



Integrating Technology Into English Language Teaching at SMPN 5 Batukliang: Impacts, Challenges, and Implementation Strategies

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Abstract

This research aims to investigate the integration of technology in English language teaching at SMPN 5 Batukliang, a rural junior high school in Central Lombok, Indonesia. This research aims to investigate the types of technology employed in English instruction at SMPN 5 Batukliang, analyze their impact on students' motivation and their development in listening, speaking, and vocabulary, and examine the challenges encountered by both teachers and students in the process. Furthermore, it seeks to uncover the adaptive strategies that have been implemented to overcome these obstacles and provide insights into the importance of integrating technology in ways that are context-sensitive and responsive to local needs. Employing a qualitative case study approach, data were collected through classroom observations and semi-structured interviews with English teachers. The study applied thematic analysis and was framed using the TPACK model. The findings reveal that while the integration of technology is minimal, primarily using projectors and YouTube videos, it has significantly enhanced student motivation, listening, speaking, and vocabulary development. Challenges include limited infrastructure, low digital literacy, and difficulty in understanding native English content. Teachers implemented adaptive strategies such as offline access, simplified content, and contextualized activities to overcome these barriers. The study concludes that even limited technological tools, when used thoughtfully and in alignment with pedagogical goals, can positively impact English language teaching in under-resourced settings. The findings highlight the importance of teacher agency, collaboration, and supportive policy to ensure effective and equitable technology integration in rural schools.

Keywords: *Technology Integration; English Language Teaching; TPACK; Rural Education; Student Motivation*

Introduction

The growth of information and communication technology (ICT) has radically changed many areas of human life, and education is no exception. As technology keeps evolving, education, which is one of the strategic sectors identified as a key, has undergone major changes. Technology integration in classrooms is no longer a trend but a necessity, particularly in light of the needs of 21st-century learning. Numerous researchers believe that integrating technology into teaching can enhance teaching quality as well as student engagement. This is also true for the teaching of English as a foreign language, especially at junior high school levels.

English is an international language that can assist learners in accessing global knowledge, communicating with other cultures, and becoming more competitive globally. Nevertheless, where technology is not readily accessible, students tend to find English learning difficult and uninteresting. In such cases, technology can enhance the learning experience in the classroom by making it more engaging, relevant, and appropriate for the needs of contemporary students, who are frequently referred to as digital natives (Kessler, 2016; Putra & Santosa, 2023).

Through digital tools, instructors are able to present English content in more visual, versatile, and interactive manners. In Indonesian junior high school contexts, tools such as instructional videos, YouTube, Padlet, Google Classroom, and interactive quizzes like Kahoot! and Quizizz have been effectively used to increase student engagement, especially in listening and speaking activities. These tools provide authentic language exposure, help students improve pronunciation, and promote active learning through collaborative tasks (Kencana, 2022). If used strategically, such platforms can also reduce student boredom, personalize learning, and enhance motivation in English language classrooms.

Although it has great potential, the utilization of educational technology is still not so advanced in most schools, particularly in rural and semi-urban areas. Preliminary observations in SMPN 5 Batukliang, a junior high school in Central Lombok, West Nusa Tenggara, indicate that the use of digital tools such as projectors and YouTube videos is minimal, typically occurring once every two weeks. Classroom teaching still relies heavily on lectures and exercises from textbooks.

Despite these advantages, a significant gap still exists between the potential of educational technology and its everyday application in rural schools. Studies show that several factors contribute to this gap, including limited ICT infrastructure, low teacher digital literacy, and a lack of school-level policies to support digital integration (Billik & Olbata, 2023). Many rural schools lack basic resources such as projectors, stable internet, or access to digital devices. In some cases, institutional rules even prohibit students from bringing smartphones, despite their potential usefulness for mobile-assisted language learning (Zulaikha et al., 2023). These challenges illustrate the pressing need for professional development, infrastructure investment, and flexible school regulations that support thoughtful and contextual technology integration.

Many students also show low motivation to learn English. A common mental barrier is the fear of making mistakes when speaking. This fear gets worse because they have a limited vocabulary and do not get enough chances to practice in real life. Technology can help by providing a supportive and low-pressure place where students can practice the language on their own and with confidence.

In light of such realities, an in-depth analysis of technology integration in English language teaching, especially in resource-poor school environments like SMPN 5 Batukliang, is required. Despite the growing recognition of the potential benefits of educational technology, its actual implementation in rural classrooms remains limited and often inconsistent. Therefore, this study seeks to bridge the gap between theory and practice by exploring how digital tools are currently used, the extent to which they influence students' engagement and language skills, and the barriers that hinder their effective use. This research aims to investigate the types of technology employed in English instruction at SMPN 5 Batukliang, analyze their impact on students' motivation and their development in listening, speaking, and vocabulary, and examine the challenges encountered by both teachers and students in the process. Furthermore, it seeks to uncover the adaptive strategies that have been implemented to overcome these obstacles and provide insights into the importance of integrating technology in ways that are context-sensitive and responsive to local needs. Through this investigation, the study contributes to the broader discourse on digital inclusion in education and highlights the critical role of teacher agency and institutional support in ensuring meaningful technology-enhanced learning

Literature Review

The integration of technology into English language teaching (ELT) has been widely recognized as a powerful approach to enhance instructional effectiveness and increase student engagement. Numerous studies support the view that digital tools, when integrated thoughtfully, can significantly improve students' listening, speaking, and vocabulary acquisition (Rizal & Nurkhamidah, 2025; Syafradin & Nuraeni, 2022). In Indonesian junior high school contexts, tools such as YouTube are frequently used to present short dialogue videos or songs with subtitles, which help students practice pronunciation and recognize sentence patterns. Similarly, Google Classroom has been employed by some teachers to distribute materials and collect assignments, while online quizzes like Kahoot! and Quizizz serve as interactive means for engagingly reviewing vocabulary and expressions.

The theoretical foundation that informs these practices is the Technological Pedagogical Content Knowledge (TPACK) framework developed by Mishra and Koehler (2006). According to this model, successful technology integration occurs when teachers can effectively blend their understanding of content, pedagogy, and technological tools. For instance, teachers who teach simple greetings and expressions using subtitled YouTube videos, followed by role-play or pronunciation drills, are applying TPACK principles by aligning content goals with appropriate technological media and suitable pedagogical strategies.

In rural educational contexts, such as SMPN 5 Batukliang, where access to technology is minimal and internet connectivity is unstable, teachers face unique challenges. Research confirms that such barriers include lack of ICT infrastructure, such as limited availability of projectors or functional internet, as well as low digital literacy among both teachers and students (Marlina & Susanto, 2021; Ningsih, Fauzi, & Rahmawati, 2022). For example, in several rural schools, including SMPN 5 Batukliang, digital tools are often used only once every two weeks due to limited equipment and scheduling constraints. In addition, institutional policies that prohibit smartphone use in class further restrict opportunities for mobile-assisted learning (Anwar, Lestari, & Zainuddin, 2025).

Despite these limitations, multiple studies highlight that even low-tech and infrequent interventions can be impactful when supported by pedagogical creativity. Offline strategies, such as pre-downloading YouTube videos to USB drives for use via projectors, selecting short and level-appropriate content, and combining video viewing with follow-up tasks like vocabulary reviews or dialogue writing, have proven effective in rural Indonesian schools (Putra & Santosa, 2023; Rizal & Nurkhamidah, 2025). At SMPN 5 Batukliang, for instance, a teacher used children songs and simple native-speaker videos to build listening comprehension and speaking fluency, especially by encouraging students to imitate intonation patterns and identify new vocabulary.

In sum, the literature reflects both the opportunities and the constraints of integrating technology into English teaching, particularly in under-resourced schools. While barriers persist, such as limited devices and internet access, teacher resourcefulness and contextual adaptation play a crucial role in making technology-supported learning both feasible and effective. This study extends previous research by offering a focused look at how basic digital tools are implemented, what challenges arise in real-life classroom settings, and how teachers in schools like SMPN 5 Batukliang navigate these challenges through grounded and practical strategies.

Method

This research used a qualitative approach with a single case study design. The study was conducted at SMPN 5 Batukliang, a rural junior high school in Central Lombok, West Nusa Tenggara, Indonesia. The study was framed using the TPACK model, which emphasizes the combination of technological, pedagogical, and content knowledge in classroom practices.

The participants were English teachers who regularly used technology in their teaching. They were selected using purposive sampling based on criteria such as teaching status, experience in using digital tools, and willingness to participate.

Data were collected through semi-structured interviews and classroom observations. Interviews focused on teachers' experiences and challenges in using technology. Observations were used to document actual teaching practices. However, during the observation, the class material did not require technology, so the interviews became the main data source. To increase credibility, triangulation was applied by comparing data from interviews and observations.

The data were analyzed thematically. The process included data collection, reduction, display, and conclusion drawing. Interview transcripts and observation notes were coded and categorized into main themes such as types of technology used, reasons for use, challenges, and adaptive strategies. This process helped the researchers capture a clear picture of how digital tools were applied in a rural English teaching context.

Findings and Discussion

Findings

This research was intended to explore how technology integration is implemented in English language instruction at SMPN 5 Batukliang. The findings presented below are based on classroom observations and teacher interviews, and are organized into four main themes: the use of technology in teaching, its impact on students learning, challenges in implementation, and strategies adopted to overcome these challenges.

The use of Technology in English Language Teaching

The Use of Technology in English Language Teaching Class observation and interviews revealed that while the use of technology at SMPN 5 Batukliang is still low, it is felt to be very effective when used properly. The primary technology tools utilized are projectors and YouTube, and these are used about once every two weeks. These tools are not used as part of everyday teaching because of technical and scheduling constraints, but are chosen strategically according to the subject of learning.

For instance, in teaching everyday expressions, the instructor utilized brief dialogue videos with native speakers. There was also the use of children's songs as listening material, which aided in vocabulary gain. The instructor frequently coupled these with traditional methods like lecturing and writing drills in order to present a well-rounded learning experience. This practice is congruent with the TPACK model (Mishra & Koehler, 2006), in which technological, pedagogical, and content knowledge are conflated in planning instruction.

Projectors allowed the class to view videos as a whole group, and follow-up activities like spotting new vocabulary or imitating intonation patterns meant students were able to interact actively with the content.

Impact of Technology Use on Student Learning

In spite of the limited tools, the teacher indicated some beneficial effects of technology integration. The utilization of YouTube videos was especially successful in enhancing the listening and speaking abilities of the students, as they were introduced to real language usage in contextual situations.

Students were observed to listen more intently, particularly when viewing cartoon videos or hearing songs with subtitles.

According to the teacher, "Yes, students' interest and motivation have increased significantly. For instance, whenever I show a dialogue video between native speakers with subtitles, the students listen more carefully, and they are more likely to mimic the characters' speech." (Interview, May 20, 2025)

The videos also supported vocabulary acquisition and grammatical awareness, as students picked up sentence structures and spelling from subtitles. Follow-up writing activities to the video sessions, such as writing dialogues or summarizing the content, also continued to enhance students' reading and writing competence.

Challenges in Technology Integration

In spite of the advantages, there were some challenges in the use of technology that were noted. Firstly, there is a lack of infrastructure: not every classroom has projectors, and internet connection is not stable. The teacher sometimes has to shift equipment around manually or rearrange lessons according to availability. Live streaming from YouTube is especially challenging because of the slow internet connection speed.

First, planning digital lessons, such as looking for appropriate videos or editing material, takes longer than planning textbook-based lessons. From the learner's point of view, comprehending rapid or accented English in videos is a tremendous challenge. The educator observed that most learners do not have enough listening practice and need a lot of support to understand audiovisual content.

Implementation Strategies

To overcome these difficulties, the teacher implemented a number of adaptive strategies. One of these strategies is to download videos beforehand and store them offline on a flash drive. This prevents the need for real-time internet streaming and enables lesson delivery with fewer interruptions.

One approach is to choose brief, level-appropriate videos so that students comprehend the material and remain interested. Such videos are always followed by interactive activities, like class discussions, role-plays, or writing exercises, which serve to convert passive watching into active learning. In the opinion of the teacher, this approach not only consolidates understanding but also increases students' confidence and motivation.

The educator also emphasized the value of colleague collaboration. With minimal resources, there exists a collective ethos of cooperation among educators in using digital media. In the future, the educator desires additional training and resources to enhance the long-term use of technology. Notably, the educator prioritized a measured and contextualized approach to technology implementation, a mixture of old and new methodologies depending on student requirements and subject applicability. This reflects again the TPACK framework, which emphasizes the conjunction of technological tools with suitable pedagogical methods.

Discussion

The results of this research provide abundant evidence of the grounded realities of technology integration in English language teaching in a rural school setting, namely SMPN 5 Batukliang. The data point to a paradox typical of under-resourced learning contexts: although there are infrastructure constraints, teacher agency, resourcefulness, and pedagogical adaptability could still render technology-supported learning not only feasible but also effective.

One of the most profound revelations is the substantive use of common digital tools, including projectors and YouTube. While these are not used every day, their intentional use shows that the quality of integration is more important than quantity. This supports Kessler's (2016) contention that effective technology use is less about the latest and greatest tools, but leveraging available resources in pedagogically effective ways. In accordance with the TPACK model (Mishra & Koehler, 2006), the teacher's conscious choice of videos based on lesson goals indicates an informed combination of technological, pedagogical, and content knowledge.

In addition, the research validates the motivational and cognitive advantages of using multimedia in language learning. Exposure to real English, through songs, dialogue videos, and animations, elicits students' interest and makes them more willing to participate. This resonates with Self-Determination Theory (Deci & Ryan, 1985) that learning is best achieved when students are intrinsically motivated, feel competent, and autonomous. As attested, the students' heightened attentiveness and imitation of native speaker pronunciation indicate not just better listening and speaking abilities but also developing confidence in using the language.

Furthermore, the function of subtitles as scaffolding devices cannot be overestimated. Subtitled videos enabled learners to make the connection between spoken and written English, facilitating the acquisition of vocabulary, grammatical awareness, and sentence structure. This validates the pedagogical value of multimodal input in assisting learners to acquire language through various sensory modalities (Mayer, 2005).

Yet, it is necessary to place these advantages amidst the challenges that remain. The infrastructure of SMPN 5 Batukliang is not consistently conducive to the integration of technology. The lack of projectors in all classrooms and unstable internet connectivity represent a wider digital divide that continues to impact rural education. These results are consistent with the findings of Marlina and Susanto (2021), who highlight that the success of EdTech implementation is not just dependent on access to devices but also on a stable support system, encompassing technical, pedagogical, and institutional aspects. Moreover, the intellectual challenge for the students to understand rapidly spoken or thickly accented English underpins the necessity for meticulous material choice and scaffolding. Most of the students in rural areas lack previous exposure to spontaneous spoken English, and therefore, it is crucial for educators to pre-teach essential vocabulary, reduce playback speed, or pause repeatedly for clarification. Such adjustments take additional preparation time and profound familiarity with learners' needs, underlining the significance of teacher professionalism and commitment in such environments.

The instructor's implementation plans, particularly offline downloading of videos and integrating digital materials with active follow-up activities, illustrate a good way of contextualizing technology use. Rather than depending on digital exposure alone, the instructor took students through after-viewing activities like discussion, imitation, or writing tasks. This not only reinforced understanding but also permitted integration of skills across listening, speaking, reading, and writing. In this manner, the passive reception of digital content was changed into active building of language knowledge.

Another issue deserving of mention is the school's collaborative ethos. The teacher spoke about the value of peer support in surmounting difficulties, mirroring a community of practice (Wenger, 1998) in which knowledge and resources are exchanged among colleagues. Such a collaborative spirit can provide a strong buffer against systemic constraints, enabling grassroots innovation and capacity building through mutual support.

Lastly, the desire for future training and resource availability indicates the shared ambition of the teachers to develop professionally and enhance students' learning outcomes. It also indicates the necessity for policy-level action. Unless government departments or stakeholders in education are interested in

enhancing access to digital learning on an equitable basis, investment in infrastructure, continuous development of teachers, and locally applicable digital content needs to be accorded priority. In conclusion, SMPN 5 Batukliang's case shows how even relatively low technology can be used to have a revolutionary impact on English language learning through pedagogical intentionality.

The results affirm that rural schools are not necessarily disadvantaged in the quality of education. What they lack in terms of resources can frequently be compensated for through intense teacher dedication, contextualized adaptation, and innovative problem-solving.

For future practice and research, it is critical to investigate how such context-sensitive approaches may be amplified and sustained in comparable educational contexts throughout Indonesia and elsewhere.

Conclusion

This study found that the integration of technology in English language teaching at SMPN 5 Batukliang, although limited in terms of frequency and infrastructure, has brought meaningful benefits to students. The use of basic tools such as projectors and YouTube videos, when paired with follow-up activities like discussions, role-plays, and writing exercises, proved effective in improving listening, speaking, and vocabulary skills. These results demonstrate that even low-cost technologies can support language learning when used strategically.

The findings also reveal that the teacher's role, guided by the TPACK framework, is crucial in ensuring effective technology integration. Despite facing challenges such as unstable internet connections and limited access to devices, the teacher applied adaptive strategies including offline video use, simplified content, and collaboration with colleagues. These practices helped bridge the gap between pedagogical goals and technological constraints.

However, some challenges remain, especially in terms of digital infrastructure and students' ability to comprehend native speaker content. Therefore, greater support is needed through investment in school technology, professional training for teachers, and policies that encourage innovation. Ultimately, successful technology use in rural classrooms depends not only on access to tools but also on how well those tools are integrated into meaningful, context-sensitive instruction.

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