TRANSFORMING EDUCATION IN THE 5.0 ERA: A CASE STUDY ON THE DIGITAL READINESS OF ENGLISH LECTURERS AT POLYTECHNICS

By:

Ferri Hidayad[1], Ridayani[2], M. Bambang Purwanto[3], Evi Agustinasari[4]

Universitas PGRI Palembang[1], InstitutTeknologi dan Bisnis Muhammadiyah Polewali Mandar[2], Politeknik Prasetiya Mandiri Bogor[3], Politeknik Negeri Sriwijaya Palembang[4]

ferri6591@gmail.com[1], ridayani@itmpolman.ac.id[2], mbambangpurwanto@gmail.com[3], eviagustinasari@polsri.ac.id[4]

Abstract: This study evaluated the readiness of English lecturers at the Darussalam Polytechnic to face the transformation of digital learning in the 5.0 era. Using a retrospective case study approach, this study identified the factors that affect lecturers' readiness and the challenges they face in adopting digital technology in teaching. Data were collected through in-depth interviews and observations, which were analyzed using descriptive and thematic analysis techniques. The study results showed that English lecturers at the Darussalam Polytechnic have a positive attitude towards digital learning and show an increase in technological literacy due to the COVID-19 pandemic. However, the limitations of technological infrastructure and the need for continuous training remained significant challenges. This study concluded that lecturers' readiness to face digital transformation was quite significant, but it still needed to be improved through infrastructure improvement, continuous training, and institutional support. The results of this research are expected to contribute to the development of educational policies and teaching practices at the Darussalam Polytechnic and other higher education institutions in Indonesia.

Keywords: digital transformation, English learning, English lecturer

INTRODUCTION

Digital technology has developed rapidly in recent decades, transforming various aspects of human life, including Education.

Purwanto et al. (2020) explain that the 5.0 era, which is characterized by the integration of advanced technologies such as artificial intelligence (AI), big data, and the

Internet of Things (IoT), presents new challenges and opportunities for higher Education. This digital transformation focuses on using technology in the teaching and learning process (Nasar et al., 2024) and on developing an adaptive, inclusive, and sustainable education ecosystem (Purwanto et al., 2023).

Higher education institutions worldwide are faced with the demand to adopt digital technologies to improve the quality of Education and prepare graduates to face global challenges. (Putriani & Hudaidah, 2021). In Indonesia, the Darussalam Polytechnic, one of the vocational higher education institutions, also feels this pressure. Lecturers, as the front line in the education process, have a crucial role in ensuring the success of this transformation. Therefore, Trstenjak et al. (2022) explained that the readiness of lecturers to face these changes is a critical factor in determining the effectiveness and sustainability of digital transformation in the institution.

English lecturers have a unique role in supporting digital transformation. As a global language, English is a bridge for access to the latest information and technology. The ability of English lecturers to integrate digital technology in teaching improves students' language competence and opens up access to a broader range of global resources. (Dito & Pujiastuti, 2021). However, lecturers must have adequate digital literacy, a positive attitude towards technology, and the ability to develop innovative and exciting learning content.

Dito and Pujiastuti (2021) claim that online learning is the leading solution to maintaining educational continuity amid social restrictions. This pandemic has encouraged lecturers to adapt quickly to digital teaching methods at the Darussalam Polytechnic. The experience during this pandemic provides valuable insights into the readiness of lecturers and the challenges they face in implementing digital learning (Dito & Pujiastuti, 2021; Rosmayati & Maulana, 2021; Slamet et al., 2021).

This study aimed to evaluate the readiness of English lecturers at the Darussalam Polytechnic to face the transformation of digital learning in the 5.0 era.

METHODOLOGY

This study used a retrospective case study design to assess the readiness of English lecturers at the Darussalam Polytechnic. This design was chosen to understand the lecturer's experience and perception of digital learning.

This research uses a qualitative method with a literature review approach, which involves collecting and analyzing relevant literature to underlie the research. The literature review includes previous studies on digital learning, lecturer readiness, and educational transformation in the digital era. Data collection was carried out through several interview and observation methods. To complete the data, observations were conducted on lecturers' digital teaching practices. Interviews were conducted with several lecturers to gain deeper insights into their experiences in facing digital transformation.

The results of the data analysis are interpreted to answer research questions and test the hypothesis that has been formulated. The study's findings are explained in detail, including the identification of factors that support or hinder lecturers' readiness to face digital learning transformation. Based on the research's results, conclusions are drawn. This research also produces practical recommendations to improve lecturers' readiness to face digital learning and proposals for further research in the future.

The final stage is preparing a research report covering the entire research process and findings. This report is prepared in a format that is by academic standards and submitted to relevant parties at the Darussalam Polytechnic.

RESULTS AND DISCUSSION

Technology Literacy

In the digital era of 5.0, technological literacy is very important for English lecturers. Hargreaves (1994) explained that with the transformation of learning that increasingly relies on digital technology, lecturers must master various technological skills to ensure teaching effectiveness. Technology literacy allows lecturers to develop digital learning materials using digital tools, manage online classes, use digital evaluation tools, and interact with students (Swarastuti et al., 2024; Kabri et al., 2024).

From the results of the interview with the English Lecturer, he explained.

> *In using digital technology in teaching activities, I use Learning Management Systems (LMS) platforms such as Google Classroom or Moodle to organize*

assignments, manage discussions, and monitor student progress.
Source: Mr. PB interview results (May 2024).

The results of the interview above show that the use of technology literacy by English lecturers at the Darussalam Polytechnic has gone well, even though there are still shortcomings in the implementation in the field.

Provide institutional support through policies that encourage the use of technology in learning and provide incentives for lecturers participating in professional development programs. (Hussin et al., 2012; Jamalai & Krish, 2021).

Digital Content Development

Loughran and Berry (2005) explain that in the context of English lecturers, digital content development means preparing materials used to teach English more interestingly and effectively through technology.

The findings obtained in English learning activities at Darussalam Polytechnic show that only 50% of lecturers feel comfortable developing digital learning content.
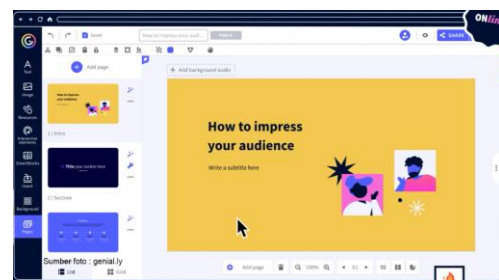

Figure 1. Online Content Learning in English Learning.

This shows that there are still many lecturers who need help and training in this field. Lecturers who have developed digital content tend to focus on learning videos, interactive modules, and multimedia presentations. Some also use podcasts and blogs as part of their teaching materials.
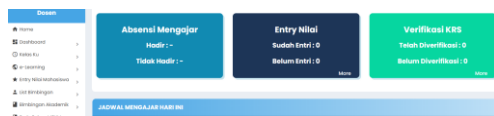
Figure 2. LMS Lecturer in Teaching

Digital content development has become very important in the digital era 5.0, especially with the increasing use of technology in Education. From the analysis above, it is concluded that digital content development is an essential aspect of the readiness of English lecturers to face digital learning transformation in the 5.0 era. Despite several challenges, such as time constraints, lack of skills, and inadequate infrastructure, Darussalam Polytechnic's lecturers firmly commit to improving the quality of teaching through digital content. With the proper support from the institution, through training, infrastructure improvements, and the provision of incentives, lecturers can be more effective in developing digital content that is engaging and beneficial to students. This, in turn, will improve the quality of Education and prepare students for success in the digital age.

Lecture Perception and Attitude towards Digital Learning

Lecturers' perceptions and attitudes towards digital learning are crucial in determining how effectively technology can be integrated into teaching. A positive attitude and a good perception of digital learning can encourage lecturers to be more active in using technology. (Yang & Lin, 2015), developing digital content (Kessler, 2018), and adopting innovative teaching methods (Hoopingarner, 2009). Conversely, negative attitudes or poor perceptions can hinder technology adoption and reduce learning effectiveness. (Lo et al., 2013).

The results of the interview with the English Lecturer explained:

> *In today's digital literacy challenges, lecturers feel they need more training to improve their digital skills. This shows that despite the positive attitude, there is still a need to support lecturers with adequate training.*

Source: Results of the interview with Mr. RI (May 2024).

Then, the Head of the Language Institute of the Darussalam Polytechnic gave a response;

> *Limited technological infrastructure on campus, such as unstable internet connections and a lack of hardware, is a significant barrier to digital learning. Students need help finding time to develop digital materials amid teaching and administration demands.*

Source: Results of Mr. ZR's interview (May 2024).

From the interview results above, it is known that the lecturer admitted that digital learning can increase student involvement, making them more active in the learning process despite various obstacles in the implementation process. Lecturers show a strong desire to innovate in teaching by utilizing digital technology. Technology can make learning more exciting and interactive. This is because digital technology allows lecturers to provide teaching materials more flexibly. (Kessler, 2018), allowing students to learn anytime and anywhere.

Based on the research findings, there are several strategies to improve perceptions and attitudes toward digital learning, such as organizing training and workshops that focus on using technology in teaching, digital content development, and applying effective digital learning methods. Institutions need to provide vital support through policies that encourage the use of technology in learning and provide incentives for lecturers who actively participate in digital development programs. (Alex.,

2019; Ali, 2020), and encourage collaboration and sharing between lecturers to share experiences, resources, and best practices in digital learning (Nasar et al., 2023; Novia et al., 2024).

From the explanation of the above findings, it can be concluded that the perception and attitude of English lecturers at Darussalam Polytechnic towards digital learning is generally positive, with recognition of the benefits of technology in increasing student engagement and teaching flexibility (Adams, 2006; Rosell-Aguilar, 2015).

The Impact of the COVID-19 Pandemic

The results of interviews with several staff and lecturers, information was obtained;

> *95% of lecturers had to adapt to online learning immediately during the pandemic. They are forced to use digital technology in*

a short period, which requires them to improve their technological literacy quickly.
Source: Results of Mr. VD's interview (May 2024).

From the explanation of the interview results above, the pandemic encourages lecturers to master more digital tools that may have been less familiar before. The blended learning method is commonly used. During the pandemic, lecturers developed blended learning methods (Graham, 2006; Sharma, 2010; Singh, 2021), which combine face-to-face and online learning (Moskal et al., 2013). This provides greater flexibility for students and lecturers (Graham et al., 2013). Student evaluations also shifted to digital formats, using tools such as online quizzes, project-based assignments, and online exams (Donmus, 2010; Nasir & Neger, 2022; Yudiawan, 2020).

COVID-19, which is present in Indonesia, has changed the face of the education system. As the paradigm changes in Education, digital learning has become a regular part of the education system. (Widayanti, 2014; Yazdi, 2012), and many institutions, including the Darussalam Polytechnic, are likely to continue to use blended learning methods to improve the flexibility and accessibility of Education. The pandemic emphasized the importance of technology in Education and prompted institutions to invest more in technology infrastructure and training for lecturers and students. (Harapan, 2019; Indrawati et al., 2020; Primayana, 2020).

From the overall explanation above, the COVID-19 Pandemic has significantly impacted the readiness of English lecturers at the Darussalam Polytechnic to face the transformation of digital learning. Despite facing challenges such as limited infrastructure and increasing workloads, lecturers have improved their digital skills and found new ways to teach effectively. (Bambang & Agustin, 2022; Bambang, 2017; Hidayad et al., 2023).

CONCLUSION

This study concludes that English lecturers at the Darussalam Polytechnic show significant readiness to face digital learning transformation in the 5.0 era. Lecturers at the Darussalam Polytechnic generally have a positive attitude and perception towards digital learning. They recognize the benefits of technology in improving student engagement and teaching flexibility. The COVID-19 pandemic

catalyzes increasing technological literacy among lecturers. Most lecturers show a willingness to learn and adapt to new digital tools, although there is a need for further training. Although challenges must be overcome, such as limited infrastructure and training needs, a positive attitude and increased technological literacy among lecturers shows excellent potential for success in adopting digital technology. With the proper support from the institution, lecturers can continue to develop their skills and provide a better and more innovative learning experience for students in the future.

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