

What Do Gen Z Students Need to Succeed in Reading Comprehension?

*I Gde Putu Agus Pramerta

¹Universitas Mahasaraswati Denpasar, Indonesia

*Correspondence:

putuagus1708@unmas.ac.id

Submission History:

Submitted: April 5, 2024 Revised: August 12, 2024 Accepted: August 19, 2024



This article is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Abstract

The development of tailored educational content is essential for meeting the diverse needs of students, particularly in the context of English language education. This study aimed to identify the specific reading requirements of first-year undergraduate students majoring in English language education, focusing on Generation Z, characterized by their digital nativeness and unique learning preferences. Utilizing a mixed-methods approach, the research involved 56 Gen Z students at Mahasaraswati Denpasar University who participated in surveys and semi-structured interviews. The findings revealed a significant preference for intensive reading activities driven by challenges with unfamiliar vocabulary. Additionally, students emphasized the need to improve both vocabulary mastery and reading comprehension skills. The study also identified critical procedural, setting, and role-related needs influencing the learning process. These results underscore the importance of integrating Gen Z students' target and learning needs into the design of reading courses. Consequently, English teachers are encouraged to adapt their instructional strategies based on a comprehensive needs analysis to support their students' learning objectives effectively.

Keywords: Gen Z, needs analysis, reading course, Digital natives, Undergraduate students

INTRODUCTION

Reading is crucial for academic success and lifelong learning, particularly in English as a foreign language (EFL) classrooms. For Generation Z (Gen Z) students born between the mid-1990s and early 2010s, their approach to reading is significantly influenced by their digital upbringing, setting them apart from previous generations. Gen Z students, often described as digital natives, exhibit unique learning preferences that challenge traditional reading instruction methods (Twenge, 2017). Critical reading, which empowers students to analyze, evaluate, and draw meaningful conclusions from academic content, is essential for developing higher-order thinking skills (Niculescu & Dragomir, 2023). The five pillars of reading—phonemic awareness, phonics, fluency, vocabulary, and comprehension—serve as a comprehensive framework for teaching and honing these abilities (George, 2023).

Moreover, complex literacy skills, developed through consistent reading are strong predictors of academic success in higher education (Lampi et al., 2023). Thus, fostering these skills in EFL classrooms is vital for equipping students with the tools they need to excel in an increasingly competitive and globalized world.

Despite the recognized importance of reading skills, Gen Z students need help in EFL classrooms. A significant hurdle is their struggle with unfamiliar vocabulary, which impedes their reading fluency and comprehension (Laufer & Ravenhorst-Kalovski, 2010). Gen Z's preference for digital media over traditional reading materials is compounding this issue, which often leads to reduced exposure to complex texts and a decline in critical reading skills (Twenge, 2017). This shift toward digital content has led to different cognitive processing styles, such as a tendency toward skimming rather than deep reading, which can negatively impact comprehension and critical thinking (Carr, 2010). Moreover, the lack of tailored reading courses that address the specific needs of Gen Z learners—including their unique learning styles and preferences—further exacerbates these challenges (Jewitt, 2008). These evolving dynamics highlight the pressing need for innovative educational approaches that align with Gen Z's digital habits and learning preferences.

Some previous studies have explored Gen Z students' reading habits and educational needs in various contexts. For example, Twenge (2017) examined how Gen Z's immersion in digital environments influences their reading behaviours and cognitive development, noting a decline in deep reading practices and critical thinking skills. Similarly, research by Jewitt (2008) emphasized the need for education systems to adapt to the diverse learning preferences of modern students, mainly through integrating digital tools and interactive content. Laufer and Ravenhorst-Kalovski (2010) addressed EFL learners' challenges with vocabulary acquisition, a critical component of reading comprehension. Their study highlights the significant barrier that limited vocabulary poses for Gen Z students, who may need help with more traditional, text-heavy learning materials.

In response to these challenges, recent studies have focused on innovative methods to engage Gen Z students in reading. Saxena and Mishra (2021) explored the potential of gamification in education, finding that game-based learning strategies significantly enhance motivation and engagement among Gen Z learners. Additionally, Bilonozhko and Syzenko (2020) investigated the use of authentic texts in EFL classrooms, demonstrating that materials reflecting real-world contexts are more effective in capturing the interest of Gen Z students and improving their reading outcomes.

However, despite these contributions, there remains a significant gap in the literature concerning the development of tailored reading programs that specifically address the needs of Gen Z students in EFL settings. This study aims to fill this gap by integrating insights from previous research and applying them in a novel way to create a comprehensive framework for designing reading curricula that are both relevant and engaging for Gen Z learners. Unlike earlier studies focusing on individual aspects such as digital engagement or vocabulary acquisition, this research takes a holistic approach. It incorporates gamification, authentic texts, and technology-enhanced learning environments, aligning with the cognitive and motivational characteristics of digital natives. By exploring Gen Z students' specific reading needs and preferences in EFL contexts, this study addresses the challenges identified in earlier research and provides actionable strategies for educators. The findings of this study

are expected to significantly influence the design of future EFL reading curricula, ensuring they are more responsive to the needs of this digital generation.

METHOD

This study employed a mixed-methods approach to assess the reading demands of Generation Z (Gen Z) students in higher education, focusing on students at Mahasaraswati Denpasar University. The use of mixed methods, which combines quantitative and qualitative data, provided a comprehensive understanding of students' reading needs within the context of English as a Foreign Language (EFL). This approach was chosen to capture the complexity of Gen Z students' reading preferences, goals, and learning needs, as mixed methods allow for a more in-depth analysis by drawing on the strengths of quantitative and qualitative research (Creswell & Plano Clark, 2017).

The sample consisted of 56 Gen Z students, with a mix of academic performances and engagement levels, ensuring a diverse representation. Quantitative data were collected through a structured survey distributed via Google Forms. This survey gathered information on the student's academic and personal goals, preferred reading methods, and participation in reading activities. The survey quantified the students' preferences and challenges using closed-ended and Likert-scale questions, offering a broad overview of their reading demands. The online survey method is well-suited to efficiently gather data from diverse student populations (Wright, 2005).

To complement the quantitative data, qualitative insights were obtained through semistructured interviews with a purposive sample of sixteen students, representing the diversity of the larger group. The interviews provided more profound insights into the student's experiences and challenges in reading activities, revealing complex motivations and behaviours not captured in the survey (DiCicco-Bloom & Crabtree, 2006). These interviews were instrumental in exploring the student's engagement with reading and their perceptions of learning strategies.

For data analysis, the quantitative survey results were examined using descriptive statistics, identifying key patterns and trends in the students' reading needs and preferences (Salkind, 2010). The qualitative interview data were analyzed using thematic analysis, following the framework by Miles et al. (2014) and Braun and Clarke (2006). This approach allowed for identifying key themes, which were then mapped to the broader research objectives. By combining the survey's broad trends with the interview's detailed insights, this integrative analysis provided a nuanced understanding of the reading demands of Gen Z students in EFL contexts, offering actionable insights for developing tailored reading programs.

FINDINGS AND DISCUSSION

This section presents a detailed analysis of the data gathered from Gen Z students in an EFL context, focusing on their reading preferences, challenges, and roles within reading activities. This section interprets the critical findings in light of relevant literature, providing insights into how these students engage with reading and which strategies are most effective in supporting their learning.

Students' Reading Difficulties

This section explores Gen Z students' challenges in their EFL reading activities. Understanding these difficulties helps educators adjust their teaching strategies. Table 1 highlights critical issues like vocabulary, pronunciation, tenses, and finding information.

Table 1. Students' reading difficulties

No	Reading Difficulties	Number	Percentage (%)
1	Finding general information	3	5.4
2	Finding specific information	8	14.3
3	Knowing vocabularies	18	32.1
4	Understanding tenses	10	17.9
5	Reading fluently	5	8.9
6	Pronouncing correctly	12	21.4

Table 1 reveals several significant challenges that Generation Z (Gen Z) students face in English as a Foreign Language (EFL) settings, underscoring areas where targeted instructional strategies are essential. Vocabulary knowledge is identified as the most substantial barrier, affecting 32.1% of students, which aligns with Nation's (2001) research on the critical role of vocabulary in reading comprehension. Students reported that unfamiliar words disrupt their reading, suggesting a need for more focused vocabulary instruction, potentially enhanced with engaging digital tools (Folse, 2004). Pronunciation difficulties, reported by 21.4% of students, highlight the importance of phonetic exercises and regular practice, as supported by Derwing and Munro (2005), who emphasize pronunciation's significance in language learning. Students' reluctance to read aloud due to fears of mispronunciation reflects Celce-Murcia et al.'s (2010) emphasis on consistent pronunciation practice. Understanding tenses is another challenge, with 17.9% of students needing help. This aligns with Ellis's (2006) focus on the importance of grammatical structures in reading comprehension and suggests a need for more contextualized grammar instruction, as proposed by Larsen-Freeman (2001). Additionally, 14.3% of students face difficulties finding specific information, highlighting the necessity of teaching strategies like skimming and scanning for more efficient reading (Grabe & Stoller, 2002). Reading fluency. which affects 8.9% of students, is linked to comprehension, with Rasinski (2003) suggesting that repeated reading exercises could help improve fluency. Finally, while only 5.4% of students need help finding general information, some may still benefit from practice in summarizing and synthesizing information, as Kintsch (1998) recommends.

These findings highlight the critical need for targeted instructional strategies to address EFL students' challenges. Enhanced vocabulary instruction, supported by digital tools, could help mitigate the disruptions caused by unfamiliar words and improve overall comprehension. Regular phonetic exercises and pronunciation practice are crucial to building students' confidence and accuracy, especially for those hesitant to read aloud. The struggle with understanding tenses points to the importance of integrating grammar instruction within reading activities, allowing students to apply grammatical concepts in context, as suggested by Larsen-Freeman (2001). The difficulty in finding specific information underscores the need for teaching effective reading strategies like skimming and scanning, which are vital for academic success in EFL contexts. Additionally, addressing

reading fluency through repeated practice can enhance speed and comprehension, holistically improving reading skills. These targeted strategies can significantly improve Gen Z students' reading proficiency and language development in EFL settings, providing them with the tools necessary for academic and professional success.

The students' reading wants

Table 2 highlights their primary goals, like improving vocabulary, reading comprehension, and preparing for future careers. This information helps educators adjust their teaching to meet student's needs better and support their academic and career success.

Table 2. The students' reading wants

No	Reading Wants	Number	Percentage (%)
1	Improving vocabulary mastery	20	35.7
2	Improving critical thinking skills	6	10.7
3	Improving reading comprehension	20	35.7
4	Improving digital literacy	0	0
5	Fulfilling graduation requirement	0	0
6	Preparing for future career	10	17.9

The findings from Table 2 highlight the key areas where Generation Z (Gen Z) students in an English as a Foreign Language (EFL) context wish to improve their reading abilities. The most common goals identified by 35.7% of students are "improving vocabulary mastery" and "improving reading comprehension." This indicates a clear recognition among students of the importance of these foundational skills for effectively understanding and interpreting texts. Research supports this focus, as studies have shown that a strong vocabulary is closely linked to better reading comprehension and overall academic performance (Dong et al., 2020; Ha, 2021). The interdependence of vocabulary and comprehension skills is well-documented, underscoring the need for targeted instruction to enhance students' reading proficiency.

In addition to these academic goals, 17.9% of students expressed a desire to focus on "preparing for future careers," reflecting an awareness of the practical importance of reading skills beyond the classroom. This focus on career readiness suggests that students look beyond immediate academic needs, prioritizing long-term skill development to support their professional aspirations. Interestingly, no students desired to improve "digital literacy" or focus on "fulfilling graduation requirements." This could indicate confidence in their existing digital skills, which aligns with the digital-native characteristics of Gen Z (Prensky, 2001; Chen, 2023). However, despite their digital fluency, students may need to recognize the broader importance of digital literacy within academic and professional contexts. Studies have shown that digital literacy plays a crucial role in enhancing academic performance and soft skills, yet it still needs to be emphasized by these students (Rinekso et al., 2021; Su, 2023).

Despite its recognized benefits, the need for more emphasis on digital literacy improvement suggests that while Gen Z students are comfortable with technology, they prioritize traditional academic skills like vocabulary and comprehension when it comes to reading. This could also imply that they see digital literacy as a separate competency, already well-developed and not directly linked to their reading success. Therefore, while educators

should continue to build on students' strengths in digital literacy, there is a clear need to focus on enriching their vocabulary and reading comprehension to meet their academic and future professional needs. This comprehensive approach will better prepare Gen Z students for the challenges they will face in academic settings and their future careers.

The students' needs for reading activities

Table 3 provides detailed insights into these preferences, highlighting the activities that students believe best support their language development. The data from this table is crucial for understanding how students prioritize different methods of reading practice, which in turn can help educators tailor their teaching strategies to align more closely with the needs and preferences of their students, ensuring that the chosen activities effectively enhance students' reading proficiency and overall language skills.

Table 3. The students' needs for reading activities

No	Reading Activities	Number	Percentage (%)
1	Reading aloud	33	58.9
2	Reading and answering questions	3	5.4
3	Discussing text in groups	6	10.7
4	Analyzing new words' meaning	9	16.1
5	Others	5	8.9

The data in Table 3 highlights the reading activities that Gen Z students in EFL contexts find most important for their language development. The top choice, "reading aloud," selected by 58.9% of students, suggests that this activity is valued for improving pronunciation, fluency, and confidence. Research supports this, indicating that reading aloud helps students connect spoken and written language, essential for oral proficiency (Chang & Hsu, 2011). Additionally, it keeps students engaged and helps them process information more effectively, reducing boredom (Andoko et al., 2020; Zayed, 2021). Another significant focus is on "analyzing new words' meaning," chosen by 16.1% of students, reflecting the importance of vocabulary development. Strong vocabulary skills are crucial for better reading comprehension and language proficiency, particularly in EFL settings (Nation, 2001; Schmitt, 2008).

"Discussing text in groups," selected by 10.7% of students, shows the value placed on collaborative learning, where students can share insights and reinforce understanding through interaction (Soller, 2001). However, traditional methods like "reading and answering questions" were less popular, chosen by only 5.4% of students, indicating a preference for more active learning strategies that promote deeper engagement (Lin et al., 2021). 8.9% of those who chose "others" indicated an interest in alternative or personalized approaches, such as digital tools or project-based learning (Prensky, 2001). These findings indicate that Gen Z students prefer interactive, student-centred activities that enhance practical language skills and support their engagement in the learning process. Educators should consider these preferences when designing reading activities to meet this generation's needs better.

The procedure of reading activities preferences

Table 4 provides an overview of students' preferred approaches to reading activities, highlighting which methods they find most effective for learning. This information helps educators design reading activities that match students' preferences, improving the effectiveness of their teaching strategies.

Table 4. The procedure of reading activities preferences

No	Reading Preferences	Number	Percentage (%)
1	Lecture	1	1.8
2	Discussion	25	44.6
3	Presentation	10	17.9
4	Role-Play	9	16.1
5	Games	10	17.9
6	Questions and answers	1	1.8
7	Debate	0	0

The data in Table 4 reveals that Gen Z students in EFL contexts strongly prefer interactive and participatory reading activities. "Discussion" is the most popular method, chosen by 44.6% of students, highlighting their preference for collaborative learning. This preference is supported by research, which shows that discussion-based activities improve comprehension, vocabulary, and engagement (Trinidad et al. et al., 2021; Wu et al., 2024). Interviews with students confirm that discussions help them understand texts better by allowing them to share ideas and clarify concepts with peers.

"Presentation" and "games," each favoured by 17.9% of students, indicate that students enjoy dynamic and enjoyable activities that involve creativity and collaboration. "Role-play," preferred by 16.1%, shows their interest in applying language skills in real-life scenarios, which helps solidify their learning. In contrast, traditional methods like "lecture" and "questions and answers" are the least favoured, each receiving only 1.8% of preferences, suggesting these methods are less engaging. The lack of interest in "debate" might be due to its confrontational nature or perceived irrelevance.

These findings suggest that Gen Z students prefer active, engaging methods over traditional, passive approaches. Educators should consider incorporating more discussions, presentations, and interactive activities into their teaching to better align with students' preferences and improve learning outcomes.

The students' ways of learning to read

Table 5 provides detailed insights into these learning methods, showcasing whether students prefer reading aloud, problem-solving, self-regulated learning, or reviewing reading sources.

Table 5. The students' ways of learning to read

No	Ways of Learning to Read	Number	Percentage (%)
1	Reading aloud	25	44.6
2	Problem-solving	9	16.1
3	Self-regulated learning	11	19.6
4	Reviewing reading sources	11	19.6
	110 110 1111111111111111111111111111111		

The data in Table 5 indicates that Gen Z students in EFL contexts prefer various reading methods, with "reading aloud" being the most favoured, chosen by 44.6% of students. This method is particularly effective for improving pronunciation, fluency, and comprehension, as research shows it enhances vocabulary and builds confidence (Indrianti, 2019; Maqbulin, 2022). Student 7 noted, "I find reading aloud really helpful... It boosts my confidence, especially when I get the pronunciation right," emphasizing how this approach actively engages them and strengthens their language skills.

In addition, "self-regulated learning" and "reviewing reading sources," each preferred by 19.6% of students, highlight the importance of independent learning. Research suggests these methods foster autonomy and a deeper understanding of the material (Zimmerman, 2002). This is reflected in Student 2's comment: "I like to study on my own... Self-study lets me take my time and focus on areas where I struggle," showing the value of learning at one's own pace. Furthermore, "problem-solving," chosen by 16.1% of students, demonstrates a preference for activities that involve critical thinking and practical application of reading skills. This aligns with studies on the benefits of problem-solving for developing higher-order thinking skills (Jonassen, 2000). Students 2 and 13 remarked, "I really enjoy problem-solving activities... They make me think critically about what I'm reading and how to apply it," illustrating the need for tasks that connect learning to real-world scenarios.

These findings suggest that Gen Z students benefit from reading aloud, independent study, and problem-solving activities. The insights from students reinforce the importance of diverse, engaging learning methods that cater to various preferences, effectively enhancing their language skills.

The setting of learning to read

Table 6 provides detailed insights into these settings, showing whether students favour individual, pair, group, or whole-class reading environments.

Tab.	le 6.	The	setting	of i	learning to reac	l
Iab	ic U.	1110	Sctung	UI.	icai iiiig to i ca	u

No	The setting of Learning to Read	Number	Percentage (%)
1	Individual works	23	41.1
2	Pair works	10	17.9
3	Group works	19	33.9
4	Whole class works	0	0
5	Others	4	7.1

The data in Table 6 shows that Gen Z students in EFL contexts strongly prefer "individual works," with 41.1% choosing this setting. This suggests that many students prefer working alone to focus independently and manage their learning pace. Student 7 mentioned, "I feel more comfortable working alone because I can go at my own pace and focus on what I need to improve." This preference aligns with research indicating that individual work allows students to process information deeply and tailor their learning to their needs (Kaweera et al., 2019; Astanina & Kuznetsov, 2020). However, "group works" is also favored by 33.9% of students, highlighting the value of collaborative learning. Student 13 shared, "I enjoy working in groups because it allows me to hear different viewpoints and learn from my classmates." This supports studies showing that group work enhances learning by promoting

social interaction and cooperation, essential for language development (Johnson & Johnson, 2009; Widyastuti, 2023).

Additionally, 17.9% of students prefer "pair works," which balances individual focus with social interaction. Student 11 noted, "Working with a partner allows me to concentrate better and helps me feel more supported." This aligns with research on the benefits of pair work for practising conversational skills and deepening understanding (Storch, 2002). Interestingly, no students chose "whole class works," suggesting it may be less effective for personalized learning. Furthermore, 7.1% selected "others," indicating interest in more flexible or innovative learning environments, such as digital or blended approaches, which appeal to Gen Z's familiarity with technology (Prensky, 2001). Overall, the findings suggest that Gen Z students prefer a mix of individual and collaborative learning settings, and educators should design reading activities that balance these preferences to engage better and support their learning.

The student's roles in reading activities

Table 7 provides detailed insights into these roles, highlighting whether students see themselves as active readers, thinkers, problem solvers, facilitators, or learning sources.

No	Student's Roles	Number	Percentage (%)
1	Active readers	26	46.4
2	Active thinkers	5	8.9
3	Problem solvers	2	3.6
4	Facilitators/helpers	2	3.6
5	Learning sources	9	16.1
6	Others	12	21.4

The data in Table 7 reveals the roles Gen Z students prefer during reading activities in an EFL context, with the majority (46.4%) identifying as "active readers." This role involves directly engaging with the text, which aligns with the characteristics of Gen Z learners, who often show higher levels of motivation and engagement when they can actively participate in the learning process. Student 5 mentioned, "I like being an active reader because it helps me stay focused and really understand what I'm reading." This preference for active reading is supported by research indicating that when students actively engage with the material, they tend to develop a deeper understanding and retain information more effectively (Roy et al., 2021). Active reading fosters critical thinking and promotes a sense of ownership over the learning process, which is crucial for Gen Z learners who value autonomy in their education (Buzzetto-Hollywood et al., 2018).

In addition to active readers, 16.1% of students see themselves as "learning sources," where they contribute knowledge and assist others, reflecting a collaborative spirit. This role aligns with the cooperative nature of Gen Z, who often prefer learning environments that allow them to share knowledge and support their peers (Johnson & Johnson, 2009). Student 8 noted, "I enjoy helping others understand the material; it makes the learning process more rewarding." Meanwhile, 21.4% of students selected "others," indicating interest in roles not explicitly listed, suggesting a desire for more diverse or personalized roles in learning activities. Less common roles included "active thinkers" (8.9%), "problem solvers" (3.6%),

and "facilitators/helpers" (3.6%), showing that while these roles are less preferred, they still play an essential part in classroom dynamics. These findings suggest that while most Gen Z students prefer to be directly involved as readers, there is also significant interest in contributing to the learning environment in supportive or alternative ways. Educators should recognize these varied preferences and consider incorporating a range of roles in reading activities to cater to different learning styles and enhance overall engagement.

Based on the findings and the discussion above, this study has important implications for educators designing reading activities for Gen Z students in EFL contexts. The strong preference for active, student-centred learning methods such as reading aloud, discussion and problem-solving highlights the need for instructional strategies that prioritize engagement, critical thinking, and interaction. Educators can better align with Gen Z's learning preferences by incorporating these interactive activities, fostering deeper comprehension and more effective language development. Additionally, the emphasis on individualized learning settings suggests that a flexible approach, allowing students to work independently or in small groups, can enhance focus and cater to diverse learning needs. Understanding students' preferred roles in reading activities, such as active readers or learning sources, can help educators structure classrooms to maximize involvement and collaboration. However, this study has limitations, including a relatively small and potentially unrepresentative sample size, reliance on self-reported data, and a crosssectional design that limits the ability to draw causal conclusions. Future research should address these limitations by including a more diverse group of EFL learners across different cultural contexts, using longitudinal designs to explore changes over time, and employing experimental methods to test the effectiveness of specific instructional strategies. Qualitative studies could also provide richer insights into students' experiences and motivations, further refining instructional practices for this generation of learners.

CONCLUSION

This study sheds light on the reading preferences, challenges, and roles of Generation Z (Gen Z) students in EFL contexts. The findings reveal a strong preference for active and student-centred learning methods, such as reading aloud, discussions, and problem-solving, which align with Gen Z's interactive and autonomous learning style. However, the study also highlights significant challenges in vocabulary acquisition, pronunciation, and grammar, indicating the need for targeted instructional strategies to support these learners effectively. While the study provides valuable insights, its limitations suggest that further research is needed to explore these findings in more diverse and longitudinal settings. The study emphasizes the importance of adopting flexible, engaging, and tailored teaching approaches to enhance Gen Z students' reading proficiency and overall language development in EFL contexts.

REFERENCES

- Andoko, B. S., Hayashi, Y., Hirashima, T., & Asri, A. N. (2020). Improving English reading for EFL readers by reviewing kit-build concept maps. *Research and Practice in Technology Enhanced Learning*, 15(1), 7. https://doi.org/10.1186/s41039-020-00126-8
- Astanina, A., & Kuznetsov, I. (2020). Linguistic imperialism in EFL teaching: New role of a teacher in educating generation z. *Proceedings of the International Scientific Conference on Philosophy of Education, Law and Science in the Era of Globalization (PELSEG 2020)*. International Scientific Conference on Philosophy of Education, Law and Science in the Era of Globalization (PELSEG 2020), Ekaterinburg, Russia. https://doi.org/10.2991/assehr.k.200723.004
- Bilonozhko, N., & Syzenko, A. (2020). Effective reading strategies for Generation Z using authentic texts. *Arab World English Journal*, 2, 121–130. https://doi.org/10.24093/awej/elt2.8
- Buzzetto-Hollywood, N. A., Elobeid, M., & Elobaid, M. E. (2018). Addressing information literacy and the digital divide in higher education. Interdisciplinary Journal of e-Skills and Lifelong Learning, 14, 077-093. https://doi.org/10.28945/4029
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative research in psychology, 3(2), 77-101. https://doi.org/10.1191/1478088706qp063oa
- Celce-Murcia, M., Brinton, D. M., & Goodwin, J. M. (2010). Teaching pronunciation hardback with audio CDs (2): A course book and reference guide. Cambridge University Press.
- Chang, C. K., & Hsu, C. K. (2011). A mobile-assisted synchronously collaborative translation—annotation system for English as a foreign language (EFL) reading comprehension. Computer assisted language learning, 24(2), 155-180. https://doi.org/10.1080/09588221.2010.536952
- Chen, R. (2023). Generation Z students' characteristics and attitudes in a Chinese English language teaching classroom. *Lecture Notes in Education Psychology and Public Media*, 2(1), 765–778. https://doi.org/10.54254/2753-7048/2/2022458
- Creswell, J. W., & Clark, V. L. P. (2017). Designing and conducting mixed methods research. Sage publications.
- DiCicco-Bloom, B., & Crabtree, B. F. (2006). The qualitative research interview. Medical education, 40(4), 314-321. https://doi.org/10.1111/j.1365-2929.2006.02418.x
- Derwing, T. M., & Munro, M. J. (2005). Second language accent and pronunciation teaching: A research-based approach. TESOL quarterly, 39(3), 379-397. https://doi.org/10.2307/3588486
- Dong, Y., Tang, Y., Chow, B. W.-Y., Wang, W., & Dong, W.-Y. (2020). Contribution of vocabulary knowledge to reading comprehension among Chinese students: A meta-analysis. *Frontiers in Psychology*, 11, 525369. https://doi.org/10.3389/fpsyg.2020.525369
- Ellis, R. (2005). Principles of instructed language learning. System, 33(2), 209-224.
- Fu, S. (2021). The roles of intensive and extensive reading activities in Chinese EFL university students' reading comprehension skills. *Education and Linguistics Research*, 8(1), 1. https://doi.org/10.5296/elr.v8i1.19189
- Folse, K. S. (2004). Myths about teaching and learning second language vocabulary: What recent research says. TESL reporter, 37, 13-13. http://lir.byuh.edu/index.php/Issue1/article/download/1256/1208

- George, S. (2023). Five pillars of reading. *SSRN Electronic Journal*, *3*(9), 6. https://doi.org/10.2139/ssrn.4576276
- Grabe, W., & Stoller, F. (2002). Teaching and research reading. Harlow, UK: Longman.
- Ha, H. T. (2021). Exploring the relationships between various dimensions of receptive vocabulary knowledge and L2 listening and reading comprehension. *Language Testing in Asia*, 11(1), 20. https://doi.org/10.1186/s40468-021-00131-8
- Ha Le, V. (2021). Common difficulties of reading comprehension experienced by Vietnamese students. *2021 5th International Conference on Education and Multimedia Technology* (ICEMT), 306–310. https://doi.org/10.1145/3481056.3481073
- Huss, J. (2023). Gen z students are filling our online classrooms: Do our teaching methods need a reboot? *InSight: A Journal of Scholarly Teaching*, 18, 101–112. https://doi.org/10.46504/18202306hu
- Indrianti, T. (2019). Reading aloud activity in ESP class in the perspectives of students. *Journal Polingua: Scientific Journal of Linguistic Literatura and Education*, 7(2), 37–42. https://doi.org/10.30630/polingua.v7i2.71
- Jewitt, C. (2008). Multimodality and literacy in school classrooms. Review of research in education, 32(1), 241-267. https://doi.org/10.3102/0091732X07310586Kaweera, C., Yawiloeng, R., & Tachom, K. (2019). Individual, pair and group writing activity: A case study of undergraduate EFL student writing. *English Language Teaching*, 12(10), 1. https://doi.org/10.5539/elt.v12n10p1
- Johnson, D. W., & Johnson, R. T. (2009). An educational psychology success story: Social interdependence theory and cooperative learning. Educational researcher, 38(5), 365-379. https://doi.org/10.3102/0013189X09339057
- Jonassen, D. H. (2000). Toward a design theory of problem solving. Educational technology research and development, 48(4), 63-85. https://doi.org/10.1007/BF02300500
- Kintsch, W. (1998). Comprehension: A paradigm for cognition. Cambridge university press.
- Lampi, J. P., Armstrong, S. L., Talwar, A., & Magliano, J. P. (2023). Reading matters in supporting students: The role of complex literacy tasks in academic success. *Journal of College Student Retention: Research, Theory & Practice*, 15210251231214557. https://doi.org/10.1177/15210251231214557
- Larsen-Freeman, D. (2001). Teaching grammar. Teaching English as a second or foreign language/Heinle & Heinle.
- Lin, Y. H., Chen, M. R. A., & Hsu, H. L. (2021). Fostering low english proficiency learners' reading in a freshman EFL reading class: effect of using electronic and print textbooks on Taiwanese University students' reading comprehension. International Journal of English Linguistics, 11(1), 54-67. https://api.semanticscholar.org/CorpusID:228972097
- Laufer, B., & Ravenhorst-Kalovski, G. C. (2010). Lexical threshold revisited: Lexical text coverage, learners' vocabulary size and reading comprehension.
- Maqbulin, A. (2022). The effectiveness of reading aloud to improve students reading ability in secondary school. *Inovasi-Jurnal Diklat Keagamaan*, 16(2), 129–135. https://doi.org/10.52048/inovasi.v16i2.349

- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (Third edition). SAGE Publications, Inc.
- Nation, I. S. P., & Macalister, J. (2020). Intensive Reading. In I. S. P. Nation & J. Macalister, *Teaching ESL/EFL Reading and Writing* (2nd ed., pp. 30–54). Routledge. https://doi.org/10.4324/9781003002765-3
- Niculescu, B.-O., & Dragomir, I.-A. (2023). Critical reading: A fundamental skill for building 21st century literacy. *International Conference KNOWLEDGE-BASED ORGANIZATION*, 29(2), 215–220. https://doi.org/10.2478/kbo-2023-0060
- Rasinski, T. (2003). Parental involvement: Key to leaving no child behind in reading. New England Reading Association Journal, 39(3), 1. https://search.proquest.com/openview/aa009b840584e65db769a25602a91d01/1?pq-origsite=gscholar&cbl=34991
- Roy, N., Torre, M. V., Gadiraju, U., Maxwell, D., & Hauff, C. (2021). Note the highlight: Incorporating active reading tools in a search as a learning environment. *Proceedings of the 2021 Conference on Human Information Interaction and Retrieval*, 229–238. https://doi.org/10.1145/3406522.3446025
- Salkind, N. J. (Ed.). (2010). Encyclopedia of research design (Vol. 1). sage.
- Saxena, M., & Mishra, D. K. (2021). Gamification and gen z in higher education: A systematic review of literature. *International Journal of Information and Communication Technology Education*, 17(4), 1–22. https://doi.org/10.4018/IJICTE.20211001.oa10
- Su, Y. (2023). Delving into EFL teachers' digital literacy and professional identity in the pandemic era: Technological Pedagogical Content Knowledge (TPACK) framework. *Heliyon*, 9(6), e16361. https://doi.org/10.1016/j.heliyon.2023.e16361
- Soller, A. (2001). Supporting social interaction in an intelligent collaborative learning system. International journal of artificial intelligence in education, 12, 40-62.
- Storch, N. (2002). Patterns of interaction in ESL pair work. Language learning, 52(1), 119-158. https://doi.org/10.1111/1467-9922.00179
- Trinidad Trujillo Castro, M., Rua Cortes, M., Alberto Álvarez Guayara, H., & Aguilar-Cruz, P. J. (2021). Class discussions based on cultural aspects to foster the speaking skill among high school students. *Astraea*, 2(2), 10–38. https://doi.org/10.34142/astraea.2021.2.2.01
- Twenge, J. M. (2017). *iGen: Why today's super-connected kids are growing up less rebellious, more tolerant, less happy--and completely unprepared for adulthood--and what that means for the rest of us.* Simon and Schuster.
- Prensky, M. (2001). Nativos digitales, inmigrantes digitales. On the horizon, 9(5), 1-7.
- Widyastuti, S. (2023). Subtle othering in EFL group work. *Diksi*, *31*(2), 182–192. https://doi.org/10.21831/diksi.v31i2.65438
- Wright, K. B. (2005). Researching Internet-based populations: Advantages and disadvantages of online survey research, online questionnaire authoring software packages, and web survey services. Journal of computer-mediated communication, 10(3), JCMC1034. https://doi.org/10.1111/j.1083-6101.2005.tb00259.x

- Wu, S., Liu, D., & Li, Z. (2024). Consolidating EFL content and vocabulary learning via interactive reading. *International Review of Applied Linguistics in Language Teaching*, 62(2), 197–221. https://doi.org/10.1515/iral-2021-0228
- Zayed, J. (2021). Think-aloud strategy: Improving reading comprehension in an online context. *International Journal of Education and Practice*, 9(1), 1–12. https://doi.org/10.18488/journal.61.2021.91.1.12
- Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. Theory into practice, 41(2), 64-70.