
ANALYSIS OF TECHNOLOGY USE IN ENGLISH LANGUAGE LEARNING: TEACHER AND STUDENT PERSPECTIVES

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Abstract

This study aims to analyse the use of technology in English language learning at the junior high school level by examining both teacher and student perspectives and identifying its pedagogical implications. Despite the growing integration of digital tools in education, studies focusing specifically on early secondary contexts remain limited, particularly in exploring the tension between engagement and higher-order thinking development. This research was conducted at Baitul Hikmah Islamic Junior High School, involving one English teacher and two seventh-grade students. A descriptive qualitative approach was employed to gain an in-depth understanding of participants' experiences. Data were collected through semi-structured interviews, classroom observations, and documentation, and analyzed using reflective thematic analysis, including coding, categorization, and theme development, supported by data triangulation to ensure credibility. The findings reveal that both teachers and students perceive technology as an effective tool to enhance motivation, engagement, and access to authentic learning resources. The teacher integrated various digital media, such as PowerPoint, audio-visual materials, and the Duolingo application, to create interactive and meaningful learning experiences. Students reported that technology-based learning is more engaging, enjoyable, and less monotonous than conventional approaches, contributing to increased participation and interest in learning English. However, the study also identifies several challenges, including limited digital devices, unstable internet connectivity, and concerns regarding the potential decline in students' critical thinking skills due to overreliance on technology. This study contributes to the literature by categorizing teacher and student perspectives while highlighting a pedagogical tension between increased engagement and the development of higher-order thinking skills in early secondary education. It suggests that technology integration should be carefully balanced with instructional strategies grounded in the TPACK framework. The findings provide practical insights for teachers and schools to optimize technology-enhanced English learning in a more pedagogically meaningful way.

Keywords: English learning, Junior High School Students, Teachers, Technology

Introduction

The development of information and communication technology (ICT) has brought about significant transformations in the world of education, including English language learning at the junior high school level. The use of technology in learning is now not only an alternative but also an urgent need to improve the quality of learning and student engagement. Technology has opened up opportunities for teachers and students to access broader learning resources, provide interactive media, and create more engaging and contextual learning environments (Munisa et al., 2024; Wahyudi et al., 2024).

Various forms of technology, such as Learning Management Systems (LMS), learning apps like Duolingo and Kahoot, and artificial intelligence (AI) tools like ChatGPT, have been widely used in English teaching. These technologies have been proven to improve student motivation, listening and speaking skills, and even critical thinking skills (Bong & Firmansyah, 2023; Soro et al., 2024; Sptyarini Putri A & Trisna Hady P, 2020). In fact, teacher training in creating technology-based learning media is an important step in encouraging more optimal use of technology in the classroom (Wulandari et al., 2024).

However, utilizing technology in English learning is not without challenges. Some teachers still struggle to design effectively integrated technology-based learning, primarily due to limited digital literacy and a lack of adequate training (Indriani & Wirza, 2020; Purandina, 2022). On the other hand, students also face obstacles in accessing technology and still show low interest in learning English, which can be influenced by monotonous or non-contextual teaching methods (Hidayat & Devi, 2024; Novianti, 2024). From a pedagogical perspective, technology integration should be based on a deep understanding of students' learning needs, as well as the principles of Technological Pedagogical Content Knowledge (TPACK) so that learning can run effectively (Fatoni & Baqi, 2022). In addition, teacher and student perceptions of the use of technology in learning are crucial factors in the success of this integration. Previous studies have shown that positive perceptions of technology correlate with increased student motivation and participation in the learning process (Iskandar & Safitri, 2021; Syahira et al., 2023).

Based on this background, this study aims to analyse the use of technology in English learning at the junior high school level from the perspective of teachers and students. The focus on junior high school students is particularly important because this level represents a critical transitional stage in language learning development. At this stage, students begin to develop more complex cognitive abilities, including analytical and critical thinking, while also experiencing increased exposure to digital technology in their daily lives. This combination creates a unique learning context in which technology integration can significantly influence both language acquisition and higher-order thinking skills.

In addition, junior high school students are often in the early phase of formal English learning, making it essential to examine how technology can support foundational language skills while maintaining meaningful engagement. Despite this importance, studies focusing specifically on technology use at the junior high school level remain limited, as most previous research has concentrated on senior high school or higher education contexts. Therefore, investigating this level provides valuable insights into how technology can be effectively integrated at an earlier stage of language learning.

By understanding how teachers and students interpret and practice the use of technology in the context of English learning, it is hoped that the results of this study can make a real contribution to designing innovative, effective, and relevant learning strategies to meet the needs of 21st-century learning.

Method

This study uses a qualitative approach with a descriptive-exploratory research type, which aims to understand in depth the subjective experiences, meanings, and interpretations of teachers and students towards the use of technology in English learning. This research was conducted at SMP Islam Baitul Hikmah in the even semester of the 2024–2025 academic year, specifically in the period May–June 2025. The selection of this school was based on the consideration that the institution has consistently implemented technology in English learning for the past three years. The research subjects consisted of English teachers with a minimum of three years of teaching experience and have

actively used learning technology, as well as eighth-grade students who have participated in technology-based learning for at least one year. Subjects were selected using a purposive sampling technique in accordance with these criteria.

The instruments used in this study included semi-structured interview guides for teachers and students, observation sheets for the learning process, and relevant learning documentation. Data were collected through in-depth interviews (30–45 minutes for teachers and 25–30 minutes for students), direct observation of the classroom learning process, and analysis of documents demonstrating technology integration. The data were analysed using reflective thematic analysis techniques, which included transcription, coding, theme identification, and validation through data triangulation. This approach was chosen so that the analysis results could represent the participants' authentic interpretations of technology use in English learning at the junior high school level.

Findings

The interview data were analyzed using reflective thematic analysis. After transcription and familiarization, the researcher conducted coding to identify meaningful units related to technology use in English learning. These codes were grouped into broader themes, resulting in five key themes: motivation for technology use, implementation strategies, perceived effectiveness, impact on students, and challenges in technology integration. Representative excerpts are presented below, followed by their interpretations.

1. Teacher Perspectives

Motivation for Technology Use

Excerpt:

R: "Why do you choose to use technology in teaching English?"

T: "Because students today are already familiar with technology. When I use digital media, they become more enthusiastic and interested in the lesson."

This response indicates that the teacher's decision to integrate technology is primarily driven by an awareness of students' characteristics as digital natives. The increased

enthusiasm observed suggests that technology aligns well with students' daily experiences, making learning more relevant and engaging. This implies that motivation is not only influenced by content delivery but also by the medium used, highlighting the importance of contextualizing pedagogy within students' technological environments.

Implementation Strategies

Excerpt:

R: "What types of technology do you usually use in your classroom?"

T: "I usually use PowerPoint combined with videos and audio. Sometimes I also use applications like Duolingo so students can practice independently."

The teacher's use of varied digital tools reflects an effort to create multimodal learning experiences. The combination of visual, auditory, and interactive elements suggests an understanding that different media can support different aspects of language learning. Additionally, the inclusion of applications like Duolingo indicates a shift toward promoting learner autonomy, where students are encouraged to continue learning beyond the classroom.

Perceived Effectiveness

Excerpt:

R: "Do you think technology improves students' learning outcomes?"

T: "Yes, it helps them understand the material faster. But sometimes they rely too much on the application and don't think deeply."

This finding reveals a pedagogical tension between efficiency and depth of learning. While technology facilitates faster comprehension, it may simultaneously reduce opportunities for critical thinking if students become overly dependent on ready-made answers. This suggests that technology integration should not only focus on accessibility and speed but also on designing activities that encourage deeper cognitive engagement.

Impact on Students

Excerpt:

R: “How does technology affect students’ participation in class?”

T: “They become more active and more confident to answer questions or participate in activities.”

The increased participation and confidence indicate that technology creates a more supportive and less intimidating learning environment. Interactive tools may lower students’ anxiety and encourage them to engage more actively. This highlights the role of technology in fostering not only cognitive but also affective aspects of learning.

Challenges in Implementation

Excerpt:

R: “What challenges do you face when using technology?”

T: “Sometimes the internet connection is unstable, and not all students have their own devices.”

This response underscores that technological integration is still constrained by infrastructural limitations. The lack of equitable access to devices and stable internet connectivity may create disparities among students. This suggests that successful implementation of technology requires not only pedagogical readiness but also institutional and infrastructural support.

2. Student Perspectives

Learning Experience

Excerpt:

R: “How do you feel about learning English using applications like Duolingo?”

S1: “It’s fun because it feels like a game, not like studying from a book.”

S2: “It’s more interesting and helps me understand better.”

Students’ responses indicate that gamified and interactive features of technology significantly enhance their learning experience. The perception of learning as “fun”

suggests a shift from traditional, possibly monotonous methods to more engaging approaches. This highlights the importance of incorporating elements of enjoyment and interactivity in language learning.

Motivation and Engagement

Excerpt:

R: "Do you feel more motivated when using technology?"

S1: "Yes, I feel more excited and want to keep learning."

S2: "I am not bored anymore when learning English."

The increased motivation reflects the strong influence of technology on students' emotional engagement. The absence of boredom suggests that technology helps sustain attention and interest over time. This indicates that engagement is a key mediating factor in effective learning, which can be significantly enhanced through appropriate use of digital tools.

Impact on Learning Achievement

Excerpt:

R: "Do you feel your English skills have improved?"

S1: "Not yet, because this is my first time using it."

S2: "Yes, I feel my English is improving because learning is fun."

The differing responses suggest that the impact of technology on achievement may vary depending on students' duration of exposure and individual experiences. While some students may not immediately perceive improvement, others associate enjoyment with learning progress. This implies that the effectiveness of technology may be gradual and influenced by both time and engagement.

Language Skills Development

Excerpt:

R: "Which skills are helped by using technology?"

S1: "All skills like: listening, speaking, reading, and writing."

S2: “Especially listening, but I think all skills improve.”

Students perceive technology as supporting integrated language skill development. The emphasis on listening suggests that audio-visual media play a significant role in enhancing comprehension. This finding indicates that technology can provide a more holistic language learning experience compared to traditional methods.

Learning Preferences and Expectations

Excerpt:

R: “What do you expect from your teacher when using technology?”

S1: “The teacher should still explain clearly so we understand.”

S2: “Teachers need to guide us so it’s easier to learn.”

Despite the benefits of technology, students still emphasize the importance of teacher guidance. This suggests that technology cannot replace the teacher’s role but rather functions as a supporting tool. Effective learning occurs when technology is integrated with clear instruction and pedagogical support.

Overall, the findings indicate that technology plays a significant role in enhancing motivation, engagement, and learning experiences in English language learning at the junior high school level. However, a consistent pattern emerges showing a pedagogical tension between increased engagement and the potential decline in critical thinking due to overreliance on technology. Additionally, both teacher and students highlight that the success of technology integration depends not only on the availability of digital tools but also on effective pedagogical strategies and teacher guidance.

Based on the interview results, the following information was obtained:

Table 1. Teacher Perspectives

Aspect	Findings
Motivation for Use	Student enthusiasm is high because they are digital natives
General View	Facilitates access to authentic materials and native speakers; complements traditional methods
Implementation Strategy	Interactive PowerPoint, audio/video, Duolingo app
Evaluation of Effectiveness	Improve learning outcomes; can reduce critical thinking skills
Impact on Students	Students are more active and motivated

Table 2. Student Perspectives

Aspect	Subject 1	Subject 2
Learning Experience	Duolingo is fun because it is game based, not boring like books.	Learning is more interesting, Duolingo helps understanding
Impact of Motivation	More enthusiastic and want to continue learning with technology	Increased enthusiasm for learning, no boredom
Impact of Achievement	I haven't felt it yet because it's my first time using Duolingo	Feel abilities increase because the learning process is fun
Assisted Skills	All skills (listening, speaking, reading, writing) are helped	All skills are helped
Favorite Technology	Duolingo and listening to English songs	English songs and Kahoot
Learning Outside the Classroom	Ever used Kahoot	Ever studied with Kahoot
Expectations for Teachers	Teachers must explain clearly and make students understand	Teachers must be able to explain well so that it is easy for students to understand.

Discussion

This section discusses the results of research on the use of technology in English learning at Baitul Hikmah Islamic Junior High School, focusing on the perspectives of teachers and two students in grade VII-F. Data obtained through interviews, observations, and documentation indicate that both teachers and students responded positively to the use of technology, particularly in improving motivation, engagement, and English language skills. However, several obstacles such as limited devices and unstable internet connections remain challenges in implementing technology-based learning. The following discussion elaborates on these findings in more depth based on themes that emerged from the data analysis.

1. Teachers' Perspectives on the Use of Technology in English Learning

Teachers view the use of technology in English learning as a highly potential tool for creating engaging and meaningful learning. They stated that the primary motivation for adopting technology was students' high enthusiasm for digital devices. This aligns with the findings. Munisa et al. (2024) This indicates that teachers' adoption of technology in learning is driven by the need to adapt teaching approaches to the characteristics of students as digital natives. Teachers cited the use of interactive PowerPoint with audio and video, as well as applications like Duolingo, as key strategies for delivering material. Technology is seen as facilitating access to authentic learning resources and allowing students direct exposure to native English speakers. This reinforces the statement Indriani & Wirza (2020) which states that the use of technology can enrich students' learning experiences through contextual content. Teachers also believe that the use of technology can improve learning outcomes and student engagement in the learning process. However, they continue to emphasize the importance of balance so that students do not become overly dependent on technology, which could potentially reduce their critical thinking skills (Wahyudi et al., 2024).

In terms of supporting factors, teachers cited the availability of projectors, school Wi-Fi access, and basic computer training as key factors in implementing technology. However, barriers remain, such as unstable internet connections, limited student devices, and difficulties in assessing the authenticity of online assignments. These barriers were also noted by Bong & Firmansyah (2023) which mentions infrastructure as a crucial element in the effective use of learning applications. As a solution, teachers suggest improving facilities, providing advanced training based on digital pedagogy, and developing a valid online evaluation system, as suggested by Fatoni & Baqi (2022) within the TPACK (Technological Pedagogical Content Knowledge) framework.

2. Students' Perspectives on the Use of Technology in English Learning

Students in this study demonstrated high enthusiasm for the use of technology in English learning. Subject 1 and Subject 2, two seventh-grade students interviewed, felt that learning with technology like Duolingo and Kahoot was much more engaging than conventional methods. Duolingo, for example, was considered fun because it was game-based, while listening to English songs helped expand vocabulary. This view aligns with the findings of the study Novianti (2024) which states that technology-based learning applications are able to increase students' interest in English subjects.

Learning motivation also increased. Students felt more enthusiastic and less bored when learning using digital media Syahira et al (2023) noted that technology, including artificial intelligence in learning, can significantly increase student motivation and participation. Although some students have not experienced significant improvements in achievement, they have found that learning has become more enjoyable and has helped them develop their comprehensive language skills of listening, speaking, reading, and writing. This was also confirmed by Sptyarini Putri A & Trisna Hady P. (2020) who found that AI-based media in English learning had a positive impact on these four basic skills.

However, students also mentioned challenges such as sometimes slow internet connections and limited digital devices available at home. Nevertheless, they expressed

hope that teachers would continue to guide and explain the material effectively. This demonstrates that while technology helps, the role of teachers remains irreplaceable Iskandar & Safitri (2021) emphasized that the success of technology-based learning still requires interpersonal interaction and direct direction from teachers so that learning does not lose its essence.

Conclusion

Based on the research results, it can be concluded that the use of technology in English learning at Bustanul Hikmah Middle School has a positive impact on the teaching and learning process, both from the perspective of teachers and students. Teachers utilize various media such as interactive PowerPoint, the Duolingo application, and learning videos/audios to increase student participation and enrich teaching materials. Technology is seen as helping students access authentic materials and increasing learning motivation, although teachers continue to emphasize the need for balance to avoid dependency that can reduce students' critical thinking skills. Meanwhile, students feel that learning with technology is more interesting, enjoyable, and helps develop all four language skills. However, challenges such as unstable internet connections and limited devices remain obstacles to optimizing the use of technology.

Therefore, schools are advised to improve their technological infrastructure and ensure equitable digital access for all students. Teachers also need further training in integrating technology and digital-based pedagogy to make learning strategies more effective and sustainable. Students should also be guided to use technology productively, both inside and outside the classroom, as a means of independent learning. Further research is recommended to expand the scope of subjects and regions, and combine qualitative and quantitative approaches to gain a more comprehensive understanding of the influence of technology on English language learning outcomes.

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