Improving Teacher Competency in Developing Learning Equipment Based on E-Learning through Metamorphosis Learning

Titin Kartini\textsuperscript{1}, Mukhamad Zulianto\textsuperscript{2}, Ermita Rizki Albirri\textsuperscript{3}, Sri Wahyuni\textsuperscript{4}

\textsuperscript{1}Department of Economic Education, University of Jember, Indonesia
Email: titin.fkip@unej.ac.id

\textsuperscript{2}Department of Economic Education, University of Jember, Indonesia
Email: zulianto.fkip@unej.ac.id

\textsuperscript{3}Department of Mathematics Education, University of Jember, Indonesia
Email: ermitara@unej.ac.id

\textsuperscript{4}Department of Economic Education, University of Jember, Indonesia
Email: sriwahyunipe.fkip@unej.ac.id

Abstract—Learning by utilizing E-learning facilitates students in the learning process, because E-learning does not require the presence of teachers and students physically in the classroom. Students can interact with teachers anytime and anywhere. The purpose of this activity provides training on E-learning along with learning tools, assisting E-learning utilization to MTs Walisongo and MA Walisongo Jember teachers. Training activities are E-learning, instructions for E-learning and applying E-learning media to one of the subjects. Through the above activities, teachers are able to develop learning equipment based on E-learning and improve ICT competencies.

Keywords—Competencies of ICT Teachers, E-Learning, Learning Metamorphosis.

I. INTRODUCTION

Technological developments give a significant impact on the sustainability of the learning process. Technological sophistication offers changes in learning from conventional to ICT-based learning. Information and communication technology-based learning media are easily obtained and accessed. Currently, the learning media are learning media based on E-Learning. E-learning is an alternative model in learning. Darin E. Hartley (2001) says that e-learning is a type of teaching and learning that allows teaching material to be conveyed to students using the Internet, Intranet or other computer network media.

E-learning aims to facilitate the implementation of learning, can improve learning achievement, and train students' soft skills independence. For this reason, the use of e-learning is an alternative method of learning. Learning by utilizing E-learning facilitates students in the learning process because E-learning does not require the presence of teachers. Students can interact with teachers anytime and anywhere, as long as there are electronic facilities and internet access.

Many schools already have internet networks but the use of using E-learning as a learning media has not been widely used. Many factors cause low use of E-learning, one of which is the low interest of teachers in utilizing the use of E-learning, because E-learning does not solely rely on academic abilities but also must be supported by the skills of teachers in terms of internet usage.

MTs / MA Walisongo is one of the schools that has an internet network. During this time the internet facilities are used as a means to send school data reports requested by related parties sent via the internet, sometimes used as a source of enriching school lessons. Even though this facility besides the above can be used as an alternative media in the learning process. The use of E-Learning in the learning process at Walisongo MTs / MA is very low. It is inversely proportional to the use of social media by teachers and students. In their daily lives, they often use social media, such as Facebook, Instagram, Twitter, paths, etc., to interact and share information.

MTs / MA Walisongo is at the Walisongo Islamic Education Foundation. The number of teachers at MTs / MA Walisongo is 33 people consisting of 16 MTs teachers and 17 MA teachers. The location of MTs / MA Walisongo is approximately 30 kilometers from the city of Jember. Because the location of the school that is far from the city is used as a reason for rarely taking part in the E-learning utilization workshop held by educational institutions in the city of Jember. Learning with the use of E-learning to be implemented properly, teachers need to prepare learning devices.
Learning equipment in E-learning is almost the same as conventional learning equipment, only different in developing the learning process. Learning equipment developed include Learning Plans based on E-learning and Modules based on E-learning.

Teachers who have undergone a metamorphosis process are teachers who are ready to use their abilities to create change. By being an agent of change, it means that a teacher is no longer present in the midst of the students simply shaking up the obligation to teach. Conversely, a teacher must appear as a lighter for his students. When he was in the school where he served, he became an agent of positive change for students and fellow teachers. According to H.D Franto (2013), learning metamorphosis is divided into three main phases namely the caterpillar phase, the cocoon phase, and the butterfly phase. The caterpillar phase in this service activity is likened to the teacher still in the stage of not understanding and weak in developing learning devices and utilizing E-learning so that training is held related to learning device materials and E-learning. The cocoon phase is a mentoring activity in the development of learning devices and the use of E-learning, then in the butterfly phase the teacher can develop learning tools and apply the use of E-learning independently.

II. METHOD
The obligation of teachers to plan deep learning is a form of pedagogic competence in teacher performance appraisal for the development of the career of the teacher as a professional teacher. One of the learning plans of teachers can develop E-learning based learning tools and the use of E-learning as a medium that can help in the learning process in the classroom. Therefore the approach method used in this activity is training on E-learning and its use as a learning media with steps (instructions) for its use, and assistance in applying E-learning media in one of the subjects taught by a teacher. The target of this activity is all teachers under the Walisongo Islamic Education Foundation which consists of 2 (two) schools, namely: (1) MTs Walisongo, and (2) MA Walisongo.

III. RESULT AND DISCUSSION
Stages in learning metamorphosis, (1) Caterpillars, conducted training by providing e-learning-based learning materials and partner teachers need additional material specifically on e-learning-based learning devices, (2) Cocoon, assisted in the development of e-learning based tools learning and partner teachers have begun trying to apply the results of training through mentoring to develop e-learning based learning tools, and (3) Butterflies, partner teachers have been able to develop their own e-learning based learning tools without assistance from the service team. In detail the results of dedication are presented as follows:
1. Arranging e-Learning Based Learning Devices Module
   This module contains learning tools, e-learning-based, and steps in the preparation of e-learning based learning tools. In this module examples of e-learning-based learning tools are presented and hints at some examples of the use of e-learning in learning.
2. Carrying out e-Learning Based Learning Device Training
   The training was held on Saturday 10 November 2018 at the MA Walisongo Jember. The training was attended by partner teachers consisting of two schools, MTs Walisongo, and MA Walisongo. The number of training participants is 50 partner teachers. With the help of 3 students, the training participants immediately practiced the use of e-learning in learning so that partner teachers were interested in developing learning equipment based on E-learning.
   Before assistance, pre-assistance is done via email or WhatsApp. During training, partner teachers are asked to develop learning equipment in the form of Learning Plans (RPP) and Student Worksheets (LKPD). Learning equipment is sent via email or WhatsApp discussed E-learning that is done during mentoring.
   Pre-mentoring activities have not been able to run optimally because there are still many service participants who have difficulty in compiling learning indicators and objectives and formulating E-learning based learning steps based on their choice of model/strategy. In formulating learning indicators there are still many who have not used operational verbs. For the formulation of objectives, the problems that arise there are those that have not referred to the indicators, there are those who formulate goals only pay attention to the results (do not pay attention to the process), the objectives formulated there are fewer than indicators. The resource person again gave confirmation to the participants about what things were needed in developing learning equipment based on E-learning, starting from school identity writing, core competencies, basic competencies, indicator formulation, learning goals, teaching materials, models/strategies learning, activity steps, media, learning resources and assessment, and any attachment that need to be in the learning device. The participants were guided to make improvements to the devices that had been compiled. The results of the activities at the mentoring meeting were better than the results at the pre-mentoring meeting.

IV. CONCLUSION
Based on several activities can be concluded that in the training on the development of learning equipment based on E-learning, teachers get additional material about the
characteristics of each learning equipment, E-learning, and utilization of e-learning.

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REFERENCES