

ENHANCING INDONESIAN HIGH SCHOOL STUDENTS' ENGLISH PROFICIENCY THROUGH DIGITAL PLATFORMS

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ABSTRAK

Abstrak: Penelitian ini bertujuan untuk menganalisis efektivitas platform pembelajaran digital dalam meningkatkan kemampuan berbahasa Inggris peserta didik sekolah menengah atas di Indonesia. Rendahnya tingkat kemahiran bahasa Inggris yang masih dihadapi oleh banyak peserta didik disebabkan oleh terbatasnya paparan terhadap penggunaan bahasa yang autentik, dominannya metode pembelajaran berpusat pada guru, serta kesenjangan akses terhadap sumber belajar yang berkualitas. Penelitian ini menggunakan desain mixed-methods yang mengombinasikan pendekatan kuantitatif dan kualitatif. Data kuantitatif diperoleh melalui tes awal dan tes akhir kemampuan bahasa Inggris yang mencakup keterampilan menyimak, berbicara, membaca, dan menulis. Sementara itu, data kualitatif dikumpulkan melalui angket, observasi kelas, dan wawancara semi-terstruktur. Partisipan penelitian terdiri atas 180 peserta didik kelas XI dari lima sekolah menengah atas negeri yang berasal dari beberapa provinsi di Indonesia. Hasil penelitian menunjukkan adanya peningkatan signifikan pada kemampuan bahasa Inggris setelah penerapan platform pembelajaran digital, dengan kenaikan skor rata-rata antara 10 hingga 18 poin. Peningkatan terbesar ditemukan pada keterampilan menyimak dan berbicara, sedangkan keterampilan membaca dan menulis juga mengalami perkembangan positif. Temuan kualitatif menunjukkan bahwa penggunaan platform digital meningkatkan motivasi belajar, kemandirian, partisipasi, dan kepercayaan diri dalam menggunakan bahasa Inggris. Meskipun demikian, penelitian ini juga menemukan kendala berupa keterbatasan perangkat digital, ketidakstabilan jaringan internet, dan perbedaan tingkat literasi digital. Dengan dukungan pedagogis yang tepat dan infrastruktur yang memadai, platform pembelajaran digital berpotensi menjadi sarana yang efektif untuk meningkatkan kemampuan berbahasa Inggris di lingkungan pendidikan menengah Indonesia.

Kata Kunci: Pembelajaran Digital; Kemampuan Bahasa Inggris; Sekolah Menengah Atas; Motivasi Belajar; Literasi Digital

ABSTRACT

This study aims to examine the effectiveness of digital learning platforms in enhancing English language proficiency among Indonesian senior high school students. English proficiency remains a challenge for many learners due to limited exposure to authentic language use, teacher-centered instructional practices, and unequal access to quality learning resources. This research employed a mixed-methods design combining quantitative and qualitative approaches. Quantitative data were collected through pre-tests and post-tests measuring listening, speaking, reading, and writing skills, while qualitative data were obtained through surveys, classroom observations, and semi-structured interviews. The participants consisted of 180 eleventh-grade students from five public senior high schools located in several provinces of Indonesia. The findings revealed significant improvements in English language proficiency following the implementation of digital learning platforms, with average score gains ranging from 10 to 18 points. The most substantial improvements were observed in listening and speaking skills, while reading and writing skills also demonstrated positive progress. Qualitative findings indicated that digital learning platforms enhanced learner motivation, autonomy, participation, and confidence in using English. However, several challenges were identified, including limited access to digital devices, unstable internet connectivity, and varying levels of digital literacy. The study concludes that, when supported by appropriate pedagogical practices and adequate technological infrastructure, digital learning platforms can serve as an effective means of improving English language proficiency among Indonesian senior high school students.

Keywords: Digital Learning; English Proficiency; Senior High School Students; Learning Motivation; Digital Literacy

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A. INTRODUCTION

English language proficiency has become an essential competency in the twenty-first century, serving as a key medium for international communication, academic advancement, access to information, and participation in the global workforce (OECD, 2023; UNESCO, 2023). In Indonesia, English is taught as a foreign language and remains a compulsory subject at the senior high school level. The national curriculum expects learners to develop communicative competence and literacy skills that enable them to engage effectively in both academic and social contexts. However, despite the strategic position of English within the education system, learning outcomes remain relatively unsatisfactory compared to global expectations (Rahman & Weda, 2021).

Numerous studies have reported that Indonesian learners continue to experience difficulties in mastering English, particularly in productive skills such as speaking and writing (Suryani et al., 2022). These challenges are often associated with limited exposure to authentic English input, teacher-centered instructional practices, examination-oriented learning environments, and insufficient opportunities for meaningful language use beyond the classroom (Azizah & Mulyadi, 2021; Fitria, 2022). Consequently, many learners acquire theoretical knowledge of grammar and vocabulary but struggle to apply their knowledge in real communicative situations.

The challenges become more apparent when considering the sociolinguistic context of Indonesia. English is rarely used in daily communication, particularly outside major urban centers, making classroom instruction the primary source of language exposure for many learners (Rahman & Weda, 2021). In addition, large class sizes, limited instructional time, and a strong emphasis on examination performance often reduce opportunities for communicative interaction and language practice (Suryani et al., 2022). As a result, students frequently demonstrate passive language knowledge while lacking confidence and fluency in actual communication.

Recent advances in educational technology have introduced new possibilities for overcoming these limitations. The integration of digital learning platforms into language education has transformed the way learners access information, interact with learning materials, and engage in language practice (UNESCO, 2023). Platforms such as Google Classroom, Moodle, YouTube, Ruangguru, Quipper, and various mobile-assisted language learning applications provide learners with access to authentic language resources and interactive learning experiences that extend beyond the traditional classroom setting (Fitria, 2022; Sudipa et al., 2024).

Digital learning environments are particularly relevant in English as a Foreign Language contexts because they increase exposure to authentic English input. Through videos, podcasts, interactive exercises, online discussions, and multimedia content, learners can encounter language as it is naturally used in real-life communication (Hasanah et al., 2024). Previous research has demonstrated that increased exposure to authentic materials contributes positively

to vocabulary acquisition, listening comprehension, speaking confidence, and overall language proficiency (Kurniawati & Lestari, 2023; Pratama & Hidayat, 2024).

From a theoretical perspective, the integration of digital learning platforms is supported by constructivist learning theory, which views learning as an active process in which learners construct knowledge through interaction, exploration, and collaboration. Digital environments facilitate these processes by enabling students to engage with authentic materials, participate in collaborative tasks, and access learning resources independently (Cirocki & Farrell, 2023). Furthermore, communicative language teaching emphasizes meaningful communication as the primary goal of language learning, and digital platforms support this objective by providing opportunities for synchronous and asynchronous interaction through discussion forums, video conferencing, messaging applications, and collaborative online activities (Widodo et al., 2023).

The effectiveness of digital learning can also be explained through Self-Determination Theory, which highlights autonomy, competence, and relatedness as key factors influencing learner motivation. Digital platforms allow students to regulate their learning pace, monitor their progress, and receive immediate feedback, thereby enhancing their sense of autonomy and competence. At the same time, online interaction with peers and teachers supports social connectedness and learner engagement (Kurniawati & Lestari, 2023). These characteristics suggest that digital learning environments can foster both cognitive and motivational dimensions of language learning.

Empirical studies conducted in various Indonesian regions have reported positive impacts of digital learning on English language development. Research has shown improvements in vocabulary acquisition, reading comprehension, speaking confidence, learner motivation, and classroom engagement following the implementation of digital or blended learning approaches (Pratama & Hidayat, 2024; Sudipa et al., 2024; Wahyuni & Utami, 2023). Nevertheless, several challenges remain. Unequal access to digital devices, unstable internet connectivity, and varying levels of digital literacy continue to affect the quality and effectiveness of technology integration across schools (UNESCO, 2023; Widodo et al., 2023). Schools in urban areas generally possess greater technological readiness than those in rural or remote regions, creating disparities in learning opportunities.

Although previous studies have provided valuable insights into the benefits of technology-enhanced language learning, most have focused on higher education settings, specific digital applications, or limited instructional interventions. Comprehensive investigations examining the influence of digital learning platforms on all four language skills among Indonesian senior high school students remain relatively scarce, particularly studies involving participants from multiple regions with differing levels of technological readiness (Cirocki & Farrell, 2023; Pratama & Hidayat, 2024).

Therefore, further research is needed to examine the effectiveness of digital learning platforms in enhancing English language proficiency among Indonesian senior high school students while simultaneously exploring learners' experiences and contextual challenges. Such investigation is important for developing evidence-based pedagogical practices and informing educational policies related to technology integration in English language teaching.

Accordingly, this study aims to investigate the effectiveness of digital learning platforms in enhancing English language proficiency among Indonesian senior high school students. Specifically, the study examines: (1) the extent to which digital learning platforms improve students' overall English proficiency and individual language skills, (2) students' perceptions

regarding motivation, autonomy, and engagement in digital learning environments, and (3) contextual challenges related to technological infrastructure and digital readiness. By providing empirical evidence from multiple Indonesian provinces, this study contributes to the growing body of research on technology-enhanced English language learning and offers practical implications for teachers, policymakers, and educational stakeholders.

B. METHOD

This study employed a mixed-methods research design, integrating quantitative and qualitative approaches to provide a comprehensive understanding of the effectiveness of digital learning platforms in enhancing English language proficiency among Indonesian senior high school students. The mixed-methods approach was selected because it enables researchers to examine both measurable learning outcomes and participants' experiences within a single investigation (Creswell & Creswell, 2018; Johnson et al., 2021). By combining numerical data obtained from proficiency assessments with qualitative insights gathered through surveys, interviews, and classroom observations, the study sought to achieve methodological triangulation and improve the credibility and validity of the findings (Creswell & Plano Clark, 2023).

Research Sites and Participants

The study was conducted in five public senior high schools (*Sekolah Menengah Atas / SMA*) located in different regions of Indonesia. The selection of research sites was based on regional representation and varying levels of digital infrastructure readiness, allowing the study to capture diverse educational contexts and technological conditions across the country (UNESCO, 2023).

The participants consisted of 180 eleventh-grade students, with each school contributing 36 students. Eleventh-grade students were selected because they had already received several years of formal English instruction and possessed sufficient academic maturity to engage independently with digital learning environments (Rahman & Weda, 2021). In addition, five English teachers from the participating schools were included as interview participants to provide professional perspectives regarding instructional implementation and pedagogical challenges associated with digital learning integration (Widodo et al., 2023).

Table 1. Participants by School and Region

School Code	Region	Number of Students
SMA-A	Central Java	36
SMA-B	Yogyakarta	36
SMA-C	Bali	36
SMA-D	Sulawesi	36
SMA-E	Kalimantan	36
Total		180

Research Instruments

To obtain comprehensive and reliable data, multiple research instruments were utilized.

English Proficiency Tests

Standardized English proficiency tests were administered as pre-tests and post-tests to evaluate students' language development before and after the digital learning intervention. The assessments measured five components of English proficiency, namely listening, reading, grammar, speaking, and writing. Using equivalent test formats for both administrations ensured

consistency, reliability, and comparability of the results (Brown & Abeywickrama, 2019). The assessment framework was aligned with communicative language competence principles that emphasize both receptive and productive language skills (Richards, 2022).

Student Surveys

A structured questionnaire employing a five-point Likert scale was distributed to all student participants following the intervention period. The survey measured students' perceptions of digital learning platforms in terms of learning motivation, digital literacy, learner autonomy, engagement, and attitudes toward technology-enhanced English learning. Previous studies have demonstrated that learner perceptions significantly influence the effectiveness of digital learning environments and technology acceptance (Kurniawati & Lestari, 2023; Hasanah et al., 2024).

Teacher Interviews

Semi-structured interviews were conducted with one English teacher from each participating school. The interviews explored teachers' perceptions regarding digital readiness, instructional strategies, technological challenges, and the overall effectiveness of digital learning platforms in supporting English language development. Semi-structured interviews were chosen because they allow participants to provide detailed explanations while maintaining consistency across interview sessions (Creswell & Creswell, 2018).

Classroom Observations

Classroom observations were conducted throughout the intervention period to examine how digital learning platforms were implemented in actual instructional settings. Observation activities focused on learner engagement, participation patterns, teacher facilitation practices, collaborative interaction, and the integration of digital tools into classroom activities. Observational data provided contextual evidence that complemented the quantitative findings and interview results (Cirocki & Farrell, 2023).

Digital Learning Platforms Used

The intervention integrated multiple digital learning platforms to support different dimensions of English language learning. The use of various platforms was intended to provide students with authentic language exposure, interactive learning opportunities, and flexible access to learning materials (Fitria, 2022; Sudipa et al., 2024).

The platforms included:

- **Google Classroom** as a learning management system for distributing materials, collecting assignments, and providing feedback.
- **YouTube** and **TED-Ed** as sources of authentic listening and viewing materials.
- **Duolingo** for vocabulary enrichment and grammar practice.
- **Zoom** and **Google Meet** for virtual communication, discussion, and speaking activities.
- **Quipper** and **Ruangguru** as supplementary learning platforms providing structured exercises and reinforcement activities.

The combination of these platforms was designed to facilitate the development of listening, speaking, reading, and writing skills while accommodating diverse learning preferences and technological accessibility levels (Pratama & Hidayat, 2024).

Research Procedure

The study was conducted over an eight-week intervention period and followed a systematic sequence of activities.

1. Administration of English proficiency pre-tests to establish baseline language competence.
2. Orientation sessions introducing students and teachers to the selected digital learning platforms.
3. Implementation of digital learning integration within regular English instruction.
4. Continuous classroom observations throughout the intervention period.
5. Administration of English proficiency post-tests at the conclusion of the intervention.
6. Distribution of student perception surveys.
7. Conducting semi-structured interviews with participating English teachers.
8. Compilation, coding, and analysis of quantitative and qualitative data.

The eight-week duration was considered sufficient to observe measurable learning development while allowing participants to become familiar with the digital learning environment (Hasanah et al., 2024).

Data Analysis

Data analysis involved both quantitative and qualitative procedures.

Quantitative data obtained from the pre-tests, post-tests, and student surveys were analyzed using descriptive statistics, including means, standard deviations, frequencies, and percentages. To determine whether significant differences existed between students' English proficiency before and after the intervention, paired-sample *t*-tests were conducted. This statistical technique is widely used to evaluate learning gains resulting from educational interventions and instructional innovations (Field, 2021).

Qualitative data collected from teacher interviews and classroom observations were analyzed using thematic analysis. The analysis followed several stages, including data familiarization, initial coding, theme identification, theme refinement, and interpretation (Braun & Clarke, 2022). Recurring themes related to learner engagement, autonomy, motivation, digital literacy, technological challenges, and instructional practices were identified and interpreted in relation to the quantitative findings.

The integration of quantitative and qualitative results enabled a more holistic understanding of the effectiveness of digital learning platforms in enhancing English language proficiency among Indonesian senior high school students. Such integration also facilitated the identification of contextual factors influencing the success of technology-enhanced language learning across different educational settings (Creswell & Plano Clark, 2023).

C. RESULTS AND DISCUSSION

Result

4.1 Overall Improvement in English Language Proficiency

The quantitative analysis reveals a substantial improvement in students' overall English language proficiency following the integration of digital learning platforms. Descriptive statistics indicate that the mean post-test scores across all participating schools were considerably higher than the pre-test scores, suggesting positive learning outcomes resulting from the digital learning intervention. These findings support previous studies that reported positive effects of technology-enhanced language learning on English proficiency development (Pratama & Hidayat, 2024; Sudipa et al., 2024).

Table 2. Descriptive Statistics of Overall English Proficiency Scores

Test Type	Mean	Standard Deviation
Pre-Test	67.2	6.8
Post-Test	80.2	5.9

The results of the paired-sample *t*-test demonstrate a statistically significant difference between pre-test and post-test scores ($t = 14.63, p < 0.05$). This finding confirms that the improvement in students’ English proficiency is unlikely to be due to chance and can be attributed to the integration of digital learning platforms during the instructional period. Similar findings have been reported by Kurniawati and Lestari (2023), who found that digital learning environments significantly improved learners’ language achievement through increased access to authentic learning materials and self-paced learning opportunities.

In addition to the increase in mean scores, a notable reduction in standard deviation was observed in the post-test results. This decrease indicates that students’ performance became more homogeneous after the intervention. In other words, digital learning integration appears to have reduced proficiency gaps among students, enabling lower-performing learners to improve while simultaneously supporting higher-achieving students. This finding aligns with UNESCO (2023), which emphasizes that well-designed digital learning environments can promote more inclusive and equitable learning opportunities.

4.2 Skill-Based Performance Analysis

To gain deeper insight into students’ language development, a skill-based analysis was conducted focusing on listening, speaking, reading, and writing skills.

Table 3. Mean Scores by Language Skill

Skill	Pre-Test Mean	Post-Test Mean	Mean Gain
Listening	66.5	82.4	+15.9
Speaking	64.8	80.1	+15.3
Reading	69.2	78.6	+9.4
Writing	68.3	76.5	+8.2

The data indicate that all four language skills improved following the digital learning intervention. However, the magnitude of improvement varied across skills. Listening and speaking demonstrated the highest gains, with increases of 15.9 and 15.3 points respectively. These findings support previous studies suggesting that digital technologies are particularly effective in enhancing oral communication skills through increased exposure to authentic audio-visual content and interactive communication opportunities (Hasanah et al., 2024; Sudipa et al., 2024).

The substantial improvement in listening skills suggests that frequent exposure to authentic materials through platforms such as YouTube and TED-Ed played a critical role in enhancing learners’ comprehension of spoken English. Exposure to authentic language input has been identified as a key factor in developing listening proficiency and communicative competence in English as a Foreign Language contexts (Richards, 2022).

Similarly, significant gains in speaking performance indicate that opportunities for virtual interaction, online discussions, and oral presentations facilitated through Zoom and Google Meet contributed to increased fluency and confidence. According to Widodo et al. (2023), digital communication environments provide learners with meaningful opportunities to practice language in authentic contexts while reducing communication anxiety.

In contrast, reading and writing skills showed more moderate improvement. Although digital platforms provided access to extensive reading materials and writing tasks, these skills often require longer periods of practice, explicit feedback, and higher-order cognitive processing to achieve substantial gains (Wahyuni & Utami, 2023). This finding is consistent with Kurniawati and Lestari (2023), who reported that productive literacy skills generally develop more gradually than receptive oral skills within digital learning environments.

4.3 School-Based Comparison of Proficiency Gains

An analysis of proficiency gains across participating schools reveals variations in learning outcomes.

Table 4. Proficiency Gains by School

School	Mean Gain
SMA-A (Central Java)	+10.2
SMA-B (Yogyakarta)	+10.2
SMA-C (Bali)	+17.7
SMA-D (South Sulawesi)	+12.7
SMA-E (South Kalimantan)	+14.2

Among the participating schools, SMA-C demonstrated the highest proficiency gain (+17.7). Conversely, SMA-A and SMA-B exhibited comparatively lower gains. Qualitative data from interviews and classroom observations provide contextual explanations for these differences. SMA-C was characterized by more stable internet connectivity, greater availability of digital devices, and teachers with stronger digital pedagogical competence.

These findings indicate that the effectiveness of digital learning platforms is influenced not only by the technology itself but also by contextual factors such as infrastructure readiness and teacher preparedness. Similar conclusions were reported by UNESCO (2023) and Widodo et al. (2023), who found that successful technology integration depends heavily on institutional support, technological accessibility, and teachers' digital competencies.

4.4 Students' Perceptions of Digital Learning Platforms

Survey findings reveal generally positive student perceptions regarding the integration of digital learning platforms into English instruction.

- 84% of students reported increased motivation to learn English.
- 79% indicated greater confidence in speaking English.
- 87% agreed that digital learning platforms made English lessons more engaging.
- These results suggest that digital learning environments positively influence affective dimensions of language learning, including motivation, confidence, and engagement. Such factors play a crucial role in successful language acquisition because motivated learners tend to participate more actively and persist longer in learning activities (Ryan & Deci, 2020).

Furthermore, qualitative responses revealed that students appreciated the flexibility, accessibility, and diversity of learning activities available through digital platforms. Many participants reported feeling less anxious during online speaking activities compared with traditional face-to-face classroom interactions. This finding supports Self-Determination Theory, which emphasizes that autonomy and psychological comfort contribute significantly to learner motivation and performance (Ryan & Deci, 2020).

Discussion

5.1 Effectiveness of Digital Learning Platforms in the Indonesian EFL Context

The findings provide strong empirical evidence that digital learning platforms significantly enhance English language proficiency among Indonesian senior high school students. The observed improvement supports previous studies highlighting the role of educational technology in expanding language exposure, increasing learner engagement, and improving language outcomes (Pratama & Hidayat, 2024; Sudipa et al., 2024).

- In Indonesia, where English is rarely used outside educational settings, digital learning platforms serve as an important bridge connecting classroom instruction with authentic language use. Through access to videos, podcasts, virtual discussions, and online communication, learners encounter English in more meaningful and authentic contexts than those typically available in conventional classrooms (Hasanah et al., 2024).

5.2 Digital Learning and Communicative Competence

The substantial improvement in speaking skills strongly supports the principles of Communicative Language Teaching (CLT). Digital platforms facilitate meaningful communication through virtual interactions, collaborative tasks, and discussion-based learning activities. According to Richards (2022), communicative competence develops most effectively when learners actively engage in authentic language use rather than merely studying linguistic forms.

Additionally, digital environments reduce communication anxiety by allowing learners to rehearse, revise, and reflect on their language production before sharing it with others. This reduced affective barrier likely contributed to increased participation and fluency among participants.

5.3 Learner Autonomy and Motivation

The findings also highlight the role of digital learning platforms in promoting learner autonomy. Students reported greater control over learning pace, content selection, and practice frequency. These findings are consistent with Self-Determination Theory, which argues that autonomy enhances intrinsic motivation and learning effectiveness (Ryan & Deci, 2020).

In contexts where instruction remains predominantly teacher-centered, digital learning platforms provide opportunities for independent exploration and self-directed learning. Such autonomy appears to have contributed to sustained engagement and improved proficiency outcomes throughout the intervention period.

5.4 Infrastructure and Equity Issues

Despite the positive outcomes, the study also reveals persistent challenges related to educational equity. Schools with better internet connectivity, more reliable technological infrastructure, and greater access to digital devices demonstrated stronger proficiency gains than schools with limited resources.

This finding is consistent with UNESCO (2023), which warns that unequal access to digital technologies may widen educational disparities if technology integration is implemented without adequate infrastructural support. Therefore, digital transformation in education must be accompanied by investments in connectivity, devices, and teacher capacity building.

5.5 Comparison with Previous Studies

The findings are consistent with previous research conducted in Indonesian EFL contexts that reported positive effects of blended and online learning on language proficiency, learner motivation, and classroom engagement (Kurniawati & Lestari, 2023; Wahyuni & Utami, 2023;

Pratama & Hidayat, 2024). However, the present study contributes additional evidence by examining multiple regions and evaluating all four language skills simultaneously. This broader scope enhances the generalizability of the findings and provides a more comprehensive understanding of digital learning effectiveness in Indonesian secondary education.

5.6 Implications for Policy and Practice

From a pedagogical perspective, the findings suggest that digital learning platforms should be integrated as core components of English language instruction rather than merely supplementary tools. Teachers should be encouraged to incorporate authentic digital resources, collaborative online activities, and learner-centered instructional strategies into classroom practice (Widodo et al., 2023).

From a policy perspective, investment in digital infrastructure, equitable access to educational technology, and continuous professional development for teachers remains essential. Strengthening these areas will help maximize the benefits of digital learning and support the development of English language proficiency among Indonesian senior high school students in diverse educational contexts (OECD, 2023; UNESCO, 2023).

D. CONCLUSION AND SUGGESTIONS

This study set out to investigate the effectiveness of digital learning platforms in enhancing English language proficiency among senior high school students in Indonesia. Based on the quantitative and qualitative findings presented in the Results and Discussion sections, it can be conclusively stated that the integration of digital learning platforms has a significant and positive impact on students' overall English proficiency, particularly in listening and speaking skills.

The statistical evidence demonstrates a clear improvement between pre-test and post-test scores, indicating that digital learning platforms are not merely complementary tools, but function as powerful learning environments capable of facilitating meaningful language development. The reduction in score variability after the intervention further suggests that digital learning contributed to minimizing proficiency gaps among students, allowing lower-performing learners to catch up while still supporting higher-achieving students. This finding is especially relevant in the Indonesian educational context, where classrooms often consist of learners with highly diverse linguistic backgrounds and learning abilities.

Skill-based analysis reveals that listening and speaking experienced the highest gains compared to reading and writing. This outcome aligns with the affordances of digital platforms, which provide abundant audio-visual input, real-life language exposure, and interactive communication opportunities. In an EFL context like Indonesia, where authentic English input outside the classroom is limited, digital platforms effectively extend the learning environment beyond physical classrooms and textbooks. Through videos, online discussions, and virtual presentations, students are able to engage with English as a living language rather than as a purely academic subject.

The findings also highlight the crucial role of affective and psychological factors in language learning. Increased motivation, confidence, and engagement reported by students indicate that digital learning platforms positively influence learners' attitudes toward English. Reduced anxiety, particularly in speaking activities, allows students to participate more actively and take greater risks in using the language. This shift is essential for communicative competence development and supports the view that emotional readiness is as important as cognitive ability in successful language acquisition.

However, the school-based comparison underscores that the effectiveness of digital learning is not uniform across contexts. Schools with stable internet access, adequate digital devices, and teachers who possess strong digital pedagogical skills achieved higher learning gains. This finding reinforces the argument that technology alone does not guarantee improved learning outcomes. Digital learning initiatives must be accompanied by sufficient infrastructure, continuous teacher training, and institutional support. Without these elements, the implementation of digital platforms risks deepening educational inequalities between urban and rural areas or between well-resourced and under-resourced schools.

From a pedagogical perspective, this study suggests that digital learning platforms should be systematically integrated into English language instruction rather than used sporadically or as emergency solutions. Teachers are encouraged to design communicative, student-centered tasks that fully utilize the interactive features of digital platforms. At the same time, policymakers should prioritize equitable access to digital infrastructure and professional development programs to ensure that all students can benefit from technology-enhanced learning.

In conclusion, digital learning platforms represent a viable and effective approach to improving English language proficiency among Indonesian senior high school students when implemented thoughtfully and supported by adequate resources. The results of this study provide empirical evidence that supports the long-term integration of digital learning into English education in Indonesia. Future research is recommended to explore longitudinal impacts, specific platform comparisons, and the role of emerging technologies such as artificial intelligence in further enhancing EFL learning outcomes.

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