E-Learning Application Training for AL-SAFITRI Vocational School Teachers in South Buton Regency

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ABSTRACT

Combining face-to-face meetings, in this case in class, with electronic learning can increase the contribution and interactivity between students. Through face-to-face students can get to know fellow students and their accompanying teachers. This familiarity greatly supports virtual collaborative work. Improving the quality of education at SMK 1 Al-Safitri is one of them by conducting online learning (in the network). E-Learning can be interpreted as a science of learning without having to use printed paper/hand out the material presented. On average, people working in the field of e-learning, especially from the fields of education, psychology, and computer science, know and use Moodle. teacher accounts that provide teaching topics or provide other subject matters besides being able to provide teaching topics there are several advantages of this Moodle LMS, namely there is a quiz feature, or videos.

Keywords: E-Learning; Community Service; Moodle; Training

1. Introduction

After the Covid-19 pandemic that hit the whole world including Indonesia, teachers and students were encouraged and tried to use various learning applications to support the teaching and learning process in schools which were carried out offline (outside the usual network, abbreviated online) and online (inside the usual network, abbreviated online). Learning media carried out by teachers and students to interact indirectly with each other, namely by using e-learning applications. E-learning stands for electronic foreign language learning or can be interpreted as learning in electronic devices or computers.

E-learning is a type of learning that can be used to facilitate teacher performance in teaching. E-Learning is the most efficient and closest learning method for students. If this media is packaged appropriately, uniquely and carefully, then e-learning is not only a medium of learning but can also be a medium of information, entertainment and education. (Daryanto, 2011:168).

Combining face-to-face meetings, in this case traditional classroom learning with learning using website and computer media, can increase contribution and interactivity among students. Through face-to-face students can get to know fellow students and their accompanying teachers. This familiarity greatly supports virtual collaborative work. Thorough preparation before implementing multimedia-based plays an important role for the smooth running of the learning process. All preparations such as scheduling up to the determination of communication techniques during the learning process are important stages in carrying out web-based learning.

According to Zyainuri & Marpanaji (2013) Constructivist learning in e-learning must pay attention to several aspects, such as 1) making learning an active process, 2) encouraging students to construct their own knowledge, 3) letting students determine their own learning goals, 4) learning must produce meaningful learning. 5) Learning should be interactive, with students interacting with the content, with other students, and with the teacher during the transfer process.

Improving the quality of education at SMKN 1 Al-Safitri is one of them through online learning (in-network), in addition to offline learning (out-of-network) where students and teachers are required to meet face to face, even though online learning is not where teachers and students meet face-to-face class or face-to-face, but online learning is very effective in the teaching and learning process because online learning styles have the support of electronic and internet network devices anytime and anywhere. In addition, the talents and abilities of educators in using information technology in learning activities are still inconsistent. (M. Ikhsan et al 2023).

According to Muhammad et al. (2020) said E-Learning can be interpreted as the specificity of learning without having to use printed paper/hand out the lessons delivered. Learning using E-Learning is a flexible learning habit, because between the teacher and students can access E-Learning media without being hindered by time and place for learning. In addition, according to Dyah. et al. (2020) e-learning also makes it easier for students to access learning materials from a variety of sources. The process of interaction between students can be better connected because it utilizes various application systems that can further strengthen educators in mastering the material provided both in class and outside the classroom. So it can be said that e-learning is one of the broader knowledge development processes where the process can occur anywhere and at any time as long as it is supported by proper equipment and infrastructure.

Some of the reviews above define the term E-Learning, so the next step is to determine the type of LMS (Learning management system) application. Lots of WEB-BASED LMS applications. Moodle is a web-based LMS application but it is free and free and easy to use, therefore the author chose the Moodle application (Modular Object-Oriented Dynamic Learning Environment) and then stated (Irawan & Surjono, 2018) that the average person who has knowledge in the field of e-learning especially from the fields of education, psychology, and computer science know and use Moodle.

In carrying out online learning, teachers need electronic devices such as computers, supporting applications, and the right steps for implementing online learning (Octan Setyawan & Erny Roesminingsih, 2022). Currently, almost all countries in the world are being hit by a pandemic, namely the 2019 corona virus or COVID-19 which began to spread at the end of 2019. It started in China and then spread throughout the world including Indonesia, killing millions of people (WHO, 2020).

The activities of community service partners or abbreviated as PKM in this opportunity are the Al-Safitri Vocational High School consisting of 4 teachers and 41 students and service members consisting of 4 lecturers from the Computer Systems Engineering study program, Faculty of Engineering, Muhammadiyah University of Buton.

2. Method

The implementation of Community Service begins with an analysis of the needs of teachers and students of AL-Safitri Vocational School. Furthermore, in teaching and learning activities the needs of teachers and students are analyzed, so the socialization stage and at the same time E-learning training are carried out.

There are several ways to do community service in class. Including According to Ngibad et al. (2020), the community service approach uses various methods, namely lectures, demonstrations, exercises/practices, mentoring, and questions and answers.

a. Lecture

According to (Harie et al., 2020) good educators must master various kinds of learning methods. There are many learning methods that can be used by educators to increase the interest and learning achievement of their students. Generally, educators use conventional methods in this case what is commonly used is the lecture method.

b. Demonstration

The speaker demonstrates or demonstrates the procedures for using the various features available in Moodle-based e-learning in a systematic manner and refers to the training module. Meanwhile, according to (Ayu et al., 2021) demonstration activities where the servant provides an explanation of the use of each command in accessing the website.

c. Exercise or practice

Participants practice using various moodle-based e-learning functions according to the subjects taught by students.

d. Accompaniment

To prevent confusion and mistakes/errors during practice or installation, mentoring is held. Assistance was carried out because of the large number of participants during the activity, not all of the material or orders went well.

e. Ask java or discussion

Discussions or questions and answers are given to all participants so that during the service activities run interactively between presenters and participants. Besides that, the discussion or question and answer aims to increase motivation and provide solutions to participants.

Moodle is an application program that can convert learning media into a web form and can function as a medium of information in the form of text, graphics, simulations, animations, exercises, quantitative analysis, and direct feedback (Setiyorini et al., 2017).

According to Coal (2017); Masfingatin and Maharani (2019), There are four advantages to using online learning, namely: (1) The application of online learning can shorten learning time and also reduce the cost of learning activities thereby increasing learning efficiency (2) Providing easy interaction between students. (3) Students can share files and information with each other and can access learning materials at any time and repeatedly so that students can independently improve their mastery of the material in accordance with the material standards provided by the teacher or lecturer. (4) Online learning allows the knowledge development process to be supported by computers and the internet, not only in the classroom.

The Community Service Activity (PKM) involved lecturers from Muhammadiyah Buton University as speakers, the Head of South Buton Al Safitri Vocational School to open the activity and teachers and all students of South Buton Al Safitri Vocational School as participants. PKM activities are carried out for 1 day, namely Tuesday, December 6th 2022, while the PKM Implementation Method consists of stages as shown in Figure 1 below:

Figure 1. Method of Implementation of PKM Activities

Description of the image of the method for implementing community service activities above as follows:

1) The preparatory stage is the initial evaluation, namely conducting surveys and discussions to obtain the information needed during the training, as well as setting targets in the training. At the preparatory stage, materials and props are also prepared for use during training.

2) Implementation is the process stage, namely the implementation of community service activities in the form of training with the following activity stages:

   a. Opening of the activity, the opening of the activity was attended by the participants and the servants and the principal of the school

   b. Implementation of the program, the presentation will be held on December 6, 2022. This activity begins with an explanation: 1. The definition, functions and benefits of Moodle E-learning in the learning process, 2. Components in making Moodle E-Learning.

   c. Practicum, held in the second session. After all participants have a good understanding of Moodle E-Learning, then enter the account creation session on Moodle, uploading materials, assignments, both in the form of writing and videos that can be uploaded on Youtube.

   d. Question and answer, all training participants are given the opportunity to ask questions about online learning, both of which are used for free and some are paid

3) Evaluation and reporting.

Evaluate the final stages of the results of community service activities that have been carried out previously for future improvements in implementing similar programs to make them even better.

3. Result and Discussion

Result of training on the use of E-learning using the Moodle application as an online (in-network) learning medium as follows:

a. The first session was the presentation of training material which was attended by AL Safitri Vocational School teachers, who were very enthusiastic about receiving the material presented by the presenters (Figure 2).

Figure 2. Presentation of Training Materials

E-learning application training was carried out in the multi-purpose room at AL-Safitri Vocational School which was attended by teachers and students which was previously opened by the principal of Al-Safitri Vocational School. The activity went well, namely the servant brought material using powerpoint, to be presented to the participants.

This activity was given a presentation by 4 lecturers consisting of servants and 2 lecturers and 45 participants, as well as the principal of the school gave remarks and opened the service activities. In this session, several students and teachers gave good responses, because it was not only carried out in a theoretical manner but was carried out with direct practicum

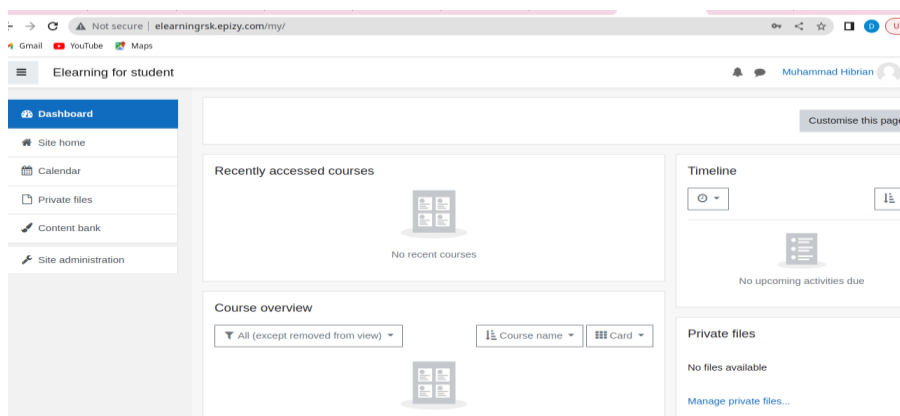b. The second session is the hands-on practice of creating a Moodle Account (Figure 3).

Figure 3. The process of installing the Moodle application on hosting

The picture above is the result of installing the Moodle application. The application installed is using Moodle LMS version 4.0. the initial display shows the successful results of the moodle installation and at the same time shows the creation of an admin account that is done on a free hosting or online basis. The admin and teacher features have different access, including student accounts whose access is restricted.

Moodle is an open source program that supports the distribution of e-learning packages that can be used to accommodate learning materials in various formats. (Herayanti et al. 2012).

There are nine points according to the types of learning related to Education 4.0 (Maharani, Kholid, Pradana, & Nusantara, 2019; Taban, 2021). (1) Learning activities are flexible and can be done anytime, anywhere. (2) Online learning activities are suitable for each learner (3) Learners have the choice to decide how they will study. (4) Active students or students can learn more based on project work. Through assignments in the form of project work, students will learn and work in teams. (5) Learners or students can learn more directly through experience in the field of internships, guided project activities, collaborative project activities, etc. (6) Learners or students will be faced with the interpretation of data, and they will be asked to apply their theoretical knowledge of numbers and use their reasoning skills to draw conclusions based on the logic and trends of existing data sets. (7) Students will be assessed in different ways, (8) Student comments and suggestions will be considered in the framework of designing and conducting course reviews. (9) Students become more independent in learning activities, and the teacher acts as a facilitator to guide students. These features allow governments and educational institutions as well as teachers and lecturers to conceptualize appropriate and accurate learning activities according to current developments.
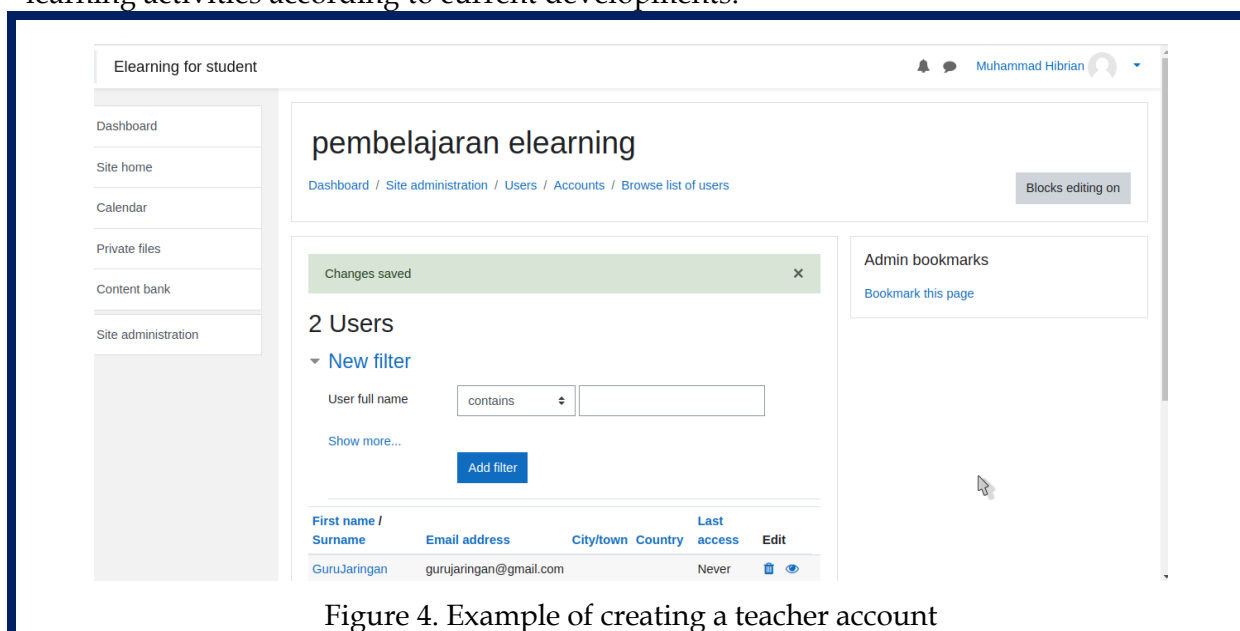

Figure 4. Example of creating a teacher account

One of the accounts that must exist and is important is the teacher's account where the teacher's account provides teaching topics or provides other subject matter besides being able to provide teaching topics. There are several advantages of this Moodle LMS, namely there is a quiz feature, or videos that can be accessed or students if the teacher has posted on the teaching topic page.

4. Conclusion

Based on the results of research that has been conducted at Al-Safitri Vocational School, which has gone through the Covid-19 pandemic, this is a solution in the education system because learning is not only done in the classroom. Because when face-to-face learning cannot be carried out directly, it can be applied using the Moodle LMS-based learning system which supports the learning process indirectly which can be done anywhere and anytime by educators and students.

The Moodle LMS can create mappings between teachers and students. Teachers can upload material and edit material needed by students and can give exams online. Furthermore, students can also access material or take exams online without being limited by

space and time. Student activity and attendance can be assessed and analyzed by the teacher directly.

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