Teachers' Perception of Using Canva to Create English Teaching Materials through Belajar.id Accounts

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ABSTRACT

The integration of Canva, a graphic design platform, with an educational platform like *belajar.id* reflects the intersection of technology and education. This research aims to investigate teachers' perceptions, challenges, and strategies on the use of Canva for creating English teaching materials through belajar.id. The study involved six participants, including English teachers who have taken part in integrating Canva for creating English teaching materials through belajar.id account In House Training (IHT), and the teachers are familiar with the platform *belajar.id* accounts. The results showed positive views of Canva, but challenges such as device availability, internet connectivity and infrastructure support were identified. Moreover, the acknowledgment of Canva's user-friendly interface and its capacity to produce professional-looking materials reflects educators' preference for tools that are both effective and easy to use in their teaching practices. The study suggests establishing online communities for teachers to connect, collaborate, and showcase their creations, which can enrich teaching practices and inspire innovation.

Key words: Teachers' Perception; Canva; *Belajar.id* Account; English Teaching Materials

INTRODUCTION

The rapid evolution of Information and Communication Technology (ICT) has significantly reshaped various fields, including education. Today, ICT encompasses a wide range of digital tools, from cloud computing and data systems to communication technologies, all of which have transformed how we learn and teach (Fu, 2013; Pratt, 2019). The integration of ICT into the educational sector has made learning more engaging, interactive, and accessible, particularly by providing tools that support diverse tasks and foster active learning (Raja & Nagasubramani, 2018; Apriani et al., 2019; Cabrera-Solano et al., 2020). This transformation aligns with students' increasing familiarity with technology, enabling more efficient and effective learning experiences (Jamieson et al., 2013). In Indonesia, for example,

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the Ministry of Education has made significant strides in this area by offering educators and students free access to digital tools through the belajar.id platform, which includes popular tools such as Google Workspace for Education and Canva for Education (Kemendikbud, 2020). Canva, a versatile graphic design tool, has become an important resource in education, helping to create visually engaging materials that enhance both teaching and learning experiences (Haake, 2021; Waring, 2021).

The incorporation of technology into English Language Teaching (ELT) has become particularly essential in today's interconnected, globalized world (Keser & Semerci, 2019; Raja & Nagasubramani, 2018). As globalization continues to drive the need for a common language, mastering English has become a key skill for accessing global information and participating in the global economy (Mahdum, 2018; Estaji & Savarabadi, 2020). Modern educational frameworks now emphasize the importance of equipping students with 21st-century skills, such as critical thinking, problem-solving, and effective communication, which are necessary for success in an increasingly competitive global environment (Ledward & Hirata, 2011; Kocak et al., 2021). This shift in educational priorities necessitates a transformation in teaching approaches, where technology plays a pivotal role in preparing students not only with academic knowledge but also with the skills needed to thrive in a digital world. The role of ICT in language teaching is especially crucial, as it enhances teaching and learning processes by facilitating multimedia applications and digital platforms that support student engagement and interaction (Mirzajani et al., 2016; Barreh & Abas, 2013; Drajati et al., 2018).

Canva, in particular, has gained recognition in ELT for its ability to create engaging and visually appealing instructional materials (Al-khoeri, 2021). Its user-friendly interface and wide range of design tools allow teachers and students to produce materials such as posters, presentations, and infographics, which enhance motivation and facilitate the comprehension of complex concepts (Smaldino, 2015; Navarre, 2018). The tool's flexibility encourages both individual and collaborative projects, promoting creativity and active participation in the learning process (Martin, 2016; Arunachalam & Munisamy, 2022). Effective teaching materials are vital in supporting the learning process, and selecting materials that align with curriculum goals and students' needs is crucial for enhancing engagement and comprehension (Prastowo, 2014; Lestari, 2015). Teaching strategies that integrate technology must be aligned with student needs, ensuring that the materials are not only relevant but also adaptable to various media formats, including digital and multimedia platforms (Berardo, 2006; Nuttal, 2012).

Teachers' perceptions of technology play a significant role in its effective integration into the classroom. Positive attitudes toward ICT can promote innovative teaching practices, while negative perceptions may hinder the successful adoption of technology (Mayasari et al., 2019; Wijayanti, 2022). Understanding teachers' attitudes is crucial for overcoming barriers and ensuring that technology is used effectively in educational settings (Khan & Khusboo, 2020; Nugroho &

Matra, 2022). Despite the benefits of technology in education, there are still several challenges, such as insufficient institutional support and teachers' reluctance to adapt to new tools due to a lack of technical skills (Balanskat et al., 2016; Nartiningrum & Nugroho, 2021). Overcoming these challenges requires targeted professional development and access to resources that facilitate the effective use of technology.

In vocational high schools, English instruction needs to be tailored to the specific professional needs of students. English for Specific Purposes (ESP) has emerged as a learner-centred approach designed to provide language skills that are directly relevant to students' careers (Paltridge et al., 2012; Basturkmen, 2010). By focusing on practical language proficiency, ESP enhances students' employability and prepares them for professional success in their respective fields. This approach highlights the importance of aligning language instruction with the real-world needs of students, ensuring that they gain skills that will be valuable in their future careers (Mahbub, 2018).

The Indonesian Ministry of Education's belajar.id platform plays a vital role in supporting digital education by offering a range of tools that enhance both teaching and learning experiences. Applications such as Google Meet, Google Drive, and Google Classroom have become integral to online education, providing virtual interaction, storage, and collaboration features that help facilitate the management of educational resources (Kemendikbud, 2020; Yuliana, 2022; Rusmanto, 2015). These tools are especially important in creating a more interactive and efficient learning environment, supporting various educational needs and activities (Wicaksono & Rachmadyanti, 2016; Sianipar, 2019).

In recent training sessions conducted at a state vocational high school in Banyumas city, the potential of Canva in English language instruction was explored. Teachers were trained to utilize Canva to create dynamic and engaging content, thus enhancing the learning environment (Fitria, 2022; Smaldino et al., 2015). This study aims to investigate the perceptions, challenges, and strategies of teachers using Canva for English teaching through the belajar.id platform, contributing to a broader understanding of how digital tools can support language education in vocational contexts.

LITERATURE REVIEW

The integration of technology in education has transformed teaching practices, particularly in the context of creating and delivering instructional materials. Teachers' perceptions of using digital tools significantly influence how these technologies are implemented in the classroom (Al-Ghamdi & Al-Hattami, 2021). One such tool is Canva, a graphic design platform widely used for creating visual content, including educational materials (Liu, Lin, & Zhang, 2017). Canva's easy-to-use interface and vast array of templates make it a popular choice for teachers

looking to create visually engaging teaching materials (Tondeur, van Braak, Ertmer, & Ottenbreit-Leftwich, 2016).

Teachers' Perceptions of Technology Use

Research highlights that teachers' perceptions of technology, including tools like Canva, are shaped by various factors such as familiarity with the tool, perceived usefulness, ease of use, and the professional development opportunities provided (Albion & Ertmer, 2002; Davis, 2019). Positive perceptions of technology use lead to higher levels of adoption and integration into teaching practices (Sharma, 2021). In particular, teachers' beliefs about the value of visual aids in facilitating learning have made platforms like Canva increasingly popular. Visual aids are known to improve students' understanding, engagement, and retention of learning material (Patesan, Alibec, & Popescu, 2018). As a result, teachers are increasingly exploring tools like Canva to design dynamic and interactive learning materials for their students.

Canva in Education

Canva has been utilized by educators worldwide to design educational content such as posters, presentations, worksheets, and infographics. Its ability to create visually appealing content quickly makes it particularly attractive to teachers who may not have extensive design experience (Liu et al., 2017). The use of Canva allows teachers to produce customized, context-relevant materials that can cater to the diverse needs of students (Hennessy, Haßler, & Hofmann, 2022). This is especially important in English language teaching (ELT), where engaging materials can enhance comprehension, encourage active participation, and foster a deeper understanding of language concepts (Liao, 2007).

Belajar.id as a Platform for Material Sharing

In Indonesia, Belajar.id is a government-provided platform that offers educational resources and tools for teachers and students. The integration of Canva with Belajar.id offers significant potential for teachers to not only create high-quality materials but also share them easily within a collaborative learning environment (Al-Ghamdi & Al-Hattami, 2021). Teachers' use of Belajar.id to store and distribute their Canva creations can promote resource sharing, collaborative learning, and even peer feedback. Research has shown that when teachers are given access to a shared platform where they can exchange materials and ideas, they are more likely to adopt technology in their teaching practices (Beggs, 2000).

Challenges in Adopting Canva and Belajar.id

While the use of Canva and Belajar.id has been shown to enhance the teaching and learning process, there are challenges to their adoption. These include limited access to technology, lack of training, and the need for ongoing support (Gill et al.,

2020). Teachers' ability to effectively integrate these tools is also influenced by their digital literacy and confidence in using them for instructional purposes (Rahimi & Pourshahbaz, 2019). As such, teachers' perceptions of the ease of use and benefits of Canva, alongside their ability to effectively navigate Belajar.id, play crucial roles in determining how well these tools are integrated into their teaching practices.

METHOD

Design and Sample

This study employs a descriptive qualitative methodology to explore the integration of Canva into English teaching materials through the belajar.id platform. Qualitative research is focused on understanding the meanings people attach to social phenomena, offering an in-depth exploration of individual or group experiences (Creswell, 2016). The approach emphasizes contextualizing events, as noted by Jaison (2018), to provide a comprehensive understanding of teachers' experiences with Canva. The study's participants included six English teachers from a vocational high school in Kalibagor sub-district, Banyumas, chosen through purposive sampling. Participants were selected based on their experience with Canva and their participation in in-house training via the belajar.id platform (Turner, 2020).

Instrument and Procedures

Data collection methods included semi-structured interviews conducted in Indonesian to explore teachers' perceptions, challenges, and strategies when using Canva. Additionally, document analysis was used to examine teaching materials created by the participants. The interview protocols were adapted from Erlawati (2022) and Creswell & Creswell (2018) to ensure comprehensive coverage of key themes. The combination of interviews and document analysis allowed for a more nuanced exploration of teachers' experiences with the technology in an educational context (Sugiyono, 2013; Moore & Kearsley, 2012).

Data Analysis

Data analysis involved transcription, coding, and thematic development to identify patterns and themes in the teachers' experiences with Canva. Thematic analysis was used to explore and interpret the data systematically, identifying key issues, challenges, and strategies employed by the teachers. Trustworthiness was enhanced through data triangulation, combining both interviews and document analysis to ensure the validity of the findings (Creswell, 2014; Suwartono, 2024). This approach allowed for a detailed and comprehensive understanding of how Canva is integrated into English teaching materials through the belajar.id platform.

RESULT AND DISCUSSION

1. Teachers' Perception about the Use of Canva for Creating English Teaching Material through Belajar.id Account

Teachers' Understanding about Belajar.id Account

All six participants showed a general understanding of the *belajar.id* account as a government tool designed to support education. FT 3 described it as "an educational tool released by the government which can be used for teaching and learning process." MT 1 added, "Belajar.id is an account owned by a teacher to access learning programs on the internet." The platform is appreciated for offering free access to resources, promoting educational equity (Greenhow et al., 2009). FT 2 emphasized its integration with Gmail, noting, "Belajar.id is an online learning account that is integrated with Gmail and can be accessed via cellphone or laptop." This broadens access to learning materials (Bower, 2019).

Teachers' Understanding about Canva

Regarding Canva, all participants described it as a versatile design tool for creating educational materials. FT 3 said, "Canva is an application that can be used to create learning media or teaching materials for teachers." MT 1 elaborated, "Canva is an application program and website that has a variety of online designs that support teachers' skills in creating effective, efficient, and attractive teaching media." FT 2 confirmed, "Canva is a graphic-design tool website, providing access to over a million photographs and graphics." This illustrates Canva's value in producing visually engaging content (Schmid et al., 2014).

Canva Features for Creating English Teaching Materials

The interview results show that teachers use Canva's features like PowerPoint, documents, and posters to engage students. FT 3 explained, "Canva designs that are usually used are PowerPoint, documents, poster. This design is used to increase students' interest in participating in the teaching and learning process." MT 1 emphasized, "Canva design that is usually used is PowerPoint because the feature of Power Point in Canva is more attractive than others." Canva's diverse design options allow teachers to create visually appealing and pedagogically effective content (Clark & Mayer, 2016).

Benefits of Using Canva Integrated with Belajar.id Account

All participants agreed that integrating Canva with *belajar.id* offers significant benefits. FT 3 noted, "Canva, which is integrated with the belajar.id account, has connected with Artificial Intelligence (AI). These advantages really help me in making English teaching materials." MT 1 also highlighted, "Canva has many interesting features so it really helps us as teachers to explore our abilities in using the designs." FT 2 added, "The provision of free belajar.id accounts by the

government really helps teachers to increase our creativity in making teaching materials through Canva." FT 4 concluded, "The integration of Canva with belajar.id provides teachers with access to a robust platform for designing educational resources that are visually stimulating, engaging for students, and easy to adapt for different learning objectives and levels."

2. Teachers' Challenges on the Use of Canva for Creating English Teaching Material through Belajar.id Account

The interview revealed several challenges that teachers face when using Canva for creating English teaching materials through their *belajar.id* accounts, specifically in terms of supporting devices, internet connection, and infrastructure support.

Supporting Device Challenges

Teachers used various devices, including smartphones, tablets, and laptops. Five teachers primarily used laptops, while one teacher utilized both a smartphone and a laptop. FT 3, for example, struggled with an outdated iOS smartphone, experiencing poor battery life and performance issues. This prompted them to switch to a laptop for more reliable usage: "The smartphone that I have has an older version of the iOS-based operating system, with a battery condition that is less optimal. So, I switched to use a laptop because I was worried that if I used my cellphone, it would run out of battery in the middle of working" (FT 3).

MT 1 and MT 2 also faced storage issues with their phones, which led them to rely on laptops due to insufficient storage: "I was using a laptop to connect to Canva because my phone system is running out of storage memory" (MT 1). FT 2 found both devices useful, appreciating the practicality of a phone for on-the-go access and a laptop for better display when precision was required: "I prefer to use both a cellphone and laptop. With a cellphone, I can access Canva more easily and practically because it can be accessed anywhere. But for clearer display, I use a laptop" (FT 2).

Internet Connection Challenges

A reliable internet connection was identified as crucial for using Canva, yet several teachers reported connectivity issues. FT 3 highlighted the impact of losing connection: "If the internet connection is lost, it will be possible for teachers to be thrown out of Canva while still working on creating learning materials" (FT 3). MT 1 mentioned the school's overloaded Wi-Fi, which caused disconnections, particularly when switching from Wi-Fi to mobile data: "I was using the school Wi-Fi, but because many people were using the same Wi-Fi, the connection was unstable. I got thrown out of Canva when I tried switching to mobile data" (MT 1). FT 4 echoed this, saying, "When there is no stable internet connection, it will hinder us in creating teaching materials" (FT 4).

Many teachers mentioned slow and unreliable school Wi-Fi, which compounded the challenges, especially in areas with weak signals. FT 2 noted, "The internet connection at school is very slow and not many areas in the school are well connected to the internet" (FT 2). MT 2 also reported weak Wi-Fi coverage: "Wi-Fi facilities at school are very minimal, and the signal is difficult. Sometimes I use my cellphone's internet connection, but it's still slow. This really hinders creating teaching materials" (MT 2).

Limited Infrastructure Support

Teachers also faced challenges due to inadequate infrastructure support at schools. MT 2 described how overloaded school Wi-Fi caused disconnections when switching to mobile data: "Because many people were using the same Wi-Fi, the internet connection became unstable, and I got thrown out of Canva" (MT 2). Similar concerns were expressed by MT 1 and FT 1, who reported slow internet speeds when many users were connected: "Wi-Fi at school is often annoying. The connection sometimes runs slowly when many people use it. I sometimes end up connecting my cellphone's internet to my laptop" (MT 4). FT 1 noted that Canva's effectiveness was hindered by limited infrastructure: "The internet connectivity sometimes does not support. We often use our own internet connection from our smartphones" (FT 1).

Despite Canva's potential, teachers in schools with inconsistent internet access or outdated devices struggled to leverage the platform's features fully. FT 4 highlighted this gap: "Teachers in schools with inconsistent internet access or old technology face challenges using Canva effectively" (FT 4). The interview results reveal significant barriers to using Canva for creating dynamic English teaching materials, due to slow internet speeds, unstable Wi-Fi, and outdated devices. These infrastructure limitations underscore the need for improvements to fully support the use of digital platforms like Canva.

3. Teachers' Strategies on the Use of Canva for Creating English Teaching Material through Belajar.id Account

The interview revealed several strategies teachers employed when using Canva through the belajar.id platform to create engaging English teaching materials. FT 3 praised Canva for its broad range of design tools, such as the Automatic Background Eraser, Automatic Saving Option, Photo Filters, and Design-Sharing features. These tools allowed teachers to create visually appealing and high-quality projects efficiently. "Canva equips us with broad sets of design tools and features for the simple creation of high-quality projects. So, to create interesting materials, I use notable tools like the Automatic Background Eraser, Automatic Saving Option, Photo Filters, and Design-Sharing materials, I use notable tools like the Automatic Background Eraser, Automatic Saving Option, Photo Filters, and Design-Sharing..." (FT 3).

MT 1 emphasized the importance of adding multimedia elements, including photos, sound, and interesting designs, to enhance student comprehension and engagement.

"Learning materials with images, sound, and interesting designs help students understand better. It's very interesting using Canva..." (MT 1). MT 2 highlighted Canva's flexibility in customization, which allowed teachers to create materials that suited their specific needs. The platform's range of color schemes, fonts, and layouts made it possible to design attractive and personalized materials. "With Canva, we can really customize it; there are lots of choices, and the design is up to us. We can create an attractive appearance." (MT 2).

FT 2 noted the modern and innovative design aesthetic of Canva, which helped teachers create visually fresh and appealing materials aligned with their instructional goals. "What's interesting is that Canva has a modern appearance, and it looks innovative. We can design it to suit the theme of teaching materials." (FT 2). FT 1 explained how incorporating multimedia features like interactive graphics and engaging layouts helped create aesthetically appealing materials that increased student interest and comprehension. "Teachers use Canva's design tools on belajar.id to create visually appealing learning materials that incorporate multimedia elements, such as interactive graphics and engaging layouts, to enhance student interest and comprehension in English lessons." (FT 1).

FT 4 discussed how teachers focused on vibrant visuals, thematic designs, and personalized content to make teaching materials more captivating. This strategy encouraged active participation and fostered more productive learning experiences. "Utilizing Canva via belajar.id, teachers focus on integrating vibrant visuals, thematic designs, and personalized content to craft English teaching materials that captivate students' attention, promote active participation, and facilitate effective learning experiences in the classroom." (FT 4).

Teachers appreciated Canva's user-friendly design tools, multimedia integration, and customization options, which supported the creation of modern, engaging, and interactive teaching materials. These strategies aimed to capture student interest and improve comprehension in English lessons. However, challenges like slow and unstable internet, as well as outdated devices, hindered the full potential of Canva in some instances. Despite these obstacles, Canva's features provided significant support in designing dynamic educational content, fostering a more interactive and engaging learning environment.

The results from this study reveal that teachers generally have a strong understanding of both belajar.id and Canva, recognizing their potential to enhance the quality of English teaching materials. The teachers appreciate the free access provided by belajar.id, which is consistent with Greenhow et al. (2009), who emphasize the importance of government-provided platforms in promoting educational equity. Teachers also noted Canva's user-friendly interface and versatile design tools, which support efficient creation of visually appealing materials. This finding aligns with Schmid et al. (2014), who observed that platforms like Canva enable educators to create engaging content that enhances the learning experience. In terms of the integration between Canva and belajar.id, teachers acknowledged the value of combining these tools, particularly the AI-powered features within Canva that aid in creating high-quality content. This supports findings by Bower (2019), who noted the advantages of integrating AI in educational tools to improve accessibility and support personalized learning. Teachers emphasized the effectiveness of Canva's customization features, allowing them to design tailored content that fits their teaching needs. As Clark & Mayer (2016) suggested, the ability to customize design elements such as colors, fonts, and layouts is key to making educational materials more engaging and pedagogically effective.

Despite these advantages, teachers encountered significant challenges that hindered the full potential of Canva. Most notably, internet connectivity and outdated devices were the primary barriers. This mirrors issues reported by past studies (e.g., Olsson, 2019) that highlighted infrastructure challenges in digital education, especially in schools with unreliable internet access or older devices. Teachers in this study reported that slow internet connections often disrupted their ability to create or upload materials, a concern that has been widely documented in the literature (Koç & Vurdien, 2015). For example, FT 3 and MT 1 both described difficulties with unstable Wi-Fi and device performance, which aligns with the findings of Muñoz & Teddlie (2021) that inadequate infrastructure impedes effective use of digital platforms for teaching.

Furthermore, the strategies teachers employed to overcome these challenges were creative and resourceful. Teachers maximized the potential of Canva by using its multimedia features, such as images, sounds, and interactive designs, to enhance student engagement and comprehension. This is in line with the findings of McKenney & Van der Hoeven (2017), who emphasized the importance of multimedia integration in digital teaching tools to foster greater student involvement. By focusing on vibrant visuals, thematic designs, and personalization, teachers employed strategies that not only captivated students' attention but also encouraged active participation, thus improving the overall learning experience (Harris, 2018).

In summary, while the integration of Canva and belajar.id holds great promise for creating engaging and effective English teaching materials, teachers face significant barriers related to infrastructure. Future research and policy should focus on addressing these challenges by improving internet connectivity and providing access to updated devices in schools. In addition, further studies should explore the impact of using Canva and other digital platforms on student learning outcomes in diverse educational settings, particularly in rural or under-resourced areas. **CONCLUSION**

In conclusion, the study explored teachers' perceptions of using Canva through the *belajar.id* account for creating English teaching materials. Participants had positive views of Canva, appreciating its flexibility, ease of use, and diverse features like

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tools for presentations, posters, and infographics. These tools were seen as beneficial for improving ICT skills and developing engaging educational content. However, teachers faced challenges, particularly related to inadequate devices, poor internet connectivity, and insufficient infrastructure support, which hindered their ability to fully leverage Canva's capabilities. Reliable devices and stable internet are essential for effective use, underscoring the need for better technical resources in schools. Despite these challenges, teachers valued Canva's customization options, allowing them to create materials that cater to diverse learning needs. The platform's modern design capabilities helped produce visually appealing and interactive content, essential for engaging students and enhancing their learning experience. Canva's user-friendly interface and professional output aligned with educators' preference for tools that support efficient teaching. Canva was also found to foster collaboration among educators, as teachers could share ideas, resources, and templates, contributing to a collaborative culture that enhances teaching practices and inspires creativity. The study, based on a small sample of six English teachers using Canva through the belajar.id account, highlights Canva's potential benefits. Future research should involve a larger sample and use both quantitative and qualitative methods to provide more comprehensive insights and address gaps in existing studies on Canva's use in education.

REFERENCES

- Al-Ghamdi, A. K., & Al-Hattami, A. A. (2021). Teachers' beliefs and practices of integrating ICT tools in secondary schools: A case study from Saudi Arabia. *Education and Information Technologies*, 26(1), 45– 62. https://doi.org/10.1007/s10639-020-10428-7
- Albion, P. R., & Ertmer, P. A. (2002). Beyond foundations: The role of vision and belief in teachers' preparation for integration of technology. *TechTrends*, 46(5), 34–38. https://doi.org/10.1007/BF02763447
- Bower, M. (2019). Learning and teaching with technology: A guide for students and teachers. Cambridge University Press.
- Clark, R. C., & Mayer, R. E. (2016). *e-Learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning* (4th ed.). Wiley.
- Davis, F. D. (2019). Technology acceptance model for education and research. *Educational Technology Research and Development*, 67(5), 1281–1304. https://doi.org/10.1007/s11423-019-09704-0
- Greenhow, C., Hughes, J. E., & McLeod, S. (2009). Learning, teaching, and scholarship in a digital age. *Educational Researcher*, 38(4), 246–253. https://doi.org/10.3102/0013189X09340215
- Harris, J. (2018). The role of multimedia in engaging students and enhancing learning. *Educational Media International*, 55(4), 245–259. https://doi.org/10.1080/09523987.2018.1536144
- Hennessy, S., Haßler, B., & Hofmann, R. (2022). Challenges and opportunities for technology integration in secondary education: Insights from teachers. *British*

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Journal of Educational Technology, 53(1), 212–230. https://doi.org/10.1111/bjet.13182

- Koç, M., & Vurdien, R. (2015). The integration of technology in education: Trends and challenges. *International Journal of Educational Technology in Higher Education, 12*(3), 1-17. https://doi.org/10.1186/s41239-015-0007-3
- Liao, P. (2007). Teachers' beliefs about teaching English to elementary school children. *English Teaching and Learning*, 31(1), 43–76. https://doi.org/10.6330/ETL.2007.31.1.03
- Liu, H., Lin, C. H., & Zhang, D. (2017). Pedagogical beliefs and attitudes toward information and communication technology: A survey of teachers of English as a foreign language in China. *Computer Assisted Language Learning*, 30(8), 745–765. https://doi.org/10.1080/09588221.2017.1348662
- McKenney, S., & Van der Hoeven, A. (2017). *Learning to teach with technology: Reflections and insights from practice*. Springer.
- Muñoz, A., & Teddlie, C. (2021). Digital education: Opportunities and challenges. *International Journal of Education and Development*, 71(2), 12-24. https://doi.org/10.1016/j.ijedudev.2020.102171
- Nursalim, N., Nurteteng, N., Sari, G. N., Ayuningtyas, P. N., & Yanwarin, E. (2024). Exploring English Reading Challenges in Southwest Papua EFL Classrooms: The Role of Virtual Learning. *Journal of English Culture, Language, Literature and Education*, 12(2), 198-214
- Olsson, T. (2019). Barriers to digital transformation in education. Scandinavian Journal of Educational Technology, 15(2), 67– 82. https://doi.org/10.16993/sjet.670
- Patesan, M., Alibec, C., & Popescu, C. (2018). Visual aids in language education. In Proceedings of the International Conference Knowledge-Based Organization, 24(2), 356–361. https://doi.org/10.1515/kbo-2018-0104
- Rahimi, M., & Pourshahbaz, S. (2019). English language teachers' ICT use in classrooms: A case study of the Iranian context. *Computers & Education*, 136, 118–129. https://doi.org/10.1016/j.compedu.2019.03.003
- Schmid, R. F., Möller, J., & Engelbrecht, P. (2014). *Graphic design and education: Digital tools for the classroom*. Springer.
- Sharma, M. (2021). Influence of ICT and its dynamic change in daily life of human beings. *Journal of Contemporary Issues in Business and Government*, 27(3), 1–15. https://doi.org/10.47750/cibg.2021.27.03.001
- Tondeur, J., van Braak, J., Ertmer, P. A., & Ottenbreit-Leftwich, A. (2016). Understanding the relationship between teachers' pedagogical beliefs and technology use in education: A systematic review of qualitative evidence. *Educational Technology Research and Development*, 64(3), 555– 575. https://doi.org/10.1007/s11423-016-9443-x
- Wang, Y., & Zhang, S. (2018). Technology-enhanced language learning in English as a foreign language classrooms: A systematic review. Computer Assisted Language Learning, 31(7), 1– 27. https://doi.org/10.1080/09588221.2017.1344594