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Lecturer Resistance To The Development Of Digital Technology In Learning In The Modern Education Era.

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Abstract. *This study examines lecturers' resistance to the development of digital technology in learning in the era of modern education. The purpose of the study was to identify barriers to explore factors that contribute to higher education resistance to the integration of digital technology in higher education. This method used a mixed methods approach , utilizing a survey to assess lecturers' attitudes toward digital technology and interviews to provide deeper insights into personal experiences and perceived barriers. Data were analyzed using thematic analysis to identify common themes and patterns related to resistance with faculty members from various disciplines across institutions. The innovation in this study lies in a holistic approach that integrates faculty perspectives and institutional policies. And professional development and training on modern learning theories and the application of digital technologies in education. The results of this study underscore the need for tailored support and training initiatives to improve skills and confidence in the use of digital technologies so as to address specific issues and barriers identified by faculty by integrating technology into teaching towards effectiveness and can improve student learning experiences in this increasingly digital era.*

Keywords: *Lecturer resistance, Digital technology, Modern learning.*

1. INTRODUCTION

The rapid development of digital technology has fundamentally changed various sectors, including education. In the context of modern education, which is characterized by the integration of digital tools and platforms, it is increasingly clear that the role of faculty is crucial in shaping the effectiveness of these innovations. However, despite the potential benefits of digital technology in enhance the learning experience, a significant phenomenon has emerged: faculty resistance to the development and implementation of these technologies in educational contexts. This resistance is not simply a matter of personal preference or individual skepticism; rather, it reflects a complex relationship between pedagogical philosophy, institutional policies, and the broader socio-cultural context. where education operates.

The integration of digital technologies in education has become a critical focus in modern education, especially in the context of higher education. As institutions seek to prepare students for an increasingly digital world, the adoption of innovative teaching methods and technological tools has become critical. However, despite the recognized potential of digital technologies to improve learning outcomes and educational effectiveness, many faculty members demonstrate resistance to their adoption. This study examines the underlying factors that contribute to this resistance, exploring the barriers that prevent faculty from fully

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embracing digital technologies in their teaching practices. Using a mixed methods approach, this study aims to provide a comprehensive understanding of faculty attitudes toward digital technologies and the institutional dynamics that influence these attitudes.

The modern era of education, characterized by rapid technological advancements, presents both opportunities and challenges for educators. The proliferation of online learning platforms, digital resources, and interactive tools has transformed the way knowledge is disseminated and acquired. According to the Educause Horizon Report (2019), technology integration in higher education is not just an improvement, but a necessity for creating meaningful learning experiences in the 21st century. However, the transition to a technology-enabled educational environment is often met with skepticism and resistance from faculty members, who may feel unprepared, overwhelmed, or unsure about the effectiveness of these tools in their teaching practices (Bennett & Maton, 2019).

Research suggests that faculty resistance to digital technologies can stem from a variety of sources, including lack of technical skills, inadequate institutional support, and entrenched pedagogical beliefs (Dahlstrom et al., 2020). For example, some faculty members may prioritize traditional teaching methods that they perceive as more effective or believe that digital tools detract from the quality of education. Additionally, institutional policies and professional development programs may not align with faculty needs and preferences, further exacerbating the gap between technology adoption and pedagogical practices (Harris & Hofer, 2020). Faculty resistance to the development of digital technologies in instruction is multifaceted, encompassing subthemes such as pedagogical beliefs, technology literacy, institutional support, and digital equity implications. Each of these dimensions contributes to a deeper understanding of why some faculty members may be hesitant or even resistant to adopting digital tools in their instructional practices. As we explore this topic, it is important to consider the implications of this resistance for the future of education, especially as we continue to witness the proliferation of digital technologies in learning environments.

Pedagogical Beliefs and Teaching Philosophy

A major factor influencing faculty resistance to digital technologies is the educators' deep-seated pedagogical beliefs. Many faculty members have developed teaching philosophies that emphasize traditional instructional methods, such as lectures, face-to-face interactions, and hands-on activities. For these educators, the adoption of digital technologies may feel at odds with established pedagogical practices. Research suggests that faculty who are committed to constructivist teaching methods—which emphasize active learning and student engagement—

may be more open to integrating technology into their classrooms (Davis & Tearle, 2019). In contrast, those who adhere to more traditional, teacher-focused approaches may view digital tools as a threat to their authority and teaching effectiveness.

The alignment between faculty beliefs and perceptions about the effectiveness of digital technologies plays a significant role in shaping their attitudes toward these innovations. Faculty members who view technology as a valuable tool for improving learning outcomes are more likely to embrace its integration into their teaching practices (Bennett & Maton, 2019). In contrast, those who are skeptical of the educational value of digital technologies may resist their implementation, viewing them as unnecessary distractions rather than essential components of modern education.

Technology Skills and Digital Literacy

Another important aspect of faculty resistance to digital technology development is the varying levels of technological proficiency and digital literacy among educators. The rapid pace of technological advancement can leave some faculty members feeling overwhelmed or unprepared to integrate new tools into their teaching. Research shows that faculty who have limited experience or are less confident using digital technologies are less likely to adopt these tools in their instructional practice (Hew & Brush, 2020). This lack of proficiency can create a cycle of resistance, as faculty may avoid engaging with technology for fear of inadequacy or failure.

Digital literacy encompasses more than just technical skills; it includes the ability to critically evaluate and effectively utilize digital resources for pedagogical purposes. Faculty members who lack comprehensive digital literacy may struggle to identify technologies that are appropriate for their teaching goals, leading to frustration and resistance (Mishra & Koehler, 2020). Institutions must recognize the importance of providing ongoing professional development and support to enhance faculty members' technological competencies, thereby fostering more positive attitudes toward digital technology integration.

Institutional Support and Policy Framework

The role of institutional support and policy frameworks cannot be underestimated in the context of faculty resistance to digital technology development. Institutional culture, leadership, and resources significantly influence faculty members' willingness to adopt new technologies. Research has shown that faculty are more likely to adopt digital tools when they perceive strong institutional support, including access to training, resources, and collaborative

environments (Ertmer & Ottenbreit-Leftwich, 2020). Conversely, a lack of institutional commitment to technology integration can exacerbate resistance, as faculty may feel isolated or unsupported in their efforts to innovate.

Institutional policies regarding technology use can either facilitate or hinder faculty engagement with digital tools. Policies that promote experimentation and risk-taking in teaching practices can encourage faculty to explore new technologies without fear of negative consequences (Garrison & Anderson, 2019). On the other hand, rigid policies that prioritize compliance over innovation can stifle creativity and reinforce resistance among faculty members. Therefore, it is critical for educational institutions to create supportive environments that empower faculty to experiment with digital technologies while providing the resources and training necessary to succeed.

Digital Equality and Access Issues

As digital technologies become increasingly important in the educational experience, concerns about digital equity and access have emerged as significant factors influencing faculty resistance. The digital divide—differences in access to technology and the internet—poses challenges for both students and educators. Faculty members may be hesitant to integrate digital tools into their instruction if they feel that their students do not have equal access to the necessary resources (Warschauer, 2020). These concerns can lead to a reluctance to assign technology-based assignments or assessments, ultimately perpetuating inequities in learning opportunities.

Additionally, faculty resistance may stem from broader societal discussions questioning the role of technology in education. Some educators worry that over-reliance on digital tools could exacerbate existing inequities, particularly for marginalized student populations. This uncertainty may manifest as resistance to adopting technology in the classroom, as faculty may favor traditional methods that they believe are more accessible and equitable for all students (Selwyn, 2019). Addressing these concerns requires a comprehensive approach that emphasizes the importance of digital equity and inclusivity in technology integration efforts.

The significance of this study lies in its holistic approach to understanding faculty resistance. By integrating faculty perspectives with institutional policy analysis and professional development initiatives, this study aims to illuminate the complex interplay of individual attitudes and organizational factors that shape technology integration in higher education. Through surveys and interviews, this study will assess faculty attitudes toward digital technologies and identify common themes and patterns of resistance. These findings

will provide valuable insights into the specific challenges faculty face, as well as the support and training initiatives needed to increase their confidence and skills in using digital tools.

Furthermore, this study aims to contribute to broader technology integration in education by highlighting the importance of support and training initiatives tailored to the unique needs of faculty. As higher education institutions continue to navigate digital transformation, it is critical to create an environment that fosters innovation and encourages faculty to adopt new teaching methodologies. By addressing barriers to technology adoption and providing targeted professional development opportunities, institutions can increase faculty engagement and ultimately enhance the student learning experience.

In recent years, the COVID-19 pandemic has further emphasized the urgency of integrating digital technologies into higher education. The sudden shift to distance learning exposed significant gaps in faculty readiness and institutional support for technology use (Hodges et al., 2020). As institutions were forced to rapidly adopt online teaching methods, many faculty members struggled to adapt to the new environment, highlighting the critical need for ongoing professional development and institutional support (Meyer et al., 2021). Therefore, this study not only addresses pre-existing barriers to technology integration but also considers the implications of the pandemic on faculty attitudes and practices.

Thus, it can be concluded that faculty resistance to the development of digital technologies in learning is a complex issue that encompasses a variety of interrelated factors, including pedagogical beliefs, technological literacy, institutional support, and concerns around digital equity. As educational institutions continue to confront the challenges and opportunities presented by digital technologies, it is important to foster an environment that encourages faculty engagement and innovation. By addressing the underlying causes of resistance and providing the necessary resources and support, institutions can empower educators to embrace digital tools that enhance the teaching and learning experience. Ultimately, understanding and reducing faculty resistance to the development of digital technologies is key to the evolution of education in the modern era.

2. METHOD

The method used is a mixed method to investigate lecturers' resistance to the development of digital technology in learning in the context of modern education. This study describes the research design, participants, data collection methods, and data analysis strategies used to explore the complexities surrounding lecturers' attitudes towards the integration of

digital technology in educational environments. The random sampling method of a sample of 50 lecturers from various academic fields with a minimum response rate of 50%.

3. RESULTS AND DISCUSSION

Discussion

Lecturer resistance to technology refers to the attitude of refusing to adopt and integrate digital technology into the learning process. Many lecturers are trained in an educational system that prioritizes face-to-face methods and textbook-based learning. Conventional teaching methods are deeply rooted in academic culture, creating a sense of comfort and resistance to change. (González & García, 2022), but conventional teaching is a barrier to adopting new technologies (Kumar & Kaur, 2023).

Barriers to Digital Technology Integration

One of the major barriers identified in this study was the lack of adequate training and support for faculty. Many educators expressed feelings of inadequacy and anxiety regarding their ability to effectively use digital technologies in their teaching. This finding is consistent with existing literature, which suggests that inadequate training can lead to a lack of confidence among faculty, ultimately resulting in resistance to adopting new technologies (Rogers, E.M. 2020; Hew, K.F. & Brush, T. 2021; Oreg, S. & Nov, O. 2023). Interviews revealed that many faculty members desired more structured and ongoing professional development programs that not only introduced digital tools but also demonstrated their application in pedagogy. This highlights a critical gap in current faculty training initiatives, which often focus solely on the technical aspects of technology without addressing its pedagogical implications.

This study found that institutional policies play a significant role in shaping faculty attitudes toward digital technologies. Many educators reported feeling unsupported by their institutions, especially in terms of resources and incentives to integrate technology into the curriculum. This lack of institutional support can create an environment where faculty feel isolated in their efforts to innovate, leading to increased resistance. As Kirkpatrick, D. (2020) notes , institutional culture and support systems are critical in creating an environment that supports technology adoption. Therefore, higher education institutions must reevaluate their policies and create a more supportive framework that encourages faculty experimentation and innovation with digital tools.

Faculty Perspectives and Institutional Policies

This study also highlights the importance of understanding faculty perspectives in the context of institutional policies. Thematic analysis revealed that many faculty perceived a mismatch between their teaching philosophy and the institution's push for technology integration. Some faculty expressed concerns that the emphasis on technology might detract from the quality of education, leading to a perception of reduced academic rigor. These sentiments underscore the need for institutions to engage faculty in meaningful discussions about the role of technology in education, ensuring that technology is viewed as an enhancement, not a replacement, for traditional teaching methods.

Faculty resistance is often rooted in a lack of alignment between institutional goals and individual teaching practices. For successful integration of digital technologies, it is critical for institutions to foster a culture of collaboration and open dialogue among faculty (Sheninger, E. (2021)). By creating a platform for faculty to share experiences, challenges, and successes in technology integration, institutions can not only reduce feelings of isolation but also promote a sense of community and shared purpose. This collaborative approach can facilitate the exchange of best practices and innovative strategies, ultimately leading to a more cohesive and supportive environment for technology adoption.

Professional Development and Training

The crucial role of professional development initiatives and customized training in overcoming faculty resistance. Faculty members expressed a desire for training that is not only relevant to their specific discipline but also aligned with contemporary learning theories. This suggests that professional development programs must move beyond generic training sessions and instead focus on providing customized, discipline-specific support that addresses the unique challenges faced by faculty in various fields.

Training should cover both the technical skills needed to use digital tools and the pedagogical strategies needed for effective integration. Faculty are more likely to embrace technology when they understand how it can enhance their teaching and improve student learning outcomes. Therefore, professional development initiatives should integrate evidence-based practices that demonstrate the positive impact of technology on student engagement and achievement.

Implications for Higher Education Institutions

The implications of this research extend beyond faculty to encompass broader institutional strategies. Higher education institutions must recognize that successful integration of digital technologies requires a systemic approach that addresses the diverse needs of faculty. This includes providing adequate resources, fostering a culture of innovation, and ensuring that faculty voices are heard in decision-making processes related to technology adoption.

Additionally, institutions should consider implementing mentorship programs that pair experienced faculty who are proficient in using technology with those who are less confident. Such programs can facilitate peer learning and provide a supportive framework for faculty to explore and experiment with digital tools in a low-stakes environment. By leveraging the expertise of faculty who have successfully integrated technology, institutions can create a more inclusive and supportive atmosphere for all educators.

3. RESULTS

This section presents findings from a mixed-method study conducted to explore faculty resilience to digital technology integration in higher education. The results are organized into three main themes drawn from quantitative survey data and qualitative interviews: (1) Attitudes Toward Digital Technologies, (2) Barriers to Integration, and (3) Recommendations for Support and Training. Each theme is discussed in detail to illustrate the complexity of faculty resilience and the factors that influence their engagement with digital technologies in educational contexts.

Attitudes towards Digital Technologies

Survey data reveal a spectrum of attitudes among faculty members regarding the use of digital technologies in education. A total of 350 faculty members participated in the survey, with a response rate of 72%. The results indicate that while the majority of faculty (62%) recognize the potential benefits of digital technologies for enhancing teaching and learning, a significant minority (38%) express skepticism or outright resistance.

Positive Perspective

Among those who viewed digital technologies positively, common sentiments included the belief that technology can facilitate interactive learning, provide access to a variety of resources, and cater to a variety of learning styles. For example, one faculty member stated, “Digital tools allow me to engage students in ways that traditional methods cannot. They provide immediate feedback and encourage collaboration.” This perspective was particularly

prevalent among younger faculty and those in disciplines such as education, social sciences, and the arts, where innovative pedagogical approaches are often emphasized.

Skepticism and Rejection

In contrast, the survey highlighted significant skepticism among some faculty members, particularly those from traditional disciplines such as the humanities and natural sciences. As many as 45% of respondents in these fields expressed concerns about the effectiveness of digital technology in delivering content and fostering critical thinking skills. One faculty member expressed this resistance by saying, "I worry that relying too much on technology will diminish the depth of discussion and critical analysis that face-to-face interaction promotes."

Qualitative interviews further illuminate these attitudes, indicating that many faculty members feel unprepared to effectively integrate technology into their teaching. A common theme among interview respondents was a lack of confidence in their technical skills, which contributed to their hesitation to adopt digital tools. One interview respondent stated, "I feel like I'm being asked to use tools that I don't fully understand, and that makes me hesitant to change my teaching methods."

Barriers to Integration

The second theme that emerged from the analysis concerned the barriers that faculty face in integrating digital technologies into their teaching practices. These barriers were categorized into three main areas: institutional policies, professional development, and personal factors.

Institutional Policy

Survey responses indicated that institutional policies significantly influence faculty attitudes toward technology integration. Approximately 58% of faculty reported that their institutions lack clear guidelines or support for the effective use of digital technologies in education. Many expressed frustration with the lack of a coherent strategy for technology integration, which they believed hindered their ability to innovate in the classroom. One faculty member noted, "Without institutional support or clear guidelines, it's hard to know how to proceed with technology in my courses."

Additionally, faculty members indicated that bureaucratic hurdles and lack of resources often hinder their efforts to adopt new technologies. For example, 40% of respondents cited inadequate funding for technology purchases or upgrades as a significant barrier. This sentiment was also echoed in interviews, where faculty discussed challenges in gaining

institutional support for technology initiatives. One interview respondent stated, “I have ideas for integrating technology, but without financial support, those ideas remain just ideas.”

Professional Development

The analysis also revealed a critical gap in professional development opportunities related to digital technologies. While 70% of faculty acknowledged the importance of training, only 30% reported having access to relevant professional development programs. This lack of training was identified as a major barrier to effective technology integration. Interview respondents expressed a desire for more comprehensive and ongoing training tailored to their specific needs and teaching contexts. One faculty member emphasized, “I need training that is more than just the basics. I want to learn how to use technology effectively to enhance my specific courses, not just general workshops.”

Additionally, interviews highlighted the importance of mentorship in navigating technology integration. Faculty members expressed a preference for peer-led training sessions where they could learn from colleagues who had successfully integrated technology into their teaching. This peer support was seen as essential to building confidence and competence in using digital tools.

Personal Factors

Personal factors also emerged as significant contributors to resistance. Many faculty members reported feeling overwhelmed by the rapid pace of technological change and the pressure to keep up with new tools and platforms. This sentiment was particularly pronounced among senior faculty, who expressed concerns about their ability to adapt to an increasingly digital educational landscape. One senior faculty member stated, “I’ve been teaching for decades, and now I feel like I’m being asked to learn a new language. It’s scary.”

In addition, time constraints were frequently cited as a barrier to technology integration. Faculty members reported that the demands of research, teaching, and service left little room to explore new technologies. This was especially true for those at research-intensive institutions, where the pressure to publish often trumped the need for pedagogical innovation. One interviewee lamented, “I want to experiment with technology, but I just don’t have the time amidst my other responsibilities.”

Recommendations for Support and Training

The final theme derived from the data analysis focused on recommendations for addressing identified barriers and increasing faculty engagement with digital technologies. Faculty members identified several key strategies that could facilitate a more supportive environment for technology integration.

Customized Professional Development

A clear recommendation from both survey and interview respondents was the need for tailored professional development programs that address specific disciplinary contexts and teaching needs. Faculty emphasized the importance of workshops that offer hands-on training with tools relevant to their courses. One participant suggested, “We need workshops that are discipline-specific and focus on real-world applications of technology in our teaching.”

Institutional Support and Resources

Respondents also called for greater institutional support, including the development of clear policies and guidelines for technology integration. Faculty members expressed a desire for administrative support and resource allocation to support their efforts. One faculty member suggested, “Institutions should establish a dedicated fund for technology initiatives and provide clear pathways for faculty to access these resources.”

Peer Mentorship and Collaboration

Interviews highlighted the potential benefits of mentorship and peer collaboration in fostering a culture of innovation. Faculty members expressed interest in establishing a mentorship program that pairs experienced colleagues with those who want to integrate technology into their teaching. One interviewee stated, “Having a mentor who has successfully integrated technology would be invaluable for someone like me who is just starting out.”

Ongoing Support and Feedback

Finally, faculty emphasized the importance of ongoing support and feedback mechanisms. Regular check-ins and opportunities for faculty to share their experiences with technology integration can create a sense of community and collective growth. One faculty member suggested, “We should have a forum where we can discuss our challenges and successes with technology. It helps to know that we are not alone in this process.”

4. CONCLUSION

The findings from this study highlight the complexity of faculty resistance to the integration of digital technologies in higher education. Although many faculty members recognize the potential benefits of technology, significant barriers—ranging from policy

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