

EFL STUDENT'S PERCEPTION ON DIGITAL LEARNING MEDIA TECHNOLOGY: THE CASE OF SECONDARY SCHOOL IN INDONESIA

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ARTICLE INFO	ABSTRACT
<p>Article history: Received: July 10, 2025 Revised: July 27, 2025 Accepted: August 10, 2025 Published: August 10, 2025</p> <p>Keywords: Digital Learning Media Perception English Learning Learning Motivation Secondary Education</p>	<p>The development of digital technology has brought significant changes to the field of education, especially in the process of learning English. The use of digital learning media enables the delivery of materials to be more interactive, flexible, and engaging for students. This study aims to explore the perceptions of tenth-grade students at a secondary school in Banyuwangi, East Java, Indonesia, regarding the use of digital learning media in English language learning. Employing a qualitative case study approach, data were collected through classroom observations, semi structured interviews with 11 students, and questionnaires involving 30 participants. The findings, which were analyzed using thematic analysis for qualitative data and descriptive statistics for questionnaire results, indicate that the majority of students hold positive to very positive perceptions of digital media, particularly in terms of enhancing comprehension (average score 4.17) and making the learning process more engaging (average score 4.23). Classroom observations reinforced these results, showing that over 75% of students demonstrated active engagement when the teacher used interactive tools such as Quizizz, Wordwall, and YouTube-based instructional videos. Interviews revealed that digital media increases motivation and makes learning more enjoyable and interactive. Despite these benefits, the study also identified significant challenges, including limited device availability, unstable internet connectivity, and insufficient teacher guidance in using digital media. Approximately 20% of students showed passive behaviour or lacked confidence in technology-based learning environments. Students also expressed the need for additional teacher training, the provision of stable Wi-Fi, and more structured and varied digital-based assignments. This study emphasizes that the successful integration of digital media in English learning relies heavily on adequate infrastructure, teacher readiness, and inclusive instructional strategies. These findings contribute valuable insights for educational policy and practice in the digital era, offering recommendations to improve digital literacy, professional development for educators, and equitable access to technological resources for all students</p> <p><i>This is an open access article under the CC BY-SA license.</i></p> 
<p>Majid, F. F. D. N., Rahman, A., & Anwar, S. . (2025). EFL Student's Perception on Digital Learning Media Technology: The Case of Secondary School in Indonesia. <i>English Language Teaching Methodology</i>, 5(2), 139-151. https://doi.org/10.56983/eltm.v5i2.1862</p>	
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INTRODUCTION

The rapid development of digital technology has reshaped the educational landscape in Indonesia, particularly in the context of secondary education. The integration of digital learning media is becoming increasingly crucial as English language skills gain importance in a globally connected environment (Imron, 2023; Ismail, 2024; Joko, 2021). This shift necessitates a re-evaluation of instructional methods to better align with students' digital engagement patterns.

Digital learning media refer to technology-based tools used to deliver instructional content in an interactive, flexible, and engaging format. Argue that Hendra et al. (2023), these tools ranging from smartphones, tablets, and computers to internet platforms enable diverse content delivery modes, such as text, video, animation, and interactive applications.

While digital tools offer various advantages, their implementation in Indonesian classrooms remains inconsistent. Barriers such as unequal access to devices, limited digital literacy among both teachers and students, and inadequate training hinder optimal usage (Alian & Alhaj, 2023; Nugroho, 2022). Furthermore, students' perceptions and acceptance of technology-based learning remain varied and context-dependent (Santoso, 2023; Widiastuti, 2022).

It is critical to explore how students perceive digital learning media, as their engagement, motivation, and comprehension are directly influenced by their experiences with these tools (Kieu et al., 2021; Rahmawati, 2022). Prior research also emphasizes the importance of teacher support and a conducive digital learning environment in ensuring successful technology integration (Hidayati, 2021; Prasetyo, 2022).

Although several prior studies have examined the role of technology in education, research that specifically explores students' perceptions of digital learning media in English language instruction at the secondary school level in the Indonesian context remains limited. Most existing studies focus on higher education settings or on teachers' perspectives, leaving a gap in understanding how high school students themselves experience and respond to digital learning tools. This study seeks to fill that gap by providing a focused investigation into student viewpoints, triangulated through observations, interviews, and questionnaires.

Initial observations conducted in English classes at a senior high school in Banyuwangi, East Java, demonstrate that digital platforms such as Quizizz, Wordwall, Google Classroom, and YouTube videos can significantly increase student participation. However, disparities remain among students in terms of confidence, access, and adaptability, which may hinder full engagement.

Despite the increasing use of digital learning media globally, there remains a significant gap in understanding how secondary school students in Indonesia, particularly in regions like Banyuwangi, perceive and adapt to such technologies. Previous studies have largely focused on higher education or teacher perspectives, leaving the student viewpoint underexplored. This research is novel in its comprehensive qualitative and quantitative

approach to examining how digital media impact tenth-grade students' motivation, engagement, and comprehension in English language learning. Given Indonesia's varied digital infrastructure and educational challenges, this study is crucial to inform effective integration of technology, addressing both pedagogical strategies and equity of access. Hence, it contributes valuable insights that can guide educators, policymakers, and stakeholders in optimizing digital learning environments, ultimately enhancing the quality of English instruction in Indonesian secondary education.

LITERATURE REVIEW

The integration of digital learning media into educational environments has garnered increasing attention due to its potential to improve student engagement, motivation, and academic outcomes. In the context of English language instruction, digital tools offer unique opportunities for contextualized, interactive, and multimodal learning experiences. This section reviews previous studies relevant to the use of digital media in enhancing English language acquisition at the high school level in Indonesia.

The Role of Digital Media in Engagement

Digital learning media such as Quizizz, Kahoot!, YouTube, and digital storytelling applications promote interactive and student-centered learning environments. According to Faiqoh (2020), the use of multimedia content enables students to better visualize abstract concepts and retain information more effectively. In classrooms where tools like Wordwall or audiovisual games are used, learners exhibit greater enthusiasm, attention, and willingness to participate. Furthermore, platforms like Instagram or WhatsApp groups also serve as informal learning channels that enhance students' communication in English (Al Jahromi et al., 2019).

Impact on Learning Outcomes

Several studies show that digital media contributes to better academic performance. Students report improved vocabulary retention, grammar comprehension, and writing fluency when supported by media-based exercises (Efendi et al., 2021). Interactive media also support differentiated learning, accommodating students with varying learning preferences—visual, auditory, and kinesthetic. Moreover, asynchronous access to learning materials empowers students to study at their own pace, reinforcing autonomy and self-regulated learning (Sakkir et al., 2020).

Evidence of Effective Integration

Empirical studies consistently highlight the effectiveness of integrating digital tools in English instruction. Ubaidillah et al. (2021) found that the gamification of lessons using Quizizz significantly enhanced student motivation and collaboration. Similarly, Meila & Rusdinal (2022) emphasized the role of Nearpod in enabling real-time teacher guidance and

personalized feedback. These findings suggest that when digital tools are thoughtfully designed and implemented, they enhance not only engagement but also academic confidence and language fluency.

RESEARCH METHOD

This study applied a qualitative case study approach to explore the perceptions of tenth-grade students toward the use of digital learning media in English instruction. This method was chosen to allow an in-depth understanding of students' lived experiences and the contextual factors influencing their engagement with digital tools. A case study is particularly suitable for capturing rich, detailed insights within a specific setting (Creswell & Poth, 2021; Rashid et al., 2019).

To ensure comprehensive and credible findings, data were collected through classroom observations, semi-structured interviews with 11 students, and structured questionnaires involving 30 participants. The combination of these methods supports data triangulation, which enhances the study's validity by comparing and corroborating information across qualitative and quantitative sources (Sugiyono, 2017). Data collected were then analyzed using thematic analysis for qualitative data and Likert scale-based statistical analysis for quantitative data, as detailed in the methodology section.

Context and Participants

The research was conducted in a state secondary school located in Banyuwangi, East Java, Indonesia. A total of 30 tenth-grade students participated, aged between 15 and 16 years. They were selected using purposive sampling to include students with diverse digital learning experiences ranging from active, tech-savvy learners to those who showed limited participation in digital activities. The participants were enrolled in the English class part of their regular curriculum and had varying degrees of access to digital media at home and school.

Research Procedure

The research was conducted over a three-month period, from February to April 2025. Initially, classroom observations were carried out during English lessons totaling 14 sessions over a two-month period to identify patterns of student engagement and the types of digital media used by the teacher. These observations provided a contextual foundation for the next stage, which involved semi-structured interviews with 11 students representing various levels of digital proficiency. Subsequently, a structured questionnaire was distributed to all 30 participants to obtain broader quantitative data and validate the qualitative findings.

Data Collection Techniques

Observation: The classroom observations were conducted during 14 English learning sessions over a two month. Observations were carried out while the teacher was delivering the lesson, allowing the researcher to closely monitor students' behavioural engagement, participation, and interactions with digital tools. A structured observation sheet was used to record indicators such as attentiveness, enthusiasm, spontaneous responses, and students' confidence in using digital technology. In addition to observing the teacher's use of media, the researcher also actively introduced and utilized several digital tools directly, including Wordwall, Quizizz, Instagram, and interactive PowerPoint slides. These tools were integrated into the lessons to observe how students responded to various digital learning formats. The observation showed that 80% of students participated actively during Quizizz based gamification, while 76.67% showed high engagement with YouTube video content. This approach enabled the researcher to gather valid insights on students' preferences and challenges when engaging with digital media.

Interview: Semi structured interviews were conducted after the classroom observation phase to gain a deeper understanding of students' perceptions and experiences regarding the use of digital learning media. A total of 11 tenth-grade students were selected through purposive sampling, representing various levels of digital literacy and engagement. The interviews were held in June 2025 and conducted in Bahasa Indonesia to ensure participant comfort and clear comprehension. Each interview session lasted approximately 10 to 15 minutes and was audio-recorded with the students' consent. The recordings were then transcribed verbatim to preserve the authenticity of students' expressions and subsequently translated into English for analysis purposes. The interview data were analysed using thematic analysis based on Braun and Clarke's (2006) six-phase model, which includes: familiarizing with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. This method enabled the researcher to systematically identify recurring patterns related to student motivation, learning experiences, and challenges in using digital learning technologies.

Questionnaire: To complement the qualitative data obtained from observations and interviews, this study also utilized a structured questionnaire to gain quantitative insights into students' perceptions of digital learning media in English language learning. The questionnaire was adapted and developed based on previous studies on students' perceptions of digital learning, particularly by Rahmawati (2022) and Santoso (2023). It consisted of 15 items, including 12 closed-ended questions using a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) and 3 open-ended questions. The closed-ended items were designed to assess key aspects such as the effectiveness of digital media in improving comprehension, learning motivation, ease of use, classroom engagement, peer collaboration, and teacher support in digital learning contexts. Meanwhile, the open-ended questions allowed students to share personal experiences, challenges, and

suggestions related to digital media usage. The questionnaire was distributed online via Google Form to 30 tenth-grade students between May 29 and June 2, 2025. The use of both closed and open-ended items in this questionnaire was intended to strengthen data triangulation and enhance the validity of the study's findings.

Data Analysis

The qualitative data collected from classroom observations and student interviews were managed and analysed using thematic analysis as proposed by Braun and Clarke (2006). This method followed six distinct phases: familiarization with the data, generating initial codes, identifying potential themes, reviewing and refining those themes, defining and naming them, and finally producing a comprehensive analytical report. Through this process, the study identified thematic patterns related to students' motivation, engagement, and the challenges they encountered when using digital learning media.

In parallel, the quantitative data obtained from the questionnaire responses were managed and analysed using descriptive statistical techniques, such as calculating means, percentages, and frequency distributions. These procedures followed the principles of educational research outlined by Cohen, Manion, and Morrison (2018) and Creswell (2012). Students' Likert-scale responses were interpreted using predetermined interval categories to classify their perceptions into levels ranging from "Very Negative" to "Very Positive." This systematic approach ensured reliable categorization and a more accurate representation of student perceptions.

Ethical Considerations

All participants were informed about the purpose and process of the study and gave consent prior to participation. Data confidentiality was maintained by anonymizing student identities using coded labels. Ethical approval was obtained from the school's academic board, and voluntary participation was upheld throughout the research process.

RESULT AND DISCUSSION

This section presents a comprehensive discussion of the research findings based on the triangulation of three data sources: classroom observations, student interviews, and questionnaire results. The themes emerged through thematic analysis and were supported by quantitative insights from questionnaire responses.

Student Engagement and Motivation Through Digital Media

Interview data revealed that the use of digital media such as Quizizz and YouTube significantly enhanced student enthusiasm and engagement in the learning process. One student expressed:

“I enjoy using Quizizz because it feels like playing a game, but I'm actually learning at the same time.”
(Student A, June 10, 2025)

This statement reflects how gamification elements can stimulate students' intrinsic motivation.

Another student highlighted the importance of visual based media:

“YouTube videos make it easier for me to understand grammar, especially when it's explained visually.”
(Student B, June 11, 2025)

This underscores how visual approaches through digital platforms help students grasp complex language concepts like grammar more effectively.

These insights are supported by questionnaire data summarized below:

Table 2. Student Perceptions of Digital Media Based on Questionnaire

Statement	Average Score (Likert Scale 1–5)
Digital media help me understand English lessons more easily	4.17
I feel more motivated when learning through digital tools	4.23
I find digital learning more enjoyable than traditional methods	4.10
I can focus better during digital-based lessons	3.87
I feel confident using digital platforms for English learning	3.73

These results were further reinforced through classroom observations, which showed high levels of student participation when digital media were used. The percentages of student engagement during various digital-based activities are presented in the following table:

Table 1. Student Responses to Various Types of Digital Learning Activities Based on Observation

Digital Activity Type	Percentage of Active Students
Quizizz / Wordwall (Gamification)	80%
YouTube-based Video Learning	76.67%
Google Classroom Assignments	70%
Listening Practice using Digital Audio	66.67%
PowerPoint and Presentation Slides	63.33%

Overall, these data demonstrate a high level of engagement among students toward interactive digital media, particularly when content was delivered through gamification or visual presentations.

Accessibility and Infrastructure Challenges

Despite these positive results, the study also identified several accessibility-related challenges. Based on the questionnaire data, 26.67% of students reported difficulty accessing stable internet, while 20% mentioned limited access to personal digital devices. One student shared during the interview: *“I have to share my phone with my younger sibling, so sometimes I can’t join the online classes.”* Another student commented that the school Wi-Fi was frequently unstable, causing them to frequently get disconnected from online sessions.

These barriers were also visible during observations, where in lessons that relied heavily on internet connectivity, several students appeared distracted, disengaged, or left the classroom due to technical issues. These findings highlight that although digital tools can enhance learning, without adequate and equitable infrastructure, some students may continue to experience difficulty in accessing or benefiting from digital-based learning environments.

To support this claim, the following table presents students' self-perceptions regarding their behavior in digital learning settings :

Table 3. Student Self identification of Learning Behaviour in Digital Settings

Category	Frequency	Percentage
Active and enthusiastic digital learners	21	70%
Lacking confidence during digital learning	5	16.67%
Passive or disinterested learners	4	13.33%

Teacher’s Role in Facilitating Digital Media

The teacher's role in supporting the use of digital media was found to be another significant factor. According to the questionnaire data, 63.33% of students agreed that their teachers were supportive providing links, tutorials, and technical guidance related to digital platforms. However, 13.33% of students reported receiving minimal assistance, noting that some teachers relied primarily on PowerPoint presentations without further explanation.

These mixed perceptions were echoed in the interviews. One student stated, *“Sometimes the teacher just gives us a link, but we don’t know what to do with it,”* pointing to a gap in instructional scaffolding. In contrast, other students appreciated when their teachers took time to explain how to access platforms and structured the digital assignments clearly.

These findings suggest that even when digital infrastructure is available, effective facilitation and consistent teacher support remain critical for maximizing the benefits of digital learning media in English classrooms.

Summary of Findings

The overall findings are consistent with the research objective stated in the introduction, which is to investigate tenth-grade students' perceptions of using digital learning media in English classrooms. The triangulation of data from questionnaires, observations, and interviews reveals that students generally perceive digital tools positively.

From the questionnaire, the average score of "I feel more motivated when learning through digital tools" was 4.23 (Very Positive), and "Digital media helps me understand English lessons more easily" scored 4.17 (Positive). These results align with classroom observations, where 80% of students were actively engaged during Quizizz/Wordwall activities, and 76.67% during YouTube-based visual learning.

Interview responses further confirmed this trend. One student mentioned, "I enjoy using Quizizz because it feels like playing a game, but I'm actually learning at the same time" (Student A, April 2025), indicating increased motivation and enjoyment. Another student said, "YouTube videos make it easier to understand grammar, especially when it's explained visually" (Student B, April 2025), highlighting the media's role in improving comprehension.

However, the study also uncovered critical challenges. Around 26.67% of students reported difficulties with internet access, and 20% faced limited access to digital devices. Observation data showed some students became disengaged during internet-dependent sessions. Interviews revealed that many students had to share devices or rely on unstable school WiFi. These findings reinforce the importance of adequate infrastructure and equitable access to support effective digital learning.

Teacher support emerged as another determining factor. While 63.33% of students agreed that teachers were supportive in using digital media, 13.33% noted minimal guidance. Interview excerpts showed mixed experiences. One student commented, "Sometimes the teacher just gives a link, but we don't know what to do with it," indicating a gap in scaffolding. This was echoed in the suggestion for better teacher training and more structured assignments.

These findings are supported by prior research. For example, Faiqoh (2020) and Maisarah et al. (2022) found that gamification and multimedia tools significantly increased student motivation and focus. Novitasari and Rahman (2024) reported that the use of technology media such as video can cognitively, emotionally, socially and behaviorally engage students in reflective activities. Ubaidillah et al. (2021) emphasized that platforms like Quizizz foster competitive engagement. Efendi et al. (2021) and Sari (2022) also demonstrated that digital content improves comprehension and retention. Moreover, challenges such as infrastructure limitations and inconsistent teacher readiness were echoed in studies by Atikah & Rahman (2021), Nugroho (2022), and Widiastuti (2022).

CONCLUSION

Based on the data collected through questionnaires, classroom observations, and student interviews, it can be concluded that Grade X students generally hold positive to very positive perceptions of the use of digital media in English learning. These tools were shown

to enhance motivation, engagement, and understanding particularly when supported by interactive platforms such as Quizizz, Wordwall, and YouTube videos.

The findings highlight that digital learning media create a more dynamic and enjoyable classroom experience. Students found digital content to be more engaging than traditional methods, especially in understanding grammar, vocabulary, and tenses through visual and interactive formats. However, challenges such as limited device access, unstable internet, and insufficient teacher guidance still hinder full adoption and impact. Addressing these obstacles is essential to promote inclusivity in technology-based learning environments.

The study recommends increased support for digital infrastructure, teacher professional development, and curriculum integration to foster sustainable implementation. These efforts should focus on promoting digital literacy and equity so that all students, regardless of their background, can benefit from technology-enhanced learning.

In sum, the integration of digital learning media in English language classrooms should not be seen as a temporary shift, but as a strategic move toward inclusive, interactive, and future-oriented education in the digital era.

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