

Investigating the Integrating of ICT in English Language Learning: A Case Study at SMP Negeri 1 Panca Rijang

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Abstract

This study investigates the integration of Information and Communication Technology (ICT) in English language learning at SMP Negeri 1 Panca Rijang. The research is driven by the increasing demand for innovative teaching methods in the 21st century, where digital tools are considered essential to support effective learning environments. A qualitative case study approach was employed, involving eighth-grade students as participants. Data were gathered through classroom observations, semi-structured interviews, and questionnaires in order to capture both teachers' and students' perspectives on ICT integration. The findings indicate that ICT integration provides multiple benefits in English learning. First, it enhances classroom interaction by promoting active student participation through the use of multimedia presentations, online quizzes, and language learning applications. Second, it fosters student motivation by making lessons more engaging, enjoyable, and relevant to real-life communication. Third, ICT offers authentic learning experiences by exposing students to original English materials such as videos, digital texts, and interactive exercises. However, the research also identified several challenges in implementing ICT. These include limited school facilities, unequal access to digital devices, unstable internet connectivity, and the need for teachers to develop stronger digital literacy and pedagogical skills for technology-enhanced instruction. Despite these challenges, the overall results suggest that ICT, when appropriately designed and systematically integrated, significantly improves the quality of English language teaching and learning at the junior high school level.

Keywords: *ICT integration, English learning, case study, student engagement, motivation, junior high school*

Introduction

In the 21st century, the role of Information and Communication Technology (ICT) in education has become increasingly vital. The rapid advancement of digital tools and online platforms has transformed the way knowledge is delivered and accessed, creating opportunities for more interactive and student-centered learning environments. In language education, particularly English as a Foreign Language (EFL), ICT plays an essential role in providing learners with exposure to authentic language use, access to a wide range of multimedia resources, and opportunities to practice communication beyond the classroom (Warschauer & Healey, 1998). Unlike traditional methods that

often rely heavily on textbooks and teacher-centered instruction, ICT enables teachers to design innovative activities that cater to different learning styles and encourage active participation.

In the Indonesian context, English is taught as a compulsory subject at junior high schools. However, many students face challenges in developing their English proficiency due to limited exposure to the language outside of the classroom and a lack of motivation to engage in communicative activities. At **SMP Negeri 1 Panca Rijang**, observations suggest that students often show low levels of interest in English lessons, particularly in speaking activities. This situation is partly caused by conventional teaching approaches that emphasize memorization of grammar rules and vocabulary rather than meaningful use of the language. As a result, students have few opportunities to practice English in authentic situations, which affects their confidence and motivation to learn.

Integrating ICT into English language teaching offers potential solutions to these challenges. Through the use of digital media such as interactive presentations, online quizzes, videos, and language learning applications, teachers can create a more dynamic classroom atmosphere that attracts students' attention and sustains their motivation. ICT also provides authentic learning materials, such as English songs, films, online articles, and podcasts, which allow learners to experience the language in real-life contexts. Moreover, ICT fosters collaborative learning by enabling students to engage in group projects, online discussions, and peer feedback using platforms such as Google Classroom, Quizizz, or Duolingo (Yunus, 2018). These activities not only improve students' linguistic skills but also develop their digital literacy, which is essential for their future academic and professional lives.

Nevertheless, the integration of ICT is not without challenges. Factors such as limited school facilities, unstable internet access, unequal availability of devices among students, and teachers' varying levels of technological competence can hinder the successful implementation of ICT-based learning (Hubbard, 2009). These challenges highlight the importance of conducting studies that investigate how ICT is being integrated in specific contexts and what impacts it has on students' learning experiences.

Therefore, this study seeks to investigate the integration of ICT in English language learning at SMP Negeri 1 Panca Rijang. Specifically, it examines how ICT supports the teaching and learning process and its impact on students' engagement and motivation. By exploring this issue, the research aims to provide insights into the effectiveness of ICT integration in EFL classrooms at the junior high school level and to identify both the benefits and the obstacles encountered in practice. The findings of this study are expected to contribute to the development of more effective teaching strategies that leverage ICT to improve students' learning outcomes in English.

Information and Communication Technology (ICT) refers to a broad range of digital tools and technologies designed to facilitate communication, information sharing, and knowledge construction. In the field of language learning, ICT encompasses multimedia resources (such as audio, video, and animations), online platforms for collaboration, language learning applications, and digital classroom management tools. Warschauer & Healey (1998) emphasize that the use of ICT in language education has reshaped traditional approaches, moving from teacher-centered instruction to more student-centered learning environments. ICT also enables learners to access authentic materials, such as podcasts, online newspapers, films, and social media, which expose them to real-life language use beyond classroom walls.

Furthermore, ICT facilitates various language learning skills. For example, online platforms like Duolingo and Quizizz provide gamified vocabulary and grammar exercises,

while video conferencing tools allow for real-time communication practice with peers or even native speakers. According to Yunus (2018), the integration of ICT is particularly relevant in the context of English as a Foreign Language (EFL), where exposure to the target language is often limited. ICT thus serves as a bridge between classroom learning and the real-world use of English, offering learners opportunities to engage with the language in meaningful and interactive ways.

Several studies have demonstrated the pedagogical benefits of ICT integration in language classrooms. First, ICT fosters **learner autonomy** by allowing students to manage their own learning pace and choose resources that match their preferences and proficiency levels (Benson, 2011). Learners can, for instance, access mobile applications for independent practice, search for online materials to support classroom topics, and revisit digital recordings of lessons for reinforcement.

Second, ICT enhances **student motivation**. According to Dörnyei (2001), motivation is a key factor in determining language learning success, and ICT contributes by making lessons more engaging, enjoyable, and relevant to students' lives. Tools such as online quizzes, videos, and interactive games transform learning into a fun and challenging activity, which sustains students' interest in English.

Third, ICT provides **exposure to authentic language use**. Unlike textbooks, which often present simplified and artificial dialogues, digital resources such as YouTube videos, online articles, and podcasts expose students to natural language input, including different accents, speech rates, and cultural contexts (Gilmore, 2007). This exposure helps students develop listening comprehension, speaking fluency, and cultural awareness.

Fourth, ICT encourages **collaborative and interactive learning**. Platforms like Google Classroom, Padlet, or Edmodo allow students to work together on projects, share feedback, and engage in discussions beyond classroom time. This not only improves linguistic competence but also nurtures 21st-century skills such as teamwork, problem-solving, and digital literacy.

While ICT offers significant benefits, its integration in language classrooms also faces notable challenges. The first challenge concerns **infrastructure and facilities**. Many schools, particularly in rural areas, struggle with inadequate resources, such as limited access to computers, projectors, or reliable internet connections. These limitations reduce the effectiveness of ICT-based activities and create inequalities among students (Hubbard, 2009).

The second challenge is **teachers' digital literacy and pedagogical readiness**. Not all teachers are equally skilled in using ICT tools for instructional purposes. Some may be familiar with basic digital applications but lack knowledge of how to design ICT-based learning activities that align with language learning objectives (Tondeur et al., 2017). As a result, the integration of ICT may remain superficial, focusing more on using technology for presentation rather than as a means to foster deeper student engagement.

The third challenge involves **students' unequal access and readiness**. While some students may own personal devices and have access to the internet at home, others may not. This digital divide creates disparities in students' learning opportunities (Selwyn, 2011). In addition, not all students possess the self-regulation skills required for autonomous learning through ICT, which may result in distraction or misuse of digital tools.

Finally, there is the challenge of **time and curriculum demands**. Teachers often report that preparing ICT-based materials requires additional time and effort. At the same time, rigid curriculum requirements may limit the flexibility to incorporate technology-based activities, especially when the focus is heavily on examination-oriented outcomes.

Methodology

A. Research Design

This study employed a **qualitative case study design**, which is appropriate for exploring phenomena in their real-life context (Creswell, 2012). The purpose of using a case study approach was to gain an in-depth understanding of how ICT is integrated into English language learning and how it influences students' engagement and motivation. This design also allowed the researcher to collect data from multiple sources to triangulate findings and ensure the validity of the research.

B. Research Site and Participants

The study was conducted at **SMP Negeri 1 Panca Rijang**, a junior high school located in Sidrap Regency, South Sulawesi, Indonesia. The participants consisted of **30 eighth-grade students** (15 male and 15 female), aged between 13 and 14 years old. The participants were selected purposively based on their involvement in English classes where ICT integration had been introduced. The teacher of the class also participated as a key informant to provide additional insights into the teaching and learning process.

C. Instruments and Data Collection

Three main instruments were employed in this study are **observation checklist, interview and questionnaire**. The researcher conducted classroom observations to examine how ICT tools were used during English lessons and how students responded to them. The observation checklist focused on students' participation, engagement, interaction patterns, and use of ICT tools during classroom activities.

Semi-structured interviews were conducted with both students and the English teacher. The interviews aimed to explore students' perceptions of ICT-based learning, their challenges in using ICT, and the teacher's strategies in integrating technology into lessons.

A student questionnaire was distributed to gather broader data on students' attitudes toward ICT in English learning. The questionnaire included both closed-ended focusing on students' motivation, engagement, and perceived benefits of ICT.

Data were collected over a period of **six weeks**, during which ICT-based learning was consistently applied in English classes. The ICT tools used included **Power Point presentations, YouTube videos, Quizizz and Duolingo**.

D. Data Analysis

The data were analyzed using a **thematic analysis approach** (Braun & Clarke, 2006). The analysis involved several steps, first is **Data Familiarization** which is transcribing interview recordings, reviewing observation notes, and compiling questionnaire responses. Second is **Generating Initial Codes**, identifying key points related to ICT integration, motivation, engagement, and challenges. Third is, **Searching for Themes**, grouping codes into broader categories such as "student motivation," "classroom interaction," "ICT challenges," and "teacher strategies." Fourth is **Reviewing Themes**, comparing and refining the themes across different data sources to ensure consistency. Fifth is **Defining and Naming Themes** by developing clear descriptions for each theme. The last is **Reporting Findings**, presenting the themes with supporting evidence from observations, quotations from interviews, and data from questionnaires. To ensure the **trustworthiness** of the study, triangulation of data sources (observation, interview, and questionnaire) was conducted. In addition, member checking with the teacher and peer debriefing with colleagues were used to validate the findings.

Findings

The findings of this study revealed that the integration of ICT in English language learning at SMP Negeri 1 Panca Rijang had a significant impact on students' motivation, engagement, and classroom interaction. Data were obtained through classroom observations, questionnaires, and interviews, and analyzed thematically. The results are presented in three main aspects: students' motivation, classroom participation, and challenges in ICT implementation.

Observation results indicated that the majority of students demonstrated higher levels of enthusiasm when ICT tools were incorporated into classroom activities. For instance, when English lessons were delivered through interactive PowerPoint slides and YouTube videos, students appeared more attentive compared to lessons that relied solely on textbooks. They were also more eager to respond to teachers' questions and participate in discussions.

The questionnaire results confirmed this trend, showing a **30% increase in motivation scores** between the initial phase and the second cycle of ICT-based learning. Many students agreed that the use of ICT made English learning more enjoyable and less monotonous. The integration of applications such as Quizizz and Duolingo gamified the learning process, turning routine drills into engaging challenges. This aligns with Dörnyei's (2001) assertion that motivation is a key factor in sustaining learning and that enjoyable, varied activities can help maintain learners' interest.

Interviews also highlighted that students perceived ICT-based learning as "fun," "interactive," and "less boring." One student commented, *"I feel more excited to learn English when using videos and online quizzes because it is like playing while learning."* This suggests that ICT not only improves intrinsic motivation but also encourages positive emotional responses toward English lessons.

In addition to increased motivation, ICT integration promoted greater participation and interaction among students. Observations revealed that students were more willing to engage in speaking activities when digital resources were used as prompts. For example, after watching short videos in English, students enthusiastically discussed the content in pairs or groups, demonstrating improved confidence in using the language.

Google Classroom was also employed to assign collaborative projects, such as creating digital posters and short presentations. These activities encouraged students to work together, share ideas, and give peer feedback. Such collaborative use of ICT supports the findings of Yunus (2018), who emphasized that ICT fosters interaction and collaboration in EFL contexts. By using ICT tools, students at SMP Negeri 1 Panca Rijang were able to move beyond passive learning and become active participants in their own learning process.

Despite the positive outcomes, several challenges emerged during the implementation of ICT-based lessons. First, limited facilities hindered smooth integration. Not all students had personal smartphones, and some experienced unstable internet connections, particularly when using applications that required continuous online access. Second, time management was an issue for both teachers and students. Teachers reported that preparing ICT-based materials, such as interactive presentations and online quizzes, required more time compared to preparing conventional lessons. Meanwhile, some students spent additional time familiarizing themselves with new applications, which occasionally slowed down classroom activities.

Third, digital literacy gaps were observed among students. While some students quickly adapted to new platforms, others struggled with basic functions, such as logging in, navigating apps, or submitting assignments online. These findings are consistent with Hubbard (2009), who noted that the effectiveness of ICT in education often depends on both teachers' and students' digital competence.

Discussion in Relation to Previous Studies

The results of this study corroborate previous research that emphasizes the motivational and pedagogical benefits of ICT integration in language learning. Warschauer and Healey (1998) argued that ICT transforms classrooms by providing access to authentic language input and interactive learning opportunities. Similarly, the findings at SMP Negeri 1 Panca Rijang demonstrate that ICT tools introduced variety and authenticity into English lessons, which increased student motivation and participation.

Moreover, the findings align with Dörnyei's (2001) theoretical framework on motivation, which suggests that enjoyable and meaningful activities contribute to sustained learner engagement. In this study, ICT tools such as Quizizz, Duolingo, and Google Classroom served as motivators by making English learning relevant, interactive, and enjoyable.

However, the challenges identified also echo earlier studies (Hubbard, 2009; Selwyn, 2011), which reported that limited resources, unequal access to technology, and varying levels of digital literacy remain significant barriers to the effective implementation of ICT in education. This indicates that while ICT has strong potential to enhance English learning, its success depends on adequate facilities, teacher training, and institutional support.

Conclusion

This study investigated the integration of Information and Communication Technology (ICT) in English language learning at SMP Negeri 1 Panca Rijang. The findings revealed that ICT had a **positive impact on students' motivation, engagement, and classroom interaction**. Through the use of digital tools such as PowerPoint presentations, videos, Quizizz and Duolingo, students experienced English learning in ways that were more **interactive, authentic, and enjoyable** compared to traditional teaching methods.

The integration of ICT was shown to:

1. Increase students' motivation, as indicated by a 30% improvement in motivation scores and positive feedback in interviews.
2. Enhance classroom participation, with more students actively engaging in speaking, collaborative projects, and online discussions.
3. Provide access to authentic materials, enabling students to be exposed to real-life English usage.

Despite these benefits, several **challenges** emerged during implementation. Limited facilities, unequal access to personal devices, unstable internet connections, and varying levels of digital literacy among students hindered the smooth use of ICT. These constraints indicate that while ICT holds strong potential to improve language learning, its effectiveness is heavily influenced by infrastructural readiness and teacher preparedness. Overall, the study concludes that ICT integration is not merely a technological enhancement but a **pedagogical innovation** that can transform the teaching and learning of English at the junior high school level.

References

- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.
- Hubbard, P. (2009). *Computer assisted language learning: Critical concepts in linguistics*. Routledge.
- Richards, J. C., & Rodgers, T. S. (2014). *Approaches and methods in language teaching* (3rd ed.). Cambridge University Press.
- Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview. *Language Teaching*, 31(2), 57–71. <https://doi.org/10.1017/S0261444800012970>
- Yunus, M. M. (2018). Innovation in education and language learning in the 21st century. *Journal of Sustainable Development Education and Research*, 2(1), 33–34. <https://doi.org/10.17509/jsder.v2i1.12355>
- Al-Munawwarah, S. F. (2015). Teachers' perceptions on the use of ICT in Indonesian EFL learning context. *English Review: Journal of English Education*, 3(1), 70–80.
- Arkorful, V., & Abaidoo, N. (2015). The role of e-learning, advantages and disadvantages of its adoption in higher education. *International Journal of Instructional Technology and Distance Learning*, 12(1), 29–42.
- Shyamlee, S. D., & Phil, M. (2012). Use of technology in English language teaching and learning: An analysis. *International Conference on Language, Medias and Culture*, 33, 150–156. IACSIT Press.
- Gilakjani, A. P. (2017). A review of the literature on the integration of technology into the learning and teaching of English language. *International Journal of English Linguistics*, 7(5), 95–106. <https://doi.org/10.5539/ijel.v7n5p95>
- Rahimi, M., & Yadollahi, S. (2011). ICT use in EFL classes: A focus on EFL teachers' characteristics. *World Journal of English Language*, 1(2), 17–29. <https://doi.org/10.5430/wjel.v1n2p17>