OPTIMIZING TEACHING AND LEARNING MEDIA AT UNIVERSITY: CHALLENGES AND STRATEGIES PAPER

Raden Aulia Utami Hidayat[1]
Tedy Sutandi Komarudin[2]

[1,2]STAI Siliwangi Garut

Corresponding Author: rauliastaisgarut@gmail.com

ABSTRACT

This study concerns optimizing learning media utilized by lecturers in one of the state universities in a suburban area in Indonesia. Further, it also presents the challenges experienced by lecturers and the teaching strategies used by them. To do so, this research involved ten lecturers from different subjects and grades who taught at that university. Observation and interview were selected as research instruments, further, the data were analyzed qualitatively. The results show that the limitation of teaching-learning media in university does not make the lecturers lack creativity, they apply the appropriate teaching strategies in the classroom to keep their students focused and engaged on the teaching and learning process. In addition, lecturers also believe that their students can still compete with students from other university. However, the lecturers still hope that the university where they teach can have more adequate teaching-learning media to facilitate them and their students in the teaching and learning process.

Keywords: Optimizing, Teaching-Learning Media, Teaching Strategies

1) INTRODUCTION

The education system changes rapidly along with the changing of time especially in this 21st century learning. The changes produce and introduce various new teaching and learning media (Sakat et all., 2014). As the result, it makes teaching and learning activities more effectively and significantly conducted. Teaching and learning media can be categorized from the most common equipment used in schools such as the picture, flashcards, textbooks, and the blackboard, to modern media such as computers, LCD, the Internet, and digital cameras (Romiszowski, 1992; Harmer, 2007). The use of them might create students' interest and engage them in the classroom activity (Kraushaar & Novak, 2010; Risko, Buchanan, Medimorec, & Kingstone, 2013). The development of teaching and learning media in education has made every school start to utilize their students with the appropriate media that can help them effectively conduct classroom activities.

The applications of teaching and learning media in class might help lecturers conduct classroom activities, the lecturer can easily communicate the information to students as well, therefore, lecturers will be able to overcome the problem of students with different learning styles (Sakat, et all., 2014). In addition, the application of teaching and learning media has good potential to keep the classroom alive, it might offer students colorful and interesting materials in the classroom (Rao, 2014). When teaching and learning media is utilized in classroom activities, it aids students in effective learning by easily acquiring, retaining, and applying what they learned (Wamalwa, 2014). In contrast, lecturers and students from one state university in a suburban area experience a different situation, the development of teaching and learning media also happens there, however, not as rapid as in other universities, especially in the universities located in the city.

The main reasons faced by the suburban area university are the availability of teaching and learning media itself and the financial problems. In line with this, the lack of access and availability of media for teaching poses a great learning challenge to both lecturers and students (Wamalwa, 2014). Additionally, the financial problems also become a challenge that has to be done. However, the lecturers should have strategies for how to optimize the use of teaching and learning media at their university.

Optimization in teaching relates to how lecturers develop their creativity in the classroom by continually reviewing and fostering his/her personal ability in teaching (Gurung and Scharwt, 2014). Further, to optimize their teaching, lecturers should be able to choose the appropriate classroom activities or teaching techniques that can help them deliver the materials. To optimize students learning, lecturers can examine students' study behaviors or study techniques to help them identify their need for additional help. In addition, lecturers can use the teaching and learning media to increase students' engagement (Weinstein & Palmer, 2002; Gurung, 2005).

Additionally, since the use of teaching and learning media is very useful for lecturers also students, now there are many research studies found to be specifically investigated the benefit of using teaching and learning media at school. These research studies generally show that the use of a variety of teaching and learning media can help lecturers effectively conduct their classes and improve students' engagement (Sakat, et all. 2012; Rao, 2014). Furthermore, they also examine the challenges that lecturers faced in using the teaching and learning media (Bhuiyan, 2010; Benson & Odera, 2013; Baum & Weinberger, 2014; Wamalwa & Wamalwa, 2014). In

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addition, the last research investigated that the use of technology in teaching is beneficial for lecturers in optimizing the teaching and learning process (Shu, 2014).

The first group of research studies has presented the benefit of the use of teaching and learning media (Sakat, et all. 2012; Rao, 2014). The study conducted by Sakat, et all. (2012), identified that the use of teaching media can stimulate effective learning and improve the performance of Jawi education, and enhance the high level of interactivity among students. In addition, Rao (2014) focused on the media used in the classroom and students' enthusiasm for their use of them at the undergraduate level in teaching English. The result of this study showed that the use of media in teaching can improve students' curiosity and develop their English ability.

The other group of research studies has specifically focused on highlighting the challenges that the lecturers faced in using teaching and learning media (Bhuiyan, 2010; Benson & Odera, 2013; Wamalwa & Wamalwa, 2014). Bhuiyan (2010) investigated the challenges that educators generally face when it comes to teaching about media convergence. This research listed some challenges faced by lecturers about teaching media convergences, they are lack of institutional commitment, lack of skills and resources; fear and resistance to change; being intimidated by the change of curricula to reflect the industry demand. In addition, Benson & Odera (2013) revealed that the use of teaching and learning media is low frequency because of the lack of availability of teaching and learning media themselves. Furthermore, Wamalwa & Wamalwa (2014) examined the challenge of effective teaching and learning. The result showed that the teaching and learning media have to be renewed by lecturers and stakeholders to enhance the teaching and learning activity, especially in English teaching subjects.

Finally, the last research conducted by Shu (2014) studied the use of modern educational technology in deepening students' understanding and optimizing the use of multimedia in class. The result showed that the appropriate utilization of modern educational technology is beneficial to the improvement of English teaching.

However, although those studies above have exemplified the number of benefits and challenges that lecturers gain from the use of teaching and learning media, yet, it seems that those studies still have left one major gap. The gap is in a form of optimizing the use of teaching and learning media, especially in a suburban area university, such as its challenges and strategies in optimizing teaching and learning media, and also lecturers' beliefs and

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expectations on the use of them. As the consequence, based on the purpose of the study then three questions are presented in this study. The questions are:

1. What are the challenges in optimizing teaching and learning media at the suburban area university?
2. What are lecturers' strategies in optimizing teaching and learning media at the suburban area university?
3. How do lecturers believe and expect the use of teaching and learning media at university?

2) METHODS

Research Design

This research study aimed to investigate the challenges and the strategies of lecturers in optimizing the use of teaching media. To be more precise, this study was also intended to reveal lecturers' belief in the use of teaching and learning media at school, and their expectation of the availability of teaching and learning media at their school. Therefore, to achieve these, then this research utilized a qualitative research design. Additionally, the qualitative research design was selected by Bruce & Berg (2001), Marvasti (2004), Creswell (2012), and Fraenkel, Wallen, and Hyun (2012) clarify that qualitative design may allow the researcher to get a detailed description and analysis of the issue being investigated. Furthermore, this design was chosen for this study because it helped gain the best answer to the research qualitatively.

Research Instrument

This research employed two instruments, these involve observation and lecturers' interviews. The description of each instrument will be depicted as follow.

Observation

Observations may include the monitoring activity of the situation of homes, public places, schools, and religious institutions to learn about groups in a community (Bruce & Berg, 2001; Birmingham & Wilkinson, 2003). Related to this study, the observation was conducted to examine the situation of the school, particularly in observing the availability of teaching and learning media.

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Lecturers' Interview

The interview was the other instrument used in this research. Interviews were aimed to validate the data that were gained from the university observation. The interviews were given in a form of in-depth semi-structured interview format. This type of interview was selected because of its flexibility, that both the researcher and lecturers are permitted to express their answers far beyond the questions prepared (Bruce & Berg, 2001; Birmingham & Wilkinson, 2003). At this point, the lecturers were asked to reflect on /her opinion and belief in the use of teaching and learning media. The challenges and strategies in optimizing the use of teaching and learning media at university. Moreover, they also stated their expectations about the availability of teaching and learning media at their university

Research Site and Participant

The research site of this study was a state university in a suburban area in Indonesia. The university was chosen because it had been accessible, and it is located in a suburban area. In addition, the director of the university was permitted to do the research. In line with this, this university as represented by the director fully supported this research and voluntarily consented to this study. It was shown by the agreement as written in the informed consent that was provided to them.

Moreover, the participants of this study consisted of twelve lecturers with a variety of teaching backgrounds, grades of students they are taught, and teaching experiences. The lecturers were also willing to be the participants in the research as shown by the informed consent given to them.

Data Collection

In this research, the data were collected through observation and lecturers' interviews. The procedure of collecting the data comprised some steps.

The observation was conducted directly by the researcher. In this case, some pictures of classrooms, lecturers' rooms, and computer labs were taken to observe the availability of teaching and learning media at university. After the university observation was completed, then it was followed by the interview. Ten lecturers were willing to be a part of this interview. The interviews were given in a form of a 'semi-structured individual interview' (Bruce & Berg, 2001; Creswell, 2012). The lecturers agreed to answer the open-ended questions with some additional questions to get a detailed answer.

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Data Analysis

The data gained from observation were saved to be asked by the lecturers in the interview session. Further, the data collected from the interview was transcribed and coded, and it was classified into three categories, namely lecturers' challenges in optimizing teaching and learning media at university, lecturers' strategies in optimizing teaching and learning media, and lecturers' beliefs and expectations on the use of teaching and learning media at university.

3) RESULTS AND DISCUSSION

The Challenges in Optimizing Teaching and Learning Media at University

Based on the observation, I found that the availability of teaching and learning media was very limited. Not all classes are not equipped with teaching and learning media such as pictures, computers, projectors, or loudspeakers. They only have two whiteboards and some markers for every class as the resource for teaching and learning media in the classroom. The university observation results are supported by the interviews of the lecturers who teach there.

Below are the results of the lecturers' interviews that represent the most answer given by the twelve lecturers:

> "We are lacks of projectors here, and they are mostly used for the meetings and lecturers' discussion, it is rare to be used in the classroom context." (Lecturer 1, 5th October 2021)

> "We have the equipment, but they are still limited, the classical reason is financial problems." (Lecturer 2, 5th October 2021)

> "For the maximum result, we face financial problems. Unlike in the city, we still need some improvements in many aspects." (Lecturer 3, 5th October 2021)

> "In our university, the availability of teaching and learning media is still not fulfilled, we don't have a projector for every class. Sometimes I use PowerPoint and a projector, but it is only once or twice a semester. Mostly, I use only manuals teaching and learning media, such as blackboards and textbooks." (Lecturer 4, 5th October 2021)

Based on the observation and lecturers' interviews, we can conclude that the main challenges faced by lecturers who teach in suburban area university are the availability of teaching and learning media. In line with this, some researchers have pointed out, that many problems prevent lecturers from using teaching and learning media in the classroom. The problems are the limitation of infrastructure (Pelgrum, 2001; Mehlinger & Powers, 2002) and

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the weakness of technical support (NetDay Survey, 2001). In addition, Parker (1997) and Ertmer (1999) also found some factors that become the barriers to the use of teaching and learning media, such as lack of time, resources, support, and unavailability of teaching and learning media themselves. Even though the teaching methods utilized are good, however, it would be harder to work well when it is not supported by the teaching and learning media (Baek, Jung, & Kim, 2008). As the result, the limitations of teaching and learning media make lecturers optimize the existing media such as boards, chalks, markers, textbooks, and worksheets in class. They rarely use electronic media or other media that can help them conduct classroom activities.

Another challenge faced by the university is the financial problem. The problem appears when the university attempts to upgrade the teaching and learning media. Bhuiyan (2010) stated that upgrading the old and the modern equipment, also maintaining the laboratories once adopted are not inexpensive, it requires a lot of money to capitalize. The observation and interview results are supporting each other, It can probably be said that the limitation of teaching and learning media is caused by the fundamental thing that is money. Therefore, it can be stated that the financial problem influences the availability of teaching and learning media.

Furthermore, after the long talking of the challenges, now we have to move to lecturers' strategies in optimizing the use of teaching and learning media at university.

Lecturers' Strategies in Optimizing Teaching and Learning Media at University

Facing the challenges, the lecturers have several strategies for conducting teaching and learning activities at university. They optimize the use of existing media, such as textbooks or worksheets. The lecturers also try to modify the existing media which can make their students engage and interested in the class. In addition, lecturers also actively motivate their students that they will succeed in the future and will still compete with other universities. Moreover, besides giving their students a set of theories, the lecturers also share their experiences related to the material being taught in class. Some lecturers have even prepared material in advance to anticipate the possibility of using teaching and learning media. After that, they can make or borrow the media they need to be used in the classroom. Most lecturers teach traditionally but are accompanied by creativity, hard work, and great responsibility to keep students engaged.

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The following are the results of the lecturers' interviews that represent the most answer given by the twelve lecturers:

"With lecturers' perseverance and responsibility, all lecturers also try to deliver the materials perfectly, even though the media are still limited. But thank God, if we see the results, our students can compete with other university. That's the result of lecturers' hard work to optimize the teaching and learning activities at here." (Lecturer 6, 5th October 2021)

"My strategy is modifying the use of teaching and learning media, for example, the availability of tools is limited, but the material must be delivered, and we must be creative in modifying it. We can find the example by ourselves or we can borrow it from other lecturers or university." (Lecturer 7, 5th October 2021)

"I rarely use a variety of teaching and learning media, mostly only textbooks or worksheets. I usually explain the material in front of the class while writing on the board." (Lecturer 8, 5th October 2021)

"We have to be creative in presenting the materials, it is not easy but I am sure that I can do that. The important one is by keeping our students' motivation to study and being creative." (Lecturer 6, 5th October 2021)

Based on the interview results above, we can conclude that optimizing, modifying, and being creative in using the existing teaching and learning media might be the best strategies that lecturers have to optimize their teaching and learning activities at university. In line with this, as mentioned before the term optimization in teaching relates to how lecturer develop their creativity in the classroom by continually reviewing and fostering his/her personal ability in teaching (Weinstein & Palmer, 2002; Zyskovsky & Zyskovsky, 2011; Gurung and Schwartz, 2014). The lecturers have implemented a way how to optimize their teaching process, especially with the limitation of teaching and learning media at university.

Lecturers' Beliefs and Expectations in the Use of Teaching and Learning Media at University

Based on the challenges and strategies that have been stated above, further, lecturers also have their own beliefs and expectation related to the use of teaching and learning media. Lecturers believe that the use of teaching and learning media will certainly help them in conducting classroom activities. However, because of the limitations, they believe that their

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effort, hard work, and creativity can also engage the student's attention to the materials and make them master them. This statement was supported by the interview result below.

"The use of teaching and learning media such as technology is important for the progress of students so that it is not outdated." (Lecturer 7, 5th October 2021)

"Teaching and learning media help the lecturer to deliver the material, the lecturer does not have to write on the board and so on, it can be directly displayed through the projector, the lecturer just explains and the students just ask. Then, the assignments are already carried out by the students, the lecturer is just waiting and evaluating them." (Lecturer 8, 5th October 2021)

"Teaching and learning media must be very helpful for lecturers in conducting teaching and learning activities in class. However, I am sure that the lecturer is the most important medium who can help students achieve their learning." (Lecturer 6, 5th October 2021)

From the interview result, we can see that lecturers believe that the use of teaching and learning media can help them in conducting classroom activities effectively. They also believe that the lecturers themselves are the most important teaching and learning media at school. In line with this, Shu (2014) stated that the good use of teaching and learning media teaching is beneficial to optimizing the learning and teaching process. Moreover, everything is done by a computer, blackboard, or chalk no matter what, as long as it deals with the subject, questions, texts, vocabulary, and sentences, is also called teaching and learning media that can help lecturers to optimize teaching and learning process (Jiang, 2001).

Additionally, lecturers also expect that universities and the government can increase the availability of teaching and learning media. Therefore, their students can compete better with other students from other universities even with the limitations of teaching and learning media. Below are some interview results related to lecturers' expectations.

"I expect that the availability of teaching and learning can be increased by the university and government because we do have the same purpose with other universities to make students successful." (Lecturer 8, 5th October 2021)

"Maybe my expectation is similar to other lecturers, I hope that the government can increase the availability of teaching and learning media in this university." (Lecturer 9, 5th October 2021)

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"I want the availability of teaching and learning media in this university to be improved. Because, even though this university is located in a suburban area, we also have great potential lecturers and students." (Lecturer 10, 5th October 2021)

We can conclude that all lecturer's expectations deal with the availability of teaching and learning media is they expect that the stakeholders and also the government can comprehensively distribute the teaching and learning materials to every university from the city to the suburban area. However, they still believe that their effort and responsibility to their students can help their students survive in this rapid change in the world.

4) CONCLUSION

This research study has examined the optimization of teaching and learning media at a suburban area university with its challenges and lecturers' strategies. The data gained in this study clearly show that the challenges faced by lecturers are the availability of teaching and learning media and the financial problem. However, they have some strategies for how optimize the existing teaching and learning media at their university by modifying the teaching and learning media, being creative in delivering and providing the materials, and motivating their students to develop their engagement in learning.

Furthermore, it was also found that the lecturers believe that the use of teaching and learning media can help them conduct an effective class, however, their effort, hard work, and responsibility in teaching can also make their students engage and master the materials better. Lecturers also expect that the university and government can help them increase the availability of teaching and learning media at their university.

Finally, three major recommendations are intended for lecturers, stakeholders, and future studies. First, lecturers, have to be able to optimize the use of the existing teaching media, they have to be creative to conduct the class even though the teaching and learning media is unavailable. Second, the stakeholders, as the lecturer expect that the stakeholders and also the government have to be aware of the universities, especially universities located in suburban areas to help the university supply the appropriate teaching and learning media. The last for future research, it is expected that they can conduct research involving larger sites and participants so that the result can be generalized to all parties.

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