

EFL Learners' Perspectives in Implementing Digital Annotation to Foster Critical Reading Skills

Yeni Afriyeni¹, Maspufah², Diana Zuriati³, Rosmala⁴

^{1,2,3,4}Universitas Persada Bunda, Riau - Indonesia

Email: ¹yenisbk@gmail.com, ²maspufah81@gmail.com,
³diana.zuriati77@gmail.com, ⁴rosmala.lbs@gmail.com

Abstract

Article History:

Received: 26/05/2025

Accepted: 12/07/2025

Published: 13/07/2025

Keywords:

*Critical Reading,
Digital Annotation,
Reading Skills,*

Critical reading requires advanced cognitive skills to evaluate, interpret, and analyse texts effectively. However, mastering critical reading can be challenging, especially for learners, due to factors such as vocabulary gaps, cultural differences, and diverse educational backgrounds. This study aimed to explore learners' perspectives on the implementation of digital annotation in enhancing their critical reading skills. This was descriptive qualitative research. Total sampling technique was applied in choosing the sample which involving sixteen eleventh-grade students from a private Islamic senior high school. The data were collected by using a questionnaire developed through Google Forms and it were analysed by reducing, displaying, and drawing conclusion which adopted from a three-step qualitative data analysis. The findings revealed that the use of digital annotation tools was perceived positively by students, as it facilitated better comprehension of reading materials, eased the acquisition of new vocabulary, encouraged critical thinking, and supported the generation of new ideas. Nevertheless, several challenges were identified, such as difficulty in articulating critical thoughts in writing, challenges in interpreting feedback notes, unstable internet connectivity, limited digital skills and supporting resources, digital distractions, and confusion caused by excessive annotations from multiple perspectives. In conclusion, learners had a generally positive attitude toward digital annotation despite facing implementation barriers. Therefore, educators are encouraged to integrate digital annotation thoughtfully, considering students' digital literacy, technological access, and regional educational contexts to ensure effective and inclusive learning

Kata Kunci:

Digital Anotasi
Membaca Kritis,
Pemahaman bacaan,

Abstrak

Keterampilan membaca kritis merupakan kemampuan penting dalam pembelajaran bahasa Inggris sebagai bahasa asing (EFL), namun penguasaannya kerap menjadi tantangan. Beberapa faktor yang menyebabkan kesulitan tersebut antara lain kesenjangan kosakata, perbedaan budaya, dan latar belakang pendidikan yang beragam. Penelitian ini dilakukan untuk mengetahui sudut pandang peserta didik terhadap implementasi anotasi digital dalam meningkatkan keterampilan membaca kritis. Metode penelitian deskriptif kualitatif diimplementasikan untuk penelitian ini. Total sampling teknik diadopsi dalam pengambilan sampel yang melibatkan 16 peserta didik kelas XI di salah satu Sekolah Menengah Atas Islam swasta. Instrumen pengumpulan data berupa kuesioner yang disebarakan melalui Google Form. Data dianalisis dengan mereduksi, menyajikan dan menyimpulkannya dengan menggunakan tiga tahap analisis data kualitatif. Hasil analisis menunjukkan bahwa penerapan anotasi digital mendorong peningkatan pemahaman peserta didik terhadap teks, memudahkan mereka dalam mempelajari kosakata baru, membantu pengembangan pemikiran kritis, dan memfasilitasi munculnya ide-ide baru. Namun demikian, peserta didik juga menghadapi beberapa tantangan selama proses implementasi, seperti kesulitan mengekspresikan gagasan kritis secara tertulis, keterbatasan dalam memahami catatan umpan balik, koneksi internet yang tidak stabil, kurangnya keterampilan teknis serta sumber daya pendukung, gangguan digital, dan jumlah anotasi yang terlalu banyak dari berbagai sudut pandang yang membingungkan. Berdasarkan temuan tersebut, dapat disimpulkan bahwa peserta didik memiliki pandangan positif terhadap penerapan anotasi digital meskipun terdapat beberapa tantangan yang harus diatasi. Oleh karena itu, guru dan dosen disarankan untuk lebih selektif dalam mengintegrasikan anotasi digital untuk mengoptimalkan penggunaan anotasi digital dengan mempertimbangkan tingkat kemampuan literasi digital siswa, akses terhadap teknologi, dan latar belakang pendidikan untuk memastikan efektivitas dan inklusifitasnya.

INTRODUCTION

Critical reading goes beyond the basic idea of understanding texts as it includes advanced thinking skills that help readers criticize what they read, spot hidden assumptions, recognize bias, and make meaning in broader cultural and social settings (Huh & Ha, 2022). For learners learning English as a foreign language, mastering these skills is tough due to vocabulary gap (Huang, 2020), cultural differences (Chen & Hwang, 2023), and different educational backgrounds (Zhang & Wang, 2021). In her influential work, Wallace (2003) emphasized that critical literacy is not just about grasping surface meaning, but also about uncovering the deeper ideas and ideologies within texts.

Critical reading has been the object of the research in many countries and the result consistently showed that EFL learners struggle with critical reading skills. Abdel Halim, (2022) noted that most of learners understood the basic meaning of texts but they failed to criticize the writer's purpose, argument quality, or underlying assumptions. Likewise, Khonamri & Karimabadi, (2023) found that many EFL students treat reading as a passive process of decoding words, rather than an active process of understanding and questioning content.

These issues are getting worse by teaching methods which focus mostly on grammar, vocabulary, and basic understanding rather than encouraging deep, analytical thinking (G. Liu & Zhang, 2022). Furthermore, many classrooms activity kept relying on teachers' instruction with few chances for students to form and express their own critical viewpoints (Choi & Yi, 2019). In addition, learners' competency was assessed more on correct answers and memorization rather than their ability to think critically (Hamarash & Hassan, 2022). The importance of critical reading was to help students to handle complex texts both in school and daily life, learning across different cultures and languages (Kim & Brown, 2022). Their research showed that learners with stronger critical reading skills had better cultural understanding and were less likely to be misled by English media

Critical reading instruction shifted along with the embedding of technology in EFL reading pedagogy as it mirrored general technological advances and

changing pedagogical beliefs. The invention of Web 2.0 technologies and smart phones has opened new chance for technology integration in critical reading pedagogy. Current technology used for EFL reading covered a broad range of platforms and devices, such as digital annotation systems, interactive e-books, online discussions boards, social reading platforms, automated learning feedback systems, and multimodal text environments (Novita & Putri, 2022) Digital annotation referred to the process of adding notes, comments, or marks on digital documents such as PDFs, e-books, or web pages. This tool allowed students to highlight text, add personal notes, and interact directly with the content (Tseng et al., 2015) which enhanced learners' engagement and support deeper understanding of texts (Noori, 2025). Several researches had been proved that methods in digital annotation such as underlining difficult words, highlighting key words or main ideas, making notes increased reading comprehension skill (Marshall, 1997), minimized the potential of cognitive load in reading process (Chun & Payne, 2004), encouraged comprehension by linking information in the text (Abuseileek, 2012), and improved critical reading skills (Johnson et al., 2010) These developments highlighted that integrating technology into critical reading was not only about using digital tools, but also creating opportunities for students to engage more meaningfully with texts, think critically, and deepen their understanding

Although digital annotation offered many benefits, several challenges arose during its implementation. Some studies reported that not all students have access to devices or a stable internet connection, especially learners who live in low-resource environments (Noori, 2025), some students may not be familiar with digital tools due to lack of many opportunities such as budget, supporting resources, learning environment, training, time, facilities, interest, learning materials, competence, and knowledge, (Furqan & Rosa, 2023), and too many annotations with various perspective confused learners (Wang & Huang, 2021).

While many researches have investigated the effectiveness of digital annotation for improving EFL critical reading outcomes, but researches which focused were relatively limited. It represented a significant gap in the literature, as learners' perceptions fundamentally influence engagement, motivation, and the

ultimate success of educational technologies (Wang & Huang, 2021). The limited existing research on student perspectives has produced mixed findings. Wang and (P. L. Liu & Chen, 2021) reported that most participants appreciated the collaborative aspects but found the technological interfaces distracting from deep textual engagement. Mohammad & Al-Awidi (2022) revealed that learners appreciated the ability to share annotations and receive peer feedback but struggled expressing complex critical thoughts in written form through the digital interface. Students reported feeling more confident in identifying bias and evaluating evidence after using the tools, though some expressed preference for blending digital and traditional approaches. Silva & Pereira, (2021) identified learners' concerns about digital distractions, the cognitive load of navigating complex interfaces, and the temptation to rely on automated comprehension tools rather than developing independent critical thinking strategies.

Despite these valuable contributions, there remains a significant research gap regarding to the object of the research which most of research have focused on university-level EFL learners, with limited exploration of secondary school contexts where critical reading foundations are established (Duan & Yu, 2023). Therefore, this research was conducted to reveal the EFL learners' perspective in implementing digital annotation to foster critical reading skill.

METHOD

This research applied descriptive qualitative approach. Descriptive research is dealing with the description of actual condition or phenomenon at the time of the study and aiming to verify and describe what had been exist one (Best in Maspufah and Zuriati, 2022). By implementing qualitative approach, it attempt to describe EFL learners' perception on implementing digital annotation to foster critical reading skills.

This study was conducted at a private Islamic Senior High School in Bagan Sinembah, Riau. The samples were taken by implemented total sampling technique which all target population were involved as the research sample (Etikan et al., 2016). Twenty one learners from the eleventh grade of senior high school were taken as the sample which consisted of three male and eighteen male students.

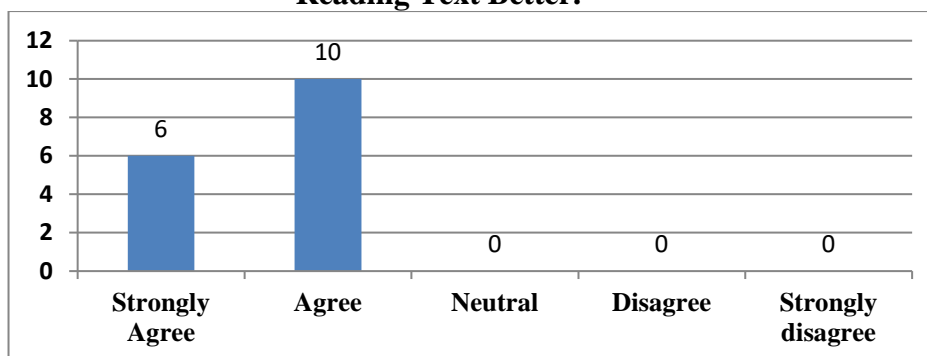
The data used were quantitative and qualitative. The quantitative data were taken from questionnaire. The questionnaires were developed in google form in likert scale started from strongly agree, agree, neutral, disagree, and disagree. The questionnaire consisted of five questions to find out learners perception in implementing digital annotation to foster critical reading skills, such as whether digital annotation activity helped learners to understand reading text better, learners were easier to learn new vocabulary, learners enjoyed making and receiving comments on the reading text, learners supported the use of digital annotation tool to learn reading, learners learned new idea from reading their classmate annotation. The qualitative data were interview to support the quantitative data. The unstructured interview was carried out to some learners who were in agree and disagree reponse in google form. The interview were conducted online via google meeting.

The data were analyzed using both quantitative and qualitative approaches. The quantitative data obtained from questionnaires were converted into percentages and presented in graphical form. Meanwhile, the interview data were analyzed based on Miles and Huberman's (1994) three-step model, consisting of data condensation, data display, and conclusion drawing. Finally, the graphical data were correlated with the interview results to interpret the result.

FINDINGS AND DISCUSSION

In this section, the findings and discussion were presented based on the question concerning learners' perceptions of implementing digital annotation to foster critical reading skills. The following described the learners' responses, which were collected through a Google Form.

Graph 1. Digital Annotation Activity Helped Learners Understand the Reading Text Better.

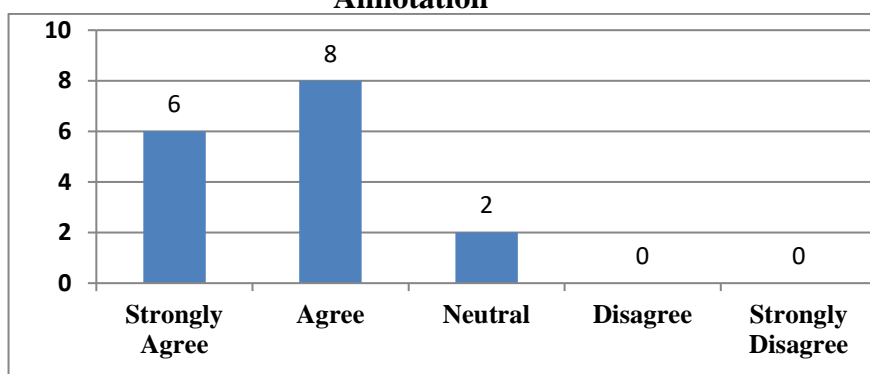


Graph 1 illustrated the responses to the question whether digital annotation activities assisted learners in better understanding the reading text. The graph showed that six learners (38%) strongly agreed, while ten learners (63%) agreed if digital annotation activity helped learners understand the reading text better. No learners gave neutral, disagree, or strongly disagree responses to this question.

The findings from the first question revealed that the majority of learners agreed that digital annotation activities helped them better understand the reading text. It meant that the implementation of digital annotation supported learners to understand the text deeper (Noori, 2025). The process of underlining unfamiliar vocabulary and adding notes for reflection improved their comprehension to the text. These results were in line with research which carried out by Marshall, (1997) that found digital annotation improved reading comprehension.

Then, the following graph illustrated the learners' responses to the second question.

Graph 2. Learners were Easier to Learn New Vocabulary through Digital Annotation

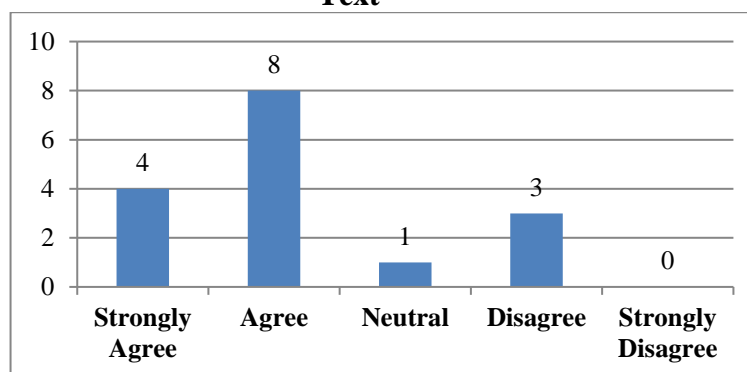


Graph 2 depicted the response to the question if learners felt easier to learn new vocabulary through digital annotation. The response were six learners or 38% said strongly agree, eight learners or 50 % said agree, and two learners or 12% said Neutral felt easier to learn new vocabulary through digital annotation. There were no learners gave response disagree and strongly disagree felt easier to learn new vocabulary through digital annotation.

The findings from the second question revealed that the majority of learners felt easier to learn new vocabulary through digital annotation. The process underlining unfamiliar vocabulary activity was enjoyable and encourage them to open dictionary to find the meaning or guessing the meaning from the context. This process made students learn new vocabulary easier than the traditional way and helped them to improve reading comprehension. The finding were in line with Marshall (1997) research which revealed that underlining the unfamiliar vocabulary improved reading comprehension.

Next, the following graphs illustrated the learners's third question response.

Graph 3. Learners Enjoyed Making and receiving comments on the Reading Text



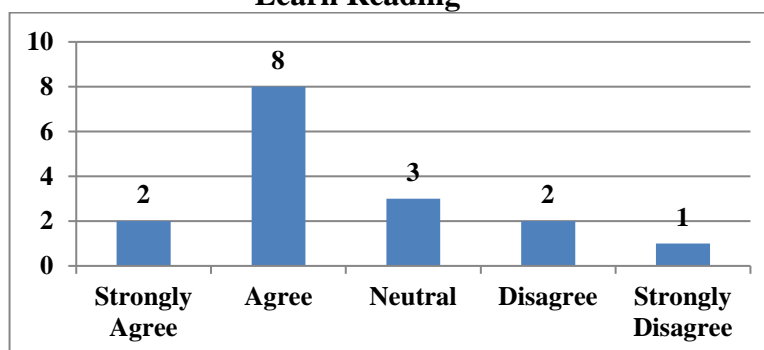
Graph 3 illustrated the response to the question if they felt enjoy of making and receiving comments on the reading text. The graph showed that four learners or 25 % strongly agreed, eight learners or 50 % agreed, one learner or 6% were neutral, and three learners or 18 % disagreed if they felt enjoy of making and receiving comments on the reading text. No learners responded strongly disagree if they felt enjoy of making and receiving comments on the reading text.

The findings from the third question showed that the majority of learners agreed if they felt enjoy of making and receiving comments on the reading text.

From the comments, learner eager to link information in the text which able to deepen students' comprehension. However, some learners said that they felt difficult in expressing critical though written form (Mohammad & Al-Awidi, 2022). Furthermore, they also struggled to understand their peer feedback note due to their limited writing skills in various perspective.

Further, the learners' response of question number 4 was depicted in the following graph.

Graph 4. Learners Supported the Use of Digital Annotation Tool to Learn Reading

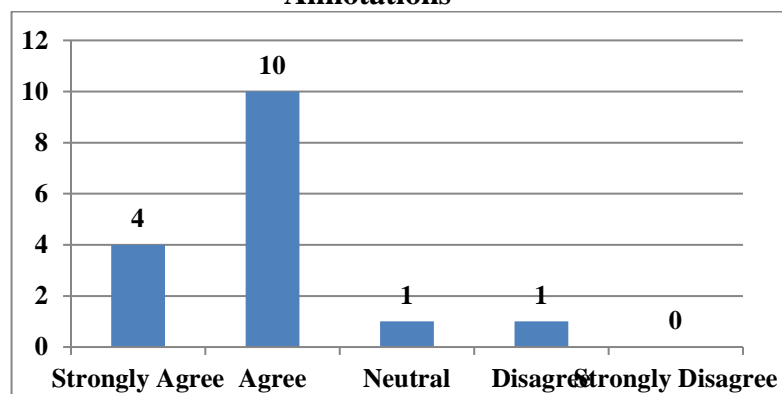


Graph 4 displayed the response to the question if learners supported the use of digital annotation tool to learn reading. From the graph, it was revealed that learners' responses were varied. There were two learners or 12% strongly agree, eight learners or 50% agreed, three learners or 18% neutral, two learners or 12% disagreed, and one learner or 6% strongly disagreed.

From the findings, it can be seen that most of students agreed if they supported the use of digital annotation tool to learn reading. It encouraged learners to understand the text and improved their critical reading. On the contrary, several learners disagreed, even strongly disagreed to use digital annotation tool to learn reading due to several reasons, such as unstable internet connection (Noori, 2025) lack of skills and supporting resources (Furqan & Rosa, 2023), and digital distraction (Silva & Pereira, 2021) where learners' focus were diverted due to notification, messages, application, or the urge to check other digital content. This result was similar to Wang & Chen (2022) research which found technological interfaces distracting learners' attention.

At last, the learners' response of question number 5 were presented in the following graph.

Graph 5. Learners learned New Ideas from Reading Their Classmates' Annotations



Graph 5 illustrated the learners' response whether learners learned new ideas from reading their classmates' annotation. The result showed that four learners or 25% strongly agreed, ten learners or 63% agreed, one learner was neutral, and another one disagreed if they learned new ideas from their classmates' annotation. No learners respond strongly disagreed if they learned new ideas from reading their classmates' annotation.

From the finding, it implied that most of learners agreed if learned new ideas from reading their classmates' annotation. Learners got new insight by reading notes from their peer feedback which sometimes encourage comprehension by linking information in the text (Abuseileek, 2012). However, too many annotation in one text made learners confuse (Wang & Huang, 2021)

CONCLUSION

The findings presented in the previous section indicated that the use of digital annotation supported learners comprehend text better. The process of underlining new vocabulary and adding notes improved their comprehension. Then, learners felt easier to learn new vocabulary from underlining process which encourage them to open dictionary or guessing the meaning from the context. Next, learners support digital annotation tool to learn reading as it effective to improve learners' critical reading. At last, learners got new idea by seeing reading notes from

their peers and linking information gathered from the note as the reflection. However, some challenges arose during the implementation of digital annotation tool such as difficulty in expressing critical through written form, understanding feedback note, unstable internet connection, lack of skill and supporting resources, digital distraction, and too many annotation in various perspective. Therefore, it can be said that learners had positive perspective and challenge in implementing digital annotation to foster reading skills.

Regarding the result of the research, it is recommended that teachers and lecturers optimized the role of digital annotation in their teaching activity, especially in reading skills. Regarding to the challenge arose in implementing the digital annotation tool, it is suggested to be wiser in choosing the tools by considering demographic factors of the population in a specific region, such as digital literacy levels, access to technology, and educational background.

REFERENCES

- Abdel Halim, S. M. (2022). Critical reading challenges among EFL undergraduate students: A case from the United Arab Emirates. *Reading & Writing Quarterly*, 38(1), 67–82.
- Abuseileek, A. F. (2012). The effect of computer-assisted cooperative learning methods and group size on EFL learners' achievement in communication skills. *Computers & Education*, 58(231–239).
- Chen, M., & Hwang, G. (2023). Effects of a mobile-supported critical reading approach on EFL students' critical thinking and reading comprehension. *Effects of a Mobile-Supported Critical Reading Approach on EFL Students' Critical Thinking and Reading Comprehension*, 36(5), 646–669.
- Choi, J., & Yi, Y. (2019). Teachers' integration of multimodality into classroom practices for English language learners. *TESOL Journal*, 10(1).
- Chun, D. M., & Payne, J. S. (2004). What makes students click: Working memory and lookup behavior.No Title. *System*, 32(4), 481–503.
- Duan, Y., & Yu, S. (2023). Secondary school EFL students' perspectives on using digital annotation tools for critical reading development. *Interactive Learning Environments*, 31(3), 1145–1158.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience

sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4.

Furqan, F. A., & Rosa, R. N. (2023). The Analysis of Students' Digital Literacy Skills Level in Instructional Practice in English Department at Universitas Negeri Padang. *Journal of English Language Teaching*, 12(2).

Hamarash, K. K., & Hassan, B. A. (2022). Assessment practices for critical reading skills in Kurdish EFL classrooms: Teachers' awareness and students' achievement. *Teaching English with Technology*, 22(3), 65-82.

Huang, J. (2020). Critical Reading Challenges for EFL Learners. *Asian EFL Journal*, 27(3), Critical Reading Challenges for EFL Learners.

Huh, S., & Ha, H. S. (2022). Developing EFL learners' critical reading skills through multimodal literacy practices. *TESOL Quarterly*, 56(4), 1184–1210.

Johnson, T. E., Archibald, T. N., & Tenenbaum, G. (2010). Individual and team annotation effects on students' reading comprehension, critical thinking, and meta-cognitiveskills. *Computers in Human Behavior*, 26(6), 1496–1507.

Khonamri, F., & Karimabadi, M. (2023). Critical reading in the EFL classroom: Student perceptions and their relation to reading achievement. *Journal of Language and Education*, 9(1), 122–135.

Kim, J., & Brown, I. (2022). Critical reading for transcultural awareness: Korean EFL university students' engagement with diverse perspectives. *Language Culture and Curriculum*, 35(4), 377–394.

Liu, G., & Zhang, X. (2022). Examining critical reading instruction in Chinese EFL classrooms: Teachers' beliefs and practices. *RELC Journal*, 53(1), 111–126.

Liu, P. L., & Chen, C. J. (2021). Digital tools and reading comprehension: A meta-analysis. *Reading Research Quarterly*, 56(2), 245–267.

Marshall, C. C. (1997). Annotation: From paper books to the digital library. *Proceedings of the 2nd ACM International Conference on Digital Libraries*. ACM.

Maspufah and Zuriati, D. (2022). *Implementing Speech-Texter Application to Improve EFL Learners ' Fricative Pronunciation*. 9(2), 1–12.

Miles, Matthew B and Huberman, A. M. (1994). Quality Data Analysis. In *Sage Publication* (Second). Sage Publication.

- Mohammad, N., & Al-Awidi, H. (2022). Saudi EFL students' perceptions of digital annotation tools for critical reading development. *Interactive Learning Environments*, 30(5), 857–871.
- Noori, A. (2025). Enhancing EFL Reading Instruction with Digital Tools: Effects on Comprehension, Vocabulary, and Engagement. *Journal of Social Sciences-Kabul University*, 7(4), 289–313.
- Novita, D., & Putri, A. R. (2022). Digital literacy practices and critical reading skills in Indonesian EFL contexts: A systematic review. *Indonesian Journal of Applied Linguistics*, 11(3), 580–593.
- Silva, C., & Pereira, P. (2021). Brazilian EFL students' perceptions of technology-enhanced reading assignments: Benefits and challenges. *System*, 97(2).
- Tseng, S.-S., Yeh, H.-C., & Yang, S. -h. (2015). Promoting different reading comprehension levels through online annotations. *Computer Assisted Language Learning*, 28(1), 41–57.
- Wallace, C. (2003). *Critical Reading in Language Education*. Palgrave Macmillan.
- Wang, Y., & Chen, N. S. (2022). Chinese EFL students' perceptions of collaborative online annotation for critical reading development. *Language Learning & Technology*, 26(1), 1–24.
- Wang, Y., & Huang, Y. (2021). The influence of teacher annotations on student learning engagement and video watching behaviors. *International Journal of Educational Technology in Higher Education*, 18(1), 1–17.
- Zhang, L., & Wang, J. (2021). Rote Learning vs. Critical Thinking: A Study in Chinese EFL Classrooms. *TESOL Quarterly*, 55(2), 389–412.