

# **Online Reading Strategies Developed By Students During The Covid-19 Pandemic. A Case Study on the Fifth-Semester English Literature Study Program (Elsp) At Hasanuddin University**

**By**

**Dian Nauwala Putri**

Faculty of Cultural Sciences, Hasanuddin University

Email: [dianwlpt@gmail.com](mailto:dianwlpt@gmail.com)

**Abidin Pammu**

Faculty of Cultural Sciences, Hasanuddin University

**Nasmilah**

Faculty of Cultural Sciences, Hasanuddin University

## **Abstract**

The descriptive study focused on investigating the reading strategies developed by students over the crisis of the COVID-19 pandemic. The respondents were the fifth-semester English Literature Study Program (ELSP) students at Hasanuddin University who have experienced almost two years of online learning during the pandemic. The Online Academic Reading Strategy (OARS) questionnaire was developed by Mokhtari & Reichard (2002) with four indicators and 42 items was used to collect data for this study. The findings indicate that students reported high use of online reading strategies during online learning for almost two years. Students' online reading strategies were varied into four types: Global Strategies, Problem-Solving Strategies, Support Strategies, and Socio-Affective Strategies. The 75% of the data revealed that the students preferred reading strategies was to have the support reading strategies, as it becomes easy when the learning activities surrounded online. Moreover, the result of this case study found that students differed significantly in general and category use of online learning before and during the Covid-19 pandemic. These results imply that the technology used also needs to be considered to enhance the learners' needs, so it could create a conducive environment because learning strategies have changed since the Covid-19 pandemic changed all aspects of life, including education. The findings generate pedagogical implications requiring lecturers during the COVID-19 pandemic to be constantly aware of the students' preferred online reading strategies and their psychological aspects for teaching as an implication after the pandemic.

**Keywords:** Reading Strategies, Online Reading Strategies, Reading Comprehension, Covid-19 Pandemic, Case Study

## **Introduction**

A pandemic is a worldwide spread of a new disease that disrupted all aspects of daily life, including education. One of the biggest pandemics happens in many countries such as Asia, Africa, Europe, The Middle East, North America, and South America, which have announced or implemented the closure of schools and universities. According to the World Health Organization (WHO) on May 8, 2020, the coronavirus (COVID-19) is quickly spread from person to person, leaving it extremely dangerous if several individuals are gathered in one room. The Covid-19 outbreak was unexpected and forced to cause changes in teaching and

learning (Moorhouse, 2020). Due to the widespread Coronavirus disease (Covid-19) in Indonesia, the government's requirements to change the learning model from a face-to-face to an online learning model in early 2020.

Teaching activities surrounded via virtual which teachers from different backgrounds and ages must prepare and present their classroom learning materials from home. The practice becomes ineffective due to the lack of knowledge and understanding about the technology, a mandatory skill teachers and students need to understand in the online learning model. Research showed that there is a need to understand the reliability of the information technology facility to support access to online learning (Sunardiyo, 2021). On the other hand, students also face difficulties due to the lack of a good learning attitude, self-discipline, suitable learning materials, and environment at home. However, it was found that an increasing number of students' Academic Performance in the application of 'Emergency Remote Teaching' raises the possibility of considering the future condition that we would need to integrate digital technology into educational processes (Pradas et al., 2021).

Many research has been conducted on English reading until now because as time goes by, people who constantly read will always be curious to find an effective strategy. There are lots of reading strategies that exist in the educational context relating to individual learning style preferences, they are: the students' metacognitive strategies, cognitive strategies, mnemonic or memory-related strategies, compensatory strategies, affective strategies, social strategies, and self-motivating strategies (Anderson, 2003). In relation to the Covid-19 pandemic where all the learning activities taught via virtual, it also caused changes in personal learning strategy, especially in reading through online or digital reading. As Kujipers et al. (2021) found in literary works, a contradictory comprehension of the digital reading strategy used by readers occurs. However, it is worth noting that the strategy increases did not necessarily impact the readers' comprehension of their reading skills. Therefore, the number of research commonly used the survey called Online Survey of Reading Strategies (OSORS) that have been introduced from (Mokhtari & Reichard, 2002) to focus on the kind of reading strategies used by second language readers and its differentiation between EFL and ESL readers' online reading strategies they measured three categories of reading strategies. The strategies are differentiated into global reading, problem-solving, and support strategies.

A number of research associated with the shifting chart number of cases during the Covid-19 pandemic that began in 2020 until now 2022 changed our daily activities, especially educational activities (Pier, Hough, Christian, Bookman, Wilkenfeld, & Miller (2021), Donnelly et al. (2021), Engzell et al. (2021) Pradas et al (2021) Erni (2021) Rianto (2021) Amran (2021) Alawiyah et al. (2022) Pammu et.al (2021) Williams et al. (2021). The focus of research is mainly on the specific aspects of which the pandemic impacted the practices that emergency changes from the usual activities. In addition, many researchers are looking forward to doing their research in an educational setting, which caused lots of cases and reflections. Each of the research inputs makes innovative methods developed to make a change in educational settings. Due to the pandemic Covid 19, Erni (2021), Rianto (2021), & Setiawati (2022) found the input of reading comprehension strategies that suit the emergency of remote teaching. However, there appear to have some problems with the research limitations because this topic is brand new. Especially in the Indonesian context, the developing countries that are still trying to revise and make a lot of effort are considered the input to found the innovation of the compelling method of the learning strategy (Pramana et al. 2021). This limited number of research drives a strong desire to carry out related research that focuses on the Indonesian educational context in the students' reading strategies developed during the Covid-19 pandemic.

Having the gap mentioned above, this study will explore how the online reading strategies developed by the students and how the students perceive online learning during emergency remote teaching. The future result will make the lecturers' and students' learning process more practical even after the pandemic changes. The researcher wants to propose research related to students reading strategies development due to the pandemic of Covid-19 to see the reflections.

## Literature review

Discussion of reading strategies appears in current research in line with the classification of language learning strategies. A reading strategy is a way or plan selected by the reader to accomplish the meaning of a reading text. Readers who are not strategic often encounter difficulties in reading comprehension (Paris et al. 2005). Some readers may know how to use appropriate strategies to enhance text comprehension (Alderson, 2000). Therefore, reading strategies is important because it has generally been found that successful readers understand how to read their text due to their chosen strategy. As developed by Oxford (1992), there are six classifications of learning strategies: cognitive, metacognitive, memory, affective, compensation, and social strategies. There are three major categories in the literature on reading strategies: cognitive, metacognitive, and compensation. Singhal (2001), cited in Magogwe (2013), categorized broader specific reading strategies: cognitive reading strategies, memory reading strategies, compensation reading strategies, effective reading strategies, and social reading strategies.

Studies on online reading strategies have been conducted in the last two decades. Online reading strategies have been used in the past years. Huang (2009) explores three dimensions of online reading strategies: comparing paper and online reading strategies, labeling EFL/ESL learners' online reading strategies, and examining the effectiveness of strategy use in a Web-based learning environment. These dimensions are used to find the significant difference between reading and online reading strategies used in different ways. As Alexander (1998) stated, 'strategies' need to naturally be procedural, purposeful, effortful, intentional, and facilitative. Therefore, measuring the different ways of reading strategies needs to rely on the current research. As time goes by, the learning process may change as the learning improves. Due to the pandemic, online reading strategies have been developed to fit the current emergency remote teaching situation, where all learning activities should be applied online. As Faust & Glenzer (2009) stated, the online reading strategy is a useful pedagogical tool and an effective way to enhance readers' comprehension that fits their enjoyment of literature. In the era of globalization, the rise of the World Wide Web, and the emergency of remote learning, online reading has become popularly used as the primary source for readers. Mokhtari and Reichard (2002) developed an inventory of online reading strategies called MARSI and OSORS. Both inventories were then widely used by experts who intended to determine learners' metacognitive reading strategies. The measure of those inventories included in four board categories of reading strategies: Global Reading Strategies, Problem-Solving Strategies, Support Strategies, and Socio-Affective Strategies.

## Research Methodology

The mixed-method design was applied for this research. This study used two research instruments: a questionnaire and an interview. The questionnaire of this study was adapted from Mokhari & Reichard (2002). Survey Online Reading Strategy (SORS) then has its renewal due to the emergency remote learning adapted from Erni' (2021). The questionnaire

consisted of 42 items which were classified into four categories: Global Reading Strategies, Problem-Solving Strategies, Support Strategies, and Socio Affective Strategies using the Likert scale. The scale comprises four points of answers: strongly disagree, disagree, agree, and strongly agree.

The participants were chosen with a purposive sampling technique. The researcher took 20 % of the population as the study subjects; they are 32 fifth-semester English Literature Study Program (ELSP) students at Hasanuddin University who have experienced almost two years of online learning during the pandemic.

In carrying out the research, the researcher collected the data by distributing questionnaire. The first step of the data collection is giving questionnaires to the fifth-semester students selected as the data source. The questionnaires are in the form of Google Forms to follow the rules of social distancing by the time the questions are being distributed. The questionnaires aimed to determine the students' reading strategies' development in the online classroom's last two years. Having all the data collected, the researcher scored and calculated the result of the student's answers to the questionnaire to determine the students' reading strategies development in the courses delivered in the online reading classroom during the COVID-19 pandemic.

The data analysis procedure then accumulated based on the category by using SPSS. The focus of the data analyzed is divided into students' online reading strategies in general, students' online reading strategies specifically in the four strategy types (Global Reading Strategies, Problem-Solving Strategies, Support Strategies, and Socio Affective Strategies), and the most and least frequently-used online reading strategies by the students.

## Result and Discussion

### Result

The result of the study reveals the frequency statistics of the students' reading strategies, which were divided into four strategy types: Global Reading Strategies, Problem-Solving Reading Strategies, Support Reading Strategies, and Socio-Affective Strategies.

**Table 1** *Students' Reading Strategy Based on The Strategy Types*

Strategy Type	Categories			Mean	Std. Deviation	Rank
	High	Medium	Low			
GLOB	17%	72%	11%	3,8	0,92	2
PROB	18%	64%	18%	4,1	0,89	3
SUP	25%	75%	0%	3,3	1,13	1
SOC	22%	56%	22%	3,8	1,11	4

Table 1 above reveals the frequency statistics of the students' reading strategy, specifically the four strategy types. It shows that the students' most frequently used reading strategy was Support Reading Strategies with a mean of 3.3 and a standard deviation of 1,13. The second was Global Reading Strategies with a mean 3.8 and a standard deviation 0.92. The third was SocioAffective Strategies with a mean of 3.8 and standard deviation 1.11, and the least frequently used reading strategy was Problem-Solving Reading Strategies with a mean 4.1 and standard deviation 0.89. Further, it can be interpreted from the table that the students' use of reading strategies was mainly categorized in the medium category in every strategy type. In Support Reading Strategies, 75% of the items are classified in the medium category, followed by Global Reading Strategies with 72%, Problem-Solving Reading Strategies with 64%, and Socio Affective Reading Strategy with 56%.

It can be concluded from the mean scores of every strategy type that the students developed a strong preference for using reading strategies when they need another reference materials, faced problems understanding the text, like guessing the meaning of unknown words, re-reading the text, etc. On the other hand, they show their development by using online reading strategies to help them comprehend the text, especially during online reading classes. Besides, the standard deviation indicates that the students' use of the four online reading strategies is almost the same, for instance, in the use of Support Reading strategies.

In addition, the students' reading strategies development is described more specifically based on each item of the four categories. The description is displayed in the following tables:

## Students' global reading strategies

The first types of online reading strategies applied by students over the crisis of Covid-19 pandemic is presented in Table 2 below:

**Table 2**

Item	Global Reading Strategies	Mean	Category	SD
5	I check my understanding when I come across new information.	4,3	Medium	0,92
6	I check to see if my guesses about the text are right or wrong.	4,5	High	0,70
7	I critically analyze and evaluate the information presented in the text.	4,5	High	0,66
10	I have a purpose in mind when I read.	4,5	High	0,61
14	I read pages for fun.	3,5	Medium	0,95
16	I review the text first by noting its characteristics like length and organization.	3,2	Medium	1,19
18	I take an overall view of the text to see what it is about before reading it.	4,3	Medium	0,71
20	I think about what I know to help me understand what I read.	4,2	Medium	0,72
21	I think about whether the content of the text fits my reading purpose.	3,9	Medium	0,93
23	I try to guess what the content of the text is about when I read.	4,3	Medium	0,85
26	I use context clues to help me better understand what I am reading.	3,9	Medium	1,03
28	I use tables, figures, and pictures in text to increase my understanding.	3,8	Medium	0,99
29	I use typographical features like bold face and italics to identify key information.	3,9	Medium	1,06
31	When reading, I anticipate to the text read.	3,7	Medium	0,93
32	When reading, I decide what to read closely and what to ignore.	3,9	Medium	0,77
33	When reading, I have a live chat discussion with a foreigner.	2,1	Low	1,29
34	When reading, I have a live chat discussion with friends.	2,6	Low	1,14
35	When reading, I read only on the keywords of the overall text (scanning).	3,4	Medium	1,06

Table 2 above shows the thirteen items of Global Reading Strategies (GLOB) along with the mean and standard deviation. The mean scores were analyzed to show the overall students' reading strategies, and the result indicates that among the thirteen Global Reading Strategies, almost thirteen items strategies were classified in the medium category. It reveals that the students sometimes decide what to read and what to ignore and only rely on the keywords of the overall text, famously known as scanning. The result also showed that only some of the students have a live chat discussion with a foreigner and their friends to have a better understanding about the text.

## Students' problem-solving reading strategies

**Table 3**

Item	Problem-Solving Reading Strategies	Mean	Category	SD
1	I adjust my reading speed according to what I am reading.	4,2	Medium	0,95
8	I do a critical evaluation before using the information.	3,5	Low	0,78
15	I read slowly and carefully to make sure I understand what I am reading.	4,1	Medium	0,81
17	I stop from time to time and think about what I am reading.	3,8	Medium	1,08
22	I try to get back on track when I lose concentration.	4,6	High	0,74
24	I try to picture or visualize information to help remember what I read.	4,3	Medium	0,83
30	When I read, I guess the meaning of unknown words or phrases.	4,3	Medium	0,87
38	When text becomes difficult, I pay closer attention to what I am reading.	4,3	Medium	0,76
40	When text becomes difficult, I re-read it to increase my understanding.	4,5	High	0,74
41	When understanding the reading text, I distinguish fact and opinion.	3,6	Low	1,14
42	When understanding the reading text, I look for both sides to cover the issues.	3,8	Medium	1,13

Table 3 above shows the eleven Problem-Solving Reading Strategies (PROB) items. The result indicates that reveals that mostly the students will always try to get back on track when they lose concentration and when the text becomes difficult, they re-reading the text to increase their understanding. Same like the GLOB types, the medium category is the most frequently answered by the students. It indicates the students will try to adjust their reading speed (slowly and carefully) and sometimes stop from time to time and think to understand the text better. Then, when the students face difficulty with the text, they tend to picture or visualize information, guessing the meaning of the unknown words or phrases and paying closer attention to help them remember and focus on what they read. Besides that, the students reveal they choose not to pay any attention to the critical evaluation of the reading text and sometimes distinguish between facts and opinions of the text they read.

## Students' support reading strategies

**Table 4**

Item	Students' Support Reading Strategies	Mean	Category	SD
4	I ask my self-questions I like to have answered in the text.	3,7	Medium	1,15
9	I go back and forth in the text to find relationships among ideas in it.	4,1	High	0,87
12	I paraphrase (restate ideas in my own words) to better understand what I read.	3,9	Medium	1,12
19	I take notes while reading to help me understand what I read.	3,5	Low	1,29
25	I underline or circle information in the text to help me remember it.	3,8	Medium	1,18
27	I use reference materials (e.g. dictionary/e-dictionary) to help me understand what I read.	4	High	1,08
36	When reading, I think about information in both English and my mother tongue.	3,7	Medium	0,99
37	When reading, I translate from English into my native language.	3,9	Medium	1,09
39	When text becomes difficult, I read aloud to help me understand what I read.	3,5	Low	1,38

Table 4 above shows the nine Support Reading Strategies (SUP) items that were classified as high, medium, and low categories. It indicates that the students tend to go back and forth to find relationships among ideas in the reading text, and they will use reference materials such as a dictionary/e-dictionary to help them understand the text. The other result also showed that the students sometimes do a self-questioning to help them understand the text by repeating the idea that they try to acknowledge the information shown in the text. The students also try to underline or circle the information in the text and sometimes restate the ideas of the text with their own words to help them comprehend the text. In most cases, the students agree that when they read the text, they assimilate it into their mother tongue so that they will have a better understanding of the ideas of the text. Alongside the students' work, they rarely take notes about the text they read and do a read-aloud to help them understand what they read.

## Students' affective reading strategies

**Table 5**

Item	Socio Affective Reading Strategies	Mean	Category	SD
2	I ask friends for questions by using discussion boards during online reading.	4,4	High	0,74
3	I ask friends to clarify doubts by using chat rooms during online reading.	3	Medium	1,08
11	I link to email for discussion while doing tasks online reading.	2,5	Medium	1,12
13	I play online English music box while doing reading tasks.	3,1	Medium	1,48

Table 5 above shows the four items of Socio Affective Reading Strategies (SOC). The result showed that one item is classified as high category (Number 2), which means the students tend to have a discussion with their friends using discussion boards during the online reading course. Aside from that, the other three items were classified into middle categories (Numbers 3, 11, and 13). It revealed that the students are trying to ask their friends to clarify their doubts by using chat rooms and email facilities to have a discussion while doing their task in online reading. The students also agree that they enjoy doing their reading task by playing online English music box.

### Students' the most and least frequently-used reading strategies

**Table 6**

Strategy Type	Items	Mean	SD	Rank
<b>The Most Frequently-Used Strategies</b>				
<b>PROB</b>	I try to get back on track when I lose concentration.	4,6	0,74	1
<b>PROB</b>	When text becomes difficult, I re-read it to increase my understanding.	4,5	0,74	2
<b>GLOB</b>	I have a purpose in mind when I read.	4,5	0,61	3
<b>GLOB</b>	I critically analyze and evaluate the information presented in the text.	4,5	0,66	4
<b>GLOB</b>	I check to see if my guesses about the text are right or wrong.	4,5	0,70	5
<b>SOC</b>	I ask friends for questions by using discussion boards during online reading.	4,4	0,74	6
<b>GLOB</b>	I check my understanding when I come across new information.	4,3	0,92	7
<b>SUP</b>	I go back and forth in the text to find relationships among ideas in it.	4,1	0,87	8
<b>SUP</b>	I use reference materials (e.g. dictionary / e-dictionary) to help me understand what I read.	4	1,08	9
<b>GLOB</b>	I read pages for fun.	3,5	0,95	10
<b>The Least Frequently-Used Strategies</b>				
<b>GLOB</b>	When reading, I have a live chat discussion with a foreigner.	2,1	1,29	1
<b>GLOB</b>	When reading, I have a live chat discussion with friends.	2,6	1,14	2
<b>GLOB</b>	I review the text first by noting its characteristics like length and organization.	3,2	1,19	3
<b>PROB</b>	I do critical evaluation before using the information.	3,5	0,78	4
<b>SUP</b>	I take notes while reading to help me understand what I read.	3,5	1,29	5
<b>SUP</b>	When text becomes difficult, I read aloud to help me understand what I read.	3,5	1,38	6
<b>GLOB</b>	I read pages for fun.	3,5	0,95	7
<b>PROB</b>	When understanding the reading text, I distinguish fact and opinion.	3,6	1,14	8
<b>GLOB</b>	I check my understanding when I come across new information.	4,3	0,92	9
<b>GLOB</b>	I take an overall view of the text to see what it is about before reading it.	4,3	0,71	10



The table above also describes the students' least frequently used reading strategy. As a brief description, it can be interpreted that they do not prefer to do a live chat discussion with foreigners and their friends during online learning, especially during the online reading course. Besides, when the students are confronted with reading difficulties, some strategies are likely not used by the students as the solution. The strategies are reviewing the text first by noting its characteristics like length and organization, doing the critical evaluation (distinguish fact and opinion) before using the information, taking notes or read-aloud while reading to help them understand, read pages for fun, and taking the overall view of the text to see what it is before reading the text.

## **Discussion**

After conducting the research, the researcher found that most of the fifth-semester ELSP students at Hasanuddin University's online reading strategies score possessed the medium level of the four online reading strategies. This study revealed that among the four strategy types of students' online reading strategy, the most frequently used was Support Reading Strategies, the second rank was Global Reading Strategies, the third rank was Problem Solving Reading Strategies, and the fourth rank was Socio Affective Reading Strategies. This is in line with Erni (2021), who found that among the fourth strategy types, Support Reading Strategies are the most frequently used online reading strategy by students in Indonesia. Further, Rianto (2021) indicates that Support Reading Strategies were dominantly used during the pandemic, while Global Reading Strategies were the least used of the strategy. The finding of this research also revealed the most and the least frequently used reading strategies by the students. The analysis showed that the most commonly used strategy was 'try to get back on track when losing concentration, and the most frequently used strategy was 'live chat discussion with a foreigner'. Then, this study research revealed that the students who differed and most dominant strategies were more metacognitively aware while reading the text. This finding is in line with Abidin et.al (2018), which showed that significant improvement students reading skill come from students who are more metacognitively aware. Thus, it can be concluded that during the pandemic, the most frequently used was 'read slowly and carefully to understand the reading', and the least used was 'try to picture or visualize information to help remember what was being read'. Therefore, it can be interpreted that the student preferred reading strategies vary based on their personal learning.

## **Conclusion and Suggestions**

### ***Conclusion***

The result of the analysis suggests an essential basis for considering the students' online reading strategies in enhancing successful students' reading comprehension. This study has provided information regarding the development of the students' online reading strategies used by the fifth-semester ELSP Indonesian students during the Covid-19 pandemic. During the pandemic, support reading and problem-solving strategies were more widely used, while socio-affective strategies remained the least used, which means that technological advances contributed to online reading strategy. The results of this study are in line with many of the previous studies which have discovered educational development during online learning (Erni, 2021; Rianto, 2021; Amran, 2021; Donnelly et al., 2021); Engzel et al., 2021; Pradaz et al., 2021; Abidin et al., 2021, Nasmilah, 2022; and Alawiah et al., 2022).

Online Reading Strategies developed before and during the pandemic have been proven to have other inputs on how the students adapted their learning strategies to reach successful

comprehension, especially in reading class. For almost two years of online learning, the students should have their learning strategies in a way they are able to effectively improve their reading comprehension, specifically in implementing the ideas of the written text for their reading class. It is worth noting that teaching reading comprehension has become effective, interactive, and efficient when the learning activity involves the students' use of effective learning strategies throughout the teaching and learning process. Most importantly, the outcomes where the students reading class during the pandemic affected their motivation from external and internal factors, created learning loss, and specifically changed their reading strategies throughout the online learning.

The data analyzed showed that the students tend to have their own preferred personal learning strategy, which differs from one to another based on their characteristics. The development of their online reading strategies for almost two years has proven the students used to support strategies after problem-solving strategies have not helped their understanding of the reading. It was supported by the numbers of the data where 75% of the data revealed the students preferred reading strategies was to have the support reading strategies, as it becomes easy when the learning activities surrounded online. They tend to open their own devices when conducting online learning activities comfortably. Therefore, it could be concluded that students differed significantly in general and category use of online learning before and during the Covid-19 pandemic. The technology used also needs to be considered to enhance the learners' needs, so it could create a conducive environment because learning strategies have changed since the Covid-19 pandemic changed all aspects of life, including education.

### ***Suggestions***

This study has provided a picture of the strategies preferred by students at Hasanuddin University during online learning for almost two years. Referring to the findings and conclusion presented in the previous part, the researcher suggests additional reading strategy research to compare students from different faculties and genders, individual differences, socioeconomic status, and other factors on online reading strategies, especially in the EFL context. The lecturers could encourage their foreign language learners' motivation and use the appropriate online reading strategies to achieve student comprehension so that the knowledge becomes effective. The psychological aspects also need to contribute to rebuilding the students' learning loss due to the covid 19 pandemic in Indonesia for almost two years. It may be necessary to follow up on the cohort of students used in this study later to gain more insight into the strategies they use as they progress to higher levels of education. Another result is that metacognitive reading strategies should be regarded as an opportunity to provide students with knowledge and confidence that enables them to manage their learning and empowers them.

The major limitation of this study is that the research findings are based on the practice in a single university, specifically only in the reading class, and was from a limited number of students. A suggestion for future research is to adopt the research online learning strategies developed to meet the students' online reading strategies needs in broader ways. Another suggestion is to consider the factors that affect the students due to the unplanned emergency remote teaching so that future research can obtain a more comprehensive picture of effective strategies to cure the learning process after the Covid-19 Pandemic. Moreover, since this study did not cover the students reading skill test metacognitive and cognitive scores, it is suggested that future research will also measure the students reading skill scores towards online and blended learning and compare the differences that may affect the students' reading strategies due to the adaption of educational movement from the Covid-19 Pandemic.

## References

- Alawiah, T., Yassi, A. H., & Pammu, A. (2022). Proposed 21st Century Learning Themes in English Classrooms. *Journal of Language Teaching and Research*, 13(3), 583-589.
- Alexander, P. A., Graham, S., & Harris, K. R. (1998). A perspective on strategy research: Progress and prospects. *Educational psychology review*, 10(2), 129-154.
- Amran, d. F. (2021). Lecturers and students challenges and perception of online reading classroom during covid-19 pandemic in basic general course english mku hasanuddin university.
- Anderson, N., & Nunan, D. (2003). *Practical English language teaching* (pp. 67-86). New York: McGraw-Hill.
- Donnelly, R., & Patrinos, H. A. (2021). Learning loss during COVID-19: An early systematic review. *Prospects*, 1-9.
- Engzell, P., Frey, A., & Verhagen, M. D. (2021). Learning loss due to school closures during the COVID-19 pandemic. *Proceedings of the National Academy of Sciences*, 118(17).
- Erni, E. (2021). Online Reading Strategy in Academic Reading by Foreign Language Learners during Covid 19 Outbreak. *AL-ISHLAH: Jurnal Pendidikan*, 13(1), 374-386.
- Hsieh, P. H., & Dwyer, F. (2009). The instructional effect of online reading strategies and learning styles on student academic achievement. *Journal of Educational Technology & Society*, 12(2), 36-50.
- Huang, H. C., Chern, C. L., & Lin, C. C. (2009). EFL learners' use of online reading strategies and comprehension of texts: An exploratory study. *Computers & Education*, 52(1), 13-26.
- Iglesias-Pradas, S., Hernández-García, Á., Chaparro-Peláez, J., & Prieto, J. L. (2021). Emergency remote teaching and students' academic performance in higher education during the COVID-19 pandemic: A case research. *Computers in Human Behavior*, 119, 106713.
- Magogwe, J. M. (2013). Metacognitive awareness of reading strategies of University of Botswana English as Second Language students of different academic reading proficiencies. *Reading & Writing-Journal of the Reading Association of South Africa*, 4(1), 1-8.
- Mendikbud. (2020). Surat edaran Mendikbud: Pembelajaran secara daring dan bekerja dari rumah dalam rangka pencegahan penyebaran coronavirus disease (COVID-19) [Minister of Education and Culture Circular: Learning online and working from home in order to prevent the spread of the coronavirus disease (COVID-19)]. <http://kemdikbud.go.id/main/files/download/51e9b72ef92c6d8>
- Mokhtari, K., & Sheorey, R. (2002). Measuring ESL students' awareness of reading strategies. *Journal of developmental education*, 25(3), 2-11.
- Moorhouse, B. L. (2020). Adaptations to a face-to-face initial teacher education course 'forced' online due to the COVID-19 pandemic. *Journal of Education for Teaching*, 46(4), 1-3.
- Nasmilah. (2022). Boosting the Adult EFL literacy in Indonesian context: Revisiting the Universality of Schema Theory. *Eduvelop: Journal of English Education and Development*, 5(2), 139-154. <https://doi.org/10.31605/eduvelop.v5i2.1044>
- Oxford, R. L. (1992). Research on second language learning strategies. *Annual review of applied linguistics*, 13, 174-187.
- Pammu, A., Machmoed, H. A., Astuty, A. D., & Sahraeny, S. (2021, December). Applying Blended Learning as an Effective Model for EFL Learners' Reading Comprehension. In *The 2nd International Conference of Linguistics and Culture (ICLC-2)* (pp. 7-11). Atlantis Press.

- Pammu, A., Sahraeny, S., Nasmilah, N., & Rosmiaty, R. (2022, April). Applying Cultural-Based Narrative Text to Induce Metacognitive Reading Strategies of Proficient EFL Learners at English Department, Hasanuddin University Makassar. In 9th Asbam International Conference (Archeology, History, & Culture In The Nature of Malay)(ASBAM 2021) (pp. 447-452). Atlantis Press.
- Paris, S. G., Carpenter, R. D., Paris, A. H., & Hamilton, E. E. (2005). Spurious and genuine correlates of children's reading comprehension. In *Children's reading comprehension and assessment* (pp. 149-178). Routledge.
- Pier, L., Hough, H. J., Christian, M., Bookman, N., Wilkenfeld, B., & Miller, R. (2021). Covid-19 and the educational equity crisis: Evidence on learning loss from the CORE data collaborative. Policy Analysis for California Education. <https://edpolicyinca.org/newsroom/covid-19-and-educational-equity-crisis>
- Pramana, C., Chamidah, D., Suyatno, S., Renadi, F., & Syaharuddin, S. (2021). Strategies to Improved Education Quality in Indonesia: A Review. *Turkish Online Journal of Qualitative Inquiry (TOJQI)* Volume 12, Issue 3, July 2021:1977- 1994
- Reiber-Kuijpers, M., Kral, M., & Meijer, P. (2021). Digital reading in a second or foreign language: A systematic literature review. *Computers & Education*, 163, 104115.
- Rianto, A. (2021). Indonesian EFL university students' metacognitive online reading strategies before and during the Covid-19 pandemic. *Studies in English Language and Education*, 8(1), 16-33.
- Setiawati, M. D. A., & Budiasih, B. (2022). STRATEGIES ON TEACHING READING COMPREHENSION FOR THE JUNIOR HIGH SCHOOL STUDENTS DURING THE COVID-19 PANDEMIC. *International Journal of Research on English Teaching and Applied Linguistics*, 2(2), 15-25.
- Singhal, M., 2001, 'Reading, proficiency, reading strategies, metacognitive awareness and L2 learners', *The Reading Matrix* 1(1), 1–23, available from [www.readingmatrix.com](http://www.readingmatrix.com)
- Sunardiyo, S. (2021, March). Online learning in higher education during the Covid-19 pandemic: A case research in the Department of Electrical Engineering, Universitas Negeri Semarang. In *IOP Conference Series: Earth and Environmental Science* (Vol. 700, No. 1, p. 012020). IOP Publishing.
- Williams, H., Haynes, M., & Kim, J. (2021, October). Dual Teaching: Simultaneous Remote and In-Person Learning During COVID. In *Proceedings of the 22st Annual Conference on Information Technology Education* (pp. 111-116).