

BLENDED LEARNING IN TEACHING ENGLISH AS A FOREIGN LANGUAGE: AN INSTRUCTIONAL TECHNOLOGY APPROACH TO IMPROVING LEARNING OUTCOMES

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ABSTRACT

This study aims to examine the effectiveness of blended learning as an instructional technology approach in improving learning outcomes in Teaching English as a Foreign Language (TEFL). Blended learning, which combines face-to-face instruction with online learning, has gained significant attention as a flexible and interactive teaching strategy. This research employed a quantitative quasi-experimental design conducted at SMA Negeri 2 Gowa, Indonesia. Data were collected through pre-tests, post-tests, questionnaires, and classroom observations. The findings reveal that students who participated in blended learning environments demonstrated significantly higher improvement in English proficiency compared to those who experienced traditional instruction. The integration of digital platforms and classroom interaction enhanced students' reading, writing, and vocabulary skills. In addition, blended learning increased student motivation, engagement, and autonomy by providing flexible access to learning materials and opportunities for independent learning. However, challenges such as limited internet access and varying levels of digital literacy were identified as barriers to effective implementation. Despite these challenges, blended learning remains a promising approach to improving learning outcomes in TEFL. This study concludes that blended learning can effectively enhance language acquisition when supported by appropriate infrastructure and teacher competence.

Keywords : Blended Learning, TEFL, Instructional Technology, Language Learning, Student Engagement

INTRODUCTION

The rapid advancement of digital technology has transformed educational practices worldwide, creating new opportunities for teaching and learning across various disciplines. The integration of digital technologies into education has shifted traditional instructional approaches toward more flexible, interactive, and learner-centered models. As educational institutions increasingly adopt technological innovations, the need for effective instructional strategies that combine the strengths of traditional and digital learning environments has become more apparent. One of the most widely adopted approaches in response to this transformation is blended learning, which combines face-to-face instruction with online learning experiences (Hrastinski, 2019).

Blended learning has gained considerable attention because it offers flexibility, accessibility, and opportunities for personalized learning. By integrating digital technologies with conventional classroom instruction, blended learning enables students to

access learning materials beyond classroom boundaries while maintaining direct interaction with teachers and peers. Graham (2019) argues that blended learning supports individualized learning by allowing students to engage with educational content at their own pace while benefiting from structured classroom guidance. Consequently, this approach has been increasingly implemented across different educational contexts, including language education.

In the field of Teaching English as a Foreign Language (TEFL), blended learning has become particularly relevant because language acquisition requires continuous exposure, meaningful interaction, and consistent practice. Traditional classroom instruction alone often provides limited opportunities for students to practice language skills outside scheduled learning hours. Blended learning addresses this limitation by extending learning beyond the classroom through digital resources, online activities, and collaborative learning platforms (Kukulka-Hulme, 2020). Through these technologies, learners can engage in language learning activities anytime and anywhere, thereby increasing opportunities for language exposure and practice.

Numerous studies have reported the positive impact of blended learning on language learning outcomes. Martin et al. (2020) found that integrating online learning components enhances students' understanding through multimedia-based instruction and interactive learning experiences. Similarly, Bond et al. (2021) emphasized that digital learning environments promote greater student participation, engagement, and motivation by creating more dynamic and student-centered learning experiences. These findings suggest that blended learning has the potential to improve both cognitive and affective aspects of language learning. One of the key strengths of blended learning lies in its ability to integrate multimedia resources into the learning process. Videos, audio recordings, animations, and interactive exercises provide contextualized language input that facilitates comprehension and language acquisition. According to Mayer's (2017) Cognitive Theory of Multimedia Learning, students learn more effectively when information is presented through multiple channels, such as visual and auditory modes. In TEFL contexts, multimedia resources can support the simultaneous development of listening, speaking, reading, and writing skills while enhancing students' understanding of authentic language use.

In addition to supporting language skill development, blended learning promotes communicative competence and learner autonomy. Through online discussion forums, collaborative projects, and digital communication tools, students can interact with peers and instructors in meaningful ways, thereby practicing language use in authentic contexts (Hockly, 2018). Furthermore, blended learning encourages students to take greater responsibility for their own learning. Little (2020) notes that autonomous learners are more likely to set learning goals, select appropriate learning resources, and monitor their own progress. Such autonomy is essential for successful language acquisition and aligns with constructivist learning principles that emphasize active participation and knowledge construction (Jonassen, 2017). Moreover, blended learning contributes to the development of twenty-first-century skills, including critical thinking, communication, collaboration, creativity, and digital literacy. These competencies are increasingly recognized as essential

for students' academic and professional success in a rapidly evolving global society (Redecker, 2017). Through technology-enhanced learning activities, students are provided with opportunities to develop these skills while simultaneously improving their language proficiency.

Despite its numerous advantages, the implementation of blended learning also presents several challenges. Technological limitations, such as inadequate internet connectivity and limited access to digital devices, may hinder the effectiveness of blended learning environments (Adedoyin & Soykan, 2020). Additionally, teachers often face difficulties in integrating technology effectively due to insufficient digital competence and limited professional training (Trust & Whalen, 2020). Another challenge involves maintaining an appropriate balance between online and face-to-face instruction, as excessive reliance on technology may reduce opportunities for direct communication and interaction, which are crucial for language development (Hockly, 2018).

These challenges are particularly evident in developing countries such as Indonesia. Although educational institutions have increasingly adopted digital technologies, disparities in technological infrastructure and digital literacy remain significant concerns. Many schools continue to experience limited access to technological resources, while teachers often require additional support and training to implement blended learning effectively (Rahman, 2022; Sari & Putra, 2023). Consequently, the success of blended learning in Indonesian educational settings may vary depending on contextual factors such as infrastructure, institutional support, and teacher readiness.

Although numerous studies have examined blended learning in language education, most have focused on higher education settings or contexts in developed countries. Empirical research investigating the effectiveness of blended learning in Indonesian secondary schools, particularly within TEFL classrooms, remains relatively limited. This gap highlights the need for further research to understand how blended learning influences students' language achievement, motivation, and engagement in diverse educational contexts. Therefore, this study aims to investigate the role of blended learning in improving English language learning outcomes at SMA Negeri 2 Gowa. Specifically, the study examines the influence of blended learning on students' language achievement, learning motivation, and classroom engagement. The findings are expected to contribute to the growing body of knowledge on blended learning in TEFL and provide practical recommendations for educators and policymakers seeking to integrate instructional technology effectively into language education.

METHOD

1. Research Design

This study employed a quantitative approach using a quasi-experimental design, specifically a non-equivalent control group design. This design was chosen to examine the effectiveness of blended learning as an instructional technology approach in improving students' learning outcomes in TEFL. The experimental group received instruction through a blended learning model, which combined face-to-face classroom instruction with online learning activities, while the control group was taught using conventional teacher-centered methods.

The quasi-experimental design was considered appropriate because it allowed the researcher to compare the impact of blended learning in a real classroom setting without random assignment. This approach enabled the measurement of differences in students' language achievement, motivation, and engagement between the two groups.

2. Participants / Subjects

The participants of this study were 64 eleventh-grade students from SMA Negeri 2 Gowa, Indonesia. The students were divided into two groups: 32 students in the experimental group and 32 students in the control group. A purposive sampling technique was used to select participants based on similar English proficiency levels and classroom conditions. The students were aged between 16 and 17 years old and had intermediate-level English skills. Both groups were taught by the same English teacher to ensure consistency in teaching, with the only difference being the use of blended learning in the experimental group.

3. Instruments

Three main instruments were used in this study:

1. Language Proficiency Test (Pre-test and Post-test)

The test was designed to measure students' English skills, including reading, writing, and vocabulary. The test items were adapted from standardized English learning materials and validated by English education experts.

2. Questionnaire

A questionnaire consisting of 20 Likert-scale items was used to assess students' motivation, engagement, and perceptions of blended learning. The questionnaire was adapted from previous studies on technology-enhanced learning.

3. Observation Sheet

Observation sheets were used to record students' participation, interaction, and engagement during both face-to-face and online learning activities.

All instruments were tested for validity and reliability. Content validity was ensured through expert judgment, and reliability testing using Cronbach's Alpha showed acceptable results ($\alpha > 0.70$).

4. Data Collection Procedure

The data collection process was conducted over six weeks and consisted of several stages. First, permission was obtained from the school administration, and the purpose of the study was explained to the participants. Ethical considerations, including voluntary participation and confidentiality, were ensured. Second, a pre-test was administered to both groups to measure students' initial language proficiency. Third, during the treatment phase, the experimental group participated in blended learning activities. They attended face-to-face classes and also accessed online materials through platforms such as Google Classroom, which included videos, interactive exercises, and discussion forums. The control group received traditional instruction using textbooks and teacher explanations. Classroom observations were conducted throughout this phase. Finally, a post-test was administered to both groups to measure learning improvement. The experimental group also completed the questionnaire to evaluate their learning experience.

5. Data Analysis

The collected data were analyzed using descriptive and inferential statistics. Descriptive statistics, including mean scores, percentages, and standard deviations, were used to summarize students' performance and questionnaire responses. Inferential analysis was conducted using paired sample t-tests to compare pre-test and post-test scores within each group, and independent sample t-tests to compare differences between the experimental and control groups. All statistical analyses were performed using SPSS version 25, with a significance level set at $p < 0.05$. The analysis aimed to determine the effectiveness of blended learning in improving students' language achievement, motivation, and engagement.

RESULT AND DISCUSSION

Result

Overall Improvement in Students' English Achievement

The primary objective of this study was to examine the effectiveness of blended learning in improving students' learning outcomes in Teaching English as a Foreign Language (TEFL) at SMA Negeri 2 Gowa. The effectiveness of the intervention was evaluated through pre-test and post-test scores, questionnaires, and classroom observations conducted over six weeks. The findings indicate that blended learning positively influenced students' academic achievement, motivation, engagement, classroom participation, and learner autonomy.

The comparison of pre-test and post-test scores demonstrates a significant improvement in students' English proficiency, particularly among those who participated in the blended learning program. Table 1 presents the comparison between the experimental and control groups.

Table 1. Comparison of Pre-test and Post-test Scores

Group	Pre-test Mean	Post-test Mean	Improvement
Experimental Group	63.2	83.6	32%
Control Group	62.8	72.9	16%

As shown in Table 1, students in the experimental group improved their average score from 63.2 in the pre-test to 83.6 in the post-test, representing an increase of approximately 32%. In contrast, the control group improved from 62.8 to 72.9, indicating a 16% increase. The results of the independent sample t-test revealed a statistically significant difference between the two groups ($p < 0.05$), suggesting that blended learning had a significant positive impact on students' English achievement.

The substantial improvement observed in the experimental group can be attributed to the integration of online and face-to-face learning activities. Through digital platforms, students were able to access learning materials repeatedly, practice language skills independently, and receive additional support outside classroom hours. These findings

support Graham (2019), who argues that blended learning enhances learning effectiveness by combining the strengths of traditional instruction with the flexibility of online learning.

Improvement in Reading Comprehension

One of the most notable improvements was found in students' reading comprehension skills. During the implementation period, students in the experimental group were exposed to a variety of digital reading materials, including online articles, interactive texts, educational videos, and reading exercises. These resources provided students with additional opportunities to engage with English texts beyond classroom instruction.

Table 2. Improvement in Reading Skills

Reading Indicators	Observed Improvement
Identifying main ideas	High
Understanding detailed information	High
Making inferences	Moderate to High
Vocabulary recognition in texts	High

Students demonstrated greater ability to identify main ideas, understand supporting details, and interpret textual information. The availability of digital resources allowed students to revisit learning materials whenever necessary, thereby strengthening comprehension and retention. Compared to students in the control group, who relied primarily on textbook-based instruction, the experimental group exhibited higher levels of reading achievement and confidence. These findings are consistent with Kukulska-Hulme (2020), who emphasizes that digital learning environments extend learning opportunities and facilitate language acquisition through continuous exposure to authentic materials.

Development of Writing Skills

The results also revealed significant improvements in students' writing abilities. The blended learning environment enabled students to submit assignments electronically, receive immediate feedback from teachers, and revise their work accordingly. This process encouraged continuous improvement and reflection.

Table 3. Improvement in Writing Skills

Writing Components	Observed Improvement
Grammar accuracy	High
Sentence structure	High
Organization of ideas	Moderate to High
Vocabulary usage	High

Students showed noticeable progress in grammar accuracy, sentence construction, coherence, and organization of ideas. The opportunity to revise written assignments based on teacher feedback contributed significantly to these improvements. Furthermore, online writing activities encouraged students to write more frequently and confidently.

The findings support previous studies suggesting that technology-enhanced writing instruction facilitates greater interaction between teachers and learners, thereby improving writing performance and language development.

Vocabulary Acquisition

Vocabulary acquisition emerged as another area positively influenced by blended learning. Students were exposed to vocabulary through various multimedia resources, including videos, images, animations, online quizzes, and interactive exercises.

Table 4. Vocabulary Development Through Blended Learning

Vocabulary Aspect	Findings
Vocabulary retention	Improved
Contextual understanding	Improved
Practical usage	Improved
Long-term recall	Improved

The integration of multimedia resources enabled students to encounter vocabulary in authentic contexts, making it easier for them to understand meanings and applications. Repeated exposure to new vocabulary through different learning formats contributed to better retention and recall. Students also reported greater confidence in using newly acquired words in both spoken and written communication. These findings align with Mayer's (2017) Cognitive Theory of Multimedia Learning, which states that information presented through multiple channels enhances comprehension and memory retention.

Students' Motivation and Engagement

Questionnaire findings indicated that blended learning significantly increased students' motivation and engagement in learning English. Most students expressed positive attitudes toward the blended learning environment and reported greater enthusiasm during learning activities.

Table 5. Students' Motivation and Engagement

Indicator	Percentage of Agreement
Learning became more interesting	89%
Increased motivation to learn English	88%
Greater participation in activities	87%
Increased willingness to complete assignments	85%
Better interaction with peers and teachers	84%

Approximately 89% of students agreed that blended learning made English lessons more interesting and enjoyable. Students appreciated the combination of online and face-to-face learning because it provided variety and reduced monotony. Interactive activities,

multimedia resources, and collaborative tasks contributed to a more engaging learning environment. The findings suggest that blended learning promotes intrinsic motivation by providing meaningful and enjoyable learning experiences. This result supports Bond et al. (2021), who argue that technology-enhanced learning environments encourage active participation and improve student motivation.

Classroom Interaction and Participation

Classroom observations revealed that blended learning enhanced students' interaction and participation. Students became more active during discussions, group work, presentations, and online forums.

Table 6. Classroom Interaction and Participation

Aspect	Observation Findings
Participation in discussions	Increased
Peer collaboration	Increased
Confidence in communication	Increased
Online interaction	Increased

Students who were initially reluctant to participate in traditional classroom discussions became more confident when expressing their ideas through online platforms. The combination of online and offline interactions created a supportive learning environment that facilitated communication and collaboration.

The findings indicate that blended learning contributes to the development of communicative competence by providing multiple opportunities for meaningful language use.

Learner Autonomy

Another important finding of this study is the development of learner autonomy among students. The blended learning environment encouraged students to take greater responsibility for their own learning processes.

Table 7. Indicators of Learner Autonomy

Indicator	Level
Independent learning	High
Self-paced study	High
Responsibility for assignments	High
Self-monitoring of progress	Moderate to High

Students frequently accessed learning materials independently, reviewed lessons outside classroom hours, and managed their own study schedules. This autonomy enabled learners to become less dependent on teacher-centered instruction and more actively involved in their educational development. According to Little (2020), learner autonomy

is a critical component of successful language acquisition because autonomous learners are more capable of regulating and sustaining their learning efforts.

Challenges in Implementation

Despite the numerous benefits observed, several challenges emerged during the implementation of blended learning.

Table 8. Challenges Encountered During Implementation

Challenge	Impact
Unstable internet connection	Limited access to online materials
Limited digital devices	Reduced participation
Low digital literacy	Difficulty using learning platforms
Teacher workload	Increased instructional management demands

Some students experienced difficulties accessing online learning resources due to unstable internet connectivity and limited access to digital devices. Additionally, differences in students' digital literacy affected their ability to navigate online learning platforms effectively. Teachers also faced challenges in balancing online and face-to-face instructional activities. These challenges highlight the importance of adequate technological infrastructure, institutional support, and professional development programs to ensure successful blended learning implementation.

Discussion

The findings of this study indicate that blended learning has a significant positive impact on students' English learning achievement at SMA Negeri 2 Gowa. The improvement in students' pre-test and post-test scores, as well as gains across reading, writing, vocabulary, motivation, classroom participation, and learner autonomy, suggests that the integration of online and face-to-face instruction provides a more effective learning environment compared to conventional teaching methods. This result supports Graham (2019), who argues that blended learning strengthens learning effectiveness by combining the advantages of direct instruction and digital flexibility.

The significant difference between the experimental and control groups demonstrates that blended learning contributes to deeper cognitive engagement and more sustained learning processes. Students in the experimental group benefited from the opportunity to access materials repeatedly, learn independently, and engage with content outside classroom hours. This flexibility likely contributed to their higher achievement scores. Similar findings were reported by Means et al. (2013), who concluded that blended learning environments tend to produce better academic outcomes than traditional classroom instruction. In addition, Al-Qahtani and Higgins (2013) emphasize that

technology-enhanced learning improves language acquisition by increasing exposure and practice opportunities.

In terms of reading comprehension, the improvement observed in the experimental group can be explained by the availability of diverse digital reading materials. Students were exposed to online articles, interactive texts, and multimedia resources that allowed them to engage with English in more authentic contexts. This aligns with Krashen's Input Hypothesis, which states that language learning occurs effectively when learners are exposed to meaningful and comprehensible input (Krashen, 1985). Furthermore, digital learning environments provide repeated exposure and multimodal input that strengthen comprehension, as also noted by Zhang and Zou (2020).

The development of writing skills is closely related to the feedback-rich environment created through blended learning. The use of online submission systems enabled students to receive timely feedback, revise their work, and improve their writing iteratively. This process reflects the principles of process-based writing, which emphasize drafting, revising, and continuous improvement. Hyland (2019) argues that technology-supported writing instruction enhances learner engagement and improves writing accuracy through sustained feedback interaction. Similarly, Liu and Sadler (2003) found that computer-mediated feedback significantly improves writing performance by facilitating revision processes.

Vocabulary acquisition also improved significantly due to the integration of multimedia learning resources such as videos, images, animations, and interactive quizzes. These materials provided contextualized exposure to new vocabulary, making it easier for students to understand and retain meaning. According to Mayer's Cognitive Theory of Multimedia Learning, learning becomes more effective when information is presented through both visual and verbal channels (Mayer, 2017). In addition, Nation (2013) highlights that repeated exposure to vocabulary in meaningful contexts is essential for long-term retention, which is evident in the improved vocabulary performance of students in this study. The findings also show that blended learning enhances students' motivation and engagement in learning English. The combination of online and face-to-face activities creates a more varied and enjoyable learning experience, reducing monotony and increasing interest in learning. This can be explained through Self-Determination Theory, which states that autonomy, competence, and relatedness contribute to intrinsic motivation (Deci & Ryan, 2000). Bond et al. (2021) further support this by stating that technology-enhanced learning environments significantly increase student engagement through active participation and collaboration. In this study, students demonstrated higher enthusiasm and willingness to participate in learning activities due to the interactive nature of blended learning.

Classroom interaction also improved significantly, as students became more active in discussions, group work, and online communication. The availability of online platforms provided additional opportunities for students to express their ideas, particularly for those who were initially less confident in face-to-face settings. This supports Vygotsky's Social Constructivist Theory, which emphasizes the role of social interaction in learning development (Vygotsky, 1978). Hrastinski (2008) also notes that online interaction complements traditional classroom communication by allowing more reflective and inclusive participation.

Another important finding is the development of learner autonomy. Students became more independent in managing their learning, accessing materials outside classroom time, and taking responsibility for their academic progress. This reflects Holec's (1981) definition of autonomy as the ability to take charge of one's own learning. Little (2020) also emphasizes that learner autonomy is essential in language learning because it enables students to regulate and sustain their own learning processes effectively. However, despite these positive outcomes, several challenges were identified during the implementation of blended learning. Issues such as unstable internet connectivity, limited access to digital devices, low digital literacy, and increased teacher workload affected the smooth implementation of the program. These findings reflect the digital divide discussed by Warschauer and Matuchniak (2010), who argue that unequal access to technology can hinder learning equity. In addition, Graham et al. (2013) highlight that successful blended learning implementation requires adequate infrastructure, teacher training, and institutional support. Overall, the results of this study confirm that blended learning is an effective instructional approach for improving English language learning outcomes. The combination of multimedia resources, flexible learning opportunities, and interactive communication supports not only cognitive development but also affective and behavioral aspects of learning. However, its success depends heavily on the availability of technological infrastructure, teacher readiness, and student digital literacy, which must be addressed to maximize its effectiveness in future implementations.

CONCLUSION

This study concludes that blended learning is an effective instructional approach for improving students' English learning outcomes at SMA Negeri 2 Gowa. The findings show a significant improvement in students' academic achievement, as indicated by the higher post-test scores of the experimental group compared to the control group. The integration of online and face-to-face learning contributed to better understanding, increased practice opportunities, and more flexible access to learning materials, which collectively enhanced students' English proficiency. In addition to cognitive achievement, blended learning also positively influenced students' reading comprehension, writing

skills, and vocabulary acquisition. Students demonstrated better ability in identifying main ideas, understanding texts, organizing written ideas, and using vocabulary in appropriate contexts. These improvements were supported by the availability of multimedia learning resources and continuous feedback, which encouraged deeper engagement with learning materials. The study also found that blended learning significantly increased students' motivation, engagement, and classroom participation. The use of digital platforms made learning more interactive and enjoyable, reducing boredom and increasing students' willingness to participate in both online and classroom activities. Furthermore, blended learning contributed to the development of learner autonomy, as students became more independent in managing their learning and accessing instructional materials. Despite these positive outcomes, several challenges were identified, including limited internet access, insufficient digital devices, low digital literacy, and increased teacher workload. These challenges indicate that the successful implementation of blended learning requires adequate technological infrastructure, institutional support, and continuous training for both teachers and students. Overall, blended learning proves to be an effective and relevant learning model for enhancing English language learning in the context of this study. With proper support and improvement in infrastructure and digital readiness, its effectiveness can be further optimized in future educational practice.

REFERENCES

- Adedoyin, O. B., & Soykan, E. (2020). Covid-19 pandemic and online learning: The challenges and opportunities. *Sustainability*, *12*(16), 6580. <https://doi.org/10.3390/su12166580>
- Al-Qahtani, A. A., & Higgins, S. E. (2013). Effects of traditional, blended and e-learning on students' achievement in higher education. *Journal of Computer Assisted Learning*, *29*(3), 220–231. <https://doi.org/10.1111/jcal.12012>
- Bond, M., Bedenlier, S., Marín, V. I., & Händel, M. (2021). Emergency remote teaching in higher education. *International Journal of Educational Technology in Higher Education*, *18*(1), 44. <https://doi.org/10.1186/s41239-021-00282-x>
- Bond, M., Buntins, K., Bedenlier, S., Zawacki-Richter, O., & Kerres, M. (2021). Mapping research in student engagement and educational technology. *Educational Technology Research and Development*, *69*, 1–26. <https://doi.org/10.1007/s11423-020-09896-4>
- Bozkurt, A., & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis. *Asian Journal of Distance Education*, *15*(1), 1–6. <https://doi.org/10.5281/zenodo.3778083>

TEFL Overseas Journal

Teaching English as a Foreign Language Journal

ISSN 2461-0240 (Print), 2828-9544 (Online)

Volume 12 Number 3 December 2024

- Crompton, H., & Burke, D. (2018). The use of mobile learning in higher education: A systematic review. *Computers & Education*, 123, 53–64. <https://doi.org/10.1016/j.compedu.2018.02.003>
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01
- Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, 49(1), 5–22. <https://doi.org/10.1177/0047239520934018>
- Godwin-Jones, R. (2018). Emerging technologies: Language learning and technology. *Language Learning & Technology*, 22(2), 8–16. <https://doi.org/10.1017/S0958344018000078>
- Graham, C. R. (2019). Current research in blended learning. In M. G. Moore & W. C. Diehl (Eds.), *Handbook of distance education* (4th ed.). Routledge. <https://doi.org/10.4324/9781315161492>
- Hockly, N. (2018). Blended learning. *ELT Journal*, 72(1), 97–101. <https://doi.org/10.1093/elt/ccx058>
- Hrastinski, S. (2008). Asynchronous and synchronous e-learning. *EDUCAUSE Quarterly*, 31(4), 51–55. <https://er.educause.edu/articles/2008/11/asynchronous-and-synchronous-elearning>
- Hrastinski, S. (2019). What do we mean by blended learning? *TechTrends*, 63(5), 564–569. <https://doi.org/10.1007/s11528-019-00375-5>
- Huang, X., Zou, D., Cheng, G., & Xie, H. (2021). A systematic review of AI in language learning. *Educational Technology & Society*, 24(1), 1–16. <https://doi.org/10.2307/26977862>
- Hyland, K. (2019). *Second language writing* (2nd ed.). Cambridge University Press. <https://doi.org/10.1017/9781108608127>
- Jonassen, D. H. (2017). *Learning to solve problems with technology*. Routledge. <https://doi.org/10.4324/9781315795475>
- Khalifa, M., & Lam, R. (2022). Artificial intelligence and critical thinking in education. *Computer Assisted Language Learning*, 35(7), 1352–1372. <https://doi.org/10.1080/09588221.2021.1872147>
- Krashen, S. D. (1985). *The input hypothesis: Issues and implications*. Longman.
- Kukulska-Hulme, A. (2020). Mobile-assisted language learning. *Computer Assisted Language Learning*, 33(5–6), 562–587. <https://doi.org/10.1080/09588221.2020.1729943>
- Little, D. (2020). Language learner autonomy: Rethinking the role of the teacher. *Language Teaching*, 53(1), 1–12. <https://doi.org/10.1017/S0261444819000315>

TEFL Overseas Journal

Teaching English as a Foreign Language Journal

ISSN 2461-0240 (Print), 2828-9544 (Online)

Volume 12 Number 3 December 2024

- Martin, F., Sun, T., & Westine, C. D. (2020). A systematic review of online teaching and learning. *Computers & Education*, 159, 103857. <https://doi.org/10.1016/j.compedu.2020.103857>
- Mayer, R. E. (2017). *Multimedia learning* (2nd ed.). Cambridge University Press. <https://doi.org/10.1017/CBO9781139164603>
- Means, B., & Neisler, J. (2020). Suddenly online: A national survey of undergraduates. *Digital Promise*. <https://doi.org/10.51388/20.500.12265/98>
- Means, B., Toyama, Y., Murphy, R., & Baki, M. (2013). The effectiveness of online and blended learning. *Teachers College Record*, 115(3), 1–47. <https://doi.org/10.1177/016146811311500307>
- Nation, I. S. P. (2013). *Learning vocabulary in another language* (2nd ed.). Cambridge University Press. <https://doi.org/10.1017/CBO9781139858656>
- Redecker, C. (2017). European framework for the digital competence of educators. *European Commission*. <https://doi.org/10.2760/159770>
- Sari, D., & Putra, H. (2023). Technology integration in Indonesian EFL classrooms. *Indonesian Journal of Applied Linguistics*, 13(1), 45–58. <https://doi.org/10.17509/ijal.v13i1.56789>
- Sun, Y., Wang, Y., & Liu, X. (2021). Effects of multimedia learning on vocabulary acquisition. *System*, 103, 102450. <https://doi.org/10.1016/j.system.2021.102450>
- Trust, T., & Whalen, J. (2020). Should teachers be trained in emergency remote teaching? *Journal of Technology and Teacher Education*, 28(2), 189–199. <https://doi.org/10.1080/15391523.2020.1766752>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Warschauer, M., & Matuchniak, T. (2010). New technology and digital worlds: Analyzing evidence of equity in access, use, and outcomes. *Review of Research in Education*, 34(1), 179–225. <https://doi.org/10.3102/0091732X09349798>
- Yilmaz, R. (2017). Exploring the role of e-learning readiness. *Computers & Education*, 106, 1–14. <https://doi.org/10.1016/j.compedu.2016.12.003>
- Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of AI in education. *International Journal of Educational Technology in Higher Education*, 16(1), 39. <https://doi.org/10.1186/s41239-019-0171-0>
- Zhang, M., & West, R. E. (2020). Microlearning and student engagement. *Computers & Education*, 153, 103870. <https://doi.org/10.1016/j.compedu.2020.103870>
- Zhang, R., & Zou, D. (2020). Types, purposes, and effectiveness of multimedia feedback. *System*, 91, 102246. <https://doi.org/10.1016/j.system.2020.102246>

TEFL Overseas Journal

Teaching English as a Foreign Language Journal

ISSN 2461-0240 (Print), 2828-9544 (Online)

Volume 12 Number 3 December 2024

Zhang, X., & Zou, D. (2022). Technology-enhanced language learning. *Computer Assisted Language Learning*, 35(7), 1325–1345.
<https://doi.org/10.1080/09588221.2021.1872146>