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EFL Pre-Service Teacher' Online Reading Strategy Use and Their Insight to Teach Reading

Abstract. The purpose of this study is to investigate the usage of the online reading strategy among EFL pre-service teachers in the Education Program and their pedagogical practices in teaching online reading. 107 participants from the English Education program in East Java were involved in this study. A mix-method design was used as the research approach. For data collection, this present study used a closed-ended $question naire of the Second\ Language\ Online\ Reading\ Strategy\ Inventory$ (SLORSI) and a semi-structured interview. 13 p22 icipants from each university were involved in the interview session. Based on the statistical analysis of the questionnaire, it was found that EFL pre-service teachers were at a high level of usage of online reading strategy (M=3.71-4.14). And the most frequently used was the Saving strategy (M = 4,14). However, the interview result was inconsistent with the questionnaire; although the participants were at a high level of usage of online reading, the participants showed different perspectives on teaching online reading. The participants mention inadequate reading digital literacy and strategies for future reading classes. Therefore, this study suggests that EFL education programs must highlight the importance of providing explicit practice for pre-service teachers using the online reading strategy and model the strategy for future students.

Keywords: Indonesian EFL pre-service teachers; online reading strategy; digital reading text; teaching online reading

1. Introduction

The internet provides digitally based material or information for our reading. As a result, reading activity has migrated from print to online/digital texts. Besides the changes in the medium of reading; paper text, and screen text (Coiro & Dobler, 2007; Cho, 2014; Dobler & Eagleton, 2015; Cho & Afflerbach, 2017), there are several changes, including readized habits and practices (Jang et al., 2020). Printed texts show that the reader reads multiple forms of traditional texts, such as books and magazines, while in online reading, readers actively engage with reading digital texts such as websites, e-books, and text messages. The practice of scaffolding in reading has also changed where scaffolding must be supported by using technology to fit the needs of students in 21st-century learning (Kucirkova et al., 2015; Arifani, 2020). Another essential part of technology development in reading is the new literacy in online reading comprehension. Leu et al. (2012) mention that the usage of the internet as a result of technological advancement offers new literacies in online reading comprehens 177, they are; 1) reading to notice significant concerns; 2) reading for locating information; 3) reading for critically assessing information; 4) reading to synthesizing online information; 5) reading and writing to exchange internet knowledge.



There is little empirical evidence, particularly among adolescents, to support claims that printed and digital texts are distinctive media that necessitate different cognitive processes (Cho, 2014; Cho & Afflerbach, 2017). Commonly, traditional cognitive reading skills focus on strategic comprehension of a single text, ranging from literal and inferential comprehension (Cho, 2014). A traditional cognitive strategy is required for online reading but is insufficient; cognitive flexibility is required for online reading (Coiro & Dobler, 2007). Cognitive flexibility requires readers to use past knowledge flexibly within the multiple texts from different sources/hypertexts available on the Internet (Coro & Dobler, 2007; Cho & Afflerbach, 2017). Further, Cho (2014) claims that internet reading is successful when readers efficiently navigate a range of digital sources and make informed judgments about what to read, how to sequence their selections, and when and where to read further and access new sources or not. Thus, new types of strategic knowledge are required in the online reading process, including identifying, locating, analysing, and utilising informative material accessible on the Internet (Coiro and Dobler, 2007; Cho and Afflerbach, 2017). In addition, Gilbert (2017) investigated how English students (in an ESL environment) interpret and assess reading using digital literacy abilities. He implies that language learners use different reading strategies and practices while reading web material. Furthermore, Gilber 132017) advises that digital literacy abilities should be developed alongside traditional literacy abilities in the target language, including reading.

Several previous studies have investigated reading strategies in the online environment (Coiro & Dobler, 2007; Chou, 2012; Cho 2014; J. Park et al., 2014, Hahnel et al., 2016). These studies have produced many claims about how students use strategies when reading online; one of which is that the success and experience of students using online reading strategies depend on how their teacher scaffolds the reading process (H. R. Park & Kim, 2017). However, those previous researchers have not investigated how teachers experience online reading strategies in much detail, including the pre-service teacher. As stated by Leu, Jr. et al. (2004) that in line with the emergence of new literacy in internet integration in classroom learning; particularly in online reading literacy; it is crucial to study how teachers manage the learning experience in new literacy, both in the teacher's own experience in using online reading strategies and how teachers teach their students these strategies.

In Indonesian context, previous research contributed to pre-service teachers' online reading strategy was done by Mudra (2018). He focuses on the portrait of the use of reading online strategy by pre-service teachers at one of the Unive 23 lies in Indonesia. The limitations of his study are; first, the instrument used in the study was the Online Survey of Reading Strategies (OSORS), which adopted the Metacognitive Awareness of Reading Strategy Inventory (MARSI). This instrument was believed to fail to address the distinctiveness and specific features of online reading, such as new cognitive strategies and social communication (Li, 2020). Second, Mudra (2018) has not investigated pre-service teachers' perspectives on digital reading literacy that impacted their pedagogy knowledge, particularly how to teach online reading in their future reading classes. As Larson

(2013) states, educators must recognize digital reading literacy and assist students in determining which reading strategies to employ. The learning experiences of pre-service teachers when they are in education will have an impact on their readiness to become teachers (Hikida et al., 2019), their perception of what kind of teacher they will become (Griffith, 2017), and their level of awareness of how to become a teacher and how to use specific teaching strategies in their future classrooms (Iwai, 2016; Zamora & Zamora, 2022). Therefore, this study highlights the importance of an online reading strategy for EFL pre-service teachers, particularly in Indonesia, during their undergraduate degrees. Proficiency as a teacher in emerging literacies necessitates knowledge, abilities, and attitudes intimately related to the subject, context, and pedagogy (Larson, 2013; Tafazoli et al., 2020). Mainly teaching how to use digital media in reading instruction in response to new and evolving technologies (Maden, 2018). Therefore, this present study aims to investigate:

- 1. What online reading strategy is used by EFL pre-service teachers in reading online texts?
- 2. How are EFL pre-service teachers' insights in teaching online reading strategies for their future reading classes?

2. Literature Review

2.1 Online Reading Strategy

Reading strategies are contextual activities of human cogn on aimed at achieving a particular reading objective in the broadest sense. Reading strategies are selected, structured, and implemented based on how readers engage with the materials and sources accessible in the task context. Consequently, a strategic reader would respond actively to the texts by retaining the fundamental and evolving objectives, and this responsiveness influences their reading strategy selection and coordination (Cho, 2014). Further, a comprehensive study evaluation on reading comprehension techniques was conducted by Song et al., (2020). She believes there is a significant link between students' reading competency and strategy utilization; ESL/EFL readers may learn to utilize higher-order thinking methods to increase their reading ability.

Using computers and the internet is one of the advantages of using CALL in English teaching and learning. This multimedia gives a wealth of materials, including text, graphics, video, animation, computer data, online libraries, and e-jou als. There is a relationship between online reading and electronic literacies, so readers need to adopt literacy skills and adjust their reading patterns and purposes in different reading environments (H. R. Park & Kim, 2017). With the different characteristics and tasks of online text, language learners experience new challenges where traditional reading strategies are not enough to help them read online text. One example is when entering keywords in a search engine, they will be presented with more than ten choices relevant to the keywords they entered, so they must be able to decide, which text should be read first, second, and next (Cho & Afflerbach, 2017). It is also in line with the research results by Gilbert (2017) that language learners use different reading strategies and practices while reading web material. As a result, online readers must learn new reading

strategies in the face of new reading settings and challenges (Reiber-Kuijpers et al., 2021).

Recently, investigators have examined the use of online reading strategies by preservice teachers. Among them is the research conducted by Amer et al. (2010). He investigated students' online reading strategies, which were limited to differences in the use of strategies by students based on gender differences (male and female) and semester level (first and fourth semester) at one of the universities in Oman. Moreover, Iwai (2016) examined pre-service teachers' use and understanding of metacognitive reading strategies at three levels of the teacher education program (initial, middle, and final). Meanwhile, Mudra (2018) only focuses on the portrait of the use of reading online strategy by pre-service teachers at one of the universities in Indonesia. Generally, those previous studies use the existing instruments (MARSI or OSORS) to investigate pre-service teachers online reading strategies. However, Li (2020) argues that the weakness of OSORS is only adaptation items from MARSI, whereas most items taken from MARSI will only add phrases online/online to the OSORS instrument. So, it is still questionable about the instrument's validity, because eight items were taken from MARSI without any further explanation or validation. Therefore, OSORS instrument has not fully captured the complex nature of online reading, such as using both traditional print text and electronic literacy strategies (Li, 2020).

The online reading strategy questionnaire used in this research is a new self-report instrument called Second Language Online Reading Strategies Inventory (SLORSI), developed by Li (2020). The instrument includes cognitive, metacognitive, and social aspects of online reading (Li, 2020). The three aspects of focus that are measured in the instrument used in this study will provide a complete picture of frequent strategy use in online reading. Moreover, in the aspect of cognitive strategy, it will provide an overview of traditional and new cognitive strategies in online reading. Basically, in the online reading process, there is a collaborative process between traditional strategies (such as skimming, inferring, translating) with electronic literacy skills for reading (locating, synthesizing), which are also called new cognitive strategies (Leu et al., 2012; Leu et al., 2017; Li, 2020). In previous research on the Indonesian setting (Mudra, 2018), investigating online strategies by EFL pre-service teachers has not addressed electronic literacy skills, which is the uniqueness of online reading strategies. Electronic literacy skills affect how the readers approach the online reading environment (H. R. Park & Kim, 2017; Song et al., 2020). Another difference between the SLORSI and other online reading strategy questionnaires is that the SLORSI questionnaire is constructed based on three theoretical perspectives: constructively responsive reading, the Information Problem Solving (IPS) model, and new literacies of reading (Li, 2020). Thus, the information obtained from this questionnaire will comprehensively describe the strategies used by readers, especially in the new cognitive and communication strategies needed in online reading. Further, the results of this questionnaire can illustrate how readers perform new literacy practices in reading online/digital texts. For this reason, it is proper to investigate Indonesian EFL-preservice teachers using SLORSI.

2.2 EFL pre-service teachers' reading literacy and reading strategy

The New Literacies Perspective acknowledges that new literacies are everchanging and that he link between literacy and technology is transactional The transformational effects of technology on traditional (Larson, 2013). definitions of reading and learning impact the purpose, processes, medium, and act of reading (Brueck & Lenhart, 2015). So, students require new literacy skills to tap into the promise 7 emerging and changing technology effectively. However, once students utilize technology in new ways, students also alter the technology, resulting in further new literacies (Leu et al., 2017). Teachers are constantly challenged to modify their reading teaching in response to new and changing technology. Also, one of the impacts of the emergence of new literacy related to ICT development is the changing ree of teachers in the classroom (Zamora & Zamora, 2022). In the literacy era, teachers will be challenged to thoughtfully guide students' learning within information environments that are richer and more complex than traditional print media, presenting richer and more complex learning opportunities for both themselves and their students (Le 10 r. et al., 2004). Burke & Rowsell (2008) claim that educators or teachers should re-examine their beliefs about what it means to be literate in a technological world and how reading instruction should improve the complicated skills required to analyze digital texts critically. Digital Reading Literacy combines traditional book reading with knowledge of the Internet, ICT, or digital reading setting (Chen, 2017). Students must recognize, select, and retrieve important messages related to their objective due to the vast number and diversity of digital information resources. Since teachers must evaluate students' needs in var 5 us learning contexts and determine the best approach to assist them, they must be aware of the significance of, and competent in, electronic literacies and online reading (H. R. Park & Kim, 2017).

Teacher proficiency in emerging literacies necessitates knowledge, skills, and attitudes that are intricately linked to content, context, and pedagogy (Larson, 2013). Practical online training in new reading strategies would not only assist readers in overcoming challenges in reading digital texts and improve their performance in reading electronic medium materials (Li, 2020). Regrettably, not all teachers prioritize teaching the nuances of online texts and online reading strategies (Laeli [15]., 2020; Li, 2020). Also, Instructors may assist their students in improving their online reading fluency and comprehension by recognizing the unique challenges of online reading and ensuring adequate strategy instruction and digital-reading practices (Brun-mercer, 2019). Therefore, strategic training should begin with the teacher demonstrating the approach to understanding how to apply it and why it is essential.

Previous research on digital and reading literacy for the pre-service teacher is limited to integrating digital literacy practice into teaching instruction (Hoffman et al., 2019; Prasojo et al., 2018; Botturi, 2019) and digital reading literacy practices (Larson, 2013; Brun-mercer, 2019). However, there has been little discussion among EFL researchers, including in Indonesia, about the strategy used by the pre-service teacher in digital reading associated with the pre-service teacher's knowledge of digital reading literacy activities in reading class. Whereas, As future teachers, pre-service teachers are demanded not only to learn how to learn

but also to teach or transfer the knowledge to the students (Bembenutty et al., 2015); including can set an example for their students on the use of the strategy (Perry et al., 2007) and develop new strategies that contribute to the achievement of an effective teaching-learning process (Zamora & Zamora, 2022). Therefore, investigating how pre-service teachers' insight in teaching online reading strategy is essential so that their future students might solve the issue of online reading and become digitally literate.

3. Research Method

3.1 Research Design

This present study applies a mixed-method approach, with an explanatory sequential design. This design was used to explore further the results or a specific aspect of the findings (Merriam & Tisdell, 2016). The current study first relies on quantitative data collection (the questionnaire), followed by qualitative collection (semi-structured interview). The quantitative data revealed which strategies EFL pre-service teachers typically apply while reading online/digital texts. And the qualitative interviews gave insight into online reading strategy, specifically how these ideas manifested themselves in their pedagogy.

3.2 Participants and settings

107 male and female English pre-service teachers (in the sixth and eighth semesters) participated in this study. They are university students of 13 separate state and private English Education programs in East Java province, Indonesia (table 1). The participants' age range of 20-22. The study program of all participants involved in the study has the status of accredited by the Indonesian National Accreditation Body with a range of A - B. The participants involved in the interview had completed their reading series program and a complete microteaching program.

This study was conducted in early 2022 (January to March 2022). At that time, the COVID-19 pandemic situation in East Java Province was still classified as unsafe, so this research was conducted online through synchronous activity (virtual conference) and asynchronous activities (*Google Form*). Researchers coordinate and recruit participants through *What's up* chat communication. Finally, from January to March, the required data has been confirmed as saturated, so data retrieval is declared complete.

Table 1: Pre-Service Teacher's Profile

Gender	30 male & 77 females
Average age	21 years old
Semester	6th semester (64 std) & 8th semester (43 std)
Province	East Java
Questionnaire participants	107
Interview participants	13 students

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3.3 Instruments and Data Collection

3.3.1 Developing Instruments

The questionnaire was developed based on a self-report instrument for Second Language online Reading Strategies (SLORSI) developed by Li (2020). the researcher did not make changes or modifications to the questionnaire items in SLORSI since Li (2020) had checked statistically using the Confirmatory Factor Analysis (CFA) to validate the questionnaire's items. Further, theoretically, all the items had included all the aspects that meet the new literacy in digital reading. The total items of the questionnaire were 29, which is divided into four major sections. The first section was focused on the *traditional cognitive strategies*, which then included *inferring strategy* (3 items), *skimming strategy* (3 items), and *Translating strategy* (3 items). The second section was about the *new cognitive strategies*, which included *locating strategy* (3 items), *synthesizing strategy* (4 items), *saving strategy* (4 items), and *navigating strategy* (3 items). The third section examined *evaluating strategy* (3 items), and the fourth was *communicative strategy* (3 items). For each section of the questionnaire, five-point Likert scale items were used.

3.3.2 Developing Interview

The interview items focused on participants' perspectives on online reading literacy for the future students in the class, what online reading strategies they use to teach digital reading text in their future reading class, and whether they have specific reading digital text practices in their university class. The interview items were modified from SLORSI Questionnaire (Li, 2020) and the questions guide from Iwai (2016). Then, this semi-structured interview was conducted with 13 participants that were selected based on their university representativeness. The interviews were done one on one via online virtual conference. The participants' voices and videos were recorded based on their permission.

3.4 Data Analysis

The quantitive data were analyzed to know the frequency of usage strategy by determining the *Mean* (M) and *Standard Deviation* (SD). The mean score of each item and each strategy subscale obtained from the questionnaire were identified into three levels based on Oxford's language learning strategy usage (1990) (Li, 2020); high (mean of 3.5 or above), medium (mean of 2.5 to 3.4) and low (2.4 or lower). The lower the mean value of the items and strategy subscale, the least frequent the strategy used by the EFL Pre-service teachers. Contrary, the higher the mean value of the items and strategy subscale, the more frequent the strategies used by the EFL Pre-service teachers. Finally, each strategy subscale's results were statistically compared to the data evaluated with SPSS 20.

Meanwhile, the qualitative data from the semi-structured interview were analyzed based on the step proposed by Creswell (2012). The analysis including; organize the data, coding the data, coding to build descriptions and themes, reporting the findings, interpreting the findings, and validating the findings' accuracy. The result of the semi-structured interview was used to know EFL pre-

service teachers' insight about teaching reading digital literacy and online reading strategy for future students.

4. Findings

4.1 Online Reading Strategies Used by EFL Pre-Service Teachers

Traditional Cognitive strategies, New Cognitive Strategies, Evaluation Strategies, and Communication strategies. The finding will be presented based on an analysis of the frequency of using strategy items in each subscale on each dimension. Then, after all the strategy items are reported, the findings in this study will report the results of the comparison between the subscales in each dimension to find the subscale strategy on which dimension is most often used by EFL pre-service teachers online reading.

4.1.1 Dimension Traditional Cognitive Strategy

Based on data reported in table 2, all strategy items on the subscale in the dimension of traditional cognitive strategy get a high lever (M = 3.50 above). Although all strategy items in each subscale are high, there is a significant difference in the mean scores for each item among the subscale. From the three strategy items in *Infering*, the most frequently used strategy is "I check if my guesses about the online text are right or wrong" (M=3.82). It means that, in consider meanings of the text that are not clearly expressed, the participants prefer to verify their geneal predictions regarding the web material are correct or incorrect, rather than focusing on unfamiliar words or phrases. It is in line with score of strategy items in Skimming, where to determine the core concept or links between ideas at a glance, participants mostly do "I scroll up and down in an online text to find relationships among ideas in it." (M=4.12), rather than reading the first sentence of each paragraph of the entire text. And when they have a comprehension problem, they prefer to look up the meaning of difficult words in their native language, rather than looking for equivalent words in the targeted language (English) through search engines or certain dictionaries online. It can be seen from the mean score of the subscale Translating strategy items, where the item with the highest mean is "I translate difficult sentences into my native language to deal with comprehension failures" (M=4.29). And in the end, it can be concluded that the strategy ite 24 in the traditional cognitive strategy dimension oftenly used is Translating (M=3.99, SD=0.733).

Table 2. The result of Mean, Standard Deviation (SD), and Level of Dimension Traditional Cognitive Strategy

Dimension	Subscale	Items	Mean	SD	Level
		1	(M)		
Dimension	inferring	1. I check if my guesses	3,82	0,70	High
Traditional		about the online text			
Cognitive		are right or wrong.			
Strategy		6. When I read on line,	3,79	0,79	High
		I try to guess what the			
		content is going to be			
		next.			

	16			
	11. When I read on	3,79	0,82	High
	line, I guess the			
	meaning of unknown			
	words or phrases.		2.21	
skimming	2. While reading on	3,85	0,81	High
	line, I read the first			
	sentence of each			
	paragraph for a quick			
	overview.			
	18. I take an overall	3,66	0,70	High
	view of an online text			
	to see what it is about			
	the beginning stage.		0.4	
	24. I scroll up and	4,12	0,65	High
	down in an online text			
	to find relationships			
	nong ideas in it.	4.00	0.44	***
translating	7. I translate difficult	4,29	0,64	High
	sentences into my			
	native language to deal			
	with comprehension			
	pilures.		. ==	***
	14. I look for the native	3,77	0,73	High
	language equivalents			
	of terms in an online			
	pecialized dictionary.			
	26. I look for the native	3,93	0,72	High
	language equivalents			
	of key words on line by			
	using search engines.			

4.1.2 Dimension New Cognitive Strategy

In the New Cognitive Strategy dimension, based on table 3, all items in each subscale are at a high level, which means that participants in this study widely use all strategy items. There are four subscales in the New Cognitive Strategy dimension: locating, synthesizing, saving, and navigating. Based on table 3, in each subscale, among locating, participants often use the strategy "I use my background knowledge about the topic to locate target information," (M=3.96). it means that, to search and identify the location of the information needed, the participant oftenly used their additional information about the topic rather than the information about the website or information from the printed text. Furthermore, among synthesizing, the most widely used strategy is on the items "I click on a hyperlink when it is important for my understanding of the current online text," (M=3.95); and "I check to see whether new information fits my reading purpose" (M=3.95). So, the participants mostly combine different sources and examine whether the content is appropriate for their reading needs to consciously build the texts' content form online reading. Meanwhile, among subscale saving, the strategy item that is widely used is "I save the link when I feel an online text is important," (M=4.50). it can be conclude that the participants oftenly save the information they found without additiononal notes or highlight about the topic. Moreover, among Navigating, the most widely used strategy item is "I remind myself of my reading purposes before clicking on a link," (M = 3.93). It means, the participants control and manage their act of moving over a website while reading. However, within the subscale in the dimension of new cognitive strategy, highest mean score is Saving strategy.

Table. 3 The Result of Mean, Standard Deviation (SD), and Level of Dimension New

Cognitive Strategy

Dimension	Subscale	Items	Mean (M)	SD	Level
Dimensi	locating	10. I use my background	3,96	0,64	High
New	Totaling	knowledge about the	0,50	0,01	1 Ingil
Cognitive		topic to locate target			
Strategy		information.			
8)		16. I use my knowledge	3,79	0,71	High
		of informational website		-,-	
		structures to locate			
		target information.			
		25. I use prior	3,80	0,68	High
		knowledge of printed			
		informational text			
		structures to locate			
		tazet information.			
	synthesizing	4. I contrast information	3,76	0,76	High
		from various pages to			
		sort out those that			
		mostly serve my			
		reading purposes.			
		9. I click on a hyperlink	3,95	0,68	High
		when it is important for			
		my understanding of			
		the current online text.			
		13. I check to see	3,95	0,60	High
		whether new			
		information fits my			
		reading purpose.			
		28. I check whether	3,85	0,55	High
		information on a new			
		webpage fits my			
		understanding of the			
		te. 2.	4.50	0.70	7 7 1
	saving	5. I save the link when I	4,50	0,73	High
		feel an online text is			
		important.	110	0.76	IEak
		15. When I feel an	4,10	0,76	High
		online text is important,			
		I save it together with my notes.			
			4.07	0.77	LI;~l-
		22. When I feel an	4,07	0,77	High
		online text is important,			
		I save it with			

		2			
		nighlighted information			
	į	n it.			
	[:	27. I save pages bearing	3,89	0,78	High
	:	similar information in			
		an internet bookmark			
		folder for future			
		eviewing.			
navi	gating	19. I consciously control	3,79	0,65	High
		my reading path by			
		clicking on suitable			
		inks.			
		21. Before I start reading	3,66	0,79	High
		new website, I glance			
		over the website's main			
		nenu.			
		23. I remind myself of	3,93	0,70	High
		my reading purposes			
		pefore clicking on a link.			

4.1.3 Dimension Evaluating Strategy

For subscale evaluating on the evaluating strategy dimension, based on the item strategy table 4, all strategy items are at the High level (Mean= 3.50 above), but among the item strategy within this dimension, the highest score of Mean was "*I look for multiple online texts on the same topic*" with Mean=3.93 and SD=0.70. It means that participants tend to find and analyze a similar idea to find information for a particular topic rather than text that contains various sides of the topic.

Table. 4 The Result of Mean, Standard Deviation (SD), and Level of Dimension New Evaluating Strategy

varuating Strategy					
Dimension	Subscale	Items	Mean	SD	Level
		1	(M)		
Dimension	evaluating	8. When reading on line, I	3,75	0,67	High
Evaluating		look for sites that cover			
Strategy		both sides of an issue.			
		12. I look for multiple	3,93	0,70	High
		online texts on the same			_
		pic.			
		29. I critically analyse and	3,74	0,65	High
		evaluate the information			
		presented in an online text.			

4.1.4 Dimension Communication Strategy

Based on table 5, In the communicative subscale in the dimension communicative strategy, participants show variations in the use of this strategy, there are two levels in this subscale, namely High and medium, in which the highest item used by the participants is "I collaborated with others online to gain a deeper understanding of a text" with mean = 4.01 and SD = 0.79. In understanding the text, participants more often collaborate with others to find a deeper understanding of the information they get through the online text. However, unlike the level results on the strategy items, one of the items in the communication subscale has resulted at

the medium level, "I communicate with other readers by leaving comments in message areas," (M=3,28; SD=0,87). it means that participants in this study tend not to communicate with other users in an enormous scope; where they tend not to know each other; while understanding the information in a digital text. Of course, this result contrasts with the other two strategy items in subscale communication. So, from the inconsistency of these results, it can be concluded that the participants in this study prefer to communicate and collaborate with other users who are still in the same community they know, such as close friends or classmates.

Table. 5 The Result of Mean, Standard Deviation (SD), and Level of Dimension New Evaluating Strategy

Dimension	Subscale	Items	Mean	SD	Level
		1	(M)		
Dimension	Communication	3. I collaborate with	4,01	0,79	High
Communicative		others online to gain			
strategy		a deeper			
		understanding of a			
		text. 1			
		17. I communicate	3,28	0,87	Medium
		with other readers			
		by leaving			
		comments in			
		message areas.			
		20. I discuss my	3,83	0,95	High
		comprehension			
		problems on online			
		social media (eg.			
		Facebook,			
		WhatsApp, Wechat,			
		etc.).			

4.1.5 Subscale Strategy Among Dimension

This study also analyses each subscale across dimensions through the mean, standard deviation score, and level. In table [21] can be seen that all subscales are in a high-level position (Mean = 3.50 above). However, even though all subscales are at a high level, there is a slight difference in their mean scores. The highest mean loss was in the Saving subscale (Mean=4.14 and SD= 0.793). It means that Saving subscale strategy in the New Cognitive strategy was more frequently used than the other subscale strategy across dimensions. It means that participants in this study use electronic technology to preserve significant or comparable online text material. Moreover, the lowest subscale strategy is communication, which implies that online readers communicate, discuss, and participate with others to address their reading challenges using network services.

Table. 6 The Result of Mean, Standard Deviation (SD), and Level Subscale among Dimension

Dimension	Subscale	Mean (M)	SD	Level
Dimension Traditional	Inferring	3.80	0.769	High
Cognitive strategy	Skimming	3.88	0.746	High
	Translating	3.99	0.733	High
Dimension New Cognitive	Locating	3.85	0.680	High
strategy	Synthesizing	3.88	0.656	High
	Saving	4.14	0.793	High
	Navigating	3.80	0.724	High
Dimension Evaluating Strategy	Evaluating	3.80	0.677	High
Dimension Communicative strategy	Communication	3.71	0.923	High

4.2 EFL Preservice Teachers' Insight on Reading Digital Literacy and Strategy

The data to answer the second research question was taken from the interview result. Thirteen participants were invited to the interview session. The result of the interview will be reported as follow;

4.2.1 EFL Pre-Service Perspective on Online Reading Literacy

The first item from the interview was about EFL pre-service teachers defining online reading literacy practices. Based on the responses in the interview sessions, most EFL pre-service teachers define online reading literacy practices as an activity to improve their reading understanding through internet media specifically, they also said that online reading is an activity to obtain and understand messages or information in text written via the internet:

"In online reading to find information, I will teach the students how to search information. I will ask them to write related keywords based on the topic they find in the google browser". (Pre-service Teacher 5)

"Online reading practices including the process of reading or understanding the meaning of text in digital format or in online". (Preservice Teacher 7) "Online reading literacy practices is an activity that is involved in the process of obtaining information or messages conveyed by the author to the reader through internet media". (Preservice Teacher 13)

However, some respondents say that online reading is the process of reading text in the form of soft file sprit pdf, epub, etc., making it easy for readers to read anywhere without carrying the printed book.

"online reading is a kind of reading which is in format electronic. By online reading, we can read anything what we want and where we want only with our gadget, not only that, online reading no need confused to find words and pages, we can easily by typing the words or pages on the search". (Preservice Teacher 3)

From the responses in this study, it can be implied that EFL pre-service teachers have different knowledge about online reading activities. Some of them already understand that online reading activity is an activity to promote their reading literacy digitally through the media. However, some still say that online reading is just a non-printed text reading activity.

4.2.2. Locating, Saving, and Evaluating as The Strategy to Teach Online Reading

The second focus of the interview was asking the English pre-service teachers how they will teach online reading to their future reading classes. The interview result indicated that, firstly, the EFL pre-service teacher tends to teach their future students how to search the internet using the background knowledge of the topic (Locating). Further, they explain that in searching the information on the internet, they will suggest the students' type keywords related to the topic of their target information.

"in online reading to find information, I will teach the students how to search information. I will aks them to write related keywords based on the topic they find in the google browser". (Pre-service Teacher 5)

The following strategy mentioned was about saving the information deemed appropriate to the topic of information (Saving). Specifically, the participants explained that they will teach students to save the information obtained into a specific folder on their laptops or cell phones.

"after the students find the information, I will teach them how to save, if it is in the form of pdf/word it should be downloaded, and save it in their folder, but if it is kind of website, I will ask them to copy all the information, and save it into word file". (Pre-service Teacher 8)

The last strategy shown based on the interview was searching information from various websites, hyperlinks, or texts on the internet for the same topic (evaluating). The EFL pre-service teachers explained that students must find resources to collect more information about the topic.

"Another important strategy to teach online reading is to find more information about the topics from different websites or links, that is appearing on the search page when they are searching for information". (Preservice Teacher 13)

4.2.3 The EFL Pre-Service Teachers Need Specific Intervention to Teach Online Reading

The last issue in the interview session is whether the students got explicit or specific subjects to teach online reading for their future students. Based on the interview, the students mentioned that they did not get specific or direct intervention about teaching online reading; they claimed that they had personal experiences searching for information from the internet, more in writing class, and some content classes that they had to present a theory. Commonly, they were asked to find a reference source for their presentation material. However, they did not receive training on teaching online reading according to needs in reading digital literacy for their future reading class.

"So far, I have never received any special material that discusses how to teach reading when students have to read online (looking for information on the internet). Yes, usually, when the TEFL course is related to reading learning in class, the lecturer only focuses on several learning strategies that we can use for reading learning, such as the KNWL strategy, etc". (Preservice Teacher 4)

5. Discussion

Based on the findings in this study, it is known that the participants showed a high level of using the strategies. In other words, participants tend to use all the strategies described in the questionnaire frequently. These conditions could be due to the characteristics of the participants. The participants in this study were generally 20-21 years old, who belong to digital natives (Prensky, 2001). And, digital natives already have basic computer skills in using internet media in information retrieval since they have been familiar with using technology in their lives. Hahnel et al. (2016) state that readers who already have basic computer skills profoundly influence the digital reading process. Further, the findings of this study also confirm a retaint by Alieto et al. (2020). In his report, pre-service teachers between 18 – 25 show a positive attitude toward reading digital text since they have a solid understanding of technology and digital resources. Therefore, it is reasonable that all participants in this study show high levels on all item strategies.

Additionally, the four strategy dimensions result shows that the highest mean score is in New Cognitive Strategies (M = 3.9), in which the highest subscale is the *Saving* strategy. The result is in line with the claim of Dobler & Eagleton, (2015), who stated that internet or web texts provide various information that can be obtained and organized more efficiently, thus making online readers more likely to save and sort the information they feel necessary or relevant to the topic they are looking for. Furthermore, in the traditional cognitive strategy dimension, the *Translation* subscale has the highest mean value among the other subscales (M=3,99), meaning that online readers more often use the help of their mother

tongue to understand the information contained in the texts they read. This finding is in line with Song et al. (2020), which states that bilingual online resources are used in applying the comprehension strategy when reading online, including dictionaries that online readers often use. After all, from the questionnaire results in this research, the combination strategy between traditional and new cognitive strategies that participants often use are *Translating* and *Saving*.

Another essential point from the finding is using a communicative strategy to read online. The item in the communicative subscale shows that the participant did not take collaborative communication to broader users on the internet within the text/web. Indeed, online communication is a crucial aspect of online reading practices (Leu et al., 2012). Because in communication, readers do collaborative efforts by discussing, sharing, and negotiating to improve reading performance and comprehension (Orosco & O'Connor, 2014). The study also highlights an essential social element unique to online reading: communicative techniques. Such that, second language online readers employ new information and communication 1 echnologies to ask each other questions, discuss, and share to collaboratively co-construct meanings of texts. In this sense, online reading is no more an isolated activity but the collaborative efforts of online readers to address reading difficulties (Kiili et al., 2012). Such interactive and dialogic procedures assist online readers in increasing their cognitive awareness of learning (Liu et al., 2014). It is critical to assist with new literacy in online reading and comprehension, which includes the capability to interact over the internet to gain more information, collaborate on information, or convey the information you have learned.

Nevertheless, the findings of the study's online reading strategy used by EFL preservice teachers also provide an overview of how online readers approach online reading for their learning (Song et al., 2020). The results of this study indicate that Indonesian EFL-Pre1 rvice teachers were high users of online reading strategies inventory (within traditional cognitive strategies, new cognitive strategies, evaluation strategies, and communicative strategies). The finding of these strategies was in contrast to the research results of Mudra (2018) and Iwai (2016) which showed that EFL Pre-service teachers were Medium users of online reading strategies.

In addition, the result of the interview concerning pre-service teachers' insight on teaching online reading is inconsistent with the result of using the online reading strategy from the questionnaire. First, their understanding of digital reading literacy practices shows that most participants mention literacy practices is the ability to search for information within the text on the web or hyperlinks. In contrast, literacy practices in online/digital texts do not only focus on the ability to seek information. Literacy practice includes analyzing the information within the text in the webs/hyperlinks, evaluating the credibility of the information sources critically, and synthesizing all the information found from the texts within various sources (Leu et al., 2011; Leu et al., 2012; Brun-mercer, 2019). Further, in addition to the four skills, literacy practice in online reading also includes the

ability to communicate and collaborate with other online users while reading online (Li, 2020; Kiili et al., 2018). Second, the interview result shows that preservice teachers did not comprehensively understand what strategies they would give their future students when reading online. They only stated that three strategies would be given: locating, saving, and evaluating. Of course, this result contrasts with the statement of Song et al., (2020), Li, (2020) and Reiber-Kuijpers et al. (2021), which states that in the online strategy, there is a collaboration in the use of printed text strategy (traditional strategy) and online text (new cognitive strategy) as well as a communication strategy. Beside that, participants stated that they had not been given an explicit program on how to teach online reading with appropriate strategies for online reading for their future reading classes. Laksani (2019) states that providing direct intervention on developing technology for English teaching is essential. Teachers must be trained to teach online reading with the appropriate strategy (Larson, 2013; Brun-mercer, 2019) so they can model it for their students (Perry et al., 2007).

This study supports the claim that teachers must evaluate students' needs in various learning contexts and determine the best approach to assist them. Teachers must be aware of the significance of, and competent in, electronic literacies and online reading strategies (Park & Kim, 2017). And, such teaching strategy training should be strated from teacher education program (Mohammadi 2020; Ndebele & Legg-Jack, 2022). Therefore, it is essential to provide EFL preservice teachers with the acceptable practice of online reading strategy to respond to digital literacy practices for their future students in reading class.

6. Conclusion

This present study reveals that EFL pre-service teachers use most of the various strategies in online reading, cognitive strategies (traditional and new), metacognitive strategy (evaluation), and social strategy (communication). The findings of the most frequent online reading strategy used by EFL pre-service teachers in this study advise teachers and pre-service teachers on potential digital reading strategy training in their teaching with more precise objectives. However, the online reading strategy experience does not imply their pedagogical practice as future teachers. During their undergraduate degrees, EFL pre-service teachers program must highlight the importance of digital reading literacy training and online reading strategy practices, particularly in Indonesia. Also, educators should obtain training on how to use such skills in pre-service teachers' professional lives. In this regard, the language curriculum should provide the fundamentals of digital reading, train excellent digital readers and teach how to integrate digital media in reading education in response to ne 20 and emerging technology. The limitation of this study is that it has not investigated the challenges faced by pre-service teachers in teaching practicum of online reading and how low and high proficient readers differ in using the online reading strategy inventory. So, the next researcher is expected to take this issue to be investigated further.

7. References

- Alieto, E., Abequibel, B., & Ricohermoso, C. (2020). An Investigation on Digital and Print Reading Attitudes: Samples from Filipino Preservice Teachers from a Non-metropolitan-based University. Asian EFL Journal, 27(43), 278– 311.
 - https://www.researchgate.net/publication/346470298_An_Investigation_on_Digital_and_Print_Reading_Attitudes_Samples_from_Filipino_Preservice_Teachers_from_a_Non-metropolitan-based_University
- Amer, A., Barwani, T. Al, & Ibrahim, M. (2010). Student Teachers' Perceived Use of Online Reading Strategies. *International Journal of Education and Development Using Information and Communication Technology*, 6(4), 102–113. https://brockhaus.com/stahl/kaltband-in-ringen/verguetungsstaehle/c-45/
- Arifani, Y. (2020). Cartoon video-assisted learning: An investigation into the acquisition of EFL children's incidental vocabulary. *Call-Ej*, 21(2), 17–31. http://callej.org/journal/21-2/Arifani2020.pdf
- Bembenutty, H., C.WHite, M., & R.Velez, M. (2015). *Developing Self-regulation of Learning and Teaching Skills Among Teacher Candidates*. Sringer. https://doi.org/DOI 10.1007/978-94-017-9950-8
- Botturi, L. (2019). Digital and Media Literacy in Teacher Education. *Nordic Journal of Digital Literacy*, 14(3), 147–163. https://doi.org/10.4018/978-1-5225-4059-5.ch006
- Brueck, J. S., & Lenhart, L. A. (2015). E-books and TPACK: What teachers need to know. *Reading Teacher*, 68(5), 373–376. https://doi.org/10.1002/trtr.1323
- Brun-mercer, N. (2019). Online Reading Strategies for the Classroom. *English Teaching Forum*, 57(4), 2–11. https://americanenglish.state.gov/files/ae/resource_files/etf_57_4_pg2-11.pdf
- Burke, A., & Rowsell, J. (2008). Screen pedagogy: Challenging perceptions of digital reading practice. Changing English: Studies in Culture and Education, 15(4), 445–456. https://doi.org/10.1080/13586840802493092
- Chen, S. F. (2017). Modeling the influences of upper-elementary school students' digital reading literacy, socioeconomic factors, and self-regulated learning strategies. *Research in Science and Technological Education*, *35*(3), 330–348. https://doi.org/10.1080/02635143.2017.1314958
- Cho, B.-Y. (2014). Competent Adolescent Readers' Use of Internet Reading Strategies: A Think-Aloud Study. *Cognition and Instruction*, 32(3), 253–289. https://doi.org/10.1080/07370008.2014.918133
- Cho, B.-Y., & Afflerbach, P. (2017). An Evolving Perspective of Constructively Responsive Reading Comprehension Strategies in Multilayered Digital Text Environments. In E. Susan (Ed.), *Handbook of Research on Reading Comprehension* (Issue January, pp. 1–28). Guilford Publications.

- https://www.researchgate.net/publication/317021664
- Chou, I. C. (2012). Understanding on-screen reading behaviors in academic contexts: a case study of five graduate English-as-a-second-language students. *Computer Assisted Language Learning*, 25(5), 411–433. https://doi.org/10.1080/09588221.2011.597768
- Coiro, J., & Dobler, E. (2007). Exploring the online reading comprehension strategies used by sixth-grade skilled readers to search for and locate information on the Internet. *Reading Research Quarterly*, 42(2), 214–257. https://doi.org/10.1598/rrq.42.2.2
- Creswell, J. W. (2012). Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research (Fourth Edi). Pearson.
- Dobler, E., & Eagleton, M. B. (2015). *Reading the Web: Strategies for Internet Inquiry* (Second Edi). The Guilford Press.
- Gilbert, J. (2017). A Study of ESL Students' Perceptions of Their Digital Reading. An International Journal Online, 17(2), 179–195. https://readingmatrix.com/files/17-z2d49xa9.pdf
- Griffith, R. (2017). Preservice teachers' in-the-moment teaching decisions in reading. *Literacy*, *51*(1), 3–10. https://doi.org/10.1111/lit.12097
- Hahnel, C., Goldhammer, F., Naumann, J., & Kröhne, U. (2016). Effects of linear reading, basic computer skills, evaluating online information, and navigation on reading digital text. *Computers in Human Behavior*, 55, 486–500. https://doi.org/10.1016/j.chb.2015.09.042
- Hikida, M., Chamberlain, K., Tily, S., Daly-Lesch, A., Warner, J. R., & Schallert, D. L. (2019). Reviewing How Preservice Teachers Are Prepared to Teach Reading Processes: What the Literature Suggests and Overlooks. *Journal of Literacy Research*, 51(2), 177–195. https://doi.org/10.1177/1086296X19833297
- Hoffman, J. V., Svrcek, N., Lammert, C., Daly-Lesch, A., Steinitz, E., Greeter, E., & DeJulio, S. (2019). A Research Review of Literacy Tutoring and Mentoring in Initial Teacher Preparation: Toward Practices That Can Transform Teaching. *Journal of Literacy Research*, 51(2), 233–251. https://doi.org/10.1177/1086296X19833292
- Iwai, Y. (2016). Promoting strategic readers: Insights of preservice teachers' understanding of metacognitive reading strategies. *International Journal for the Scholarship of Teaching and Learning*, 10(1). https://doi.org/10.20429/ijsotl.2016.100104
- Jang, B. G., Ryoo, J. H., & Smith, K. C. (2020). Latent Profiles of Attitudes Toward Print and Digital Reading Among Adolescents. *Reading and Writing*, 34(5), 1115–1139. https://doi.org/10.1007/s11145-020-10104-7
- Kiili, C., Laurinen, L., Marttunen, M., & Leu, D. J. (2012). Working on

- understanding during collaborative online reading. *Journal of Literacy Research*, 44(4), 448–483. https://doi.org/10.1177/1086296X12457166
- Kiili, C., Leu, D. J., Utriainen, J., Coiro, J., Kanniainen, L., Tolvanen, A., Lohvansuu, K., & Leppänen, P. H. T. (2018). Reading to Learn From Online Information: Modeling the Factor Structure Reading to Learn From Online Information. https://doi.org/10.1177/1086296X18784640
- Kucirkova, N., Sheehy, K., & Messer, D. (2015). A Vygotskian perspective on parent-child talk during iPad story sharing. *Journal of Research in Reading*, 38(4), 428–441. https://doi.org/10.1111/1467-9817.12030
- Larson, L. C. (2013). It 's Time to Turn the Digital Page. Preservice Teachers explore E-Book Reading. *Journal of Adolescent & Adult Literacy*, 56(4), 280–290.
- Leu, Jr., D. J., Kinzer, C. K., Coiro, J., & Cammack, D. W. (2004). Toward a Theory of New Literacies Emerging From the Internet and Other Information and Communication Technologies. July 2015, 1570–1613. https://doi.org/10.1598/0872075028.54
- Leu, D. J., Everett-Cacopardo, H., Zawilinski, L., Mcverry, J. G., & O'byrne, A. W. I. (2012). New Literacies of Online Reading Comprehension. *The Encyclopedia Of Applied LInguistics*, 1–9. https://doi.org/10.1002/9781405198431.wbeal0865
- Leu, D. J., Kinzer, C. K., Coiro, J., Castek, J., & Henry, L. A. (2017). New Literacies: A Dual-Level Theory of the Changing Nature of Literacy, Instruction, and Assessment donald j. leu, university of connecticut; charles k. kinzer, teachers college, columbia university; julie coiro, university of rhode island; ji. *Journal of Education*, 197(2), 1–18. http://journals.sagepub.com/doi/10.1177/002205741719700202
- Leu, D. J., McVerry, J. G., O'Byrne, W. I., Kiili, C., Zawilinski, L., Everett-Cacopardo, H., Kennedy, C., & Forzani, E. (2011). The New Literacies of Online Reading Comprehension: Expanding the Literacy and Learning Curriculum. *Journal of Adolescent & Adult Literacy*, 53(September), 5–14. https://doi.org/10.1598/JA
- Li, J. (2020). Development and validation of Second Language Online Reading Strategies Inventory. *Computers and Education*, 145, 103733. https://doi.org/10.1016/j.compedu.2019.103733
- Liu, I. F., Wu, S. Y., & Ko, H. W. (2014). Learning reading strategies with online discussion. *Journal of Educational Computing Research*, 50(2), 231–247. https://doi.org/10.2190/EC.50.2.e
- Maden, S. (2018). Digital Reading Habits of Pre-Service Turkish Language Teachers. *South African Journal of Education*, 38(December), 1–12. https://doi.org/10.15700/saje.v38ns2a1641

- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative Research A Guide to Design and Implementatiob* (Fourth). Jossey-Bass.
- Mudra, H. (2018). Metacognitive Online Reading Strategies among Pre-Service EFL Teachers in Indonesia. *Educational Process: International Journal*, 7(2), 151–164. https://doi.org/10.22521/edupij.2018.72.5
- Ndebele, C., & Legg-Jack, D. W. (2022). The Impact of Mentoring in the Development of Pre-Service Teachers from a University in South Africa. *International Journal of Learning, Teaching and Educational Research*, 21(3), 88–105. https://doi.org/10.26803/ijlter.21.3.6
- Orosco, M. J., & O'Connor, R. (2014). Culturally Responsive Instruction for English Language Learners With Learning Disabilities. *Journal of Learning Disabilities*, 47(6), 515–531. https://doi.org/10.1177/0022219413476553
- Park, H. R., & Kim, D. (2017). English language learners' strategies for reading online texts: Influential factors and patterns of use at home and in school. *International Journal of Educational Research*, 82(October), 63–74. https://doi.org/10.1016/j.ijer.2017.01.002
- Park, J., Hsieh, Y. C., & Yang, J. S. (2014). University level second language readers' online reading and comprehension strategies. *Language, Learning and Technology*, 18(3), 148–172. http://llt.msu.edu/issues/october2014/parkyanghsieh.pdf
- Perry, N. E., Hutchinson, L., & Thauberger, C. (2007). Mentoring student teachers to design and implement literacy tasks that support self-regulated reading and writing. *Reading and Writing Quarterly*, 23(1), 27–50. https://doi.org/10.1080/10573560600837636
- Prasojo, L. D., Mukminin, A., Habibi, A., Marzulina, L., Sirozi, M., & Harto, K. (2018). Learning to teach in a digital age: ICT integration and EFL student teachers' teaching practices. *Teaching English with Technology*, 18(3), 18–32. https://tewtjournal.org/download/3-learning-to-teach-in-a-digital-age-ict-integration-and-efl-student-teachers-teaching-practices-by-lantip-diat-prasojo-amirul-mukminin-and-akhmad-habibi/
- Prensky, M. (2001). Digital Natives, Digital Immigrants. *On the Horizon*, *9*(5), 3961–3979. https://doi.org/10.1177/1461444818783102
- Reiber-Kuijpers, M., Kral, M., & Meijer, P. (2021). Digital reading in a second or foreign language: A systematic literature review. *Computers and Education*, 163(December 2020), 104115. https://doi.org/10.1016/j.compedu.2020.104115
- Song, K., Na, B., & Kwon, H. J. (2020). A comprehensive review of research on reading comprehension strategies of learners reading in English-as-an-additional language. *Educational Research Review*, 29, 100308. https://doi.org/10.1016/j.edurev.2019.100308

- Tafazoli, D., Gomez-Parra, M.-E., & Abril, C. A. H. (2020). Computer-Assisted Language Learning (CALL) Literacy: a Comparative Study in Spain and Iran. *International Journal for 21st Century Education*, 7(December), 3–18. https://doi.org/10.21071/ij21ce.v7i1.13220
- Zamora, J. T., & Zamora, J. J. M. (2022). 21st Century Teaching Skills and Teaching Standards Competence Level of Teacher. *International Journal of Learning, Teaching and Educational Research*, 21(5), 220–238. https://doi.org/10.26803/ijlter.21.5.12

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