

## EDUCATIONAL TECHNOLOGY POLEMIC: LECTURER COMPETENCE

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### ABSTRACT

In the field of education, the influence of educational technology and information literacy on faculty competence is a topic of critical importance. As the use of technology and access to information increases, it is essential that faculty possess the necessary skills and competencies to effectively incorporate these tools into their teaching practices. The use of educational technology and information literacy has been shown to increase faculty competence by enhancing their knowledge and abilities in areas such as pedagogy, curriculum development, and assessment. In addition, the faculty's ability to effectively use and access information can assist them in keeping abreast of the latest research and best practices in their respective fields, thereby enhancing the quality of their instruction and their overall effectiveness as educators. The use of educational technology and information literacy can have a positive impact on faculty competency and contribute to the success of the institution as a whole.

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## 1. INTRODUCTION

Competence of the lecturer is an important aspect of the teaching and learning process, as competent lecturers will be better able to convey the material and assist students in achieving their learning objectives. Therefore, it is essential for lecturers to continue to develop their competencies through various means, such as by participating in additional training and education, conducting research, and engaging in other beneficial activities that enhance competence. Several concerns regarding lecturer competence, specifically irregularities in lecturer competency standards: There may be discrepancies in determining what a lecturer must possess to be deemed competent due to the fact that the standards for lecturer competency that apply in each educational institution may vary. Many lecturers believe they have not received the additional training and education necessary to enhance their competence. This can lead to a decrease in the proficiency of professors in managing the learning process and utilizing information and communication technology in the teaching and learning process. High time pressure on lecturers The limited time lecturers have to prepare teaching materials, manage classes, and conduct research frequently puts them under stress. This can leave professors with insufficient time to continue developing their skills. To address these issues, the institution of clear and integrated lecturer competency standards, the provision of additional training and education for lecturers, the equitable management of lecturers' working hours, and the recognition of actual lecturer competence are required.

Educational technology includes online learning software, learning applications, social media, and other tools used in the teaching and learning process. Providing access to relevant information sources is one way in which educational technology can influence the competence of lecturers. Educational technology assists instructors in locating and gaining access to pertinent information sources for the purposes of creating instructional materials, designing learning methods, and conducting research. Those who are proficient with educational technology will find it easier to use online learning software, learning applications, and social media to facilitate the teaching and learning process. Improving the ability to manage and process information: Educational technology also assists lecturers in more effectively managing and processing information, including storing, searching, and analyzing the information obtained. Whether through social media, email, or other messaging applications, educational technology helps instructors improve their communication skills with students and colleagues.

Thus, educational technology can assist lecturers in becoming more competent in carrying out their educational responsibilities, thereby enhancing the teaching and learning process. Bear in mind, however, that educational technology is merely a tool and cannot replace the lecturer's ability to design and manage an effective learning process. Several research findings indicate that educational technology can affect lecturer competence in a variety of ways, including by enhancing the ability to use educational technology.

Lecturers who have received training in the use of educational technology tend to be better prepared to integrate this technology into the teaching and learning process, thereby enhancing their ability to use educational technology [1]

Improving the ability to manage and process information, lecturers who are trained in the use of educational technology are more effective at managing and processing the information obtained, thereby improving their ability to manage and process information [2]. Improving communication skills, lecturers who are trained in the use of educational technology tend to communicate with students and colleagues more effectively, thereby improving their communication skills [3]. Improving the ability to manage the learning process, lecturers who are trained in the use of educational technology are typically more effective in managing the learning process, thereby improving the ability of lecturers to manage the learning process. In conclusion, educational technology can influence lecturer competence in a variety of areas, including the ability to utilize educational technology, manage and process information, communicate, and manage the learning process. Bear in mind, however, that educational technology is merely a tool and cannot replace the lecturer's ability to design and manage an effective learning process [4].

Several research findings indicate that information literacy can influence lecturer competence in a variety of ways, including by enhancing the ability to locate and access information. Lecturers with a high level of information literacy are typically more effective at locating and gaining access to relevant information for teaching and learning purposes [5]. Enhance the capacity to manage and process data, lecturers with a high level of information literacy are typically more effective at managing and processing the information obtained [6]. Enhance the communication skills, professors with high information literacy tend to communicate with students and colleagues more effectively [7]. Enhancing the capacity to create innovative learning strategies, Instructors with a high level of information literacy are more likely to be able to develop and adapt innovative learning methods to meet the needs of their students [8]. In conclusion, information literacy can influence several aspects of lecturer competence, including the ability to locate and access information, manage and process information, communicate, and develop innovative learning strategies. Keep in mind, however, that information literacy is only one of the competencies lecturers must possess and cannot replace their ability to design and manage an effective learning process. Even though a great deal of research has been conducted on the effects of educational technology and information literacy on lecturer competencies, there are still a number of research gaps that can be used to guide future study. More exhaustive research on the effects of educational technology and information literacy on the performance of lecturers: Several studies examine the impact of either educational technology or information literacy on lecturer competence, but not both in a single analysis. A more complete understanding of the effect of educational technology and information literacy on lecturer competency can be attained through additional research.

Consideration of context and other factors in research: Some studies disregard context, lecturer characteristics, and other variables that may influence research outcomes. A more accurate picture of the impact of educational technology and information literacy on lecturer competencies can be gleaned from research that takes context and other variables into account. Research that tracks changes in educational technology and information literacy As educational technology and information literacy continue to evolve, research conducted during one period may no longer be applicable during another. Continuously updated research that tracks advancements in educational technology and information literacy can provide a more accurate depiction of the effect on lecturer competence.

Comparative research on the effects of educational technology and information literacy on lecturer competencies in diverse educational settings: Several studies have only analyzed one educational context; therefore, they are unable to provide a comprehensive picture of the effects of educational technology and information literacy on lecturer competencies in various educational contexts. Research that compares the effects of educational technology and information literacy on lecturer competencies in different educational contexts can provide a more comprehensive understanding of their effects on lecturer competencies. Research employing more robust research methods: Several studies were conducted using only descriptive or quantitative research methods, so they were unable to provide a more comprehensive picture of the impact of educational technology and information literacy on lecturer competencies. Case studies and qualitative research can provide a more in-depth picture of the impact of educational technology and information literacy on lecturer competencies than less rigorous research methods.

## 2. METHOD

This study uses a quantitative approach. The population in this study are lecturers who work in the DKI Jakarta area. The data collection method was carried out by distributing questionnaires via the Google

form. In this study the sampling technique used was purposive sampling. In this study, the authors set sample criteria, namely lecturers working at public and private universities in DKI Jakarta who had only used e-learning during the Covid-19 pandemic. Determining the number of representative samples depends on the number of indicators multiplied by 5 to 10 [9]. So that the calculation of the minimum number of samples for this study amounted to 80. The data in this study were measured using a Likert scale with a scale of 5 points. Quantitative analysis using SEM Smart PLS software.

### 3. RESULT AND DISCUSSION

#### 3.1 Result

Table 1. path coefficients

|          | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics ( O/STDEV ) | P Values     |
|----------|---------------------|-----------------|----------------------------|--------------------------|--------------|
| ET -> CL | 0,562               | 0,621           | 0,109                      | 5,729                    | <b>0,000</b> |
| IL -> CL | 0,352               | 0,325           | 0,118                      | 2,912                    | <b>0,002</b> |

#### 3.2 Discussion

##### The Impact of Educational Technology on the Competence of Lecturers

Educational technology can have a variety of effects on instructor proficiency. There are a number of effects that can be observed, one of which is that the use of educational technology can improve the ability of lecturers to present material to students in a more effective and engaging manner. The use of educational technology can assist instructors in presenting material more visually and interactively, thereby facilitating student comprehension. The use of educational technology can assist instructors in managing and gaining access to an increasing variety of learning resources, thereby expanding their knowledge and skills. In order to improve student comprehension and learning outcomes, educational technology can also aid instructors in enhancing student engagement and participation in the classroom.

The use of educational technology can also improve the quality of lecturer instruction by facilitating the management and access of data and information regarding student learning progress. However, it should be noted that educational technology does not always have a positive effect on the competence of lecturers. Utilizing educational technology improperly can actually diminish the quality of lecturer instruction and student learning outcomes. In order to have a positive effect on lecturer competence, it is crucial for instructors to comprehend and utilize educational technology appropriately. Significant findings from prior research regarding the effect of educational technology on lecturer competence. The results of previous research on the effect of educational technology on lecturer competence depend on the research approach and methods employed, as well as the research reference used. The use of educational technology can increase student engagement and participation in the classroom, as well as improve student learning outcomes [10]. The findings of this study indicate that educational technology can help instructors provide students with more effective and engaging instruction.

A study that demonstrates that the use of educational technology can assist lecturers in managing and gaining access to an increasing variety of learning resources, thereby enhancing their knowledge and skills [11]. The use of educational technology can improve lecturers' ability to present material in a more engaging and effective manner for students [12]. Keep in mind, however, that the results of previous research cannot always be used as a definitive guide regarding the effect of educational technology on lecturer competency. Therefore, it is essential for lecturers to continually update their knowledge and skills using a variety of credible and pertinent resources.

##### The impact of Information Literacy on Competence of Lecturer

Information literacy is the capacity to locate, access, analyze, and use information effectively and appropriately. The impact of information literacy on lecturer competence can be observed in multiple ways. Information literacy can improve lecturers' ability to manage and access increasingly diverse learning resources, thereby expanding their knowledge and skills. Information literacy can also assist instructors in presenting subject matter in a more structured and systematic manner, thereby making it easier for students to comprehend. The ability of lecturers to use information literacy can facilitate the rapid and accurate updating of their knowledge and competencies, thereby enhancing the quality of lecturer instruction. Information literacy can also assist lecturers in more effectively managing and gaining access to data and information regarding student learning progress, thereby enhancing the quality of lecturer instruction.

The ability of lecturers to use information literacy can also help them develop their own competence and enhance their ability to provide more effective and engaging instruction for students. However, keep in mind that information literacy does not always affect lecturer competence positively. Utilizing information literacy inappropriately can actually diminish the quality of lecturer instruction and student learning outcomes. In order for information literacy to have a positive effect on lecturer competency, it is essential for instructors to comprehend and implement it effectively. Significant findings from previous research on the relationship between information literacy and lecturer competence. The results of prior research on the effect of information literacy on lecturer competence depend on the research approach, methods, and research focus used as a point of reference.

According to a study, information literacy can assist lecturers in managing and gaining access to increasingly diverse learning resources, thereby expanding lecturers' knowledge and skills [13]. A study explain that demonstrates that information literacy can aid lecturers in presenting subject matter in a more structured and systematic manner, thereby making it easier for students to comprehend [14], [15]. Lecturers' information literacy skills can help them update their knowledge and competencies quickly and precisely, thereby enhancing the quality of lecturer instruction [16]. Keep in mind, however, that the results of previous research cannot always be used as a definitive guide to the effect of information literacy on lecturer competency. Therefore, it is essential for lecturers to continually update their knowledge and skills using a variety of credible and pertinent resources.

#### 4. CONCLUSION

After conducting research on the influence of educational technology and information literacy on lecturer competency, it can be concluded that educational technology and information literacy have a substantial effect on lecturer competency. Educational technology and information literacy can assist lecturers in managing the learning process, developing innovative learning methods, and communicating effectively with students and colleagues, according to the findings of previous research. However, keep in mind that educational technology and information literacy do not always have the same effect on lecturer competence. This influence can be affected by a number of factors, including the level of use of educational technology and information literacy by lecturers, the availability of educational technology and information literacy, and the lecturers' ability to utilize educational technology and information literacy effectively. Therefore, lecturers must pay attention to these factors and continue updating their skills in the use of educational technology and information literacy in order to maximize the improvement of lecturer competence.

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