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Student's Evaluation on the Use of Learning Media During Pandemic

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Abstract

This research aims to find out student assessments of the learning media used during the Covid-19 pandemic. We tested several learning media used, first is the WhatsApp group, zoom, and Learning Management System (LMS) used by campus. Descriptive statistic from 616 people (24.28% were male), we found that the use of text-based synchronus learning media was more desirable than the use of existing video or LMS. Positive ratings are mainly on the frequent use, effectiveness, flexibility, speed, and cheap. However, in terms of interactive abilities, clarity of information, and fun media, google meet combination with zoom better than other media trough synchrous audio-video communcation. In other hand, Campus's LMS were lowest on mostly dimentions that used in this research.

Keywords: LMS, effectiveness, pandemic

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1. Introduction

The Covid pandemic has shifted various lines of life to online platforms. One of the things that has also changed is the learning process, which is generally carried out offline face-to-face, has shifted to using a learning management system (LMS). Learning management system is a portal that connects learners and teachers by easily providing materials or online activities (Adzharuddin, 2013). LMS in its process involves an internet network to assist the learning process for students. LMS offers high functionality in personal communication, group communication, uploading content, evaluation, and giving instructions (Naveh, Tubin, & Pliskin, 2012). The use of an LMS also allows for an interactive learning process and provides feedback as soon as possible. However, in the learning process using LMS, it does not always provide benefits and has several weaknesses.

The drawbacks of this method are that it is not user friendly, has various limitations, the difficulty of integration, even for developing countries, the uneven access of the internet hinders the implementation of the LMS itself (Cavus, 2013). So in the process,

there is a need for cooperation between educational institutions, teachers and learners to respond to this situation well. Educational institutions prepare user-friendly LMS, teachers prepare teaching and evaluation methods that are still interesting, while from the learner's point of view, it is certainly expected to be able to seriously carry out the existing learning process.

But in reality, the overload on the LMS application used by the campus by collaborating with outsiders is in fact a problem itself when one campus carries out online learning simultaneously. LMS testing in the previous period was not prepared for full online implementation, or even some campuses started implementing LMS sometime before the pandemic. Maybe only a few institutions are ready because they based their learning process through the tutorial method from the start, one of which is the Open University. From the teaching side, the radical shift from face-to-face (offline) to being completely online presents its own challenges. Making material that students can understand, making evaluation methods that remain fun, and making sure that everything is understandable are some examples of challenges that must be faced by teachers. This does not include the constraints of the unequal ability to use information technology among teachers. For young teachers, of course, the use of LMS is not a problem, but the opposite must be faced by senior teachers who have to catch up in implementing information technology in their learning process. From the learner side, the composition of students who come from various regions certainly presents its own challenges. The diversity of student origins is related to the uneven availability of broadband networks in Indonesia. The uneven availability of the broadband network causes students to risk their lives just to be able to attend lectures ("Kuliah Daring, Mahasiswa di Luwu Harus Panjat Pohon dan Naik Gunung," 2020). Even students have to die for trying to take part in online classes held by lecturers ("Seorang Mahasiswi Tewas Saat Cari Sinyal Internet untuk Kuliah Online," 2020). In addition to the network problem the facility for online learning also become a problem ("Cerita Mahasiswa NTT Kesulitan Ikuti Kuliah Online, Terpaksa Pinjam Ponsel Tetangga," 2020).

In response to this, the use of learning media in the student lecture process should be selected selectively by the teacher. The use of various learning media certainly provides many positive and negative sides of each media used. The learning communication process for students is generally influenced by two things, namely the type of media and the time of interaction. The types of media used in the learning process are divided into two categories, namely audio-video and text-based. Meanwhile, the interaction time is divided into two categories, namely the interaction time which is divided into

two types, namely direct or indirect. The four things are combined in a quadrant, namely direct audio-video, indirect audio-video, direct text, and indirect text.

In the preliminary research conducted, the use of direct audio-video usually uses the form of a teleconference utilizing the facilities directly from the LMS used (google meet in the LMS google classroom) or separately (Zoom). The indirect use of audio-video usually uses recordings delivered by the lecturer which can then be seen by students at any time. The use of recordings can take advantage of the facilities of the presentation application

The assessments carried out so far have only been oriented towards the achievement of learners, but not based on how students assess the LMS it self. Some of the indicators used as benchmarks for the success of LMS are the clarity of instructions and the assessment process carried out by the teacher (Kim & Lee, 2008), the effective use of funds in the technology sector and the benefits felt by learners (Liaw, 2008). So that from this, learners have their own assessment related to the LMS used in their lecture process. (Naveh et al., 2012) reviewed that LMS played an important role in learner satisfaction, reducing costs, and reducing the number of students dropping out of lectures. So, by observing this phenomenon, the researcher wants to observe the effectiveness of each method and learning media used from the student's point of view. The results of this study certainly open new discussions about the most effective and enjoyable learning media for students, so that the learning objectives can later be understood by students.

2. Literature Review

LMS is more widely used for the learning process in supporting the blended learning model (Dias & Diniz, 2014). In general, the function of LMS is to deliver learning media, communication channels between students or lecturers and students, evaluation of learning, delivery of instructions, and productivity functions, namely uploading and downloading assignments (Clark, 2002; Kasim & Khalid, 2016). However, due to the Covid-19 pandemic, the learning process that was previously carried out in person or blended learning must completely transform into an online learning process. So the use of LMS in the learning process and shifting towards blended learning needs to be questioned for its effectiveness and satisfaction in the learning process that already exists in the college environment.

Several studies have tried to find out several factors that influence satisfaction with LMS use. From an intra-personal point of view, self-efficacy, emphasis on self-regulated

learning, low IT knowledge by students, and student characteristics contribute to satisfaction with the use of LMS (Dias & Diniz, 2014; Liaw, 2008; Liaw & Huang, 2007). Second, from an intra-personal point of view, the possibility of collaborative activities between fellow students, the speed of lecturers both in the communication process and providing feedback can affect student satisfaction (Adzharuddin, 2013; Kasim & Khalid, 2016; Liaw & Huang, 2007; Naveh et al., 2012) The quality of learning content that is less interactive, the course material that is not uploaded, the completeness of the content, and the use of media instruction are able to make students dissatisfied with the learning they get. Finally, the technology used as an LMS by institutions also affects the satisfaction of using LMS. LMS quality, lacking features, ease of navigation, and facilitation of the use of LMS by institutions also determine this (Adzharuddin, 2013; Liaw, 2008; Naveh et al., 2012). However, the various LMSs used, from paid to free ones, have their own positive and negative sides. So in this research I will conduct research on student preferences for the media / LMS used in the learning process that occurred during the Covid-19 pandemic.

3. Methodology

This research is a descriptive study to determine learning media and student assessments related to the LMS media used during the pandemic. The data in this study were taken using purposive sampling method with the criteria as active students and they use LMS in the learning process during the last semester. From these criteria, the researchers found 626 people filled out a questionnaire distributed by the researcher with the number of respondents 71.4% women, 24.28% men, and 4.31 choose not to answer. From 626 respondents, the researcher filtered the multiple data of respondents and respondents who were not willing to participate in this study. The final result of the remaining respondents is 616 people.

4. Instrument

In the first part, researchers conducted a preliminary test to obtain the media / LMS that were most often used in the learning process during this pandemic. Researchers used an open questionnaire given to 20 people to get an LMS that was often used in the lecture process and an assessment of what was considered important in using LMS, as well as a comparison between online lectures using LMS and offline. From the results of this study, researchers found google meet, zoom, whatsapp group, and LMS developed by

the campus. While the components of the assessment are effectiveness, inconvenient, fun, interactive, flexibility, clarity, speed, convenience, and cheap. The indicators are formed into a Likert scale with a score of 1 (strongly disagree) to 4 (strongly agree).

5. Analysis Results

From the results of this analysis, it shows that WhatsApp group is considered better in supporting the online learning process compared to other media, especially it is considered the cheapest (83.77%) and the most frequently used (73.7%). Meanwhile, Google Meet is considered better in almost all aspects after whatsapp group. Meanwhile, the media that was considered the most troublesome was the zoom application (44.16%). However, from the results above, it can also be seen that in general students are generally not satisfied with the campus LMS because they get low ratings in all aspects.
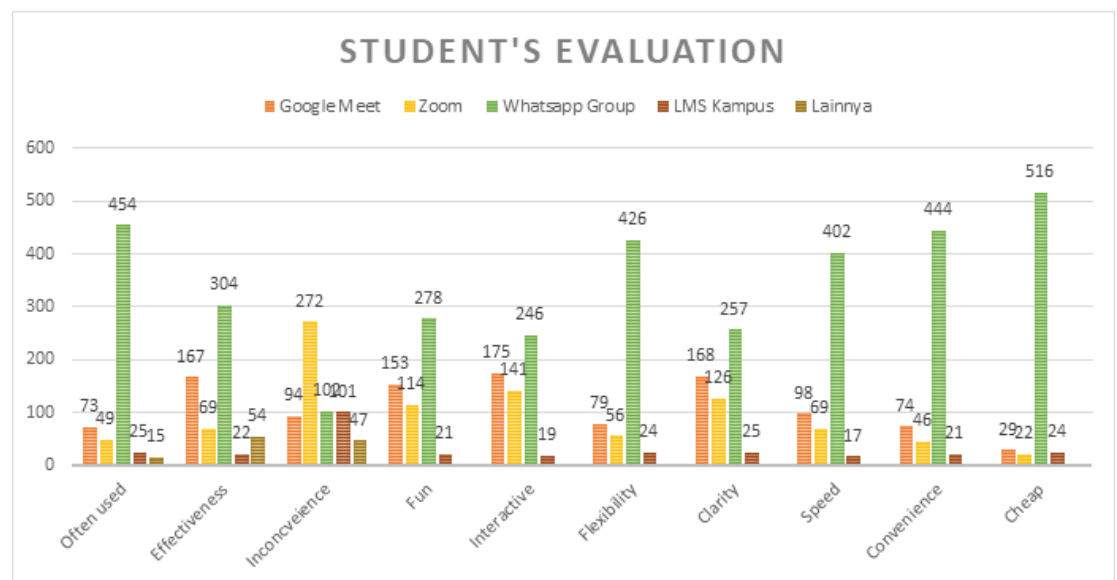

Figure 1: Student Evaluation Graphic

In addition, the results show that the use of text-based learning media gets a higher rating, but if video-based media, especially google meet and zoom are combined, the value is close to whatsapp group as a real-time text-based learning media.

This is consistent with the postulate regarding media richness theory (Trevino, Lengel, & Daft, 1987). Media richness theory explains that the richer a media is, the more it affects the effectiveness of the communication itself (Lan & Sie, 2010). The media richness theory explains that there are 4 determinants of this theory (Conradie, Moller, & Faleni, 2014). The first is the ability to provide immediate feedback (content timeliness). The

second is the ability to convey different perspectives (content richness), delivery in the right language (content accuracy), and the last is the ability of the existing medium to focus on certain individuals (content adaptability).

TABLE 1: Percentage of Media Evaluation

Criteria	Google Meet	Zoom	Whatsapp Group	University LMS	Others
Often Used	11,85	7,95	73,70	4,06	2,44
Effectiveness	27,11	11,20	49,35	3,57	8,77
Inconvenience	15,26	44,16	16,56	16,40	7,63
Fun	24,84	18,51	45,13	3,41	8,12
Interactive	28,41	22,89	39,94	3,08	5,68
Flexibility	12,82	9,09	69,16	3,90	5,03
Clarity	27,27	20,45	41,72	4,06	6,49
Speed	15,91	11,20	65,26	2,76	4,87
Convenience	12,01	7,47	72,08	3,41	5,03
Cheap	4,71	3,57	83,77	3,90	4,06

Whatsapp group has the ability to provide immediate feedback because it can be done through each student's cell phone. Unlike the LMS owned by the campus, giving feedback is sometimes not detected by students because no notification has been sent to their email. Second, the ability to convey different perspectives shows the teacher's ability to manage the class to remain focused, conducive, and active. Inviting students to express their opinions is still possible through the WhatsApp group, but of course direct discussion using video will certainly be better. This in my opinion also provides an explanation for why the video-based learning process, even though it is expensive, not cheap, inflexible, and also not fast because it may be limitted by uneven networks, is still considered an effective, fun, interactive media for students. The third component is that the use of appropriate language can be fulfilled through WhatsApp groups or synchronous audio-video based media because the ability of WhatsApp to be connected via a laptop enables the teacher to explain in detail what is meant in a problem discussed with students. This of course also applies to video-based synchronous media, because if difficulties arise, the lecturer is able to explain in more detail the problem. Finally, the ability to focus on individuals, whatsapp certainly benefits, because in whatsapp the teacher is able to specifically provide answers to individuals in particular, either directly in groups or through personal interactions between lecturers and students. Of course, the same condition will be difficult if in an audio-video-based synchronous learning setting.

6. Feedback and Suggestions

This research involved students from several campuses, so it was different from previous studies which definitely examined in-depth one LMS used in learning at certain institutions. Furthermore, this research is a preliminary study regarding the use of LMS compared to other media. From the analysis, it is found that the use of LMS is relatively very low compared to the media used during the direct Whatsapp Group-based learning process and synchronous audio-video, so further research is needed on why the implementation of LMS on campuses is still relatively low.

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