AN EXPLORATORY STUDY ON TEACHERS' STRATEGIES AND STUDENTS' PERCEPTIONS IN INTEGRATING TECHNOLOGY INTO ENGLISH LANGUAGE LEARNING AT SMPN 32 PALEMBANG

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ABSTRACT

The integration of technology into English language teaching has become increasingly significant in junior high schools. This exploratory study investigates both teachers' strategies and students' perceptions in the implementation of technology for English learning. Using a qualitative research design, data were collected through classroom observations, interviews with three English teachers, and questionnaires distributed to thirty eighth-grade students in an Indonesian junior high school. Findings reveal that teachers utilized diverse strategies such as multimedia presentations, online learning platforms, gamified mobile applications, and digital storytelling to enhance students' language learning. Students demonstrated generally positive perceptions toward technology-assisted learning, particularly in terms of motivation, engagement, and self-directed practice. Nevertheless, several challenges were identified, including inadequate infrastructure, unstable internet connectivity, and insufficient teacher training. The study concludes that effective technology integration requires a balance between pedagogical creativity, institutional support, and digital literacy.

Keywords: **Technology Integration, Teachers' Strategies, Students' Perceptions, English Learning.**

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Kata kunci : Teknologi terintegrasi, Strategi Guru, Persepsi Mahasiswa, Pembelajaran Bahasa Inggris

ABSTRAK
Integrasi teknologi ke dalam pengajaran bahasa Inggris telah menjadi semakin signifikan di sekolah menengah pertama. Studi eksploratif ini menyelidiki strategi guru dan persepsi siswa dalam penerapan teknologi untuk pembelajaran bahasa Inggris. Dengan menggunakan desain penelitian kualitatif, data dikumpulkan melalui observasi kelas, wawancara dengan tiga guru bahasa Inggris, dan kuesioner yang disebarkan kepada tiga puluh siswa kelas delapan di sebuah sekolah menengah pertama di Indonesia. Temuan mengungkapkan bahwa guru menggunakan beragam strategi seperti presentasi multimedia, platform pembelajaran daring, aplikasi seluler gamifikasi, dan penceritaan digital untuk meningkatkan pembelajaran bahasa siswa. Siswa menunjukkan persepsi yang umumnya positif terhadap pembelajaran berbantuan teknologi, terutama dalam hal motivasi, keterlibatan, dan praktik mandiri. Namun demikian, beberapa tantangan diidentifikasi, termasuk infrastruktur yang tidak memadai, konektivitas internet yang tidak stabil, dan pelatihan guru yang tidak memadai. Studi ini menyimpulkan bahwa integrasi teknologi yang efektif memerlukan keseimbangan antara kreativitas pedagogis, dukungan kelembagaan, dan literasi digital.

I. Introduction

The emergence of digital technologies has transformed nearly every aspect of human life, including education. In language learning, particularly English as a Foreign Language (EFL), technology provides opportunities for learners to access authentic materials, engage in interactive communication, and practice skills in diverse contexts. At the junior high school level, where students are building foundational skills, the role of technology becomes even more crucial.

Globally, international organizations such as UNESCO (2021) have emphasized the importance of digital literacy as a core 21st-century competency. Beyond the ability to use technology, digital literacy includes skills such as critical evaluation of online information, collaboration through digital platforms, and the ability to create digital content. For English learners, technology also offers exposure to authentic language input and opportunities for real-life communication with global communities.

In Indonesia, the urgency of integrating technology into education became most apparent during the COVID-19 pandemic. The sudden shift to online learning exposed both the potential and the limitations of technology in education. On one hand, online platforms such as Google Classroom, Zoom, and WhatsApp allowed schools to continue

teaching during lockdowns. On the other hand, problems such as unequal access to devices, unstable internet connections, and insufficient teacher training highlighted systemic challenges.

The Indonesian government has promoted policies such as *Merdeka Belajar* (Freedom to Learn) that emphasize flexibility, creativity, and technology use. However, the implementation of these policies varies widely, especially at the junior high school level. Teachers face the dual challenge of adapting their pedagogy to new technologies while also ensuring that students remain motivated and engaged. Therefore the aims of this study are to know what strategies do English teachers use to integrate technology in junior high school classrooms and to know the students perceive the use of technology in their English learning

2. Literature Review

2.1 Technology in English Language Learning

The use of technology in ELT has been the subject of extensive research. Chapelle and Sauro (2017) emphasize that technology allows learners to access authentic materials and provides opportunities for real-time interaction. Multimedia resources such as videos, podcasts, and interactive exercises enrich language input and allow students to practice listening, speaking, reading, and writing in diverse ways.

Mobile-assisted language learning (MALL) is one area that has gained prominence. Chen and Hwang (2020) found that mobile applications increase student motivation and allow for flexible learning outside traditional classrooms. In Indonesia, apps such as Duolingo, Quizizz, and Kahoot are increasingly used by teachers to support English learning.

2.2 Theoretical Frameworks

Several theoretical frameworks guide this study:

- **Technology Acceptance Model (TAM)** (Davis, 1989) highlights that technology adoption depends on perceived usefulness and perceived ease of use. Both teachers and students are more likely to accept tools that they find helpful and easy to operate.

- **Technological Pedagogical Content Knowledge (TPACK)** (Mishra & Koehler, 2006) emphasizes that effective integration requires teachers to balance their knowledge of technology, pedagogy, and content.
- **SAMR Model** (Puentedura, 2014) describes levels of integration: substitution, augmentation, modification, and redefinition. Teachers who move toward modification and redefinition are able to transform learning tasks rather than merely digitize existing practices.

2.3 Teachers' Strategies in Technology Integration

Teachers use varied strategies to integrate technology. Hung (2017) highlighted flipped classrooms, where students access video lectures at home and engage in collaborative tasks during class. Blended learning and gamification have also proven effective in EFL contexts. Alqahtani (2019) found that mobile applications improve vocabulary acquisition and student engagement.

2.4 Students' Perceptions

Students' perceptions play a critical role in determining the success of technology integration. Rahimi and Yadollahi (2017) reported that students generally enjoy interactive platforms and appreciate the flexibility of online learning. However, they also experience challenges such as distraction from non-academic content, poor connectivity, and lack of teacher support.

2.5 Challenges in Technology Integration

Despite potential benefits, integrating technology is not without barriers. Kurt (2019) identified inadequate infrastructure, insufficient training, and resistance to change as common challenges. In Indonesia, disparities between urban and rural schools further complicate access to technology.

3. Methodology

3.1 Research Design

A qualitative exploratory design was chosen for this study (Creswell, 2018). This design allows for in-depth exploration of teachers' strategies and students' perceptions in their natural learning environments.

3.2 Setting and Participants

The study was conducted in a public junior high school in urban Indonesia. The school had some access to ICT, including computer labs and projectors, but internet connectivity was inconsistent.

Participants included:

- **Three English teachers** (two females, one male) with teaching experience ranging from 5 to 15 years.
- **Thirty eighth-grade students** (ages 13–14), selected randomly from two classes.

3.3 Data Collection

Four instruments were used:

1. **Classroom observations** (eight sessions) to document technology use.
2. **Semi-structured interviews** with teachers to explore strategies, motivations, and challenges.
3. **Questionnaires** (20 items) to collect data on students' perceptions.
4. **Focus group discussions** with 12 students to gain deeper insights.

Sample teacher interview questions included:

- "What digital tools do you commonly use in teaching English?"
- "How do you prepare your lessons when integrating technology?"
- "What challenges have you faced?"

Sample student questionnaire items included:

- "Technology makes me more motivated to learn English."
- "I can learn independently using technology."

- "Internet problems make online learning difficult."

1.
2. *3.4 Research Instruments*

Table 1. Classroom Observation Instrument

No	Focus of Observation	Indicators	Data Collected
1	Use of Multimedia	Teacher uses PowerPoint, videos, or animations to explain materials	Field notes, screenshots
2	Use of Online Platforms	Teacher uploads materials/assignments on Google Classroom/WhatsApp	Teacher & student activities
3	Gamification	Teacher applies Quizizz, Kahoot, or similar applications	Students' scores, classroom responses
4	Digital Storytelling	Students create videos or audio recordings as English assignments	Students' digital products

Table 2. Teacher Interview Instrument

No	Questions	Purpose
1	What platforms or applications do you frequently use in teaching English?	To identify teachers' strategies
2	How do you prepare your lessons when integrating technology?	To explore lesson planning process
3	What are the main challenges you face when integrating technology?	To identify barriers in practice
4	In your opinion, how do students respond to the use of technology in class?	To examine teachers' perceptions of students' attitudes

Table 3. Student Focus Group Discussion Instrument

No	Questions	Purpose
1	Do you find learning English with applications/games more interesting? Why?	To explore students' motivation
2	What difficulties do you experience when learning with technology (e.g., internet, instructions, or apps)?	To identify challenges from students' perspectives
3	Do you think learning with videos/YouTube helps you understand materials better?	To examine media preferences
4	How do you feel when asked to create videos or voice recordings in English?	To measure perceptions of digital storytelling

Table 4. Student Questionnaire Instrument

(Likert Scale: 1 = Strongly Disagree, 5 = Strongly Agree)

No	Statement	Scale
1	I feel more motivated to learn English when the teacher uses applications such as Quizizz or Kahoot.	1–5
2	I can access materials anytime when the teacher uploads them to Google Classroom or WhatsApp.	1–5
3	Learning English through YouTube videos helps me understand the materials better.	1–5
4	I am often distracted by unstable internet connections during online learning.	1–5
5	I feel more confident when creating voice recordings or videos in English.	

3.4 Data Analysis

Data were analyzed thematically. Codes were grouped into categories such as **teachers' strategies** (multimedia, online platforms, gamification, storytelling) and **students' perceptions** (motivation, autonomy, challenges). Triangulation of observations, interviews, and questionnaires increased validity.

4. Findings

4.1 Teachers' Strategies

Four major strategies were observed:

1. **Multimedia Presentations**
   Teachers frequently used PowerPoint, YouTube videos, and animations. Teacher A commented:

"When I explain grammar with animations, students become more engaged. They ask questions and participate more actively."

2. **Online Platforms**
   Google Classroom and WhatsApp were used for distributing assignments and communication. Teacher B noted:

"Students are more responsible when tasks are posted online. I can check submissions easily, even outside class."

3. **Mobile Applications and Gamification**
   Teachers used Quizizz, Kahoot, and Duolingo. These platforms provided interactive quizzes and competitive elements. Teacher C shared:

"Students really enjoy Quizizz. They compete for high scores, and it motivates them to study vocabulary more seriously."

4. **Digital Storytelling**
   Teachers encouraged students to create short videos or podcasts. Teacher A explained:

"Even shy students gain confidence when recording their voices. They practice many times before submitting, which improves their speaking."

4.2 Students' Perceptions

Students generally had positive attitudes toward technology use:

- **Motivation:** Students reported feeling more excited and engaged. One student said:
  "Learning English feels less boring when we play Kahoot or watch videos."
- **Accessibility:** Students liked being able to revisit materials online.
- **Autonomy:** Many felt they could study independently using apps.
- **Enjoyment:** Gamified platforms made lessons fun.

Challenges reported included:

- **Connectivity Issues:** Internet problems frequently interrupted online tasks.
- **Distractions:** Some admitted being tempted by social media.
- **Instructional Clarity:** Confusing instructions made some tasks difficult.

5. Discussion

The findings confirm that technology integration increases motivation and engagement, supporting Chen and Hwang's (2020) conclusions about MALL. Teachers' strategies aligned with blended and gamified approaches (Hung, 2017; Alqahtani, 2019).

Students' positive perceptions echoed Rahimi and Yadollahi's (2017) research on interactivity and autonomy. However, challenges such as connectivity and distraction reflected systemic issues identified by Kurt (2019).

The study also illustrated TAM in action: both teachers and students adopted tools they found useful and easy to use (Google Classroom, Quizizz). The importance of TPACK was evident as teachers combined pedagogy with digital tools. Teachers who adapted content to fit tools achieved greater success than those who used technology without clear pedagogical goals.

Overall, this study highlights that technology can enhance EFL learning in junior high schools, but systemic barriers need addressing to ensure sustainable integration.

6. Conclusion and Implications

This exploratory study revealed that English teachers integrated technology using multimedia, online platforms, gamified apps, and storytelling. Students responded positively, emphasizing motivation, enjoyment, and independence.

However, challenges such as poor internet, distractions, and lack of teacher preparation remain obstacles.

Implications:

1. Schools should improve digital infrastructure and internet reliability.
2. Teachers require continuous professional development in digital pedagogy.
3. Policymakers should ensure equal access to technology across urban and rural areas.
4. Future research should use mixed methods with larger samples for broader generalization.

The study concludes that successful technology integration requires not only teacher creativity but also institutional support and policies that address structural barriers.

Declarations

Author Contribution
Tiara Eliza: Conceptualization, Methodology, Data Curation, Original draft preparation.
Desi Ratna Sari dan Puja Cahyantie: Investigation, Reviewing and Editing

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Conflict of Interest
The Authors, Tiara Eliza and Desi Ratna Sari dan Menik Irawati are listed immediately below certify that they have no affiliations with or involvement in any organization or entity with any financial interest (such as: honoraria:educational Grants: stock ownerships or other equity interest and expert testimony or patent licensing arrangement), or nonfinancial interest (such as personal or profesional relationship, affiliation, knowledge or belief) in the subject matter or material discussed in this manuscript

Additional Information
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