

# The Utilization of Information Technology-Based Media in Educational Administration Magister's Program

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## Abstract

Technology will be one of the determining factors of the quality of teaching learning process in the present, especially in higher education. This research aims to describe the use of information technology-based media in the magister program of education administration, faculty of teacher and educational. The research method used is a descriptive survey. The population is 163 students of the magister program of education administration with a sample of 116 people. Based on the results of the study it is known that the description of utilization of media based on information technology in the magister program of education administration is in the category very well with indicators filled including hardware, software and network. Advice to lecturers who use information technology-based media in the learning process should continue to strive to develop their skills and always seek new insights on the latest information technology-based media.

**Keywords:** Learning Media, Information Technology, Higher Education

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## I. INTRODUCTION

The media is important today. Media is a means of delivering information from the message sender to the message recipient (Livingstone, 2004), (Liu & Pratt, 2009), (Arnold, , Back, Barnato, Prendergast, Emlet, Karpov, & Nelson, 2015), ( Gutmann, Kühbeck, Berberat, Fischer, Engelhardt, & Sarikas, 2015). In the learning process, the delivery of messages from the teacher as the sender of messages to students as message recipients must go through the right media because if there is a misperception or one in receiving the message, it will have an impact on the information received (Barnes & Todd, 1977), (McMahan, Moore, Ramage, Hampson, & Arcas, 2017), Information technology-based learning media is an effective means of delivering information (Arnold, Back, Barnato, Prendergast, Emlet, Karpov, & Nelson, 2015).

During the Covid19 pandemic, which caused the learning process to not be carried out face-to-face, online-based media became the main choice (Putra, Liriwati, Tahrir, Syafrudin, & Aslan, 2020. ) The educational administration Magister program, the faculty of teacher training and education, University of Bengkulu strives to maintain the quality of the learning process even though it is via online means. The problem that arises is that the provision of facilities from institutions must be accompanied by support from other resources.

The media referred to here is the use of hardware including computers that are good for online learning. Some lecturers still do not understand the use of computers and other technology-based facilities. The online learning process from home slightly hampers the learning process due to the limited skills of lecturers in mastering various kinds of online

learning support applications. Apart from the aspect of mastery of hardware and software,

limitations also arise from the network. Internet networks are often disrupted due to bad weather or other disturbances. The study program has provided wifi access that can be accessed by lecturers and students freely but sometimes it is often hampered too.

The educational administration magister's program, faculty of teacher training and education, university of Bengkulu is one of the longest-established study programs, with various potential resources in it. However, the problem is the condition of the Covid19 epidemic which makes online learning the center of the learning process, while lecturers have limited mastery of online-based media, they are forced to adapt to this condition in a relatively short time so that the learning process is not hampered. This makes researchers interested in researching how to use information technology-based media in the educational administration magister's study program, faculty of teacher training, and education.

The problem to be examined in this research is "how to use information technology-based media in the educational administration magister's program " and the purpose of this study is to describe the use of information technology-based media in the master program of educational administration, the faculty of teacher training and education science.

the researcher's expectation of this study is useful for the management of educational administration magister's program to find out how lecturers in the educational administration Magister's program utilize information technology-based media. Also, this research has expected to be useful for lecturers in the educational administration magister program and other study programs to determine the impact of the use and utilization of information technology-based media if it is associated with the quality of learning..

## II. METHODS

The method used is descriptive quantitative. This method aims to describe the respondent's numbers. Total respondents will be interpreted in the form of explanations based on empirical conditions that arise in the field.

NO	Keterangan	Class	Population	Sample
1.	Class 2019/2020 (Semester 2)	Of A	20 Student	14 Student
2.	Class 2019/2020 (Semester 2)	Of B	20 Student	14 Student
3.	Class 2019/2020 (Semester 3)	Of A	10 Student	7 Student
4.	Class 2019/2020 (Semester 3)	Of B	37 student	26 student
5.	Class Genap 2018/2019 (Semester 4)	Of A	51 student	36 student
6.	Class Genap 2018/2019 (Semester 4)	Of B	25 student	18 student
7.	<b>Total</b>		<b>163 student</b>	<b>115 student</b>

The study population was active students in the educational administration magister program, the faculty of teacher training and education with the following descriptions:

### Population and Sample Table

From the tabulation above, it is known that the number of research samples is 115 students from semester 2, semester 3, and semester 4. Data collection using a questionnaire with closed questions using a Likert scale (5 scales). The categories proposed include strongly disagree (1), disagree (2), doubt (3), agree (4), and strongly agree (5).

The analysis technique uses the average score analysis which is then consulted on the following table of characteristics:

No.	Mean Score	Criteria
1	1,00 – 1,80	Not good / Very low

2	1,81 – 2,60	Not good / Low
3	2,61 – 3,40	Fair
4	3,41 – 4,20	Good/High
5	4,21 – 5,00	Very good / Very high

Source : Sugiyono (2011)

### III. RESULTS AND DISCUSSION

#### A. Result

Utilization of Information Technology-based media measured in three dimensions, namely hardware, software, and network. Operationalized using 12 statement items. The following describes the average score of respondents' answers to each of the indicators proposed in each dimension.

Table 2 Average Respons

Responden	Dimensi	Rata-Rata	Kategori
<b>2<sup>nd</sup> Semester</b>	<i>Hardware</i>	4,56	Very Good
	<i>Software</i>	4,44	Very Good
	<i>Network</i>	4,49	Very Good
<b>Total Respon 2<sup>nd</sup> Semester</b>		<b>4,49</b>	Very Good
<b>3<sup>rd</sup> Semester</b>	<i>Hardware</i>	4,77	Very Good
	<i>Software</i>	4,65	Very Good
	<i>Network</i>	4,61	Very Good
<b>Total Respon 3<sup>rd</sup> Semester</b>		<b>4,67</b>	Very Good
<b>4<sup>th</sup> Semester</b>	<i>Hardware</i>	4,57	Very Good
	<i>Software</i>	4,53	Very Good
	<i>Network</i>	4,48	Very Good
<b>Total Respon 4<sup>th</sup> Semester</b>		<b>4,53</b>	Very Good
<b>Total Respondent</b>	<i>Hardware</i>	4,63	Very Good
	<i>Software</i>	4,54	Very Good

<i>Network</i>	4,53	Very Good
<b>Total Reponds</b>	<b>4,57</b>	Very Good

Based on the average table of respondents' responses compared to the classification table (Sugiyono, 2011), it is known that the responses of semester 2, semester 3, and semester 4 student respondents are in the very good category. This is because the dimensions of hardware, software, and network have been fulfilled properly.

#### B. Discussion

Based on the research results, it can be explained that the hardware dimension which includes hardware knowledge and hardware utilization is in the very good category. Lecturers are considered to have very good insight into hardware such as computers, in-focus, and other supporting media. Lecturer knowledge of learning support hardware is a basic requirement because it is a means of delivering communication to students when the learning process takes place. When March to the July University of Bengkulu implemented an online learning process for all faculties to reduce the spread of the Covid19 outbreak, lecturers were forced to learn various learning support media, especially computers. Computers or laptops as learning media are nothing new for lecturers at the University of Bengkulu, especially in the master program of educational administration, the faculty of teacher training and education science. However, its use is only limited to displaying PowerPoint applications or Microsoft word applications.

When the online learning process is implemented, lecturers are required not only to master offline-based hardware or software but also various kinds of online-based applications. When the knowledge of hardware devices and tools in the form of software is mastered, the next step is to know and be able to use the network. Internet network is a basic requirement in the present. The internet network is a medium that must be used in the online learning process. In their book, Bates and Bates (2005) argue that "whoever can use

and utilize online-based media will be able to adapt to the changing world"

Internet facilities in the Educational Administration Magister Program are very good so that they can be used by lecturers in the learning process. However, when the work from the home process was implemented, lecturers were required to go online using their private internet network. The knowledge and insight of the lecturers regarding private internet networks which was initially assumed to be still lacking, according to the respondents' responses, was already in the very good category. This means that lecturers' knowledge and use of internet networks can support the learning process.

Apart from having knowledge and being able to utilize hardware, software, and internet networks, lecturers are also required to be able to choose the right online learning media. As it is known, there are many online-based learning media, but not all of them are suitable for the learning process being carried out. The selection of appropriate online-based learning media will support the quality of learning being carried out (Ramdhani and Muhammadiyah, 2015).

#### IV. CONCLUSION/RECOMENDATION

Based on the research results, it can be concluded that the use of information technology-based media in the educational administration magister program is in the very good category

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