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Analyzing the Online Reading Strategies of Indonesian In-Service EFL Teachers.

Anita Fatimatul Laeli,* Indah Werdiningsih, and Hanafi

English Education Department, Faculty of Teacher Training and Education, Universitas Muhammadiyah Jember, Indonesia

*Corresponding author: anitafatimatul@unmuhjember.ac.id

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Abstract

The rapid advancement of technology in the 21st century has transformed English language learning, particularly in reading activities. The shift from print to digital texts not only requires adapting traditional reading strategies but also introduces new strategies, such as searching for and synthesizing information online. This study examines the online reading strategies employed by English language teachers in East Java. Using a quantitative research design with a survey method, 97 English language teachers participated by completing the SLORSI (Second Language Online Reading Strategies Inventory) questionnaire. The results revealed that Traditional Cognitive Strategies, including inferring, skimming, and translating, were the most commonly used, with high scores across all subscales. In the New Cognitive Strategies dimension, strategies like locating, synthesizing, saving, and navigating were also frequently employed, with the saving strategy being the most dominant (Mean = 4.24). The Evaluation Strategy dimension indicated that teachers frequently assessed the credibility of online information. However, Communication Strategies were used the least (Mean = 3.33), particularly in terms of online collaboration and discussion. In conclusion, the study highlights that English language teachers effectively use a range of cognitive, evaluative, and communicative strategies in reading online texts. Nevertheless, there is potential for further development, particularly in enhancing communicative strategies. This underscores the importance of equipping teachers with the skills to navigate and critically engage with digital texts in their teaching practices.

Keywords: Online Reading Strategies, English Language Teachers, Digital Texts, Cognitive Strategies, Evaluation Strategies

1. Introduction

The rapid advancements in technology have significantly transformed various aspects of education, particularly in reading practices ([1][2]). Traditionally, reading involved print-based materials such as books and magazines, but with the rise of digital technology, reading now extends to digital platforms, including websites, e-books, and social media posts ([3]). This shift is not just about a change in the medium; it has also brought the need for a new set of skills to navigate the growing of digital resources. As a result, reading in the digital age is increasingly dependent on the ability to

engage with and comprehend texts across multiple formats [4].

Online reading, in particular, presents a more focused and goal-oriented approach to information gathering. Unlike traditional reading, which may vary widely, online reading tends to be directed towards solving specific problems or answering question ([5]). [2] stated that the cognitive processes involved in reading digital texts differ from those used in print-based reading. For example, digital reading requires cognitive flexibility, as readers must integrate past knowledge with information from multiple sources or hypertexts available online. In addition, [6] found that English language learners (ESL) also adapt their reading strategies when interacting with digital texts, emphasizing the need for digital literacy alongside traditional literacy skills in the target language.

Over the past few decades, research has highlighted the influence of digital technologies on reading habits, comprehension, and the development of new literacies ([7];[8]; [9]). Study by [10] explored the differences between print and screen-based reading, with digital texts demanding more active engagement from readers. [11] stressed the importance of new reading strategies, such as evaluating the credibility of online sources and synthesizing information from various platforms. Additionally, [12] introduced the concept of "new literacies," which are crucial for navigating digital reading environments, including the skills required for searching, evaluating, and synthesizing online information. While these studies offer valuable insights, they primarily focus on the general changes in reading habits without delving into the specific strategies learners need to develop for effective digital reading.

The importance of using strategic reading techniques is emphasized by research in reading comprehension [13]. A study by [14] found a significant link between students' reading competency and their use of higher-order thinking strategies. For English as a Second Language (ESL) and Foreign Language (EFL) learners, adopting advanced strategies can enhance reading abilities. This is particularly important in the context of online reading, where traditional strategies may not be sufficient to address the unique challenges posed by digital texts. Readers engaging with online materials must regulate their reading strategies according to different tasks and purposes, further highlighting the need for specialized skills when reading digital content ([15]).

As technology continues to evolve, so too must the strategies for reading and understanding digital texts [16]. Traditional reading strategies are often inadequate when dealing with the complexity of online information, where users must select relevant content from numerous options. Online readers, for example, must decide which search results to prioritize, adding another layer of complexity to the reading process ([17]). These challenges are compounded by the fact that online texts require readers to synthesize information from multiple sources quickly and efficiently, a task that demands a high level of cognitive flexibility (Picture 1) ([7]; [2]). This underscores the need for teachers to equip students with effective online reading strategies that foster comprehension and engagement with digital texts.

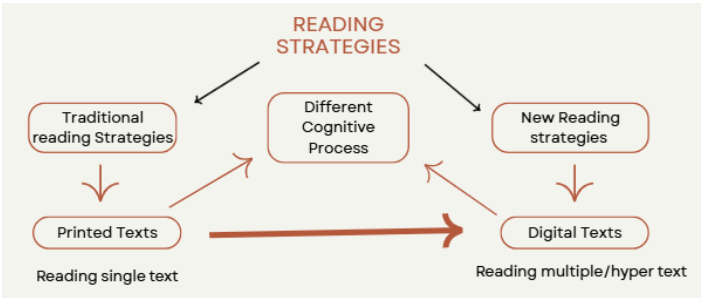


Figure 1. A Conceptual Framework of Traditional and New Reading Strategies

The transformative effects of technology on reading are not just limited to the students but also extend to teachers [18] [19]. As the nature of reading has changed, so the role of educators in guiding students through this digital landscape also changed. Teachers must not only be aware of the challenges students face when reading online, but they must also be competent in teaching new digital literacy skills ([20]). [21] emphasized that teachers are now tasked with helping students navigate complex information environments, which requires a broader understanding of how digital texts function. Teachers must therefore be well-versed in both traditional and digital reading strategies to support students' literacy development in the digital age.

However, despite the growing recognition of the importance of digital literacy, many teachers still lack the necessary training in teaching effective online reading strategies. [22] and [23] pointed out that teachers often overlook the nuances of online texts, which can hinder students' ability to read effectively in digital environments. As a result, teachers must receive explicit training on how to teach digital reading strategies and how to help students overcome the unique challenges posed by online reading ([24]). [25] argued that this strategic training should be integrated into teacher development programs to ensure that educators can support their students in developing the skills necessary for digital literacy. Teachers' experience with reading strategies plays a crucial role in shaping how they support students' comprehension and engagement ([26]). [27] found that teachers' ability to implement reading strategies in the classroom directly impacts students' learning outcomes. Furthermore, [28] emphasized that teachers' beliefs and experiences with reading strategies influence their teaching practices. Therefore, understanding teachers' experiences with online reading strategies is critical to improving teaching methods and ensuring that educators can effectively guide students through the complexities of digital texts.

Despite the existing body of research on reading strategies, there is a significant gap in understanding the specific online reading strategies that teachers themselves use. While much of the literature has focused on the strategies employed by students, less attention has been given to the strategies that teachers use when engaging with digital texts. This gap in the literature is crucial, as teachers' personal experiences with online reading can directly influence their instructional practices and their ability to teach students effectively. So, this study aims to address this gap by investigating the online reading strategies used by EFL in-service teachers, with the goal of providing insights into how teachers can better support students in developing digital literacy skills.

2. Methods

The method section contains research designs, research subjects, instruments, data collection procedures, and data analysis.

2.1 Research Design

This study employs a quantitative research design with a survey methodology. Survey research is a widely used procedure in quantitative research where researchers administer surveys to a sample or the entire population to describe various aspects, such as attitudes, opinions, behaviors, or characteristics of the population ([29]). The main aim of this study is to investigate the individual strategies used by English language teachers when reading online texts. Specifically, it aims to describe the trends in reading strategy usage among these teachers, providing a comprehensive overview of their practices in online reading.

2.2 Research Subjects

The participants in this study are English language teachers who are currently enrolled in the Professional Teacher Education Program to obtain their teaching certification. These teachers are from

various regions in East Java, including Kediri, Trenggalek, Jember, Bondowoso, Banyuwangi, and surrounding areas. The total number of participants is approximately 97 teachers from different cohorts in the year 2024. These teachers serve as the subjects of the study, offering valuable insights into the strategies they use while engaging with online texts as part of their professional development.

Table 1. Research Subjects' Profile

Gender	53 female and 44 male
Teaching experience	1 to 20 years
School teaching level	Senior and Junior High School
Province	East Java

2.3 Instruments

The primary instrument for data collection in this study is the Second Language Online Reading Strategies Inventory (SLORSI) questionnaire adopted from ([23]), which was used to identify the patterns of online reading strategies and the most dominant strategies employed by the teachers. The researcher made no alterations or revisions to the SLORSI questionnaire items because Li (2020) had already validated them statistically using CFA (Confirmatory Factor Analysis). The items demonstrated significant relationship with the respective underlying constructs, with standard coefficients varying between 0.461 and 0.751, offering empirical evidence for convergent validity. The reliabilities for all factors ranged from 0.52 to 0.75. The SLORSI questionnaire consists of 29 items, which are divided into four major sections: (1) traditional cognitive strategies, (2) new cognitive strategies, (3) evaluating strategies, and (4) communicative strategies. The first section evaluates traditional cognitive strategies, such as inferring, skimming, and translating. The second section examines new cognitive strategies, including locating, synthesizing, saving, and navigating strategies. The third section focuses on evaluating strategies, while the fourth section addresses communicative strategies. Each section consists of 3 to 4 items, allowing for a comprehensive assessment of the various strategies employed by the participants.

2.4 Data Analysis

The responses were analyzed quantitatively to identify the frequency of strategy use. The Mean (M) and Standard Deviation (SD) for each item and subscale were calculated. Based on the average scores, strategies were categorized into three levels: high (average score of 3.5 or higher), moderate (average score between 2.5 and 3.4), and low (average score of 2.4 or lower), following the framework established by Oxford (1990) and adapted by ([23]). These levels help to assess the extent to which different strategies are used by the teachers. Statistical comparisons of strategy use across subscales were conducted using SPSS 20 to explore any significant differences.

3. Results and Discussion

The following section presents the results of the data analysis in response to the research questions, focusing on the patterns of reading strategies and identifying the most dominant strategies used by English language teachers when reading online texts. The results will be organized according to the four dimensions of online reading strategies: Traditional Cognitive Strategies, New Cognitive Strategies, Evaluating Strategies, and Communication Strategies. Each dimension will be discussed in terms of the frequency and significance of the strategies used.

3.1 Traditional Cognitive Strategies

The first dimension analyzed is Traditional Cognitive Strategies, which includes three subscales: inferring, skimming, and translating. As shown in Table 1, all activities related to the inferring subscale received high scores (Mean = 4.22), indicating that teachers frequently use this strategy when encountering unknown words or phrases in online texts. Specifically, teachers often make educated guesses based on the purpose of reading, regardless of whether the guesses are correct or not. This finding suggests a reliance on prior knowledge and context to make sense of unfamiliar information. The result of the current study confirms [30] reported that previous knowledge influences readers' ability to combine familiar and unfamiliar words to comprehend the texts. Further, this finding is also consistent with [31] who mentions that readers' vocabulary knowledge helps the readers to interpret the message contained in the text.

The skimming subscale also yielded high scores, with an average range from 4.00 to 4.22 (Table.1), indicating that English language teachers often use skimming to extract main ideas and establish connections between concepts when reading online texts. Further, the result showed that when teachers engaged in skimming, they most commonly focused on the first sentence of each section or paragraph of the text (Mean=4.22). This pattern of behavior is consistent with previous research that highlights the role of skimming as an efficient reading strategy ([32]; [33]), especially when dealing with online texts that require quick comprehension ([23]). Further, the findings corroborate that the skimming strategy focuses on the first sentence, allowing readers to concentrate on the necessary information and skip through irrelevant details ([34]).

Table 2. Results for the dimension of Traditional Cognitive Strategy

Dimension	Subscale	Items	Mean (M)	SD	Level
Dimension Traditional Cognitive Strategy	Inferring	Guessing right or wrong	4.22	0.84	High
		Guessing next content	4.22	0.66	High
		Guessing unknown words	3.89	0.82	High
	Skimming	Reading first sentence	4.22	0.69	High
		Overall view on the online text	4.00	0.80	High
		Scroll up and down among the ideas	4.07	0.70	High
	Translating	Translate into native language	4.19	0.78	High
		Find the native language equivalent in dictionary	3.91	0.87	High
		Find the native language equivalent in search engine	3.85	0.94	High

Finally, the translating strategy received high scores (Mean = 3.85 - 4.19), particularly in translating content into the teachers' native language (Mean = 4.19). This suggests that translating is commonly used as a comprehension strategy, especially when encountering difficult or unfamiliar vocabulary.

Based on Table 1, in-service teachers in this study mostly interpret difficult words into their local language (Mean=4.19). The findings support the previous study's findings of [35] that found readers frequently utilize their native language to comprehend the information presented in the writings they encounter in reading online. Further,[36] reveal that multilingual internet resources are employed in adopting the comprehension approach when reading online, including the use of dictionaries.

To summarize, the findings related to Traditional Cognitive strategies reveal that EFL in-service teachers consistently utilize strategies such as inferring, skimming and translating when interacting with online texts. Moreover, the result of this study on traditional cognitive strategies in online reading align closely with previous study conducted by ([35]) that investigated the online reading strategies used by EFL pre-service teachers. This consistency shows that both groups – EFL pre-services teachers and in-service teachers- rely on the same level usage of traditional cognitive strategies in reading online.

3.2 New Cognitive Strategies

The second dimension, New Cognitive Strategies, consists of four subscales: locating, synthesizing, saving, and navigating. As shown in Table 2, the locating strategy obtained average scores ranging from 3.76 to 4.15, indicating that teachers commonly employ this strategy to discover position relevant information within online texts. Further, teachers in this study tend to utilize prior knowledge to discover relevant details, emphasizing the necessity of knowledge-based navigation in the digital reading process. This result in line with [37] reveal that activating readers' background knowledge is necessary in pre-reading activity including in reading online. In addition, the synthesizing strategy also showed high scores, ranging from 4.04 to 4.28, demonstrating that that teachers frequently assess the alignment of new information with the purpose of reading. This finding highlights the role of synthesis in organizing information and evaluating its relevance to the task at hand. Further, teachers in this study frequently compare the information from multiple source (Mean= 4,28). The Internet offers content from countless authors, websites, and perspectives, so combining and integrating information from multiple sources is needed to form a comprehensive understanding of a topic ([25]; [2];[38]).

Table 3. Results for the dimension of New Cognitive Strategy

Dimension	Subscale	Items	Mean (M)	SD	Level
Dimension New Cognitive Strategy	Locating	Using background knowledge	4.15	0.71	High
		Using knowledge of the informational website	3.76	0.91	High
		Using prior knowledge of printed text	4.09	0.76	High
	Synthesizing	Contrast the information from various sources	4.28	0.66	High
		Click on the hyperlink	4.04	0.82	High
		Checking the fitness of the new information to the reading purpose	4.31	0.70	High
		Checking the information if it fits the reader's understanding	4.15	0.79	High
	Saving	Only save the link	4.57	0.63	High
		Save the link with notes	4.19	0.83	High
		Save the link and highlight the info	4.20	0.74	High

Navigating	Save the page in book-mark	4.00	0.99	High
	Click the suitable link	3.83	1.00	High
	Glance over the website	3.80	0.96	High
	Remembering the reading purpose before clicking the link	3.93	0.77	High

The saving strategy had the highest average score in this dimension (Mean = 4.00 - 4.57), suggesting that teachers frequently save relevant links and information for future reference. This finding supports [35] study about pre-service teachers who mostly save only the link to store relevant information while reading on the Internet. This behavior reflects the importance of efficiently managing and storing information while reading online. Finally, navigating, which involves organizing and monitoring actions while searching for information, also received high scores. Teachers in this study frequently used this strategy to organize their reading and maintain control over their search process by mostly recalling the reading purpose before clicking the link. In conclusion, the results for New Cognitive Strategies suggest that English language teachers frequently use strategies such as locating, synthesizing, saving, and navigating to engage with and organize digital content efficiently. As mentioned by [23] traditional cognitive strategy is not sufficient to comprehend reading online text, therefore new cognitive strategy including navigation strategy, locate information strategy, synthesize and saving strategy is needed ([25])

3.3 Evaluating Strategies

The third dimension, Evaluating Strategies, examines how teachers assess the credibility and quality of online information. As shown in Table 3, the evaluating strategies received high average scores, ranging from 3.87 to 3.98. This indicates that teachers regularly evaluate online information to ensure its credibility. The most frequently used strategy in this dimension was searching for websites that present multiple perspectives on an issue (Mean = 3.98). This suggests that teachers place significant importance on finding balanced, reliable sources when navigating online texts. In conclusion, the use of evaluating strategies underscores the importance of critical thinking in the digital reading process. Teachers consistently evaluate online information for accuracy and reliability, reflecting a broader trend toward enhancing critical literacy in the digital age. The findings of the current study are consistent with [39] who found that analytical strategy use improve the reader ability to assess reliable information in reading online.

Table 4. Results for the dimension of Evaluating Strategy

Dimension	Subscale	Items	Mean (M)	SD	Level
<i>Dimension Evaluating Strategy</i>	Evaluating	Searching the site which cover both sides of the issue	3.98	0.81	High
		Look for multiple online text for the same topic	3.96	0.80	High
		Critically analyse the information	3.87	0.89	High

3.4 Communication Strategies

The final dimension, Communication Strategies, focuses on how teachers share or communicate the information they gather from online texts. As shown in Table 4, the average scores for communi-

cation strategies fall within the medium range (Mean = 3.13 - 3.56). Teachers reported occasionally collaborating online with others (Mean = 3.31) and discussing reading material via social media (Mean = 3.13). However, the most common activity within this dimension was leaving comments or engaging in online discussions through chat boxes (Mean = 3.56). In other words, the findings for communication strategies show that while teachers engage with others in some capacity online, the most frequent form of communication is through comments or chat-based interactions. However, the findings of the current study do not support the previous research. Based on [35] research findings showed that the participants mostly collaborate online to obtain a better comprehension of a text. There are several possible explanations for this result. One of them is that the participants in this study aged between 38 -45 years old where belong to digital immigrants, whereas the participants in the previous study belong to digital native. Digital native is more familiar with features and have a better the basic skills of digital environment ([40]). Further, digital natives are generally more comfortable and proficient with various digital tools and platforms. So that, they prefer collaborate with others online such as using video or audio class to get more comprehension. Furthermore, another possibility for these results is the lack of training for teachers on reading online literacy. According to [22] in-service teachers in her study reported that did not get any particular training on reading online strategies.

Table 5. Results for the dimension of Communicative Strategy

Dimension	Subscale	Items	Mean (M)	SD	Level
Dimension Communicative Strategy	Communication	Collaborate with others online	3.31	0.97	Medium
		Leaving comment online in the chat box	3.56	1.02	High
		Discussing online in social media	3.13	1.30	Medium

After analyzing the strategies used by teachers in each dimension, the researcher also analyzed the patterns of online reading strategy use across dimensions.

Table 6. Results across dimension

Dimension		Mean (M)	SD	Level
Traditional Strategy	Cognitive	4.06	0.79	High
New Cognitive Strategy		4.07	0.83	High
Evaluating Strategy		3.94	0.83	High
Communicative Strategy		3.33	1.11	Medium

Based on data provided in Table 5, the Traditional cognitive strategy has an average score (Mean) of 4.06 with a standard deviation (SD) of 0.79. This result shows that traditional cognitive strategies are at a high level because the average value is in a range close to the maximum. Further, the new cognitive strategy dimension has an average score (Mean) of 4.07 with a standard deviation (SD) of 0.83. These findings also show a high level, with an average value that is almost equivalent to the traditional cognitive strategy dimension, indicating good acceptance of this new strategy. Moreover, the evaluation strategy dimension has an average (Mean) of 3.94, which places this dimension at a

high level. Although slightly lower than the previous dimension, the average value close to 4 still reflects a fairly high implementation of the evaluation strategy.

In contrast, the communicative strategy has an average (Mean) of 3.33 with an SD of 1.11. this dimension is at a medium level, indicating that communicative strategies are not as strong as the other three dimensions and show greater variability in their implementation. Overall, the data show that the dimensions related to cognitive strategies (both traditional and new) and evaluation strategies scored high, while communicative strategies were still moderate. This study generated results that corroborate the conclusions of previous work ([35]). This previous study also revealed that the communicative strategies used in reading online were used at a medium level compared to traditional, new cognitive, and evaluation strategies.

4. Conclusion

This study explored the strategies that English language teachers use when reading online texts, confirming that teachers rely on a variety of strategies to navigate digital content. The findings indicate that traditional strategies such as inferring, skimming, and translating are commonly used, helping teachers efficiently comprehend and process information in digital texts. These strategies play a crucial role in supporting teachers' understanding of online materials.

In addition, the study identified the most frequently used strategies and categorized them into key dimensions. Teachers employ new cognitive strategies like locating, synthesizing, saving, and navigating to manage the vast amount of digital information they encounter. Evaluating strategies also proved important, as teachers frequently assess the credibility and reliability of online content. Though communication strategies were used less often, teachers still engage in online discussions and comments, reflecting the collaborative nature of digital literacy.

Despite the valuable insights provided, this study has some limitations. First, the sample size, although representative of English language teachers in East Java, may not fully reflect the broader population of teachers across Indonesia or other regions. The focus on one specific group of teachers may limit the generalizability of the results. Additionally, the study relied solely on self-reported data, which could introduce bias for the research result, as teachers may overestimate or underestimate their use of certain strategies.

For future research, it would be beneficial to expand the sample size to include teachers from diverse regions and educational settings to ensure a more representative overview of teaching practices. Additionally, research could explore how these strategies are applied in classroom settings and how they impact student learning outcomes. Further investigation using mixed-method studies that focus on how teachers integrate these strategies into their teaching practices, how they support students in developing their own digital reading skills, and why the teacher prefer a certain way on reading online (such as way in communication strategies) would provide a more comprehensive understanding of digital literacy in education.

Overall, the study highlights the importance of both traditional and new strategies for effective digital reading. It suggests that these strategies could be further incorporated into teacher training programs to better equip educators with the skills necessary to help students thrive in the digital age. Future research could also focus on developing specific professional development programs; such as in the form of workshop or short course; to enhance teachers' digital literacy skills, ultimately improving the quality of education in an increasingly digital world. Hopefully, these research findings will serve as a valuable reference for policymakers, emphasizing that enhancing teachers' digital literacy should not be limited to merely acquiring technological proficiency. It should strengthen the integration of technological skills with reading comprehension in the digital domain to contribute

to better educational outcomes and equip teachers to meet the evolving demands of the digital age.

References

- [1] Ghazi S. Alrawashdeh, Stephanie Fyffe, Roger F. L. Azevedo, and Nelson M. Castillo. “Exploring the impact of personalized and adaptive learning technologies on reading literacy: A global meta-analysis”. In: *Educational Research Review* 42 (2024), p. 100587. DOI: 10.1016/j.edurev.2023.100587. URL: <https://doi.org/10.1016/j.edurev.2023.100587>.
- [2] B.-Y. Cho and P. Afflerbach. “An Evolving Perspective of Constructively Responsive Reading Comprehension Strategies in Multilayered Digital Text Environments”. In: *Handbook of Research on Reading Comprehension*. Ed. by E. Susan. Guilford Publications, 2017, pp. 1–28. URL: <https://www.researchgate.net/publication/317021664>.
- [3] B.G. Jang, J.H. Ryoo, and K.C. Smith. “Latent Profiles of Attitudes Toward Print and Digital Reading Among Adolescents”. In: *Reading and Writing* 34.5 (2020), pp. 1115–1139. DOI: 10.1007/s11145-020-10104-7.
- [4] Shanshan Liao, Lijia Yu, Jan-Louis Kruger, and Erik D. Reichle. “Dynamic reading in a digital age: new insights on cognition”. In: *Trends in Cognitive Sciences* 28.1 (2024), pp. 43–55. DOI: 10.1016/j.tics.2023.08.002. URL: <https://doi.org/10.1016/j.tics.2023.08.002>.
- [5] D.J. Leu and C. Maykel. “Thinking in New Ways and in New Times About Reading”. In: *Literacy Research and Instruction* 55.2 (2016), pp. 122–127. DOI: 10.1080/19388071.2016.1135388.
- [6] J. Gilbert. “A Study of ESL Students’ Perceptions of Their Digital Reading”. In: *An International Journal Online* 17.2 (2017), pp. 179–195. URL: <https://readingmatrix.com/files/17-z2d49xa9.pdf>.
- [7] B.-Y. Cho. “Competent Adolescent Readers’ Use of Internet Reading Strategies: A Think-Aloud Study”. In: *Cognition and Instruction* 32.3 (2014), pp. 253–289. DOI: 10.1080/07370008.2014.918133.
- [8] I. C. Chou. “Understanding on-screen reading behaviors in academic contexts: a case study of five graduate English-as-a-second-language students”. In: *Computer Assisted Language Learning* 25.5 (2012), pp. 411–433. DOI: 10.1080/09588221.2011.597768.
- [9] J. Park, Y.C. Hsieh, and J.S. Yang. “University level second language readers’ online reading and comprehension strategies”. In: *Language Learning and Technology* 18.3 (2014), pp. 148–172. URL: <http://llt.msu.edu/issues/october2014/parkyanghsieh.pdf>.
- [10] C. Hahnel, F. Goldhammer, J. Naumann, and U. Kröhne. “Effects of linear reading, basic computer skills, evaluating online information, and navigation on reading digital text”. In: *Computers in Human Behavior* 55 (2016), pp. 486–500. DOI: 10.1016/j.chb.2015.09.042.
- [11] M. Dixon and J. Oakhill. “Exploring teachers teaching reading comprehension: knowledge, behaviours and attitudes”. In: *Education 3-13* 52.7 (2024), pp. 963–978. DOI: 10.1080/03004279.2024.2357884.
- [12] D.J. Leu, C.K. Kinzer, J. Coiro, J. Castek, and L.A. Henry. “New Literacies: A Dual-Level Theory of the Changing Nature of Literacy, Instruction, and Assessment”. In: *Journal of Education* 197.2 (2017), pp. 1–18. DOI: 10.1177/002205741719700202.
- [13] Joel E. Bermillo and Vivian L. T. Merto. “Collaborative Strategic Reading on Students’ Comprehension and Motivation”. In: *European Journal of English Language Teaching* 7.1 (2022). DOI: 10.46827/ejel.v7i1.4148. URL: <https://doi.org/10.46827/ejel.v7i1.4148>.
- [14] K. Song, B. Na, and H. J. Kwon. “A comprehensive review of research on reading comprehension strategies of learners reading in English-as-an-additional language”. In: *Educational Research Review* 29 (2020), p. 100308. DOI: 10.1016/j.edurev.2019.100308.
- [15] H.R. Park and D. Kim. “English language learners’ strategies for reading online texts: Influential factors and patterns of use at home and in school”. In: *International Journal of Educational Research* 82 (2017), pp. 63–74. DOI: 10.1016/j.ijer.2017.01.002.

- [16] Lucia Mason, Andrea Ronconi, Barbara Carretti, Sara Nardin, and Christian Tarchi. "Highlighting and highlighted information in text comprehension and learning from digital reading". In: *Journal of Computer Assisted Learning* 40.2 (2024), pp. 637–653. DOI: 10.1111/jcal.12903. URL: <https://doi.org/10.1111/jcal.12903>.
- [17] J. S. Brueck and L. A. Lenhart. "E-books and TPACK: What teachers need to know". In: *Reading Teacher* 68.5 (2015), pp. 373–376. DOI: 10.1002/trtr.1323.
- [18] Luis Acuña-Torres, Roger Flores-Pezo, Blanca I. Lazo-García, and María R. Rivera-Campano. "Impact of Technological Tools for Reading Comprehension in Post-Pandemic Schoolchildren". In: *International Journal of Religion* 5.9 (2024), pp. 411–424. DOI: 10.61707/0ebepr62. URL: <https://doi.org/10.61707/0ebepr62>.
- [19] Rika Herda, Nuraeningsih Nuraeningsih, Dewi Kusumastuti, and Rhoda Principe. "Teaching Reading Using Storyberries for Indonesian Young Learners". In: *Education and Human Development Journal* 8.2 (2023), pp. 20–29. DOI: 10.33086/ehdj.v8i2.4835. URL: <https://doi.org/10.33086/ehdj.v8i2.4835>.
- [20] K.F. Kehoe and A.S. McGinty. "Exploring teachers' reading knowledge, beliefs and instructional practice". In: *Journal of Research in Reading* 47.1 (2024), pp. 63–82. DOI: 10.1111/1467-9817.12440.
- [21] J. T. Zamora and J. J. M. Zamora. "21st Century Teaching Skills and Teaching Standards Competence Level of Teacher". In: *International Journal of Learning, Teaching and Educational Research* 21.5 (2022), pp. 220–238. DOI: 10.26803/ijlter.21.5.12.
- [22] A.F. Laeli, S. Setiawan, and S. Anam. "Reading Digital Text As a New Literacy in ELT: Teachers' Perception & Practices". In: *ETERNAL (English, Teaching, Learning, and Research Journal)* 6.2 (2020), p. 312. DOI: 10.24252/eternal.v62.2020.a9.
- [23] J. Li. "Development and validation of Second Language Online Reading Strategies Inventory". In: *Computers and Education* 145 (2020), p. 103733. DOI: 10.1016/j.compedu.2019.103733.
- [24] M. Reiber-Kuijpers, M. Kral, and P. Meijer. "Digital reading in a second or foreign language: A systematic literature review". In: *Computers and Education* 163 (2021), p. 104115. DOI: 10.1016/j.compedu.2020.104115.
- [25] N. Brun-Mercer. "Online Reading Strategies for the Classroom". In: *English Teaching Forum* 57.4 (2019), pp. 2–11. URL: https://americanenglish.state.gov/files/ae/resource_files/etf_57_4_pg2-11.pdf.
- [26] S. Dlodla, S. Govender, and H. Mhlongo. "Teaching strategies used by English First Additional Language teachers in teaching reading for comprehension". In: *Edelweiss Applied Science and Technology* 8.6 (2024), pp. 6717–6729. DOI: 10.55214/25768484.v8i6.3446.
- [27] N. Klapwijk. "Teachers' own use of reading strategies: Does it transfer to their teaching?" In: *Language Matters* 47.2 (2016), pp. 297–321. DOI: 10.1080/10228195.2016.1198826.
- [28] N. Lintang Pertiwi and E. Iftanti. "A conceptual article: The teachers' role in implementing cognitive reading strategies to enhance students' reading comprehension". In: *Journal of English Language Teaching and Learning (JETLE)* 6.1 (2024). URL: <http://ejournal.uin-malang.ac.id/index.php/jetle>.
- [29] J. W. Creswell. *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research*. 4th ed. Pearson, 2012.
- [30] B. Demir, Y. E. Haverkamp, J. L. G. Braasch, and I. Bråten. "Investigating the role of prior knowledge in comprehending intratextual and intertextual relationships when reading multiple texts". In: *Learning and Individual Differences* 111 (2024), p. 102442. DOI: 10.1016/j.lindif.2024.102442.
- [31] A. T. Dagnaw. "Revisiting the role of breadth and depth of vocabulary knowledge in reading comprehension". In: *Cogent Education* 10.1 (2023). DOI: 10.1080/2331186X.2023.2217345.

- [32] L. Agustin, E. T. Wisudaningsih, and R. Fatmawati. "Exploring How Skimming and Scanning Fosters EFL Students' Reading Comprehension at an English Club Senior High School in Indonesia". In: *Tamaddun* 22.1 (2023), pp. 20–27. doi: 10.33096/tamaddun.v22i1.309.
- [33] V.A. Sandi. "Applying Skimming Strategy in Teaching Reading Descriptive Text". In: *Celt: A Journal of Culture, English Language Teaching & Literature* 20.1 (2021), p. 184. doi: 10.24167/celt.v20i1.530.
- [34] M. Alrizq, S. Mehmood, N. A. Mahoto, A. Alqahtani, M. Hamdi, A. Alghamdi, and A. Shaikh. "Analysis of Skim Reading on Desktop versus Mobile Screen". In: *Applied Sciences* 11.16 (2021), p. 7398. doi: 10.3390/app11167398.
- [35] A.F. Laeli, S. Setiawan, and S. Anam. "EFL Pre-service Teachers' Online Reading Strategy Use and their Insight into Teaching Reading". In: *International Journal of Learning, Teaching and Educational Research* 21.10 (2022), pp. 139–160. doi: 10.26803/ijlter.21.10.7.
- [36] K. Song, B. Na, and H. J. Kwon. "A comprehensive review of research on reading comprehension strategies of learners reading in English-as-an-additional language". In: *Educational Research Review* 29 (2020), p. 100308. doi: 10.1016/j.edurev.2019.100308.
- [37] L. Yanbastieva-Petrova. "Activating Background Knowledge: Digital Tools in the Pre-Reading Stage of Foreign Language Lessons". In: . XXXVA.0 (2024), pp. 193–200. doi: 10.46687/RW XD6139.
- [38] K. Song and B. Y. Cho. "Exploring bilingual adolescents' translanguaging strategies during online reading". In: *International Journal of Bilingual Education and Bilingualism* 24.4 (2018), pp. 577–594. doi: 10.1080/13670050.2018.1497008.
- [39] M. Macedo-Rouet, G. Saux, A. Potocki, E. Dujardin, Y. Dyoniziak, J. Pylouster, and J.-F. Rouet. "Fostering university students' online reading: effects of teacher-led strategy training embedded in a digital literacy course". In: *Instructional Science* 52.6 (2024), pp. 1021–1054. doi: 10.1007/s11251-024-09676-6.
- [40] S. H. Soroya, A. S. Ahmad, S. Ahmad, and M. S. Soroya. "Mapping internet literacy skills of digital natives: A developing country perspective". In: *PLoS ONE* 16.4 April (2021). doi: 10.1371/journal.pone.0249495.