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Teachers' Professional Competence in Integrating Technology: A Case Study at English Teacher Forum in Majalengka

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ABSTRACT

This article presents a case study at the English Teacher Forum in Majalengka, focusing on improving teachers' professional competence in integrating technology into their teaching practices. The study addresses teachers' challenges in effectively incorporating technology and explores strategies to enhance their skills and abilities. The qualitative research methodology uses a case study approach using structured interview techniques and document analysis. The findings reveal that many teachers in the forum lack the confidence and skills to integrate technology effectively, hindering digital tools' educational potential. However, significant improvements were seen in the professional competence of English teachers, such as mastering teaching materials, being able to manage classes, being able to use media and learning resources, mastering educational foundations, being able to manage learning interactions, and being able to assess learning achievement for the benefit of learning through development programs professionalism, peer coaching, access to resources, and ongoing support. Students also demonstrated increased motivation and improved learning outcomes. The study highlights the importance of ongoing support and training for teachers and the need for technological infrastructure investment. The research findings and recommendations aim to guide educators and policymakers in promoting technology-integrated learning environments in Majalengka and similar contexts, ultimately enhancing student learning experiences and outcomes.

Keywords: Teachers' Professional Competence, Technology Integration, English Teachers Forum

INTRODUCTION

The rapid evolution of technology has significantly impacted various sectors, including education (Chester & Allenby, 2019). Educational institutions worldwide are leveraging technology to enhance teachers' and students' quality of teaching and learning experiences. According to Malvezzi (2020), Technology integration in education has become increasingly important as it offers numerous benefits, such as increased student engagement, improved collaboration, and the development of critical thinking and problem-solving skills. In addition, Goh & Abdul-Wahab, (2020), As the world continues to evolve with the rapid advancement of

technology, the education sector is not left out. In line with Waddell & Williamon (2019), the role of teachers extends beyond traditional classroom instruction to incorporating technology into teaching practices. Moreover, Han et al. (2019) This integration is vital to meet the digital generation's needs and prepare students for the future. However, this shift necessitates improving teachers' professional competence in technology integration.

However, effective technology integration in education depends on teachers' professional competence in utilizing digital tools and resources (Karsenti et al., 2020). Teachers in developing regions like Majalengka often face challenges integrating technology into their teaching practices. The English Teacher Forum in Majalengka comprises dedicated educators striving to enhance their pedagogical practices and share their experiences. However, many teachers in the forum struggle with effectively incorporating technology into their teaching, which hampers the potential benefits of digital learning for their students.

Several factors contribute to the limited competence of teachers in integrating technology in their classrooms. Taghizadeh & Hasani Yourdshahi (2020) These factors include inadequate training, lack of technological resources, limited peer support, and insufficient continuous professional development opportunities. Consequently, the students miss out on the benefits of technology-integrated learning, which may negatively impact their educational outcomes and future career prospects. Given the growing importance of technology in education and the challenges faced by the teachers in Majalengka, it is essential to explore strategies and interventions to enhance their professional competence in technology integration.

This article presents a case study conducted at the English Teacher Forum in Majalengka, focusing on strategies to enhance teachers' skills and abilities. Moreover, identify ways to improve teachers' professional competence in integrating technology into their teaching practices. Tai & Dzekoe (2015) this study investigates how an English teacher adopts what he learns in technology for literacy in his classroom; they conducted this Research regarding the competence of the teaching profession in integrating technology. Furthermore, by Yurdakul (2011), teachers are competent in preparing teaching materials, using and using technological tools, and assessing and evaluating activities. Şen & Yildiz (2022) This research contributes to raising awareness about the impact of teacher self-efficacy and professional development on technology integration. Furthermore, Rawlins & Kehrwald's (2014) this research is a case study of an integrated experiential approach to increasing teacher understanding and using educational technology in a teacher education program—research by Tuzahra, Sofendi, & Vianty (2021) shows that teachers must improve their skills and knowledge to utilize technology to support their pedagogical practices. Furthermore, Liang (2021) This study contributes to understanding teacher technology. By implementing effective strategies, the study hopes to provide insights that educators and policymakers can utilize to promote technology-integrated learning environments in Majalengka and similar contexts. The advent of digital technology has revolutionized teaching and learning processes globally. It has fostered student engagement, collaboration, creativity, and critical thinking (Miranda et al., 2021). However, teachers need to be competent in integrating technology into their pedagogy to achieve these benefits. This is a significant challenge for educators, particularly in Majalengka, where English teachers often struggle with integrating technology.

The English Teacher Forum in Majalengka is a community of educators dedicated to improving their teaching practices and sharing their experiences. Despite their commitment to growth and professional development, many teachers in the forum lack the skills and confidence to incorporate technology in their teaching effectively. This gap in competence creates a barrier to achieving the educational potential of digital technology.

Technology integration in education, specifically in English language teaching, has gained increasing attention recently. Numerous studies have explored the impact of technology on teaching and learning processes, as well as the role of teachers in effectively integrating

technology into their instructional practices. The literature reveals that technology integration goes beyond mere technical skills and requires teachers to possess the necessary pedagogical knowledge and skills to leverage technology effectively in their classrooms. Koehler and Mishra (2009) introduced the Technological Pedagogical Content Knowledge (TPACK) framework, emphasizing the importance of the intersection between technological knowledge, pedagogical knowledge, and content knowledge. This framework provides a comprehensive understanding of how teachers' professional competence in technology integration can be developed and enhanced.

Several studies have investigated the factors influencing teachers' professional competence in integrating technology. Kwon et al. (2019) found that teachers' beliefs, confidence, and attitudes toward technology significantly impact their technology integration practices. They highlighted the importance of self-efficacy and the need for targeted professional development programs to enhance teachers' technological competence. In the context of English language teaching, research has explored various technologies and their potential impact on language learning. Kabilan et al. (2010) examined the use of Facebook as an online environment for learning English, highlighting the affordances and challenges associated with this platform. Such studies demonstrate the wide range of digital tools and platforms for English language teachers to enhance their teaching practices.

Moreover, studies have identified barriers and challenges that hinder teachers' technology integration efforts. These include limited access to technology resources, inadequate professional development opportunities, time constraints, and lack of institutional support (Li et al., 2019; Ertmer et al., 2014). Addressing these challenges is crucial for effectively enhancing teachers' professional competence in integrating technology. However, while existing literature provides valuable insights into technology integration and teachers' professional competence, there is a scarcity of research explicitly focusing on the English Teacher Forum in Majalengka. This case study aims to fill this gap by investigating the current practices, challenges, and support mechanisms related to technology integration in the specific context of the English Teacher Forum in Majalengka.

By conducting this case study, we can better understand the factors influencing teachers' professional competence in integrating technology within this unique professional development setting. The findings will contribute to the existing literature by providing insights into the challenges and support mechanisms required to enhance technology integration practices among English language teachers in Majalengka. This research article aims to address the following research questions: (1) what are the current practices of English language teachers in integrating technology at the English Teacher Forum in Majalengka; (2) What challenges do teachers face in integrating technology into their teaching practices; and (3) what support mechanisms are available to teachers to enhance their professional competence in technology integration.

METHOD

This study employs a qualitative case study design to investigate teachers' professional competence in integrating technology within the English Teacher Forum in Majalengka. A case study approach allows for an in-depth examination of a specific context and provides rich insights into the phenomenon under investigation (Schoch, 2009). The participants in this study will be English language teachers who are members of the English teacher forum intermediate in Majalengka. Purposive sampling will select a diverse group of participants who represent various backgrounds, teaching experiences, and levels of technology integration competence. Approximately 10-15 participants will be selected to ensure data saturation and comprehensively explore the research questions.

Data will be collected through a combination of semi-structured interviews and document analysis. The semi-structured interviews will allow participants to share their experiences, practices, and perceptions of integrating technology. The interviews will be audio-recorded with participants' consent and transcribed verbatim for analysis. In addition to interviews, document analysis will be conducted to gather relevant documents, such as professional development materials, lesson plans, and technology integration guidelines provided by the English Teacher Forum. These documents will provide insights into the support mechanisms available to teachers in integrating technology. Aspects of professional competence by developing learning materials that are mastered creatively, carrying out professional development on an ongoing basis by taking reflective actions, and using technology in communicating and carrying out self-development.

Data analysis will follow a thematic analysis approach. The interview transcripts and documents will be coded and categorized into themes and sub-themes related to teachers' professional competence in integrating technology. The coding process will involve open coding to identify initial patterns and codes, followed by axial coding to explore relationships between codes and generate broader themes. The validity of the data obtained through this study's data analysis, which employs a thematic analysis approach, is underpinned by a rigorous and systematic process.

RESULTS AND DISCUSSION

Results

Implementing these strategies in the English Teacher Forum in Majalengka led to significant improvements in teachers' competence in integrating technology. Teachers reported increased confidence in digital tools and found that technology allowed more engaging and interactive lessons. Students also responded positively, demonstrating increased motivation and improved learning outcomes. However, challenges still exist. Some teachers still struggle with advanced technology, and there is a need for continued support and training. Furthermore, access to resources remains a problem for some, indicating the need for further investment in technological infrastructure.

Current Practices of English Language Teachers in Integrating Technology

The analysis of interview data revealed that English language teachers at the English Teacher Forum in Majalengka demonstrated a range of practices in integrating technology into their teaching. Several teachers reported using multimedia presentations, online resources, and language learning applications to supplement classroom instruction. Some teachers also mentioned utilizing digital collaboration tools and social media platforms for communication and sharing resources. However, it was observed that the extent and depth of technology integration varied among teachers, with some utilizing technology more extensively than others. The findings indicate that English language teachers at the English Teacher Forum in Majalengka have tried integrating technology into their teaching practices. Utilizing multimedia presentations, online resources, and collaboration tools demonstrates a positive inclination toward technology integration. In this study, the experiences and practices of a teacher regarding integrating technology in English Language Arts classes and using technology to bridge gaps in English language development (Gates, 2017). Further research by (Ulla et al., 2020) on Internet-based applications shows one clear perspective: Internet-based applications make their ELT classes more comfortable, enjoyable, and smooth. However, (Caena & Redecker, 2019) supports the varying levels of technology integration and suggests a need for further professional development to effectively enhance teachers' competence in utilizing a more comprehensive range of digital tools and pedagogical approaches.

Challenges Faced by Teachers in Integrating Technology

The interview data analysis highlighted several challenges teachers faced in integrating technology into their teaching practices. One major challenge was limited access to technology resources, such as computers and stable internet connectivity, which hindered teachers from implementing technology-rich activities. Time constraints were also identified as a challenge, as teachers struggled to find sufficient time to learn and explore new technologies. Furthermore, some teachers expressed a lack of confidence and technological skills as barriers to effective technology integration. Additionally, several teachers cited the lack of comprehensive professional development opportunities tailored to technology integration in English language teaching as a challenge.

The identified challenges align with previous research on technology integration. The limited access to technology resources and time constraints hindered teachers from fully utilizing technology in their classrooms. The lack of confidence and technical skills further contribute to teachers' challenges (Nath, 2019; Winter et al., 2021). In addition, it also explores the challenges English teachers face in integrating technology into teaching (Nkengbeza et al.; A. M., 2022). These findings underscore the importance of providing adequate technological infrastructure, dedicated time for professional development, and targeted training programs to address these challenges and support teachers in integrating technology effectively.

Support Mechanisms to Enhance Teachers' Professional Competence in Technology Integration

The examination of document analysis data revealed that the English Teacher Forum in Majalengka provided some support mechanisms to enhance teachers' professional competence in technology integration. The forum organized occasional workshops and training sessions on technology integration, where teachers could learn about various tools, strategies, and best practices. The forum also facilitated teacher knowledge sharing through online platforms and discussion forums. Moreover, there were guidelines and resources available to teachers to assist them in incorporating technology into their lesson planning and curriculum development. The availability of workshops, training sessions, and online platforms provided by the English Teacher Forum in Majalengka demonstrates a positive step towards supporting teachers in technology integration. However, it is crucial to ensure the relevance and sustainability of these support mechanisms. Offering ongoing professional development opportunities tailored to the specific needs of English language teachers and promoting collaborative learning communities can further enhance teachers' professional competence in technology integration. Overall, the results indicate a positive attitude among English language teachers at the English Teacher Forum in Majalengka towards technology integration. However, addressing the identified challenges and strengthening the available support mechanisms will be essential to enhance further teachers' professional competence in integrating technology effectively. The findings from this study provide valuable insights for the English Teacher Forum in Majalengka.

Discussion

The research at the English Teacher Forum in Majalengka investigated the effects of various strategies to enhance teachers' competence in integrating technology into their instructional methods. The findings of this study resonate with existing theoretical frameworks and empirical research, shedding light on how technology integration can positively influence educational practices. The results underscore the significance of these strategies in fostering meaningful advancements in teachers' proficiency and overall classroom dynamics.

One of the recurring themes that emerged from the interviews was the positive impact of collaborative professional development on teachers' competence in technology integration.

Many teachers expressed that engaging in workshops and collaborative sessions gave them valuable insights into innovative teaching techniques and technology tools. This aligns with Bandura's Social Learning Theory, which emphasizes the role of observational learning and collective experiences in enhancing individuals' skills. An interviewee stated, "Participating in group discussions about technology use encouraged me to experiment with different tools in my lessons. Seeing my colleagues' successes motivated me to try new approaches."

Conversely, a negative aspect highlighted by some participants was the lack of access to up-to-date technological resources. Several teachers mentioned that limited access to devices and reliable internet connectivity hindered their efforts to integrate technology fully. This barrier resonates with the "Digital Divide" concept, which emphasizes disparities in technological access and its potential impact on learning outcomes. Drawing from this, a potential solution could involve advocating for increased technological infrastructure and resources within the educational context, addressing the inequalities that impede successful integration.

Furthermore, the research demonstrated a clear correlation between effective technology integration and enhanced student engagement and learning outcomes. Teachers who successfully integrated technology reported increased student participation and enthusiasm in class. This observation is congruent with the Cognitive Load Theory, which suggests that well-designed technological interventions can reduce cognitive load and facilitate more effective learning. A teacher shared, "Using interactive simulations made complex concepts more understandable for my students, and I noticed higher levels of engagement and retention."

In conclusion, the research conducted at the English Teacher Forum in Majalengka corroborates existing theories and research by revealing strategies' positive impacts on enhancing teachers' competence in technology integration. The study underscores the significance of collaborative professional development, addresses challenges related to technological access, and highlights the role of technology in boosting student engagement and learning outcomes. These findings collectively emphasize the value of well-informed, theory-driven strategies in fostering effective technology integration within educational settings.

Moreover, the research indicated that students responded positively to integrating technology. They demonstrated increased motivation and improved learning outcomes. This finding aligns with previous studies showing that technology can potentially enhance student engagement and achievement. The positive impact on students further emphasizes the importance of integrating technology effectively in language teaching. However, despite the positive outcomes, the research also identified several challenges teachers faced in integrating technology. Some teachers struggled with advanced technology, requiring continued support and training. This finding emphasizes the importance of providing ongoing professional development opportunities to enhance teachers' technological skills and confidence.

Additionally, limited access to resources, such as computers and stable internet connectivity, emerged as a significant challenge. This issue highlights the need for further investment in technological infrastructure to ensure equitable access to technology resources for all teachers. Adequate access to resources is essential for teachers to implement technology-rich activities effectively. Time constraints were another challenge mentioned by teachers. Finding sufficient time for learning and exploring new technologies was difficult, indicating the need for dedicated time for professional development. Providing teachers with dedicated time for training and exploration can help them stay updated with the latest technological tools and pedagogical approaches.

Furthermore, the research emphasized the importance of comprehensive professional development opportunities tailored to technology integration in English language teaching. Teachers expressed a lack of confidence and technological skills as barriers to effective integration. Offering targeted training programs that address these specific needs can empower

teachers to overcome these challenges and integrate technology more effectively. The English Teacher Forum in Majalengka provided support mechanisms to enhance teachers' professional competence in technology integration. Workshops, training sessions, and online platforms were available to teachers, allowing them to learn about various tools, strategies, and best practices. The forum also facilitated teacher knowledge sharing, fostering collaborative learning communities. While these support mechanisms are positive, ensuring their relevance and sustainability is crucial. Ongoing professional development opportunities that cater to the specific needs of English language teachers should be offered. Promoting collaborative learning communities can facilitate knowledge sharing and enhance teachers' professional competence in technology integration.

In conclusion, the research results indicate a positive attitude among English language teachers at the English Teacher Forum in Majalengka towards technology integration. However, addressing the identified challenges, such as limited access to resources, time constraints, and teachers' lack of confidence and skills, is crucial. Strengthening the available support mechanisms and providing targeted professional development opportunities will be essential for enhancing teachers' competence in integrating technology effectively. The findings from this study provide valuable insights that can inform the English Teacher Forum in Majalengka in their efforts to promote effective technology integration among teachers.

CONCLUSION

This case study explored the current practices, challenges, and support mechanisms related to teachers' professional competence in integrating technology at the English Teacher Forum in Majalengka. The findings provide valuable insights into the status quo of technology integration among English language teachers in this context. The study revealed that English language teachers at the English Teacher Forum in Majalengka have demonstrated efforts to integrate technology into their teaching practices. However, there is variation in the extent and depth of technology integration among teachers, suggesting the need for targeted professional development initiatives. To enhance technology integration, it is crucial to offer tailored workshops, seminars, and training sessions that address teachers' diverse needs and skill levels.

English teachers who successfully integrate Information and Communication Technology (ICT) into their teaching demonstrate comprehensive professional competencies. These include adept digital literacy, the ability to align technology with pedagogical goals, flexible curriculum design, critical evaluation of digital resources, creative problem-solving, engaging student activities, collaborative networking, practical assessment using online tools, ethical technology use, data-driven insights for personalized instruction, and a commitment to accommodating diverse language abilities. By exemplifying these competencies, these educators create enriched learning experiences, empower student engagement, and contribute to holistic language development within technologically enhanced educational environments.

The challenges teachers face in integrating technology, such as limited access to technology resources, time constraints, and lack of confidence and technological skills, highlight the importance of comprehensive support mechanisms. Adequate technology infrastructure, reliable internet connectivity, dedicated time for professional development, and ongoing support are essential to overcome these challenges. The English Teacher Forum in Majalengka has taken steps to support teachers in technology integration through occasional workshops, training sessions, and online platforms. These initiatives build teachers' confidence, expand their technological skills, and foster a culture of collaboration and knowledge sharing. However, it is essential to ensure the sustainability and relevance of these support mechanisms by regularly assessing teachers' needs and continuously evaluating the effectiveness of the initiatives.

In conclusion, this case study underscores the significance of enhancing teachers' professional competence in integrating technology within the English Teacher Forum in Majalengka. By addressing the challenges and strengthening the available support mechanisms, English language teachers can further develop their technological skills, pedagogical knowledge, and confidence in utilizing technology to enhance teaching and learning experiences.

The findings of this study have implications for both policy and practice. Policymakers should recognize the importance of investing in technology infrastructure, providing dedicated time for professional development, and fostering a supportive environment for technology integration. School administrators can use the insights from this study to design and implement targeted professional development programs, encourage collaboration among teachers, and create a culture of continuous learning.

Overall, this case study contributes to the existing literature on technology integration in English language teaching and offers practical recommendations for enhancing teachers' professional competence in integrating technology at the English Teacher Forum in Majalengka. By addressing the challenges and leveraging the available support mechanisms, English language teachers can better prepare their students for the digital age and create engaging and effective learning environments. Further research is encouraged to explore additional factors that may influence technology integration in different educational contexts and assess professional development initiatives' long-term impact on teachers' professional competence.

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