviation Polytechnic were discussed with the Director, Head of the Academic Administration Subdivision, Training Unit, and Instructor with reference to the Training Implementation Evaluation. Conclusion analysis of research results related to the Implementation of E-Learning-Based Inspector Training System Certification at Palembang

Aviation Polytechnic can be continued and applied to other education and training.

V. CONCLUSION

This research was conducted based on the implementation of the Inspector Training System Certification at the Palembang Aviation Polytechnic, which was carried out through data and field observations, resulting in the conclusion that 1) E-Learning-based Inspector Training System Certification learning has been implemented and has succeeded in achieving learning objectives, the E-learning-based learning process is quite effective and very helpful with current conditions where online learning must be carried out so that it can be continued and applied to other education and training 2) E-learning facilities are good enough and can be used as an alternative for the implementation of education during the Covid-19 pandemic.

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