

The Implementation of Interactive Learning Through ICT in English Language Education for Junior High School Students

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Abstract: This study investigates the implementation of interactive learning through Information and Communication Technology (ICT) in English language education for junior high school students. Employing a mixed-methods approach, the research aims to explore how ICT is applied in English classrooms, the challenges faced by teachers and students, and its effectiveness in enhancing students' understanding and motivation. Data were gathered through interviews with English teachers and questionnaires completed by students. The findings reveal that teachers use various digital platforms such as Quizizz, Padlet, YouTube, and Word wall to create engaging and interactive learning environments. These tools are effective in increasing students' participation, improving comprehension, and supporting vocabulary acquisition. Students responded positively, indicating that ICT-based learning made lessons more enjoyable and easier to follow. However, several challenges were identified, including classroom management difficulties and the need for continuous teacher training in digital pedagogy. The study concludes that while ICT integration offers substantial benefits in motivating students and improving learning outcomes, its success relies on teachers' digital competence and institutional support. The results highlight the need for strategic implementation, regular professional development, and appropriate infrastructure to ensure sustainable and effective use of ICT in English language education.

Keywords: *English language education, ICT integration, interactive learning, junior high school, student motivation*

INTRODUCTION

The integration of Information and Communication Technology (ICT) in English Language Teaching (ELT) has become increasingly vital in the digital era. ICT offers innovative tools that enhance both teaching strategies and student engagement by enabling interactive, flexible, and student-centered learning environments. In ELT, ICT can support the development of listening, speaking, reading, and writing skills through digital platforms such as language learning applications, video-based instruction, and online assessments. Teachers can utilize interactive media like Quizizz, Padlet, YouTube, and Kahoot to present content in dynamic ways that cater to various learning styles and boost students' motivation. The effective use of ICT in ELT not only helps overcome traditional classroom limitations but also fosters a more immersive and autonomous language learning experience.

In terms of learning English at the school, English instructors must find the right ways to move forward students' enthusiasm in learning English and make them cherish their learning. As we know that numerous schools in Indonesia utilize English as a presentation to learning within the classroom, particularly in major cities of Indonesia and indeed English has ended up an extra moment dialect after the mother tongue. Numerous Indonesians, particularly understudies, have trouble in learning English, counting the learning strategies utilized improperly, restricted learning time and mental or need of certainty (Gumartifa et al., 2023). These problems highlight the need to identify and support language learning strategies at the secondary school level (Aprisama, 2024) (JELL).

Innovative headways have brought noteworthy changes in different areas, counting instruction (Martínez-Climent et al.,) The improvement of data and communication innovation has had both coordinate and circuitous positive impacts on existence (Raja & Nagasubramani, 2018). In instruction, innovation is anticipated to upgrade learning quality, particularly in educating strategies and directions

media. The integration of technology in instruction offers arrangements to various challenges within the learning prepare (Rengur et al., 2024). Moreover, innovation makes a difference instructors make more compelling learning encounters and cultivates more noteworthy interaction between teachers and understudies.

In today's computerized time, data and communication innovation has ended up an indistinguishable part of different viewpoints of life, counting instruction and the learning process (Chun et al., 2016) (Pujiastuti et al., 2021a). The Covid-19 widespread in Indonesia led to a move within the instructive framework, where learning seems not be conducted totally in schools. As a result, online learning became fundamental, with innovation playing a pivotal part in its execution. The slant of consolidating innovation into instruction has proceeded to develop, especially through intelligently learning, which serves as a successful learning arrangement (Pujiastuti et al., 2021a).

Intuitively learning coordinating different media components such as content, pictures, illustrations, liveliness, sound, and video, which clients can control and explore agreeing to their learning needs (Bardi et al., 2015) Due to its focal points, intelligently mixed media has gotten to be an inventive and compelling learning device. Firstly, it makes learning more locks in and intuitively. The intelligently nature of interactive media upgrades comprehension and empowers understudies to require a dynamic part within the learning handle (Chris Evans, 2007). Besides, intelligently mixed media can combine distinctive sorts of media, such as text, pictures, sound, music, activitys, and recordings, to form a comprehensive learning encounter (Leow & Mai NEO, 2014). This approach can alter students' discernments of complex subjects, making learning more agreeable and persuading (Ampa, 2015). Besides, intelligently interactive media suits assorted learning styles, makes a more immersive learning environment, and presents locks in activitys and visuals that improve student's intrigued and inspiration. The utilize of intuitively mixed media in learning has demonstrated to be more compelling than ordinary strategies (Rachmadtullah et al., 2018).

Based on a preparatory think about that learning inspiration and understanding of ICT based English learning stay moderately moo. This sort of learning is considered challenging, which comes about in diminished eagerness among understudies (Pujiastuti et al., 2021b). Experimental prove from the field appears that numerous understudies still battle to get a handle on the key concepts of digital-based English instruction. The learning substance frequently shows up theoretical and troublesome to comprehend for junior tall school understudies, who are still within the concrete operational organize of cognitive advancement. Hence, unique materials require appropriate learning media to assist bridge students' understanding and make learning more available.

METHOD

This study employed a mixed-methods descriptive approach to investigate the implementation of interactive learning through Information and Communication Technology (ICT) in English language teaching for junior high school students. This approach was selected to obtain a comprehensive understanding of the topic by integrating both quantitative and qualitative data.

The participants consisted of an English teacher and students from a junior high school in Samarinda, selected using purposive sampling due to the school's active integration of ICT in English instruction. The selected teacher frequently utilized digital tools such as Quizizz, Google Forms, Kahoot, and Padlet. Student participants were those enrolled in the teacher's English class who had actively participated in ICT-based learning activities.

Data collection involved semi-structured interviews with the teacher and questionnaires administered to students. The interview was designed to explore the teacher's experience, challenges, and perceptions related to ICT integration. The student questionnaire consisted of 20 items using a 3-point Likert scale (Strongly Agree, Agree, Disagree), focusing on aspects such as ease of use, usability,

engagement, and overall attitudes toward ICT-based learning. Both instruments were developed based on a literature review and validated through expert judgment.

Quantitative data from the questionnaires were analyzed using descriptive statistics (percentages) to summarize student perceptions. Qualitative data from interviews were analyzed using content analysis, where responses were categorized into themes such as implementation strategies, student motivation, effectiveness, and technical challenges.

To ensure the trustworthiness of the data, several strategies were employed. Credibility was maintained through data triangulation between teacher interviews and student questionnaires. Transferability was enhanced by providing detailed descriptions of the school context, participants, and procedures. Dependability was achieved by applying consistent procedures in data collection and analysis. Confirmability was supported through systematic documentation of the research process and by minimizing researcher bias during interpretation. Prior to data collection, informed consent was obtained from both the teacher and students. Participant confidentiality and anonymity were strictly maintained throughout the study.

RESULT AND DISCUSSION

The results of this study indicate that the implementation of ICT in English language teaching at junior high school has been effectively integrated through various digital platforms. Based on teacher interviews, digital tools such as YouTube, Quizizz, Padlet, Bamboozle, and Word wall were frequently used to create interactive learning environments. These tools were selected not only to match the lesson topics but also to align with students' interests, thereby increasing engagement. For instance, teachers used video content combined with muted scenes from popular films and converted them into interactive quizzes, allowing students to engage more deeply with the material. A similar pattern was observed in a study by (Ozah Faoziah et al., n.d.), where ICT tools like WhatsApp and Edmodo improved student motivation and participation (JELL).

Questionnaire data from students further supported the effectiveness of ICT-based learning. In the aspect of ease of use, 100% of students agreed or strongly agreed that they could easily access learning media like videos and Google Forms and follow lessons from home using digital devices. This reflects a high level of digital literacy among junior high school students. In the area of usability, all students reported that ICT helped them better understand English materials and complete tasks more efficiently. Most students also found learning more enjoyable and were more motivated when using interactive media. This finding is supported by (Syarifah, n.d.), who reported that students perceived Google Classroom as an effective tool in developing their writing skills through digital interaction (JELL).

In terms of engagement, digital quizzes such as those found on Kahoot and Quizizz were especially effective. All students agreed that these platforms made learning more fun, and many stated that they were more active in answering questions and engaging with classmates and teachers during ICT-based lessons. However, some challenges were also identified. Teachers noted that while ICT increased enthusiasm, it sometimes made classroom management more difficult. They emphasized the importance of having strategies to refocus students when they became distracted. (Nurhidayat, 2021) highlighted similar barriers faced by pre-service English teachers in promoting student communication skills, especially when digital tools were not optimally used (JELL).

The findings confirm that interactive ICT-based learning significantly contributes to enhancing English language learning experiences for junior high school students. The positive responses from students in terms of ease of use, usability, and engagement demonstrate that technology is not only accessible but also effectively supports comprehension and motivation. These results align with the Technology Acceptance Model (TAM), which posits that perceived ease of use and usefulness directly affect users' acceptance of technology.

Comparing with previous studies, these findings are consistent with (Ampa, 2015) and (Alobaid, 2020), who emphasized the effectiveness of multimedia and gamified learning tools in enhancing student motivation and understanding. In particular, the use of platforms such as Quizizz, Padlet, and Kahoot aligns with (Shih-Hsiung Liu, 2011), who highlighted that teacher digital competence is critical for successful integration.

One key insight from the teacher interview is that gamification plays a central role in student engagement. This supports the argument from (Saleem et al., 2022) that gamified e-learning increases enjoyment and fosters more active learning environments. However, while the tools increased motivation, they also introduced classroom management challenges, which highlights a dual responsibility: utilizing engaging tools and maintaining discipline through clear pedagogical strategies.

Furthermore, students' preference for visual and interactive content reflects the need for learning media that cater to diverse learning styles. The integration of videos, quizzes, and collaborative tools helped bridge abstract material and made learning more concrete and relatable, especially for students still in the concrete operational stage of cognitive development.

In terms of practical implications, this study suggests that teachers should receive continuous training in digital pedagogy to maximize the effectiveness of ICT tools. Schools should also provide adequate infrastructure and technical support to ensure smooth integration. While the findings are promising, the study's limited scope (involving only one class and one teacher) suggests that further research involving larger and more varied samples is needed for broader generalization.

Overall, the discussion highlights that while ICT offers promising solutions for improving English language education, its success is highly dependent on strategic implementation, teacher readiness, and institutional support.

Table 1. Student Perception of Ease of Use

No	Statement	Strongly Agree (%)	Agree (%)	Disagree (%)
1	I find it easy to use learning media such as videos, apps, or Google Forms.	17.6	82.4	0
2	I didn't have any difficulties when participating in technology-based learning.	23.5	67.6	8.8
3	Teachers provide clear instructions when using ICT in learning.	17.6	76.5	5.9
4	I can access the subject matter from home using a digital device.	26.5	73.5	0

5	I feel comfortable following the teacher's instructions through digital platforms.	17.6	50.0	32.4
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As shown in Table 1, 100% of students either agreed or strongly agreed that they could easily use ICT tools. Only 8.8% expressed difficulties, reflecting their strong adaptability to digital environments.

In terms of usability, students reported that ICT helped them better understand lessons and complete tasks more efficiently.

Table 2. Student Perception of ICT Usability

No	Statement	Strongly Agree (%)	Agree (%)	Disagree (%)
6	Technology helped me understand English lessons better.	52.9	47.1	0
7	I find learning to be more enjoyable when using interactive media.	23.5	76.5	0
8	The use of technology makes me more enthusiastic about learning.	20.6	79.4	0
9	Interactive learning media made me better understand English vocabulary.	26.5	73.5	0
10	ICT helps me in doing English tasks more efficiently.	23.5	76.5	0

These results suggest that digital platforms not only support comprehension but also foster students' enjoyment and motivation in English learning.

Regarding student engagement and interactivity, the data highlight how ICT promotes active participation in learning activities.

Table 3. Student Engagement and Interactivity

No	Statement	Strongly Agree (%)	Agree (%)	Disagree (%)
11	I can be more active in answering questions or discussing when using ICT media.	5.9	73.5	20.6

12	I can interact better with friends and teachers while learning to use ICT.	8.8	76.5	14.7
13	I was able to learn independently using the technology provided by the teacher.	26.5	67.6	5.9
14	I am more courageous to express my opinions when learning through interactive media.	14.7	50.0	35.3
15	I find learning more interesting when I can play digital quizzes (e.g., Kahoot, Quizizz).	50.0	50.0	0

Notably, all students agreed that digital quizzes made learning more interesting. However, the ability to express opinions confidently varied, indicating the need for further support.

The final section of the questionnaire measured students' overall attitudes toward ICT-based English learning.

Table 4. Student Attitudes Toward ICT-Based Learning

No	Statement	Strongly Agree (%)	Agree (%)	Disagree (%)
16	I love that English learning is done with the help of technology.	47.1	50.0	0
17	I hope that teachers will continue to use interactive media in learning.	32.4	67.6	0
18	In my opinion, technology is suitable for use in English lessons.	47.1	50.0	2.9
19	I feel confident when I use technology in learning English.	35.3	50.0	14.7
20	I want to learn to use more English learning apps.	44.1	55.9	0

Students showed strong enthusiasm and optimism about future technology use in English learning. This reinforces the need for sustained integration of ICT in language education.

ADDITIONAL FINDINGS: TEACHER INTERVIEW ANALYSIS

In addition to student questionnaires, the researcher conducted interviews with the English teacher to explore deeper insights into the use of ICT in the classroom. The responses were analyzed thematically and summarized in Table 5 below.

Table 5. Summary of Teacher Interview Themes

Theme	Focus	Teacher Response
ICT Tools Used	Digital Media	I use YouTube, Quizizz, and Bamboozle to support learning.
Student Motivation	Gamification	Students become more active when using games or interactive apps.
Classroom Management	Distraction Risk	Sometimes students lose focus and need to be reminded.
Learning Outcomes	Vocabulary & Comprehension	ICT helps students remember vocabulary better.
Teacher Readiness	Digital Literacy	I learned to use these tools on my own and through training.
Pedagogical Strategy	Content Alignment	I adjust the media to match the lesson topic and student needs.
Institutional Support	Facilities	The school provides Wi-Fi and allows use of projectors or speakers.

CONCLUSION

This study concludes that the application of interactive learning supported by Information and Communication Technology (ICT) significantly enhances the learning experiences of junior high school students in English education. The student questionnaire results demonstrate strong agreement that digital tools such as videos, online quizzes, and learning platforms facilitate easier access to materials, deepen understanding, and boost learning motivation.

In addition, insights from teacher interviews emphasize that ICT integration contributes to more engaging and student centered learning environments. Platforms like Quizizz, YouTube, Padlet, and Word wall help educators tailor materials to student preferences and incorporate game-based elements that foster active participation and sharpen vocabulary skills.

Despite these advantages, several challenges persist. Issues such as managing student attention and the need for ongoing teacher training in digital instruction highlight the importance of pedagogical preparedness. Without proper strategies, the use of technology can lead to distraction rather than engagement.

Ultimately, ICT-based interactive learning emerges as a highly effective and motivating approach for teaching English at the secondary level. It aligns with students' digital tendencies and supports improved learning outcomes. However, its success depends on a balanced integration of technological tools, sound instructional practices, and strong institutional support.

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