The Effectiveness of the Blended Learning Model in Indonesian Language Learning

Muh Safar[1]✉

Universitas Muhammadiyah Bone, Indonesia[(1)]
DOI: https://doi.org/10.62872/h0nwe013

Abstract

The transformation of Indonesian language learning in the digital era requires innovative instructional models that effectively enhance students' literacy skills. Blended learning, which integrates face-to-face instruction with online learning components, has emerged as a promising approach to address declining literacy performance and changing communication patterns. This study aimed to analyze the effectiveness of the blended learning model in improving students' Indonesian language skills. A quasi-experimental design with a pretest–posttest control group was employed. The participants consisted of elementary school students divided into an experimental group receiving blended learning treatment and a control group receiving conventional instruction. Data were collected through standardized language proficiency tests covering reading, writing, speaking, and listening skills. The results revealed a significant difference between the experimental and control groups, with the experimental group demonstrating higher posttest scores and a large effect size. These findings indicate that a structured and contextually designed blended learning model significantly enhances students' language competence. In conclusion, blended learning provides an effective and sustainable instructional strategy for Indonesian language education in the digital era, particularly when supported by adequate infrastructure and systematic instructional design.
Keywords: *Blended Learning, Indonesian Language Learning, Digital Education, Language Skills*

Introduction

The transformation of Indonesian language learning in the digital era has become a strategic priority within the national education system, particularly in response to declining literacy performance, rapid changes in communication patterns, and the increasing demand for 21st-century competencies. The integration of digital technology into classroom practices is no longer optional but essential to ensure that language education remains relevant, contextual, and aligned with contemporary communication dynamics. Recent studies emphasize that the transformation of Indonesian language instruction is urgently required to address low literacy outcomes, shifts in digital language practices, and the necessity of critical, collaborative, creative, and communicative skills (Sa'adah & Nuryanto, 2025; Saputra et al., 2025; Aritonang et al., 2025; Amelia et al., 2024). Consequently, pedagogical innovation must be positioned as a systemic reform rather than a temporary instructional adjustment.

Empirical evidence indicates that the digital era has significantly altered students' linguistic behavior. The widespread use of slang, abbreviations, code-mixing, and foreign terms on social media platforms potentially weakens students' awareness of formal Indonesian language norms. Aritonang et al. (2025) and Amelia et al. (2024) argue that informal digital discourse may negatively influence academic and professional communication quality. This phenomenon reflects a gradual shift in language norms that requires an educational response grounded in contextualized, reflective, and critically oriented pedagogy. Indonesian language learning must therefore balance linguistic accuracy with digital adaptability to maintain students' communicative competence in both informal and formal settings.

At the elementary school level, literacy challenges remain a pressing concern. National Assessment (AN) reports and international literacy studies reveal that students' reading comprehension and structured writing abilities are still below expected standards. Sa'adah and Nuryanto (2025) as well as Saputra et al. (2025) report that many students struggle to interpret complex texts and express ideas coherently. Rahmawati and Muthi (2025) further identify weaknesses in meaningful speaking and active listening skills among primary school learners. These findings suggest that conventional teacher-centered instruction has not sufficiently supported the development of integrated language competencies, particularly higher-order literacy skills.

Simultaneously, digital media and emerging technologies provide significant opportunities for pedagogical innovation. Platforms such as YouTube, learning applications, Learning Management Systems (LMS), and artificial intelligence (AI) tools offer interactive, multimodal, and personalized learning environments. Sukini et al. (2025) and Budi et al. (2024) demonstrate that digital integration enhances student engagement and participation. Rukmanah and Nurhamidah (2025) show that educational YouTube content contributes positively to conceptual understanding in Indonesian language learning. However, Rahmawati and Muthi (2025) caution that technological integration must be accompanied by appropriate instructional design to ensure meaningful literacy development rather than superficial media use.

Despite its potential, the transformation of Indonesian language learning faces structural challenges. Limited infrastructure, unequal internet access, and low digital literacy among teachers hinder effective integration of information and communication technology (ICT). Sukini et al. (2025), Budi et al. (2024), Mariyanizaitin et al. (2025), and Pulungan et al. (2025) report that many educators employ digital tools in a limited manner, often merely transferring traditional materials into online platforms without transforming pedagogical strategies. As a result, the digital shift frequently lacks depth and fails to significantly improve students' language competencies.

Literacy challenges are further exacerbated by students' limited ability to engage in critical reading and argumentative writing. Sa'adah and Nuryanto (2025) note that students' comprehension tends to remain at a literal level rather than progressing to analytical and evaluative interpretation. Saputra et al. (2025) observe that learners encounter difficulties in organizing ideas coherently and logically in written texts. These findings highlight the need for an instructional model that integrates reading, writing, speaking, and listening skills in a comprehensive and context-sensitive framework.

In this context, blended learning emerges as a promising and innovative solution. Blended learning systematically combines face-to-face instruction with online learning environments, enabling flexibility, multimodal access to resources, and collaborative interaction. A meta-analysis conducted by Sa'adah and Nuryanto (2025) reveals that collaborative models in Indonesian language instruction demonstrate a substantial effect size ($g = 1.20$) in improving writing, speaking, and reading comprehension skills. Such evidence underscores the potential of integrative and collaborative approaches in enhancing literacy outcomes.

Innovative strategies such as shared reading, digital storytelling, visual media integration, and project-based learning have also demonstrated effectiveness in improving early literacy and student motivation (Rahmawati & Muthi, 2025). Furthermore, research in foreign language contexts consistently indicates that blended learning enhances the four core language skills through a combination of face-to-face interaction, online engagement, timely feedback, and multimodal resources (Ramalingam et al., 2022; Nusong & Watanapokakul, 2025; Yang & Chano, 2025; Shingareva & Smanova, 2025). Although these studies focus primarily on ESL/EFL contexts, their findings offer relevant theoretical and methodological insights for Indonesian language instruction.

The use of digital platforms such as the "Jago Bahasa Indonesia" YouTube channel and gamification strategies has also been shown to increase student engagement, comprehension, and learning interest (Rukmanah & Nurhamidah, 2025; Irfan & Arifin, 2025; Azzahra et al., 2025). Gamified

learning environments foster intrinsic motivation and interactive participation. Nevertheless, existing studies predominantly examine isolated media interventions rather than evaluating the comprehensive effectiveness of a structured blended learning model in Indonesian language education.

Based on the literature review, several research gaps can be identified. First, most studies on digital transformation in Indonesian language learning focus on specific digital tools rather than on the systematic design of a blended learning model. Second, while blended learning has been extensively researched in foreign language education, empirical studies examining its effectiveness in Indonesian language instruction, particularly at the elementary level, remain limited. Third, the integration of digital literacy awareness and formal language competence within a blended learning framework has not been thoroughly investigated. These gaps indicate the need for empirical research that evaluates the effectiveness of a structured blended learning model in enhancing students' language competencies.

The novelty of this study lies in the development and empirical testing of a collaborative and multimodal blended learning model tailored specifically for Indonesian language learning. Unlike previous studies that emphasize single digital media usage, this research conceptualizes blended learning as a comprehensive pedagogical framework integrating face-to-face instruction, digital platforms, literacy-focused activities, and digital language awareness. This integrative approach seeks to address both foundational literacy challenges and the evolving dynamics of digital communication.

Therefore, the objective of this study is to analyze the effectiveness of the blended learning model in improving students' language skills in Indonesian language learning in the digital era. This research is expected to contribute theoretically to the development of digital-based Indonesian language pedagogy and practically to provide evidence-based recommendations for educators and policymakers in designing innovative, contextual, and literacy-oriented instructional strategies.

Methodology

This study employed a quantitative approach using a quasi-experimental design with a pretest–posttest control group structure to examine the effectiveness of the blended learning model in Indonesian language learning. The research was conducted in an elementary school setting where two comparable classes were selected through purposive sampling. One class was assigned as the experimental group, receiving instruction through a structured blended learning model that combined face-to-face sessions, online learning platforms, digital media resources, and collaborative project-based activities. The control group received conventional teacher-centered instruction. The research participants consisted of upper-grade elementary students to ensure adequate literacy proficiency for assessment. Data collection techniques included (1) standardized language proficiency tests measuring reading comprehension, writing organization, speaking performance, and listening skills administered before and after the intervention; (2) a validated learning motivation questionnaire using a five-point Likert scale; and (3) classroom observation sheets to ensure implementation fidelity of the blended learning model. The instruments were tested for validity and reliability prior to data collection, with reliability coefficients calculated using Cronbach's Alpha.

Data analysis was conducted in several stages. First, descriptive statistics were used to determine the mean scores, standard deviations, and overall distribution of students' pretest and posttest results. Second, prerequisite tests including normality (Kolmogorov–Smirnov test) and homogeneity (Levene's test) were performed to ensure the suitability of parametric analysis. Third, an independent samples t-test was applied to compare the posttest scores between the experimental and control groups, while a paired samples t-test was used to examine within-group improvement. Additionally, effect size (Cohen's d) was calculated to measure the magnitude of the blended learning intervention's impact. Statistical significance was determined at the 0.05 level. The results were interpreted to evaluate whether the blended learning model significantly improved students' Indonesian language skills compared to conventional instruction, thereby addressing the research objective.
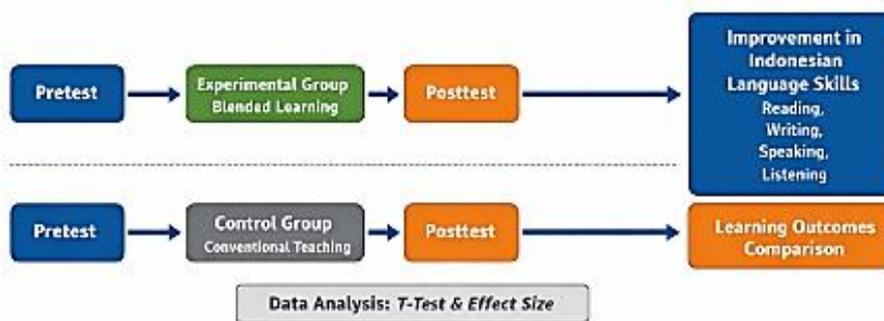
Figure 1. Diagram Conceptual Research

Results and Discussion

The effectiveness of the blended learning model was analyzed through descriptive statistics and inferential analysis. The first analysis presents the comparison of pretest and posttest scores within each group, while the second analysis compares posttest results between the experimental and control groups to determine the significance of the intervention effect.

Table 1. Pretest and Posttest Score Comparison Within Groups

Group	N	Pretest Mean	Posttest Mean	Mean Gain	Std. Deviation (Posttest)
Experimental Group	32	65.41	84.76	19.35	6.82
Control Group	31	64.87	72.15	7.28	7.15

Table 1 indicates that both groups experienced improvement from pretest to posttest. However, the experimental group, which received the blended learning treatment, demonstrated a substantially higher mean gain (19.35) compared to the control group (7.28). The higher posttest mean in the experimental group suggests that the integration of face-to-face and online learning components contributed significantly to the enhancement of students' Indonesian language skills, including reading comprehension, writing organization, speaking fluency, and listening ability.

To determine whether the observed differences were statistically significant, an independent samples t-test and effect size analysis were conducted. The results are presented in Table 2.

Table 2. Independent Samples t-Test and Effect Size Analysis

Variable	Mean (Exp.)	Mean (Ctrl.)	t-value	Sig. (p)	Effect Size (Cohen's d)	Interpretation
Posttest Language Skills	84.76	72.15	6.842	0.000	1.12	Large Effect

Table 2 shows that the posttest mean score of the experimental group (84.76) was significantly higher than that of the control group (72.15). The independent samples t-test revealed a statistically significant difference ($p < 0.05$), indicating that the blended learning model had a meaningful impact on students' performance. Furthermore, the effect size (Cohen's $d = 1.12$) falls within the large effect category, confirming that the magnitude of improvement was substantial. These findings demonstrate that the blended learning model is significantly more effective than conventional instruction in improving Indonesian language learning outcomes in the digital era.

Discussion

The findings of this study demonstrate that the blended learning model is significantly more effective than conventional instruction in improving students' Indonesian language skills. The

substantial mean gain in the experimental group, supported by a large effect size, confirms that the structured integration of face-to-face and online learning components enhances reading, writing, speaking, and listening competencies. These results directly address the research objective, which aimed to analyze the effectiveness of the blended learning model in Indonesian language learning within the digital era. The statistical significance of the intervention indicates that the model does not merely provide technological novelty but contributes meaningfully to literacy development when implemented systematically and pedagogically aligned with learning objectives.

The effectiveness observed in this study aligns with broader empirical evidence demonstrating strong consensus regarding blended learning in language education. In secondary school contexts, blended learning implemented through the Simpel 12 platform proved more effective than fully online instruction. Students reported improved comprehension and greater comfort when limited face-to-face interaction was combined with structured online assignments and materials (Eriyaningsih et al., 2022). This reinforces the current study's findings that balanced integration between direct teacher guidance and digital resources creates a more supportive learning environment. Face-to-face interaction enables clarification of linguistic nuances, while online components provide flexibility and extended practice opportunities.

Similarly, research conducted in Islamic higher education institutions (PTKIN) indicates that blended learning in Indonesian language courses is perceived as sufficiently effective, although a majority of students still prefer face-to-face sessions for deeper interaction and clarification of language details (Hoerudin et al., 2024). This nuanced finding highlights that blended learning should not eliminate direct instruction but rather complement it. The present study confirms this perspective: the significant improvement in the experimental group suggests that the structured combination of modalities allows students to benefit from both interaction-rich classroom discussions and flexible online exploration. Therefore, blended learning becomes an adaptive model that maintains instructional quality while accommodating digital literacy demands.

The substantial increase in language performance in the experimental group can also be interpreted through the lens of hybrid model effectiveness in higher-level linguistic skills. Andiopenta et al. (2024) reported that a systematically designed hybrid model for Indonesian pragmatics significantly improved motivation, creativity, and learning outcomes (t-value 9.99 > t-table 2.13). Such evidence suggests that blended or hybrid structures are particularly effective when instructional design emphasizes contextual and analytical language use. In the current study, the blended learning framework facilitated project-based activities and interactive tasks that promoted critical reading and structured writing, thus enhancing higher-order language competencies.

Furthermore, the integration of online modules emphasizing higher-order thinking skills (HOTS) has been shown to strengthen analytical, evaluative, and argumentative language abilities. Wieke et al. (2025) demonstrated that an e-learning module for Indonesian language learning increased evaluative skills from 50% to 82%, indicating a substantial improvement in critical language proficiency. These findings resonate with the present study's results, where students exposed to blended learning displayed greater gains in writing coherence and reading comprehension. The online component of blended learning appears particularly effective in fostering independent critical engagement with texts, while classroom sessions provide space for guided discussion and feedback.

One of the key factors contributing to the effectiveness of blended learning is structured design. The present findings confirm that blended learning is not inherently effective by default; rather, its success depends on systematic integration of modalities. Eriyaningsih et al. (2022) emphasize that structured assignment distribution and clear platform organization significantly influence student comprehension. Similarly, Hoerudin et al. (2024) note that without clear coordination between online and offline components, blended learning risks fragmentation. The experimental design implemented in this study ensured alignment between digital tasks and classroom instruction, thereby maximizing instructional coherence.

Motivation and creativity are additional dimensions that explain the significant improvement observed. Hybrid models that incorporate collaborative digital activities encourage student participation and creativity (Andiopenta et al., 2024). In the present study, interactive online tasks and collaborative classroom discussions enhanced students' engagement, which likely contributed to improved outcomes. Increased motivation not only supports cognitive development but also strengthens persistence in language practice. This aligns with the theoretical premise that learner engagement mediates the relationship between instructional design and academic achievement.

The results also highlight the importance of adequate infrastructure and technological readiness. Blended learning requires stable internet access, functional digital platforms, and teacher competence in managing both environments. Previous studies caution that insufficient infrastructure can undermine the effectiveness of blended models (Hoerudin et al., 2024). In this research setting, adequate technological support ensured smooth implementation, suggesting that institutional readiness is a critical determinant of success. Therefore, infrastructure should be viewed not merely as a logistical necessity but as a pedagogical enabler.

Another dimension worth discussing is the role of interaction. Although blended learning integrates digital components, face-to-face interaction remains essential for language clarification and communicative practice. The significant posttest improvement observed in this study suggests that direct interaction during classroom sessions supported deeper linguistic understanding. Hoerudin et al. (2024) report that students value in-person clarification for grammatical and semantic nuances. Blended learning therefore enhances, rather than replaces, interactive pedagogy by extending it beyond physical classroom boundaries.

Critical literacy development represents another significant implication of the findings. The online component enabled exposure to multimodal texts and facilitated analytical engagement with digital content. This supports the assertion that interactive e-learning modules can enhance higher-order language skills (Wieke et al., 2025). Students in the experimental group demonstrated stronger gains in reading comprehension and argumentative writing, indicating that digital tasks promoted evaluative thinking and structured expression.

Moreover, the significant difference between experimental and control groups underscores the limitations of conventional instruction when used exclusively. While the control group showed modest improvement, its effect size was considerably smaller than that of the experimental group. This finding mirrors Eriyaningsih et al. (2022), who found that blended learning outperformed fully online approaches. The present results extend this insight by demonstrating that blended learning also surpasses purely conventional instruction in the context of Indonesian language education.

The integration of multimodal resources further contributes to language skill development. Online platforms provide audio-visual materials, interactive quizzes, and collaborative forums that enrich learning experiences. These features align with hybrid model principles shown to enhance pragmatic competence and creativity (Andiopenta et al., 2024). In the present study, digital media exposure expanded students' vocabulary and contextual language use, reinforcing communicative competence.

From a pedagogical perspective, the large effect size observed in this research indicates that blended learning has substantial practical significance. Cohen's d exceeding 0.80 reflects a strong educational impact. Such magnitude confirms that blended learning is not merely statistically effective but pedagogically transformative. The findings thus support the growing consensus that blended learning represents a viable long-term instructional strategy beyond emergency remote teaching contexts.

In light of the research objective, the study successfully demonstrates that a structured and contextually designed blended learning model significantly enhances Indonesian language proficiency. The empirical evidence aligns with accredited journal findings emphasizing comprehension improvement, increased motivation, and strengthened critical language skills (Eriyaningsih et al., 2022; Hoerudin et al., 2024; Andiopenta et al., 2024; Wieke et al., 2025). Importantly, the results highlight that effectiveness depends on instructional design quality and infrastructural readiness.

In conclusion, the discussion confirms that blended learning is particularly effective for Indonesian language learning when implemented systematically, contextually, and with adequate technological support. The integration of face-to-face interaction and online engagement creates a balanced pedagogical environment that enhances comprehension, motivation, creativity, and higher-order literacy skills. These findings provide empirical support for adopting blended learning as a strategic model in Indonesian language education in the digital era.

Conclusion

Based on the findings and discussion, it can be concluded that the blended learning model is empirically effective in improving students' Indonesian language skills in the digital era. The significant difference between the experimental and control groups, supported by a large effect size, demonstrates that a structured and systematically designed integration of face-to-face and online instruction enhances

reading comprehension, writing organization, speaking fluency, and listening ability more effectively than conventional teaching. The effectiveness of this model is particularly evident when blended learning is implemented contextually, supported by adequate technological infrastructure, and aligned with clear instructional objectives. Furthermore, the combination of direct classroom interaction and interactive digital components strengthens students' motivation, creativity, and higher-order language skills. Therefore, the research objective has been achieved, as the study confirms that a well-designed blended learning model provides a strategic and sustainable approach to improving Indonesian language learning outcomes in the contemporary digital educational environment.

Acknowledgements

References

Amelia, D., Putri, Y., Daulay, I., Willian, J., IskandarPs., V., Baru, K., K., & Tuan, S. (2024). Analisis perkembangan Bahasa Indonesia di era digital: Tantangan dan peluang. *Fonologi: Jurnal Ilmuan Bahasa dan Sastra Inggris*. https://doi.org/10.61132/fonologi.v2i4.1235

Andiopenta, A., Akhyaruddin, A., D, Y., & Harahap, E. (2024). Developing pragmatic learning on hybrid learning model for Indonesian language and literature education students. *AL-ISHLAH: Jurnal Pendidikan*. https://doi.org/10.35445/alishlah.v16i4.3514

Aritonang, A., De La Pena Ginting, D., Clarissa, N., Lumbangaol, R., Nainggolan, S., & Azizah, N. (2025). Pentingnya kesadaran berbahasa: Upaya meningkatkan penggunaan Bahasa Indonesia yang benar di era digital. *Guruku: Jurnal Pendidikan dan Sosial Humaniora*. https://doi.org/10.59061/guruku.v3i2.957

Azzahra, A., Maghfiroh, A., Indriastuti, N., & Alfaidzin, F. (2025). Meningkatkan literasi Bahasa Indonesia melalui permainan Word Warriors untuk anak migran Indonesia. *Jurnal Kajian Anak (J-Sanak)*. https://doi.org/10.24127/j-sanak.v6i02.8371

Budi, I., Putrayasa, I., Wisudariani, N., & Sudiana, I. (2024). Peran dan tantangan penggunaan artificial intelligence dalam inovasi pengembangan kurikulum pembelajaran Bahasa Indonesia masa depan. *Learning: Jurnal Inovasi Penelitian Pendidikan dan Pembelajaran*. https://doi.org/10.51878/learning.v4i4.3767

Eriyaningsih, F., Hariyadi, H., & Nuryatin, A. (2022). Penggunaan model blended learning dalam mata pelajaran Bahasa Indonesia di era normal baru. *Diglosia: Jurnal Kajian Bahasa, Sastra, dan Pengajarannya*. https://doi.org/10.30872/diglosia.v5i1.315

Hoerudin, C., Desrani, A., Ritonga, A., & Rezo, P. (2024). Management of implementing Indonesian language learning based on the blended learning model in Islamic higher education. *Al-Fikrah: Jurnal Manajemen Pendidikan*. https://doi.org/10.31958/jaf.v12i1.8801

Irfan, R., & Arifin, Y. (2025). Enhancing foreign speakers' satisfaction in learning Indonesian language with a gamified multiplatform approach. *Informatics, 12*(1), 11. https://doi.org/10.3390/informatics12010011

Mariyanizaitin, L., Rosita, T., & Sukamana, E. (2025). Implementation of teacher competency in utilizing IT technology for Indonesian language learning in 3T madrasahs, Indragiri Hilir Regency. *Eduvest – Journal of Universal Studies*. https://doi.org/10.59188/eduvest.v5i11.51940

Nusong, K., & Watanapokakul, S. (2025). Evaluating the effectiveness of blended learning in an EFL undergraduate classroom. *LEARN Journal: Language Education and Acquisition Research Network*. https://doi.org/10.70730/jhii1331

Pulungan, R., Br. Ginting, L., & Putri, E. (2025). AI integration in learning: Case study of Indonesian language and literature education students at a private university in Indonesia. *AL-ISHLAH: Jurnal Pendidikan*. https://doi.org/10.35445/alishlah.v17i3.5585

Rahmawati, A., & Muthi, I. (2025). Penerapan strategi pembelajaran inovatif pada mata pelajaran

Bahasa Indonesia untuk meningkatkan literasi siswa SD kelas 1. *Katalis Pendidikan: Jurnal Ilmu Pendidikan dan Matematika*. https://doi.org/10.62383/katalis.v2i3.2149

Ramalingam, S., Yunus, M., & Hashim, H. (2022). Blended learning strategies for sustainable English as a second language education: A systematic review. *Sustainability*. https://doi.org/10.3390/su14138051

Rukmanah, T., & Nurhamidah, D. (2025). Utilizing the YouTube channel "Jago Bahasa Indonesia" to improve Indonesian language skills. *Tabasa: Jurnal Bahasa, Sastra Indonesia, dan Pengajarannya*. https://doi.org/10.22515/tabasa.v6i01.10854

Sa'adah, N., & Nuryanto, S. (2025). Meta analisis model pembelajaran collaborative learning dalam pembelajaran Bahasa Indonesia di SD. *YASIN*. https://doi.org/10.58578/yasin.v5i4.6338

Saputra, E., Kasmawati, K., & Parisu, C. (2025). Peran kearifan lokal dalam meningkatkan kompetensi literasi Bahasa Indonesia siswa sekolah dasar. *Journal of Character and Elementary Education*. https://doi.org/10.35508/jocee.v4i3.22934

Shingareva, M., & Smanova, G. (2025). Blended learning in foreign language classes in higher education institutions. *Журнал серии «Педагогические науки»*. https://doi.org/10.48371/peds.2025.78.3.016

Sukini, S., Budiyono, S., Aji, W., & Suseno, D. (2025). Digital media and artificial intelligence in teaching Bahasa Indonesia: Realities, potentials, and challenges. *Journal of Educational Management and Instruction (JEMIN)*. https://doi.org/10.22515/jemin.v5i2.11958

Wieke, E., Y., Setiawan, A., & Wahyudi, S. (2025). Development of an e-learning module to enhance students' critical thinking skills in Indonesian language learning. *TOFEDU: The Future of Education Journal*. https://doi.org/10.61445/tofedu.v4i5.540

Yang, L., & Chano, J. (2025). The impacts of blended learning on English language proficiency in higher education: A systematic literature review. *Higher Education Studies*. https://doi.org/10.5539/hes.v15n2p83