

Workshop and Assistance on the Utilization of E-Learning at the Universitas Muhammadiyah Buton

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ABSTRACT

Improving the learning system chosen by the Universitas Muhammadiyah Buton (UM Buton) in order to compete in the era of disruption with advances in information and communication technology (ICT), particularly electronic-based learning systems, one of which is known as the e-learning learning system. Several professors at UM Buton had difficulties in adding learning material in the form of text, and video, visualizing quiz results and semester examinations, and building forums for question-and-answer sessions while utilizing e-learning. Based on these issues, the service team developed training and mentoring for UM Buton lecturers. It is hoped that with this training, UM Buton will be able to produce quality lecturers and highly educated skilled professionals who can keep up with the times and ICT-based technology while carrying out Catur Dharma tasks and responsibilities as a lecturer at Muhammadiyah Higher Education.

A. Introduction

In the era of disruption, the world of education must be able to equip students with 21st century abilities (Sulisworo et al. 2021). In the era of disruption, students' ability to think critically and solve problems, to be creative and inventive, and to communicate and collaborate (Suherman et al. 2022) Furthermore, the ability to find, handle and communicate information is critical, such as the ability to use information and technology. The 21st century is referred to as the "digital age", in which all sectors, including education, must be digitized and technology plays an important role in education (Amaechi et al. 2022). Leadership, digital literacy, communication, emotional intelligence, entrepreneurship, global citizenship, problem solving, and teamwork are some of the abilities needed in the 21st century (Chastonay et al. 2015), only students but also lecturers must be prepared for these competencies.

In addition, the challenge for the world of education is to improve the quality of education in order to produce a workforce that is able to compete in the international world in the era of globalization (Al-Madani 2020). The future workforce must be able to master science and technology, have superior skills, and behave professionally (Mao et al. 2022). Therefore, all areas of work that use computer assistance should be studied immediately, considering that this tool can speed up and simplify work with relatively high accuracy and speed. With the rapid advancement of science and technology, especially ICT (Herrero et al. 2015; Thomas et al. 2020). ICT-based learning concepts and methods are needed. Virtual Classroom is a learning medium that allows the system to operate properly

and carry out teaching tasks in the classroom even if the lecturer is not present; This idea is also known as e-learning. To meet these standards, schools must be prepared to implement ICT-based learning, including e-learning.

The desire of students to learn about topics they are not yet familiar with encourages the active participation of students in the learning process (Lawelai et al. 2022). Lecturers play a role in providing facilities for students to learn, and the involvement of students and lecturers in active learning will produce meaningful experiences so that "students as whole people" are formed. The age of these students is part of the millennial generation. Millennials are the generation born between 1995 and 2010, the first to be born in an integrated and globally connected environment with constant access to the internet (Nurbekova et al. 2020). This generation grew up knowing and using different types of technologies. Millennials are passionate about technology and prefer to interact through social media rather than in-person conversations; this generation also has multitasking capabilities. In addition, millennials have shorter attention spans than previous generations (Iksan et al. 2022). The average student's attention span in class is seven to ten minutes, but the internet and online habits have lowered it down to eight seconds. According to the survey, 43% of young people prefer to learn online rather than use paper-based resources. 38% chose blended learning, while 16% chose books for learning (Cilliers 2017).

Several studies have revealed that the brain regions responsible for visual skills in millennials are much more developed than in previous generations, resulting in a more effective type of visual learning. Interactive games, collaborative projects, challenges, and other things that students can try and see firsthand are examples of visual learning. When given text and information online, children focus on colored graphics and read less than 20% of the text. As a result, this age group does not like the learning model of lectures and discussions (Lim, Mustaza, and Abu Hassan 2016). Application developers such as Absorb, Moodle, Canvas, Schoology, Blackboard Learn, D2L Brightspace, Edmodo, Quizlet, and Google Classroom have offered several e-learning and hybrid learning solutions (Dodero et al. 2014). Each e-learning and hybrid learning program has its own benefits, including multi-platform, multi-device, and multi-interaction between students, lecturers, and parents. E-learning allows students to tailor their studies to their specific needs (Epignosis 2014).

The UM Buton Education and Teaching Institute (LPP) is an internal institution of UM Buton that realizes the need for educational renewal. The lecturers of each study program are quite responsive to the use of technology to improve learning, as evidenced by the availability of internet connections for students and lecturers, as well as the presence of adequate computer laboratories. Meanwhile, it has not been fully integrated with the UM Buton environment for the implementation of e-learning activities. This is because lecturers are not familiar with e-learning software today. Furthermore, the talents and abilities of educators in the use of information technology in learning activities are still inconsistent. This e-learning workshop is intended to provide opportunities for lecturers to innovate learning by expanding their knowledge and skills related to e-learning or hybrid learning in order to provide an ideal learning experience for students.

B. Literature Review

Given the resources universities spend educating personnel and learning management systems (LMS), measurement of training outcomes is essential (Aldosemani, Shepherd, and Bolliger 2019; Dodero et al. 2014). Instructors attending LMS training sessions showed higher levels of LMS activity than untrained lecturers (Chow, Tse, and Armatas 2018). When compared to instructors who do not receive training, trained teachers use more 'classrooms' and 'evaluation instruments' but relatively less 'material' in their teaching.

Almost all lecturers report participating in professional development. Collaborative (group work, interactive sessions, group groups, coaching and mentoring) and interactive (self-reflection, discussion and debating, use of case studies) techniques are often preferred, although only a small percentage of participants use them. Despite the fact that most lecturers report some e-learning capabilities, existing web-based development platforms are used sparingly (McElearney, Murphy, and Radcliffe 2019). Previous studies have shown a mismatch between teachers' desires and skills for professional development and actual practice.

Competency training in technological and pedagogical knowledge is mandatory for lecturers. Workshops and seminars should be organized to encourage skill and inter-ideological development, and teaching and learning facilities should be improved regularly (Thomas et al. 2020). Kumar Basak, Wotto, and Bélanger in *E-Learning, M-Learning and D-Learning: Conceptual Definition and Comparative Analysis* describes e-learning as an educational instrument that involves, among other things, self-motivation, communication, efficiency, and technology (Kumar Basak, Wotto, and Bélanger 2018). Because social relationships are limited, students must stay engaged. E-learning is a learning method that utilizes information technology in the form of computers with telecommunication and multimedia capabilities (graphics, audio, video) as the main medium for delivering lecturer-student interaction content. The quality of the e-learning system includes the ability of students to access educational materials regardless of time, distance, or location, as well as communication assistance. Synchronous and asynchronous events, as well as many forms of educational and multimedia materials, can be recorded (text, images, audio, video, animation, etc.).

C. Method

Workshops and assistance in the use of E-Learning for UM Buton lecturers are as follows:

1. Lecture techniques

The lecture approach is used to convey the basic ideas of e-learning and general information. Furthermore, this approach is offered to provide information and understanding of the advantages of e-learning in the learning process. This strategy is presented at the beginning of each discussion of the topic and tries to build a theoretical foundation for each new subject.

2. Demonstration methods

This approach is provided to explain how to leverage each command when accessing e-learning. excellent in posting information, offering assignments, and also providing evaluations to students through e-learning. The participant's knowledge of each item should increase as a result of this strategy.

3. Practice Methods

Participants in this approach put into practice all previously acquired content. This approach is designed to assess how far each participant can go following the developed e-learning.

D. Results and Discussion

As one of the universities in Baubau City, UM Buton has also integrated the Ministry of Education and Culture's application. This must be done so that lecture activities continue to run as planned. UM Buton held an e-learning workshop where this application will be connected to SPADA Indonesia. This activity took place in the hall of Building B UM Buton for two days, from Friday, June 11, 2021, to Saturday, June 12, 2021. UM Buton lecturers are required to take part in this activity, which is divided into two sessions on the first and second days, starting at 08.30 to 11.30 and 13.30 to 15.30.

Lecturers who take part in e-learning training have different experiences with e-learning applications. Only a few lecturers claimed to have used e-learning applications, although not

continuously due to limited knowledge, of all the participants who took part in the training. E-learning training can help teachers understand the applications built with e-learning, so that after attending the training, it is hoped that teachers can create their own applications with e-learning and transfer the knowledge gained from the training to other teachers who have not attended training or have never attended training.

Chats, online courses, uploading resources, tracking assignment submissions, and creating multiple-choice quizzes are examples of training materials. Only chats, online courses, material submissions, and discussion forums are offered as training resources. As a result, few lecturers are able to manage the distribution of tasks and preparation for multiple-choice exams on the e-learning platform.



Figure 1. UM Buton E-Learning Workshop

In the case of discussion forums, guidance and training materials only cover the creation of such forums and do not include the addition of discussion topics. The content offered in this e-learning training can help UM Buton lecturers improve their skills. However, due to limited training time, not all information in e-learning can be tested in training. The results of e-learning training are influenced by various elements. The competence and basic knowledge of the participants' computers, the age of the participants, and the duration of the training itself. The e-learning training that only lasts for a limited period does not provide the best results for the participants. The fact that trainees' results are different demonstrates this.

Participants with strong computer skills can obtain e-learning training materials quickly and easily, adapt effectively to the system, and investigate systems designed using e-learning. Those who were younger had a higher basic understanding of computers, e-learning, and e-learning applications than older participants. Thus, participants with superior operational abilities in e-learning can try e-learning applications that are not explicitly given in the training with the help of the provided video tutorials. Training video tutorials can help learners use e-learning programs independently.

E. Conclusion

Based on workshop activities and e-learning assistance for lecturers at UM Buton, it can be concluded that e-learning training has opened the eyes of lecturers to the existence of several e-learning applications and the benefits and disadvantages of each. Workshop activities and e-learning assistance can help improve lecturers' ability to utilize e-learning tools. In addition, after participating in workshops and e-learning assistance, UM Buton lecturers realized that facing millennial generation students in the midst of advances in information technology and globalization flows requires a different strategy from facing previous generations through training and assistance in the use of e-learning.

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