



Teachers' and students' perceptions of ICT in english language learning at the primary level: A case study at SD Negeri 1 Suka Mukti

Gilang Lukito Permatasari¹, Hastin Yoka Ariyani², Masagus Firdaus³

^{1,2,3}Magister of English Education, Universitas PGRI Palembang, Indonesia

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ABSTRACT

This study investigates teachers' and students' perceptions of Information and Communication Technology (ICT) in English language learning at SD Negeri 1 Suka Mukti. The primary objective of this research is to explore how both teachers and students perceive the use of ICT in English learning and to identify the benefits and challenges they experience in its implementation. Using a mixed-methods approach that includes questionnaires, interviews, and classroom observations, the research examines perceived benefits, challenges, and the overall impact of ICT integration in the primary school context. The findings reveal that both teachers and students hold generally positive attitudes toward ICT. Students report increased motivation and engagement, while teachers highlight ICT's ability to diversify instructional strategies and support individualized learning. Nevertheless, challenges persist, particularly in regard to limited infrastructure, varying digital literacy levels, and insufficient pedagogical training. These results suggest that effective ICT implementation requires not only technological resources but also teacher capacity-building and supportive institutional policies. Overall, the study underscores ICT's transformative potential in enhancing English language teaching and learning in Indonesian primary schools.

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Corresponding Author:

Gilang Lukito Permatasari,
Magister of English Education,
Universitas PGRI Palembang,
Jl. Jend. A. Yani Lorong Gotong Royong, 9/10 Ulu, Kec. Seberang Ulu II, Kota Palembang, Sumatera Selatan, 30116, Indonesia
Email: gilangayu1988@gmail.com

INTRODUCTION

The integration of Information and Communication Technology (ICT) has continued to reshape educational practice worldwide, moving beyond mere augmentation toward transformation of teaching and learning processes. In the context of English language education, contemporary research indicates that ICT tools ranging from multimedia digital texts and mobile apps to web-based platforms and interactive video support vocabulary acquisition, pronunciation practice, task authenticity, and sustained learner engagement by offering multimodal input and opportunities for repeated, self-paced practice (Hasumi & Chiu, 2024).

Information and Communication Technology (ICT) based media including short instructional videos, audio recordings, digital games, and web/mobile learning platforms offer practical affordances for addressing those needs. Interactive videos and audio-rich activities scaffold listening comprehension and pronunciation practice by providing multimodal input and repeated exposure, which supports incremental improvement in receptive and productive skills (Barman & Jena, 2021; Zhang et al., 2023).

Despite the well-documented pedagogical benefits of ICT, its classroom impact depends crucially on the readiness and perceptions of both teachers and learners. Contemporary reviews of technology adoption in education emphasize that positive user attitudes and strong perceived usefulness remain among the strongest predictors of actual classroom use and instructional effectiveness. In other words, when teachers and students believe ICT will meaningfully support learning, they are far more likely to integrate digital tools into regular practice and to exploit their affordances for feedback, differentiation, and communicative tasks (Granić, 2022).

In Indonesia, many rural schools still face infrastructural and pedagogical barriers to effective ICT utilization. SD Negeri 1 Suka Mukti exemplifies this situation, representing other schools that may lack comprehensive access to digital resources. Exploring the perceptions of teachers and students at this institution is thus essential to identify their experiences, challenges, and suggestions for improvement. Such an inquiry contributes to the literature on ICT in English education.

Implementing ICT in rural or less-resourced schools may face challenges despite its advantages. At SD Negeri 1 Suka Mukti, there is a need to explore how teachers and students perceive the use of ICT in English learning, to inform future educational strategies. Therefore, this study aims to explore how teachers and students at SD Negeri 1 Suka Mukti perceive the use of ICT in learning English. By understanding their opinions, challenges, and suggestions, the school and other stakeholders can improve ICT use in the classroom to support better English learning for young students.

ICT is particularly significant in primary education as it opens access to diverse materials that can accommodate varying learning styles and abilities. Digital platforms and multimedia resources provide visual, auditory, and kinesthetic stimuli that enrich the learning experience, making lessons more engaging and comprehensible for young learners (Zou et al., 2023). Moreover, recent studies show that integrating ICT with differentiated instruction enables students to follow personalized learning trajectories, letting them progress at their own pace while teachers continuously monitor their achievement and deliver timely, specific feedback (Tajik et al., 2024).

In the field of English language learning, ICT has been widely recognized for its ability to enhance language acquisition through a variety of interactive tools and resources. Research shows that ICT can foster vocabulary development, strengthen listening and speaking skills, and improve learner motivation (Purwanto et al., 2025). Digital platforms and applications allow learners to access authentic input and practice language in ways that traditional methods often cannot provide. For young learners, interactive features such as games, quizzes, and digital storytelling create an engaging learning environment that encourages active participation while supporting cognitive and linguistic development.

Multimedia resources also play a crucial role in contextualizing language learning. Tools such as videos, audio recordings, and online applications expose learners to real-life communication patterns, pronunciation models, and cultural contexts that extend beyond classroom materials. (Hidayad et al., 2024). At the same time, ICT-based practices are consistent with the principles of communicative language teaching, which emphasize meaningful interaction and learner-centered activities. By enabling students to apply English in practical and authentic contexts, ICT helps bridge the gap between textbook knowledge and real-world communication. (Nasar et al., 2024; Swarastuti et al., 2024). This alignment suggests that ICT integration can serve

as both a pedagogical enhancement and a bridge to more authentic and practical English language learning experiences.

Teachers' and students' perceptions and attitudes strongly influence ICT's effectiveness in language classrooms. A growing body of research demonstrates that positive perceptions are closely linked with higher adoption rates and better pedagogical outcomes, as teachers who view ICT as beneficial are more inclined to integrate it into their instructional practices. (Melinda Puspita Sari Jaya et al., 2023). Teachers with favorable attitudes toward ICT often employ it to diversify teaching strategies, provide richer learning resources, and personalize instruction according to students' needs. (Ardianto et al., 2025; Yuliana et al., 2024). This approach enhances classroom interaction and fosters a more learner-centered environment that aligns with modern pedagogical principles.

Students' perceptions of Information and Communication Technology (ICT) play a central role in mediating its educational impact. Learners who hold positive views about digital tools are more likely to engage actively, persist in practice, and take communicative risks behaviors that support language development and willingness to communicate in English. Recent empirical studies confirm that favourable attitudes correlate with higher engagement and self-regulated learning in language contexts (Zhao, 2024).

Despite its numerous advantages, integrating Information and Communication Technology (ICT) in primary schools is not without challenges. Common obstacles include limited infrastructure, inadequate access to devices, and unstable internet connectivity, which collectively reduce the effectiveness of ICT-based instruction. Promisingly, recent literature identifies effective remedies. Sustained, context-sensitive PD models (blending face-to-face coaching with online communities), technical support systems, and professional learning communities have been linked to improved teacher self-efficacy and higher-quality ICT adoption. When PD focuses on pedagogical design how to integrate technology within communicative, task-based sequences teachers are more likely to create meaningful, student centred digital activities that improve learning outcomes (Liu et al., 2024).

In the Indonesian context, these challenges are particularly evident in rural settings such as SD Negeri 1 Suka Mukti, where digital divides persist and access to adequate technological resources is often limited. Rural schools frequently struggle with insufficient funding, limited exposure to ICT-based pedagogies, and a lack of ongoing technical support. As a result, both teachers and students may be unable to fully exploit the pedagogical potential of ICT in enhancing English language learning. Understanding these contextual realities is crucial for designing sustainable and inclusive strategies that ensure ICT implementation benefits all learners. Such strategies must address infrastructural gaps, provide continuous teacher training, and promote digital equity so that ICT can be a transformative tool in primary-level English education.

Several studies in Indonesia have investigated teachers' perceptions of ICT in English language learning. A study among 50 vocational English teachers in Banyumas found that most teachers held positive perceptions, with around 67% accepting ICT as part of the teaching process. However, challenges such as limited resources and lacking ICT skills were also reported (Zahroh & Ratih, 2024). Similarly, research in Surakarta involving vocational school teachers showed positive perceptions but highlighted difficulties, including device availability, teacher competence, and preparation (Syamsuddin & Fauzi, 2025). In line with this, a study of two primary school English teachers in Makassar also reported positive attitudes influenced by ease of use, perceived usefulness, policy support, and professional development. In contrast, teachers faced challenges concerning competence and classroom management with technology (Saputro, 2023).

Students' perceptions of ICT have also been widely explored. In a TEFL methodology class at STKIP Muhammadiyah Pringsewu, 30 students reported that ICT integration enhanced their learning experience, understanding, and knowledge. However, they noted both strengths and weaknesses in the tools used (Muhammad & Saefurrohman, 2022). At the university level, students

in Sorong reported that ICT use increased confidence, reduced anxiety, and made English learning more enjoyable (Muhammad & Saefurrohman, 2022).

Additionally, studies on digital literacy and interest among teachers and students across West Java, West Kalimantan, and Jakarta revealed relatively high operational and communicative digital skills. However, participants reported lower confidence in content creation and expressing opinions using ICT (Purba et al., 2024). These studies suggest that while ICT is widely perceived as beneficial for English language teaching and learning, challenges such as access, competence, and training continue to limit its optimal use, particularly in rural or resource-limited contexts such as SD Negeri 1 Suka Mukti.

RESEARCH METHODOLOGY

This study adopted a descriptive quantitative design complemented by qualitative insights to obtain a more comprehensive understanding of teachers' and students' perceptions regarding the integration of Information and Communication Technology (ICT) in English language learning. The survey-based design allowed the collection of measurable data on attitudes, access, and use of ICT tools, while qualitative follow-up interviews provided nuanced explanations of participants' experiences and challenges. The combination of quantitative and qualitative approaches reflects current trends in educational technology research, emphasizing both breadth and depth of understanding (Creswell & Guetterman, 2023; Dörnyei, 2020).

The research was conducted at SD Negeri 1 Suka Mukti, a public primary school located in a rural area of Indonesia. The participants comprised one English teacher and thirty-five students from grades 1 to 6. The English teacher was the only instructor responsible for teaching English in this school. Although the number of teacher participants was limited, the larger student sample was intended to provide balanced insights into the perception of ICT in the teaching and learning process.

The primary instrument for students was a Likert-scale questionnaire to measure their perceptions of ICT use in English learning. The questionnaire consisted of 20 items, each rated on a five-point scale ranging from strongly agree to disagree strongly. The items were categorized into four dimensions: motivation, engagement, ease of use, and perceived effectiveness. These dimensions were selected based on existing literature on ICT in language learning, ensuring content validity and relevance to the research objectives. For example, items under the motivation dimension assessed whether ICT tools made students more interested in learning English, while items on engagement focused on whether ICT increased their participation and interaction during lessons. In addition to the questionnaire, a semi-structured interview was conducted with the English teacher to gain deeper insights into teachers' perspectives. The interview protocol included open-ended questions that explored opportunities, challenges, and personal experiences related to ICT integration in the classroom. Semi-structured interviews provided flexibility, allowing the researcher to probe further into specific issues raised by the teacher while maintaining consistency across key themes. This combination of quantitative and qualitative instruments ensured a more comprehensive understanding of students' and teachers' perceptions.

The data collection process was conducted in two stages. First, questionnaires were distributed to 35 students during class time to ensure a high response rate and clear understanding of the items. The researcher supervised the session to maintain consistency and authenticity of responses. Next, a 30-minute semi-structured interview was held with the English teacher to obtain deeper insights. With informed consent, the interview was audio-recorded and transcribed verbatim for analysis. Both quantitative and qualitative data were collected within the same week to ensure consistency and contextual relevance.

The quantitative data from the students' questionnaires were analyzed using descriptive statistical techniques, including mean scores, percentages, and frequency distributions. These

methods were chosen because they effectively summarize significant survey responses and identify overall trends and patterns in the students' perceptions. For example, mean scores provided insights into the general tendency of responses for each questionnaire item. At the same time, percentage and frequency distributions highlighted the proportion of students who strongly agreed, agreed, were neutral, disagreed, or strongly disagreed with each statement. This analysis offered a clear and systematic overview of how students perceived ICT in motivation, engagement, ease of use, and perceived effectiveness. The results of this descriptive analysis served as the foundation for interpreting students' attitudes and comparing findings with previous studies in the field. Meanwhile, the qualitative data from the semi-structured teacher interviews were analyzed thematically. The interview transcript was carefully reviewed, and responses were coded into meaningful categories. Recurring ideas and perspectives were identified, grouped, and refined into broader themes through an iterative process. These themes reflected the opportunities and challenges of ICT integration in the classroom, capturing the teacher's nuanced views on issues such as access to resources, professional competence, student engagement, and classroom management. Thematic analysis was particularly suitable because it allowed for exploring explicit and implicit meanings within the teacher's narrative, providing a richer contextual understanding that complemented the quantitative findings.

Ethical considerations were ensured by obtaining permission from the school principal and informing all participants about the study's purpose. Participation was voluntary, and anonymity and confidentiality were strictly maintained.

RESULTS DAN DISCUSSION

Result

To present the qualitative findings of this study, the teacher's interview data were analyzed thematically. The results are summarized in Table 1, which highlights the key themes that emerged, supported by paraphrased example statements and their interpretations. These themes reflect the perceived benefits of ICT in enhancing English language learning and the challenges encountered in its classroom implementation.

Table 1. Thematic analysis of teachers' interviews

Theme	Example Statement (Paraphrased)	Interpretation
Positive attitudes	"ICT makes lessons more enjoyable and helps students focus."	The teacher sees ICT as a valuable tool to engage students and increase interest.
Enhancing vocabulary & motivation	"Videos and games help students remember new words more easily."	ICT supports language learning, especially vocabulary building and motivation.
Challenges in infrastructure	"Sometimes the internet is slow, and there are not enough devices for all."	Limited resources hinder consistent use of ICT in class.
Need for professional training.	"I need more training to integrate ICT effectively, not just show videos."	The teacher feels capable of using basic tools but needs pedagogical training.
Time constraints	"Preparing ICT-based lessons takes more time compared to regular teaching."	Planning with technology requires extra effort, which competes with teaching load.

Table 1 explains that the thematic coding of the teachers' interviews shows enthusiasm and concerns. The teacher confirmed ICT's role in improving student engagement and vocabulary acquisition, which was consistent with the students' responses. However, recurring challenges included unstable internet, limited devices, and insufficient digital resources. Another important theme was the need for professional development; the teacher expressed a desire for training focusing on operating ICT and integrating it meaningfully into lesson design. Time management emerged as a final concern, as ICT supported lessons require more preparation than traditional methods.

The teacher's interview data analysis further revealed several important insights into teachers' perceptions of ICT in English language learning. These perceptions can be categorized

into three main areas: their positive attitudes toward ICT, their belief in its potential to enhance vocabulary and motivation, and their recognition of the need for professional training and improved infrastructure.

Teachers' Perceptions

Teachers' perceptions of ICT in the classroom indicate a generally positive attitude toward using technology in supporting English language learning. Most teachers acknowledged that ICT makes lessons more engaging and enjoyable for students than traditional teaching methods. Using multimedia resources such as videos, audio recordings, and interactive applications effectively captures students' attention and maintains their focus during lessons. This reflects a shift from teacher centered instruction to more interactive, student centered approaches that align with modern pedagogical practices.

In addition to fostering engagement, teachers strongly believed in the potential of ICT to enhance vocabulary acquisition and increase student motivation. For instance, visual materials, online games, and other interactive exercises were considered helpful in making new vocabulary more memorable for young learners. Teachers observed that students retained words more effectively and displayed greater enthusiasm when digital tools were incorporated into classroom activities. This suggests that ICT can serve as both a cognitive aid for language retention and an affective stimulus to boost learners' interest and confidence in English.

Despite these positive perceptions, teachers also emphasized the pressing need for professional training to integrate ICT into teaching practices effectively. While most felt comfortable using basic tools such as videos or presentation slides, they expressed limited confidence in employing more advanced or pedagogically grounded applications. Teachers highlighted that ICT risks being used superficially rather than as a meaningful tool to transform learning without adequate training. This highlights the necessity for ongoing professional development programs that focus on technical skills and effective instructional strategies for ICT integration.

Another major concern is the lack of infrastructure and resources. Teachers reported slow internet, limited devices, and minimal technical support, which hinder effective ICT use. They emphasized that schools need better facilities and equal access to digital tools to fully realize the benefits of ICT in English learning.

Students' Perceptions

The findings from the student questionnaire revealed that a large majority of students (85.7%) agreed that using ICT makes English learning more interesting. In comparison, around 80% reported feeling more motivated when teachers integrated digital tools into their lessons. This suggests that ICT has a strong influence not only on cognitive engagement but also on students' affective responses toward learning. By making lessons more interactive and enjoyable, ICT appears to encourage greater participation and willingness to engage with English beyond the constraints of traditional teaching methods.

Students also expressed a high interest in using digital tools in their learning process. They consistently reported that ICT lessons were more exciting than book-based approaches, reflecting a preference for dynamic and interactive classroom experiences. This enthusiasm highlights the potential of ICT to transform learning environments by shifting from rote memorization to more experiential and engaging practices that appeal to young learners. When students perceive learning as enjoyable, their motivation and retention will likely improve significantly.

Another important finding was students' familiarity with basic applications such as YouTube and educational games. Many students reported using these platforms outside the classroom, which indicates that they already possess a level of digital literacy that can be leveraged in school settings. This familiarity enables smoother adaptation when teachers employ similar tools during lessons, as students do not need to start from scratch in learning how to use the platforms.

Consequently, using commonly accessed digital resources can bridge informal, self-directed learning at home and formal, structured learning in the classroom.

Despite these advantages, access to personal devices remained a significant challenge. Only 42.9% of students reported owning their own gadgets, while more than half relied on shared devices, often with family members. This limited access restricted their ability to fully benefit from ICT outside school hours, as time with devices had to be divided among household members. Such disparities in access highlight the issue of digital inequality, particularly in rural areas, and underscore the need for schools and policymakers to address infrastructure and resource limitations to ensure that the benefits of ICT are equitably distributed among all learners.

Challenges Identified

The main challenges in integrating ICT in English learning include unstable internet connections, a lack of suitable digital resources, and limited time for lesson preparation. Poor connectivity disrupts lessons and reduces motivation, while the shortage of localized materials and time constraints make teachers rely less on ICT, limiting its effectiveness in enhancing learning outcomes.

Discussion

The findings of this study are consistent with earlier research on the use of ICT in primary education. Similar to studies conducted in other Indonesian contexts, teachers at SD Negeri 1 Suka Mukti expressed generally positive attitudes toward the role of ICT in enhancing teaching and learning. They emphasized the potential of technology to make lessons more engaging and interactive, particularly in supporting vocabulary development and motivation among students. At the same time, students showed strong enthusiasm for learning with digital tools, reflecting previous reports that young learners are naturally drawn to multimedia resources. Nevertheless, the study also confirmed ongoing challenges, particularly the limited access to personal devices and the instability of internet connectivity, issues that have been widely documented in rural school environments.

From a constructivist perspective, the results further highlight how ICT fosters learner-centered approaches. Students' engagement with YouTube and educational games illustrates how they construct knowledge by interacting with multimodal materials. This finding is consistent with Warschauer & Kern (2000), who emphasize the importance of ICT in enabling students to build knowledge through exploration rather than passively receiving information. Similarly, Marone (2025) Argue that digital resources provide auditory, visual, and interactive contexts that help learners connect new input to prior experiences. However, limitations such as the shortage of tailored teaching materials and the extra time required to prepare ICT-based lessons reduce the extent to which ICT can fully support constructivist practices in primary classrooms.

The study also underscores the importance of institutional policies and teacher competence in shaping ICT practices. At SD Negeri 1 Suka Mukti, the success of ICT integration is influenced by resource allocation, infrastructure, and curriculum planning at the school level. Teachers acknowledged that while they are open to ICT use, gaps remain in both technical and pedagogical expertise. Gernal et al. (2024) Emphasize that ICT effectiveness depends not only on access to technology but also on teacher competence and institutional support. ICT risks remain superficial without adequate professional training, such as merely playing videos rather than being embedded in deeper teaching strategies. As Pramudianto & Iskandar (2024) Highlight: Professional development is essential to ensure meaningful ICT integration that enhances pedagogy.

Finally, this study draws attention to the persistence of the digital divide in rural schools. Limited internet connectivity, insufficient resources, and unequal access to devices remain significant barriers to effective ICT adoption. These findings mirror Erlam et al. (2021) Arguments that rural schools face systemic challenges that hinder consistent ICT use. To address this, Andang & Subhan (2023) Suggest a dual approach: immediate low-cost strategies such as offline

applications, collaborative device use, and long-term government investment in infrastructure and equitable access. By narrowing this divide, rural students can enjoy the same opportunities for ICT-enhanced English learning as their urban peers.

Several related studies in Indonesia and other contexts support the findings of this research. For instance, Achmad & Mulyati (2023) reported that vocational English teachers in Banyumas held positive perceptions of ICT but faced challenges related to limited infrastructure and lack of technical skills. Similarly, Zahroh & Ratih (2024) found that university students in Sorong were motivated and more confident when using ICT in language learning, yet access to personal devices remained limited. These studies corroborate the findings at SD Negeri 1 Suka Mukti, highlighting a typical pattern in which ICT is perceived as beneficial. However, practical constraints such as device availability and internet connectivity hinder its optimal use. Additionally, Achmad & Mulyati (2023); Saputro (2023) observed that both teachers and students in high schools across West Java, West Kalimantan, and Jakarta showed high digital literacy in operational tasks but lower confidence in creating digital content, emphasizing the need for professional development and targeted support.

The novelty of this study lies in its focus on primary school English education in a rural Indonesian context, which has received relatively little attention in prior ICT research. While most previous studies have examined secondary or tertiary levels, this research explicitly investigates the perceptions of teachers and young learners at the primary level, providing insights into early-stage ICT integration. Moreover, by combining quantitative data from student questionnaires with qualitative insights from teacher interviews, this study offers a holistic view of the opportunities and challenges associated with ICT use in rural classrooms. This dual perspective enriches the understanding of ICT adoption in early English language learning and informs practical recommendations for improving infrastructure, professional training, and equitable access in similar rural settings.

CONCLUSION

The study concludes that teachers and students at SD Negeri 1 Suka Mukti hold generally positive perceptions toward using ICT in English language learning. Teachers recognize its potential to make lessons more engaging and to enhance vocabulary acquisition and student motivation. In contrast, students report higher interest and enthusiasm when digital tools are integrated into lessons. Despite these positive attitudes, effective implementation of ICT is constrained by several factors, including limited infrastructure, unstable internet connectivity, insufficient access to personal devices, and gaps in teachers' technical and pedagogical competencies. These challenges highlight the need for comprehensive strategies that address both technological and instructional aspects of ICT integration in primary education. Based on the findings, several recommendations are proposed to optimize ICT use in English learning at the primary school level. First, regular ICT training programs should be provided for English teachers to strengthen their technical skills and pedagogical strategies. Second, improvements in internet connectivity and access to digital devices are essential to ensure equitable opportunities for all students. Third, schools should develop ICT-based English learning modules for young learners to support interactive and compelling learning experiences. Finally, further research is encouraged in similar rural contexts to explore best practices, assess long-term outcomes, and identify additional strategies for overcoming infrastructure and resource limitations.

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