An Evaluation of Students’ Readiness to Use E-learning Media in the MBKM Program

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Abstract
This study aimed to prepare the readiness of students to use E-learning media in the MBKM (Freedom to Learn – Independent Campus) program at the Faculty of Science, Technology, and Education. This was evaluation research with a quantitative research approach and descriptive method. The data collection technique used lecturer and student questionnaires based on the CIPP evaluation model (context, input, process, product). The samples were 98 students. The results indicated that in terms of readiness and understanding of E-learning-based learning management, the lecturers were included in the high category with a percentage of 87.78%. The score obtained by students based on the understanding of E-learning-based learning was included in the high category with a percentage of 82.16%. The results of the questionnaire showed that the E-learning-based learning activities were carried out well (structured, according to schedule, and coordinated).

Keywords: E-learning, CIPP evaluation model, MBKM.
INTRODUCTION

Minister of Education and Culture (Mendikbud) of the Republic of Indonesia, Nadiem Anwar Makarim, on the independence of learning. "Giving freedom and autonomy to educational institutions, and independence from bureaucratization, students are freed from complicated bureaucracy and students are given the freedom to choose the fields they like,” said the Minister of Education and Culture.

The Independent Learning Program-Independent Campus is a program launched by the Minister of Education and Culture, whose goal is to encourage students to master a variety of sciences in order to better prepare them for the workforce. Kampus Merdeka allows students to choose the courses they will pursue as a result of this policy. Students can take courses outside of their study program at the same university, courses in the same study program at different universities, courses in different study programs at different universities, and learn outside of Higher Education (Amalia, 2021).

Several things must be prepared for the study program (Prodi). (a) compiling or adapting the curriculum to the implementation model of an independent campus, (b) assisting students who will participate in cross-study learning at higher education institutions, and (c) providing courses for students to take. alternative courses are prepared online if some courses/credits have not been fulfilled from learning activities outside the study program and outside the university, (d) conduct the equivalence of courses with learning activities outside the study program and the PT and its requirements, (e) if some courses/credits have not been fulfilled from learning activities outside the study program and outside the university, alternative courses are prepared online. Students must (a) work with their academic supervisor to select courses/programs that will be taken outside of their study program, and (b) register for those courses/programs (Sudaryanto et al., 2020).

The use of E-Learning in the teaching and learning process is supposed to assist students in carrying out learning. E-Learning media facilitates the process of exchanging ideas, sharing information, and discussing specific topics online (Jimola & Ofodu, 2021; Palau et al., 2021). E-Learning is a set of technologies that can be used to enhance the value of traditional learning (conventional learning models, textbook studies, CD-ROMs, and computer-based training) in order to meet the problems of globalization. (Pudyastuti & Budiningssih, 2021).

The development of the E-Learning System facility needs to be ensured so that its usefulness is not wasted. Investment in E-Learning System facilities is not cheap, of course, it requires very large funds so institutional leaders must be able to ensure that the investment is utilized as much as possible. Adequate information technology in higher education will be able to support the success of a learning process. The success of students in the learning process can be reflected in the way students provide material through E-Learning. The seriousness and readiness of students in using the E-Learning system in dealing with MBKM is a success factor in learning and the student methods used will also be an achievement. The capacity of students varies significantly depending on the type of content and how it is given. The more information and delivery technologies are aligned with learning styles, the greater the student's capacity, and hence the better the results (Lilis & Iswara, Ulfah Setia Retnani, 2020).


In recent years, information technology has advanced at such a rapid pace that it has altered society's paradigm for seeking and acquiring information, which is no longer restricted to newspapers, audiovisual, and electronic media, but also includes other available sources of information. One of them is connected to the Internet (Furkan et al., 2021; Ritonga et al., 2022; Zhao et al., 2020). The field of education, for example, has had a significant impact on the development of this technology, where education is defined as a process of communication and information from educators to students that contain educational information and includes elements such as educators as sources of information, media as a means of presenting ideas, ideas, and
educational materials, and students themselves (Ewing & Cooper, 2021; Hardini et al., 2021; Wulandari et al., 2021)

The COVID-19 epidemic, which drove the education world to embrace an online learning model that needs high-tech literacy, has divided the education world into groups that are ready and not ready, both technologically and pedagogically (Bokayev et al., 2021; Delcker & Ifenthaler, 2021)

Several previous studies related to e-learning were carried out by Aziz et al., 2019, as well as study findings, E-Learning enables a complex learning process to take place regardless of distance or the number of people that participate in it. With the continued integration of traditional and online classrooms, e-learning becomes more productive. Izzudin et al., 2021 The score acquired by the teacher based on the comprehension and management of e-learning-based learning was included in the high category with a percentage of 87.78 percent, according to the results of the research. With an 82.16 percent score, students' grasp of e-learning-based learning falls into the strong category. Amalia, 2021 & Hidayatullah, 2021 conducted the following study on the process of implementing MB-KM. According to the study's findings, the problem faced several challenges, including what challenges occurred in legal education during the pandemic, as well as what efforts were made to overcome the challenges faced by legal education during the pandemic in increasing the role of education so that there was a positive outcome.

In supporting the implementation of E-Learning-based learning, all students or lecturers already have smartphones, laptops, and a stable internet network (Khairani et al., 2021). However, the obstacles in the e-learning learning process are signals that are sometimes unstable, the limitations of student communication with lecturers, and the most troubling thing are the uncertainty of whether students can accept the material being taught and do the tasks given by the teacher or not. (Zakiyyah et al., 2021).

What sets this study apart from others is that its goal is to assess students' readiness to use e-learning media in the MB-KM program at the Faculty of Science, Technology, and Education. The purpose of this study is to determine whether colleges are ready to integrate technology into their curriculum and learning on campus.

METHOD

This research is evaluation research. This study uses a quantitative approach. This approach is used to collect questionnaire data distributed to a predetermined number of samples. The method used in this research is descriptive. The research instrument in this study was in the form of a student readiness evaluation questionnaire for the use of E-Learning for students.

The grids and questionnaires of this study were adapted to research conducted by (Ahmadi, 2011).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Sub Indicator</th>
<th>Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>Context</td>
<td>IT-based learning environment and culture</td>
<td>Have computer equipment or gadgets to access the e-learning</td>
<td>1,2</td>
</tr>
<tr>
<td>Input</td>
<td>Student competence toward information technology in learning</td>
<td>Able to operate the computer and other supporting equipment</td>
<td>7,8,16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Can run applications on the internet</td>
<td>3,4,5,12</td>
</tr>
<tr>
<td></td>
<td>Understanding of e-learning</td>
<td>Understanding e-learning based learning</td>
<td>11,14,15</td>
</tr>
<tr>
<td>Process</td>
<td>Student ability</td>
<td>Ability to use e-Learning</td>
<td>6,17,21</td>
</tr>
<tr>
<td>Product</td>
<td>The level of students' understanding of e-learning-based learning</td>
<td>Mastery of the material for the better</td>
<td>9,10,13,18,19,20</td>
</tr>
</tbody>
</table>

Data analysis was performed using the ideal mean, ideal standard deviation, categorical distribution, mean, and level of achievement formula.
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1. Ideal Mean
   \[ M_i = \frac{(\text{highest score} + \text{lowest score})}{2} \]

2. Ideal Standard Deviation
   \[ SD_i = \frac{(\text{highest score} - \text{lowest score})}{6} \]

3. Distribution of category
   - High: \( M_i + SD < x \)
   - Middle: \( M_i + SD < x \leq M_i + SD_i \)
   - Low: \( x \leq M_i - SD \)

4. Mean
   \[ M = \frac{\text{total score of all respondents}}{\text{total respondents}} \]

5. Achievement level formula
   \[ M = \frac{\text{total score of all respondents}}{\text{total score ideal}} \]

After that, the calculations are carried out and the next stage is the quantitative descriptive analysis by providing an overview of the evaluation of the readiness of FSTP students for the use of e-learning.

RESULT AND DISCUSSION

Description of Evaluation of student readiness for the use of e-learning

1. Context aspect

The ability of the students referred to in this study is the aspect related to the learning environment and IT-based culture, and the context aspect for the students referred to in this study is the aspect related to the ability of the students referred to in this study is the aspect related to the learning environment and IT-based culture. The following are the findings of the examination of FSTP students’ readiness to use e-learning in terms of context:

- Highest ideal score: 20
- Lowest ideal score: 5
- Ideal mean: 13
- Ideal Standard Deviation: 2

The ideal mean and ideal standard deviation are then entered into the interval formula to define the category of student score ranges in terms of context features in the implementation of e-learning based learning.

<table>
<thead>
<tr>
<th>Interval</th>
<th>Category</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>( 15 &lt; x )</td>
<td>High</td>
<td>53</td>
<td>0.80</td>
</tr>
<tr>
<td>( 6 &lt; x \leq 15 )</td>
<td>Middle</td>
<td>41</td>
<td>0.31</td>
</tr>
<tr>
<td>( x \leq 6 )</td>
<td>Low</td>
<td>4</td>
<td>0.03</td>
</tr>
<tr>
<td>Count</td>
<td></td>
<td>98</td>
<td></td>
</tr>
</tbody>
</table>

Based on the calculation, the highest score was 19 and the lowest score was 7. The average (mean) obtained was 16.14 with a percentage of 80%. With an average of 14.77, it can be concluded that the context aspect for students is included in the high category. So that the ability of students to plan and create e-learning-based learning materials is good because students already have computer equipment or gadgets to access e-
learning. However, the limitation in this aspect is that it is necessary to improve the IT-based learning environment and culture so that in the future it can follow the process of technological development.

2. Input aspect

Aspects of input for students alluded to in this study are aspects connected to students’ knowledge of e-learning and their skill with information technology in learning. The following are the results of the input parts of the analysis of student implementation of e-learning-based learning:

- Highest ideal score: 20
- Lowest ideal score: 5
- Ideal mean: 14.5
- Ideal standard deviation: 1.17

To define the category of student score ranges in the implementation of e-learning-based learning in terms of input characteristics, the ideal mean, and ideal standard deviation are entered into the interval formula.

Table 3

<table>
<thead>
<tr>
<th>Interval</th>
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<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>15&lt; x</td>
<td>High</td>
<td>62</td>
<td>0.80</td>
</tr>
<tr>
<td>6&lt; x ≤ 15</td>
<td>Middle</td>
<td>33</td>
<td>0.33</td>
</tr>
<tr>
<td>x ≤ 6</td>
<td>Low</td>
<td>3</td>
<td>0.03</td>
</tr>
<tr>
<td>Count</td>
<td></td>
<td>98</td>
<td></td>
</tr>
</tbody>
</table>

Based on the calculation, the highest score was 18 and the lowest score was 11. The average (mean) obtained was 15.92 with a percentage of 85%. With a score of 15.92, it’s safe to say that the input aspect for pupils falls into the strong category. Competencies to support the implementation of e-learning-based learning such as mastery of information technology owned by students are good because students can already operate computers and other supporting equipment, can run applications on the internet, and understand e-learning-based learning. However, students still do not fully understand how to use e-learning media to access and collect assignments by lecturers, which is a limitation in this area.

3. Process aspect

Aspects of the process for students referred to in this study are aspects related to how to prepare students to utilize/cultivate a learning culture based on e-learning as well as about student skills. The following are the findings of an investigation of student application of e-learning-based learning in terms of process factors:

- Highest ideal score: 20
- Lowest ideal score: 5
- Ideal mean: 13.5
- Ideal standard deviation: 2.17

The ideal mean and ideal standard deviation are then entered into the interval formula to define the category of student score ranges in terms of process elements in the implementation of e-learning-based learning.

Table 4

<table>
<thead>
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<th>Interval</th>
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</thead>
<tbody>
<tr>
<td>15&lt; x</td>
<td>High</td>
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<td>0.80</td>
</tr>
<tr>
<td>6&lt; x ≤ 15</td>
<td>Middle</td>
<td>41</td>
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</tr>
<tr>
<td>x ≤ 6</td>
<td>Low</td>
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<tr>
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<td>98</td>
<td></td>
</tr>
</tbody>
</table>
Based on the calculation, the highest score was 20 and the lowest score was 7. The average (mean) obtained was 13.91 with a percentage of 85%. With a score of 13.91, it's safe to say that the process aspect for students falls into the high category. Competencies to support the implementation of e-learning-based learning such as the ability to use e-Learning. However, the limitation in this aspect is that students still do not understand the process or how to discuss in an online forum, thereby reducing the effectiveness of using e-learning media so that in the future it is necessary to make procedures or procedures for discussion in online forums.

4. **Product aspect**

In this study, product aspects for students refer to aspects connected to students' knowledge of e-learning-based learning. The analysis of FSTP students' readiness to use e-learning in terms of product is presented following:

- Highest ideal score: 20
- Lowest ideal score: 5
- Ideal mean: 15
- Ideal Standard Deviation: 1,17

Then the ideal mean and ideal standard deviation are entered into the interval formula to determine the category of student score ranges in the implementation of e-learning-based learning in terms of product aspects.

<table>
<thead>
<tr>
<th>Interval</th>
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</tr>
<tr>
<td><strong>Count</strong></td>
<td></td>
<td><strong>98</strong></td>
<td></td>
</tr>
</tbody>
</table>

Based on the calculation, the highest score was 20 and the lowest score was 10. The average (mean) obtained was 14.42 with a percentage of 75%. With an average of 14.42, it can be concluded that the product aspect for students is included in the high category. The level of understanding of students towards e-learning-based learning and mastery of the material is getting better. However, the limitation in this aspect is that there are still a small number of students who are not familiar with the use of e-learning it can hinder the learning process, therefore further education is needed for the use of e-learning.

**CONCLUSION**

The overall rating of e-learning-based learning is in the high category, with a score of 80%. Every feature is also included in the high category, with the following percentages: context aspect by 80%, input aspect by 85%, process aspect by 80%, and product aspect by 75%. This shows that students' readiness and understanding of e-learning-based learning is good. Although the results of the evaluation of student readiness for the use of e-learning-based media at the Faculty of Science Technology and Education are in the high category, there are obstacles experienced by students, namely unstable internet networks and concerns about student understanding in understanding student explanations, student understanding in the use of e-learning and others.

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