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STRATEGIES FOR TECHNOLOGY INTEGRATION IN JUNIOR HIGH SCHOOL ENGLISH LEARNING IN CIREBON

Siti Shailla Nurhaliza[1], Siti Luruh Ayu Noerjanah[2], Maimunah[3]

[1,2,3] English Language Teaching Department, Tarbiyah and Teacher Training Faculty, Syekh Nurjati Cyber State Islamic University Cirebon

Article Information	ABSTRACT
	This study explores the implementation strategy of technology integration in English language learning at a junior high school in Cirebon, focusing on both teachers' practices and students' perceptions. Using a qualitative case study design, data were collected through interviews, classroom observations, and open-ended questionnaires involving one English teacher and twelve seventh-grade students. The findings reveal that technology is used regularly through learning media such as videos, interactive quizzes, Classroomscreen, Kahoot, Google Classroom, and digital dictionaries. Students perceive these tools as helpful in improving comprehension, motivation, and communication skills. Technology also fosters multimodal learning and promotes active engagement, although its implementation remains inconsistent. Challenges include unstable internet connectivity, limited device access, distractions, and uneven digital literacy. Teachers attempt to address these issues through varied instructional strategies such as drilling, discovery learning, and differentiated digital activities. The study concludes that technology has strong potential to support English learning when supported by sufficient infrastructure, teacher competence, and systematic planning. Strengthening digital literacy and optimizing school facilities are essential to ensuring sustainable and meaningful technology-based learning. These findings provide practical insights for improving technology integration in English language education at the secondary school level.

Correspondence Author: *Cirebon, Indonesia. E-mail: sitishailla09@gmail.com*

1. INTRODUCTION

The development of technology in education is increasing rapidly. The ease of accessing information during classroom learning allows students and teachers to explore a

variety of resources quickly. New technologies have largely had a good impact on educational settings because they have allowed teachers to improve their knowledge and abilities, which in turn has raised educational standards (Wei et al., 2018). These advancements have made learning more interactive, engaging, and adaptive to students' needs, ultimately bettering educational outcomes. Especially in English language learning.

The rapid development of digital technology has significantly transformed educational practices, particularly in English language learning. Technology enables interactive, engaging, and flexible instruction that aligns with 21st-century learning demands. However, in Indonesia, the integration of technology into English language education remains suboptimal. Many teachers still struggle to connect digital media with pedagogical objectives, while schools often face infrastructural and policy limitations that hinder innovation in teaching (Solihin, 2021). This situation highlights the urgency of examining how technology can be effectively implemented to enhance English learning outcomes.

In between training, teachers have also not been able to determine the right strategy in using technology when learning in the classroom. It is important to learn English learning strategies so that educators can quickly select and decide which ones to use when instructing students who use digital technologies (Octaberlina, 2023). At times, teachers cannot determine the right strategy in its implementation.

In addition to teachers who have not been able to determine teaching strategies using technology, schools have also been unable to implement digital transformative learning to the fullest. Two years ago, our government promoted this new Kurikulum Merdeka. The school's focus is not on digital transformative learning and this is quite worrying because there are still some issues that teachers like and learning processes that are not student-centred (Sudimantara, 2023). The teacher is still the center of the learning process, where the teacher is still the source of information in getting material for students.

The competence of teachers to fully embrace technology like organizing, creating, and carrying out successful educational activities is just as important as having the right hardware or software for given teaching and learning sessions (Salam et al., 2023). Teacher competence is one of the things that is important for the success of learning using technology, and balanced with the right strategy.

Previous studies (Oktavia, 2021; Rintaningrum, 2023; Syathroh et al., 2021) have examined technology integration in English teaching but tend to focus on the general benefits or challenges rather than specific classroom implementation strategies. Furthermore, limited attention has been given to the dual perspectives of teachers and students in evaluating how technology-based strategies function in real classroom settings. This gap calls for an in-depth qualitative exploration of how teachers apply technology and how students perceive its effectiveness.

Accordingly, this research aims to explore teachers' strategies in implementing technology integration within English language learning at the junior high school level, as well as to investigate students' perceptions of these strategies. Specifically, the study focuses on how teachers select and utilize digital tools, such as Kahoot, Wordwall, Canva, Quizizz, Padlet, and Classroom screen, to foster student engagement and learning motivation.

This study contributes to the field of English Language Teaching (ELT) by providing empirical evidence on the practical implementation of technology-based strategies and their perceived impact on learning. The findings are expected to bridge the gap between policy and classroom practice, offering valuable insights for teachers, curriculum developers, and educational institutions seeking to promote meaningful and student-centered technology integration in language education.

2. METHODS

This study employed a qualitative method. Investigating social phenomena in their natural setting is the main goal of qualitative research, which pays close attention to meaning, concepts, definitions, characteristics, and descriptions in order to comprehend phenomena from the viewpoint of those who experience them (Mirhosseini, 2020). The researcher used a case study research design because she aims to explore the strategy of implementation of the application of technology to learning English. A useful technique for deciphering and interpreting complicated situations, case study research offers important insights into the gathering, processing, and interpretation of data (Hayes, 2022). The qualitative design was chosen to allow an in-depth examination of real classroom practices and interactions in their natural context. The research was conducted at SMPIT Sabilul Huda Cirebon, a private Islamic junior high school that has begun to adopt digital media in its English instruction.

The research subjects consisted of one English teacher and twelve seventh-grade students selected purposively based on their active participation in technology-assisted English classes and access to digital devices such as smartphones or computers. Data were collected through semi-structured interviews with the teacher, open-ended questionnaires distributed to students, and classroom observations to document the use of digital platforms such as Kahoot, Wordwall, Canva, Quizizz, Padlet, and Classroomscreen during the learning process.

The data were analyzed, which involved organizing and categorizing information from transcripts, observation notes, and questionnaire responses to identify recurring themes and patterns. The analysis focused on understanding teachers' implementation strategies, students' engagement levels, and the perceived effectiveness of technology integration in enhancing English language learning.

3. RESULTS AND DISCUSSION

The findings reveal that technology use in English language learning at SMPIT Sabilul Huda is relatively common, although not yet fully optimized. Questionnaire results show that students and teachers frequently use instructional videos, interactive quiz applications such as Quizizz and Kahoot, digital presentations, and learning platforms including Google Classroom and Edmodo. While this reflects attempts to integrate technology, the level of consistency still needs improvement. This aligns with previous studies highlighting that diverse digital media can increase instructional flexibility and interactivity but require deliberate planning to ensure effective implementation. Furthermore, interviews show that the school has not yet adopted a Learning Management System (LMS), which limits the systematic management of learning materials and digital assessments. This supports Agustina & Cahyono (2017), who noted that LMS adoption in secondary schools remains low due to limited infrastructure and inadequate teacher training, even though LMS plays a strategic role in monitoring learning comprehensively (Almarashdeh, 2016).

Students generally perceive technology as highly effective in supporting their learning process. Visual presentations, videos, and interactive quizzes make lessons clearer, more engaging, and easier to understand. Technology also enables multimodal learning through text, visuals, and audio, which enhances language comprehension. Students particularly appreciate interactive quizzes because they provide immediate feedback and foster a competitive, motivating learning atmosphere an observation that aligns with research on game-based learning indicating improves motivation and focus. This is consistent with findings by Syatroh et al. (2021), who emphasize that students with digital literacy tend to show stronger enthusiasm and positive attitudes toward technology-based learning.

Technology also contributes significantly to student motivation and learning engagement. Students report that technology makes learning less monotonous, more visual, and more conducive to independent exploration. Educational videos and digital quizzes create lively, enjoyable classroom environments that encourage active participation. These insights reinforce the notion that technology-supported learning boosts engagement through interactive, responsive digital experiences. Teachers also highlight that technology supports differentiated learning, especially for kinesthetic learners who respond actively to digital tools. This finding is consistent with Al-Azawei et al. (2016), who argue that differences in learning styles influence the success of technology integration. Teachers further stress the importance of strengthening digital literacy to avoid overdependence on technology, a perspective echoed by Prabandari et al. (2024) and the demands of 21st-century skill development described by Çelik & Baturay (2024). In practice, teachers apply strategies such as drilling and discovery learning, which have been shown to improve language fluency and comprehension (Agustin et al., 2021). The use of native-speaker audio and digital dictionaries similarly enhances students' listening and writing abilities, reinforcing.

Although technology provides many benefits, students and teachers face several challenges. Limited internet access remains the most significant barrier, often disrupting Kahoot-based assessments, a problem also highlighted by Manzoor et al. (2024). Students also reported distractions from social media and insufficient technical guidance at the beginning of lessons, indicating the need for stronger classroom management strategies for digital environments, as suggested by Rintaningrum (2023). Despite these challenges, the school provides Chromebooks and other devices, demonstrating adequate readiness in terms of facilities. The use of tools such as Classroomscreen, PowerPoint, and Kahoot is aligned with previous research showing their potential to improve participation and motivation (Wang et al., 2022). Teachers also employ evaluation tools such as Anates and e-reports, demonstrating early steps toward data-driven learning, as advocated by Alonzo et al. (2024).

Teacher professional development plays an essential role in supporting technology integration. Teachers participate in MGMP activities and other training programs, which have been shown to enhance pedagogical skills (Haliza et al., 2021). The effectiveness of training depends on delivery methods; interactive and practical training tends to yield better outcomes than theory-based approaches alone, as stated by Amaniampong & Hartmann (2023). Observations also show that teachers adapt creatively to internet limitations, reflecting adaptive innovation, a characteristic highlighted by Henriksen et al. (2021). From the student perspective, the questionnaire results suggest that although technology use is inconsistent, students believe digital tools enhance their motivation, understanding, and communication skills (Triassanti et al. 2022)

Technology also plays a role in increasing students' confidence in English learning. Students report that audiovisual materials help them understand pronunciation and vocabulary more clearly, contributing to increased self-confidence. These observations are in line with the perspectives of Sui et al. (2023). However, limited digital literacy among some students continues to hinder optimal learning outcomes, echoing concerns raised by Yan (2022). Students also proposed several suggestions to enhance technology-based learning, including improving internet connectivity, adding more engaging digital media such as educational games, and providing more technical assistance during lessons. These suggestions support findings by Putri et al. (2025), which highlight the importance of infrastructure and engaging digital content. Students further hope that future learning will incorporate more advanced audiovisual tools an expectation consistent with recommendations by Sugianto (2023), who emphasize the importance of teacher digital competence in ensuring successful technology integration.

Overall, the results indicate that technology has a positive impact on English language learning at SMPIT Sabilul Huda, particularly in enhancing student engagement, comprehension, motivation, and communication skills. However, to improve its effectiveness, schools must strengthen infrastructure, increase digital literacy, and provide ongoing professional development to ensure that technology is integrated in a meaningful and sustainable manner.

4. CONCLUSION

The integration of technology in English language learning at SMPIT Sabilul Huda demonstrates clear benefits for students' understanding, motivation, engagement, and communication skills. Although the use of digital tools such as videos, interactive quizzes, presentations, and online platforms is not yet fully consistent, these media have contributed to a more dynamic and multimodal learning environment. Students generally perceive technology as effective in clarifying material, supporting independent learning, and creating more meaningful language exposure. Furthermore, teachers' instructional strategies and adaptability combined with students' growing familiarity with digital devices have strengthened the overall learning experience.

Despite these positive developments, several challenges remain, including unstable internet connectivity, limited device access, varying levels of digital literacy, and classroom distractions. Addressing these issues is essential for maximizing the potential of technology-based learning. Students' suggestions such as improving infrastructure, expanding the use of engaging digital media, and providing more technical guidance highlight the need for more structured and sustainable technological integration. Overall, the findings indicate that technology has the potential to significantly enhance English learning when supported by adequate resources, thoughtful planning, and ongoing professional development for teachers.

REFERENCES

Agustin, W., Wahyudin, A. Y., & Isnaini, S. (2021). *Language learning strategies and academic achievement of English department students*. Journal of Arts and Education, 1(1), 19–29.

Agustina, E., & Cahyono, B. Y. (2017). Perceptions of Indonesian teachers and students on the use of Quipper School as an online platform for extended EFL learning. *Journal of Language Teaching and Research, 8*(4), 794–800. https://doi.org/10.17507/jltr.0804.20

Al-Azawei, A., Serenelli, F., & Lundqvist, K. (2016). Universal Design for Learning (UDL): A content analysis of peer-reviewed journals from 2012 to 2015. *Journal of the Scholarship of Teaching and Learning, 16*(3), 39–56. https://doi.org/10.14434/josotl.v16i3.19295

Almarashdeh, I. (2016). Sharing instructors' experience of learning management system: A technology perspective of user satisfaction in distance learning course. *Computers in Human Behavior, 63*, 249–255. https://doi.org/10.1016/j.chb.2016.05.013

Alonzo, D., Quimno, V., Townend, G., & Oo, C. Z. (2024). Using information and communication technology (ICT)-based data systems to support teacher data-driven decision-making: Insights from the literature (2013–2023). *Educational Assessment, Evaluation and Accountability, 36*(4), 433–451. https://doi.org/10.1007/s11092-024-09443-8

Amaniampong, A., & Hartmann, M. D. (2023). Factors affecting technology integration in colleges of education. *International Journal of Studies in Education and Science (IJSES), 4*(2), 176–194. https://doi.org/10.46328/ijres.69

Çelik, F., & Baturay, M. H. (2024). Technology and innovation in shaping the future of education. *Smart Learning Environments, 11*(1). https://doi.org/10.1186/s40561-024-00339-0

Haliza, H., Hizriani, N., & Nor, H. (2021). Developing teachers' pedagogical competence through English Subject Teachers' Working Group (MGMP). *LET: Linguistics, Literature and English Teaching Journal, 11*(1), 61. https://doi.org/10.18592/let.v11i1.4629

Hayes, C. (2022). Methodology and method in case study research. In *Conceptual Analyses of Curriculum Inquiry Methodologies*. IGI Global. https://doi.org/10.4018/978-1-7998-8848-2.ch007

Henriksen, D., Creely, E., Henderson, M., & Mishra, P. (2021). Creativity and technology in teaching and learning: A literature review of the uneasy space of implementation. *Educational Technology Research and Development, 69*(4), 2091–2108. https://doi.org/10.1007/s11423-020-09912-z

Manzoor, S., Jamil, H., & Nawaz, M. (2024). Technology integration in ESL classroom: Advantages and challenges. *International Journal of Language, Literacy and Translation, 7*(1). https://doi.org/10.36777/ijollt2024.7.1.102

Mirhosseini, S. A. (2020). *Doing qualitative research in language education*. Springer. https://doi.org/10.1007/978-3-030-56492-6

Octaberlina, L. R. (2023). Exploring the use of digital technology in English language teaching: Strategies and methods for effective implementation. *ENGLISH FRANCA: Academic Journal of English Language and Education, 7*(1), 175. https://doi.org/10.29240/ef.v7i1.6977

Oktavia, M., Noviati, N., Theriana, A., & Jaya, A. (2021). English language teaching in the Indonesian context toward Edutech 4.0. *The Journal of English Literacy Education, 8*(2), 125–137. https://doi.org/10.36706/jele.v8i2.14556

Prabandari, R. C. S. W., Fitria, H., & Effendi, D. (2024). The effect of digital literacy and character education on increasing the quality of learning. *Journal of Social Work and Science Education, 5*(2), 612–623. https://doi.org/10.52690/jswse.v5i2.798

Putri, H. S., Grace, A. J., & Siregar, N. R. (2025). Improving students' digital literacy through technology: The importance of information-seeking skills. *Journal of Digital Learning, 2*(2), 210–221.

Rintaningrum, R. (2023). Technology integration in English language teaching and learning: Benefits and challenges. *Cogent Education, 10*(1), 1–21. https://doi.org/10.1080/2331186X.2022.2164690

Salam, U., Wahdini, W., Surmiyati, S., Rezeki, Y. S., Riyanti, D., & Suthathothon, P. (2023). English language teaching innovations and materials. *JELTIM, 5*(1), 49–68. https://doi.org/10.26418/jeltim.v1i1.63204

Solihin, S. (2021). Using mobile-assisted language learning (MALL) to teach English in Indonesian context: Opportunities and challenges. *VELES, 5*(2), 95–106. https://doi.org/10.29408/veles.v5i2.3150

Sudimantara, L. B. (2023). *Dr. Lala Bumela Sudimantara on CALL in promoting transformative learning in Indonesian schools* [YouTube video]. https://youtu.be/x41wTWb-eU4

Sugianto, H. (2023). Game-based learning in enhancing learning motivation. *International Journal of Instructional Technology, 2*(1), 22–33. https://doi.org/10.33650/ijit.v2i1.9324

Sui, C. J., Yen, M. H., & Chang, C. Y. (2024). Investigating effects of perceived technology-enhanced environment on self-regulated learning. *Education and Information Technologies, 29*(1), 161–183. https://doi.org/10.1007/s10639-023-12270-x

Syathroh, I. L., Kareviati, E., Lestari, A., & Fitria, N. (2021). Exploring the potentials of technology integration for teaching language skills: A literature review. *PROJECT, 4*(3), 488–496. https://doi.org/10.22460/project.v4i3.p488-496

Triassanti, R., Innocenti, C., Penggaben, T., Susatyo, B., Wardhono, A., Magribi, S. A., & others. (2022). Teachers and students' perceptions on the use of ICT in English learning at a junior high school. *Didaktika, 28*(2). https://doi.org/10.30587/didaktika.v28i1.3632

Wang, L. H., Chen, B., Hwang, G. J., Guan, J. Q., & Wang, Y. Q. (2022). Effects of digital game-based STEM education on students' learning achievement: A meta-analysis. *International Journal of STEM Education, 9*(1). https://doi.org/10.1186/s40594-022-00344-0

Wei, Q., Siriyothin, P., & Lian, A. P. (2018). Improving Chinese university EFL students' speaking skills through digital storytelling. *Suranaree Journal of Social Science, 12*(2), 47–68. https://doi.org/10.55766/oxmz7550

Yan, S. (2022). Lack of self-efficacy and resistance to innovation impact on insufficient learning capabilities: Mediating the role of demotivation and moderating the role of institutional culture. *Frontiers in Psychology, 13*, 1–12. https://doi.org/10.3389/fpsyg.2022.923577