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THINK-ALOUD STRATEGY: IMPROVING READING COMPREHENSION IN AN ONLINE CONTEXT

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ABSTRACT

In response to the pandemic spread of COVID-19, universities all over the world have shifted to e-teaching. The Department of English, Mustaqbal University, College of Administration and Humanities, Saudi Arabia, used the Microsoft Teams App for teaching all courses in virtual classrooms. However, reading as a receptive skill, was difficult to teach remotely because it was not so interactive for a teacher to know whether the students have performed the assigned tasks or not. Therefore, there was a need to search for a strategy that could be integrated while using technology to help EFL students improve their reading comprehension. This strategy was think-aloud strategy which could potentially make use of participants' mental data while interpreting and responding to a text. During reading, this strategy is capable of making the mental processing covert showing direct evidence of internal reading processes. A quasi-experimental design with an experimental group and a control group was used to determine the effectiveness of this think-aloud strategy in improving the reading comprehension of 72 EFL female students majoring in English, Business, and Law. Moreover, the study also explored the instructors' and the students' perceptions towards this strategy. Results indicated that all participants viewed the think-aloud strategy very positively. The study recommends adopting a highly customized think-aloud strategy to facilitate readers' comprehension.

Contribution/Originality: This study is one of very few studies which used the think-aloud strategy to improve reading comprehension of printed texts – non-digital literacy – remotely in an emergency; without advance preparation for many obstacles such as infrastructure problems, lack of training, and weak technical support.

1. INTRODUCTION

Reading is one of the four main language skills (i.e., listening, speaking, reading, and writing). Reading is essential to the extent that competent readers are often characterized as curious, engaged learners who have a sense of being in control of their learning. Nevertheless, it is also a troublesome and complicated skill in nature. Reading is not merely asking learners to read, but it also expects them to demonstrate that they have done this successfully. In other words, a teacher must devise methods of eliciting evidence that reading comprehension has occurred (Hughes, 2003). Then, reading comprehension is manifest as the reader interacts with the text and responds to this elicitation method. Each reader brings diverse perspectives to the text that result in different interpretations.

For EFL learners, the messages conveyed through a written text may not be well-understood. In this case, they find it difficult to identify the correct meaning of the text, then their comprehension can be hindered, and their reading fluency is lowered. Indeed, previous research has indicated that when learners read passages that contain

unknown words, they are requested to process the text intensively and slowly. Understanding a text gradually builds up during the reading act and readers' making effort to comprehend it. During this process, initial predictions are confirmed, potentially ambiguous vocabulary is understood by the context, and assumptions based on previous experience are tested (Chang & Hsu, 2011; Clarke, Truelove, Hulme, & Snowling, 2014).

Coiro (2011) states that learning to read enhances the thinking process and vice versa. Consequently, when educators explicitly teach reading and thinking as mutually reinforcing processes, gains take place in both dimensions. In a sense, the teaching of thinking involves teaching students about planning, problem-solving, and metacognitive awareness, for which she quotes (Green, 2005) as "the conscious choice and systematic practice of thinking processes to suit the demands of particular situations" (p. 107). Over time, learners internalize hidden thinking processes while reading. They start to be metacognitively aware during their reading experiences while constructing meaning from a text and integrating it with their own prior knowledge. This attracted researchers to study this issue to provide a more precise roadmap for instruction of a Reading course. According to McKeown and Gentilucci (2007) "reading is a covert process actively controlled by readers to create meaning from text, and the practice of readers 'thinking about their thinking' while engaged in the reading process is known as *metacognition*" (p. 136).

In this sense, it is logical to teach students some strategies while reading to make the covert overt. Wang (2016) defines reading strategies as "self-directed actions where readers flexibly take control with a certain degree of awareness to retrieve, store, regulate, elaborate, and evaluate textual information to achieve reading goals" (p. 1790). These strategies can be either cognitive or social. The former mentally processes the extracted meaning from texts, while the latter involves interaction with peers for developing a cultural and mutual understanding of the text. This can lead to social involvement in the target language. The think-aloud strategy is a type of cognitive strategy which helps learners develop their ability to monitor their reading comprehension as it transforms the covert to be overt (McKeown and Gentilucci, 2007). Wang (2016) confirmed that the think-aloud strategy can be one of the best ways to elicit the required data for scrutinizing readers' invisible metacognitive awareness. Consequently, this strategy was adopted in this study for helping instructors teach reading courses.

1.1. Statement of the Problem

Using technology potentials in teaching reading, previous research (Alexander, 2013; Alodwan & Almosa, 2018; Aslan, Huh, Lee, & Reigeluth, 2011; Behjat, Yamini, & Bagheri, 2012; Brown & Banas, 2011; Chang & Hsu, 2011; Coiro, 2011; Coiro, 2012; Lomicka, 1998; Marzban, 2011; Tanyeli, 2009)) has suggested that the think-aloud strategy has a positive effect on several types of reading digital texts (e.g., email, instant messaging, blogs, online gaming worlds, search engines, wikis, … etc.). However, the present research is confined to the challenge to examine how the think-aloud strategy could be merged with technology to teach reading printed remotely. Therefore, this research tried to be a pioneer in this direction of scientific research as students have their paper textbooks. This study would also consider some obstacles such as infrastructure problems, lack of training, and weak technical support, which can prevent making use of technology potentials.

The study therefore attempted to answer the following question:

What is the effectiveness of the think-aloud strategy in improving EFL learners' reading comprehension in an online context? For achieving this, the study framed the following three sub-questions to analyze in this study:

1) How effective can the think-aloud strategy be in improving EFL learners' reading comprehension in an online context?
2) What are the perceptions of EFL instructors towards teaching the think-aloud strategy in an online context?
3) What are the perceptions of EFL learners towards learning through the think-aloud strategy in an online context?

1.2. Objectives of the Study

The main objective of this study was to find a strategy that teachers could follow to teach reading passages in an online context and help EFL learners improve their reading comprehension. Besides, the study aimed to focus upon the merits and demerits of using technology in teaching reading comprehension in such circumstances.

1.3. Significance of the Study

This study attempted to establish theoretical and experimental literature on reading comprehension in an online context in order to inform the practice of the nature of reading comprehension whether it is one skill, or several sub-skills combined. It has the potential to raise awareness about the think-aloud strategy as being effective both in the traditional classroom and online contexts.

2. LITERATURE REVIEW

2.1. Previous Studies

As previously mentioned, previous research proved that using technology is effective in achieving improvement in reading skills. One of its important aspects is that students are free from anxiety, and there is no peer pressure that inhibits them from language learning. For example, Tanyeli (2009) attempted to figure out the effect of web-assisted pedagogy on enhancing reading skills at Eastern Mediterranean University (EMU), Faculty of Law. The results showed that the experimental group did better than the control one. The college curriculum was then revised, and web-assisted reading skills were added accordingly. Marzban (2011) investigated the impact of Computer-Assisted Language Learning (CALL) on the quality of students' reading comprehension in an Iranian academic setting. It was concluded that the use of CALL techniques could improve students' reading comprehension.

Other studies such as Lomicka (1998) and Sukyadi and Hasanah (2010) examined the effect of the think-aloud strategy on reading comprehension. The former studied the effect of multimedia reading software on reading comprehension. Results showed that computerized reading with full glossing promoted a deeper level of text comprehension. The latter assumed that in TEFL context the effectiveness of the think-aloud strategy in scaffolding reading comprehension is still sparsely addressed. It tried to investigate the effectiveness of using think-aloud instructional scaffolding in teaching reading. The findings revealed that the improvement of the experimental group's reading comprehension was on both literal and inferential question types.

Accordingly, Coiro (2011) sought to help learners improve a new kind of literacy taking place in a digital, networked, multimodal, and multitasking world of information and communication as the traditional notions of reading comprehension, traditional methods of assessment, and traditional curricular materials are not sufficient to prepare students adequately for the new literacy (i.e., digital literacy) required online. She built her study on the existing models of think-aloud strategy instruction in nondigital texts to make explicit the particular reading and thinking strategies useful when reading across search engine results, informational Web sites, and a networked set of primary and secondary sources written from multiple points of view. Moreover, Coiro (2012) considered learners' attitudes and self-efficacy when moving into online reading environments as important factors that affect their reading performance. Successful online readers could manage texts that often change from one day to the next with patience, persistence, and flexibility. In addition, they displayed creativity and confidence. Furthermore, online readers proved to be personally productive, socially responsible, and able to collaborate with other members of a networked global community.

Bearing in mind the variables of the Coiro (2011) and Coiro (2012), the current study was driven by an emergency to apply the think-aloud strategy while teaching reading passages in a textbook. It did not overlook the affective aspect of teaching and learning in an online context. Therefore, it included investigating the perceptions of both the instructors and the students towards using the think-aloud strategy in an online context.

2.2. Theoretical Framework

One persistent issue for the current study was to establish a theoretical framework of reading comprehension and determine whether it is one skill or a group of sub-skills. An answer to this issue was found in Rost (1989) who initiated his research to investigate the claim that early reading comprehension is composed of different separate sub-skills. He administered 38 German reading tests (covering many different aspects of reading comprehension), one spelling test and one speed-of-information-processing test to 220 German second graders (114 girls and 106 boys). A principal component analysis led to one general reading comprehension component. Therefore, Rost (1989) viewed reading comprehension as a complex phenomenon consisting of various sub-skills. Moreover, he necessitated that competent readers should identify important problems, locate useful information, critically analyze the information they find, synthesize this information to solve the problems, and then communicate the solutions to inform others.

Perfetti, Landi, and Oakhill (2005) proposed a framework of reading comprehension as a global skill based on readers' answers to questions after reading of a text. They stated that reading comprehension occurs as the reader builds a mental representation of a text. To achieve this, they found that comprehension proceeds in multiple levels: word, sentence, and text level. Across these levels, comprehension processes (i.e., lexical processes, syntactic processes, and inference processes) interact with the reader's background knowledge. These processes give contextually appropriate word meanings, group words into constituents, and provide inferential representations of a text. Within this framework, these processes are commonly viewed as critical to producing higher-level comprehension. Deeper comprehension requires that the reader make inferences that bridge elements in the text or otherwise support the coherence necessary for comprehension.

Based on these different perspectives, the current study uses the above mentioned framework of Perfetti et al. (2005) as it implies that reading comprehension includes levels for words, sentences, and text. Therefore, a reader can answer different questions related to these levels in a reading comprehension test (RCT).

2.3. Research Hypotheses

1) There is no statistically significant difference between the mean scores of the Experimental Group and that of the Control Group in a -RCT.
2) EFL instructors have negative attitudes towards teaching the think-aloud strategy in an online context.
3) EFL learners have negative attitudes towards learning through the think-aloud strategy in an online context.

3. METHOD

3.1. Setting

At Department of English, College of Administration and Humanities, Mustaqbal University, KSA, the current research emerged according to the necessity of teaching all courses online in the beginning of March 2020. The experiment proceeded as follows:

1) A random assignment of six sections of first-level, Business, English, and Law students from the College of Administration and Humanities to be the Experimental Group and the Control Group.
2) Administration of the reading comprehension pre-test to both groups on March 14th, 2020 to identify the students' level before the experiment.
3) The treatment was held online using the textbook Q Skills for Success Reading and Writing Intro. The Experimental Group was taught following the think-aloud strategy while the Control Group was taught using the prescribed textbook only.
4) Administration of the reading comprehension post-test to both groups on May 3rd, 2020, to identify their level after the experiment was over.

3.2. Participants

The Department of English, College of Administration and Humanities, Mustaqbal University, KSA used Microsoft Teams App for teaching its courses in virtual classrooms. A team of students was created for each course. The team represented a virtual classroom where students gathered according to the specified schedule to have lectures with different resources such as the course syllabus, course materials (ppt files), assignments, sample quizzes, etc.

Because it is a foundational course, reading is taught only to first-level English, Business, and Law students. These students can be said to be of the same level and background since they joined college after finishing their secondary education, and they have supposedly mastered Basic English language skills. The teaching process was 100% online (not web-assisted or blended).

3.3. Design

The design adopted was the quasi-experimental as seventy-two, first-level, female students were randomly divided into an Experimental Group (EG) (n = 36 students; Business: 18, English: 6, and Law: 12) and a Control Group (CG) (n = 36 students; Business: 14, English: 7, and Law: 15). Before participating in the study, students were informed that participation in the study was voluntary, as it would not affect their GPA. Therefore, they could submit their responses to the RCT or not. The participants were pre-tested on March 14th and post-tested on May 3rd. Both quantitative and qualitative methods were employed for interpreting and comparing the improvement achieved by both groups after the treatment.

3.4. Instruments

The data were gathered through two instruments. First: the RCT aimed to determine the participants' reading comprehension at the word, sentence, and text levels. Before administering the test, the participants were informed that it was an inquiry about their experience of having an online reading course, so they should feel free to participate or not as it would not affect their final results in the course. Second: semi-structured interviews were designed (see Appendix A and Appendix B) to aid the researcher in extracting the depth of the experiences from the instructors and the students on the succeeding three days of administering the RCT.

3.5. Validity and Reliability

Designed to be administered online, the RCT consisted of three reading comprehension passages with ten multiple-choice questions in each. To be validated, it was sent to three instructors from the Department of English, College of Administration and Humanities, Mustaqbal University, KSA. They confirmed its validity and asked for a few modifications, which were done accordingly. Subsequently, the piloting of the RCT was performed on 34, second-level college students on March 13th, 2020, to make sure that all the items were clear, and to discover any unexpected problems, and also to measure its reliability. Students reached a consensus that all items were clear. The SPSS (Statistical Package for Social Sciences) Statistics V25.0 was used for analyzing the results of the current study. Because it was difficult to administer the test twice or use another rater, the reliability of the test was measured using the coefficient of Cronbach Alpha for internal consistency. The test reliability was .7326. This showed that the test was highly reliable, which gave a lot of confidence in its consistency. Therefore, the test was applicable in its final form.

3.6. Data Analysis of Interviews

Interviews were tape-recorded, and then transcribed using MAXQDA 2020 software to find patterns of recurring themes that further turned into broad categories. In the data analysis, open coding was used as the process of data analysis. Quotes from the interviews were used to back up and support the themes identified.

4. RESULTS AND DISCUSSION

This section presents the results of the experiment in light of the research questions and hypotheses and discusses the results in light of the theoretical background and related studies.

4.1. For Answering the First Question

The first questions stated: How effective can the think-aloud strategy be in improving EFL learners' reading comprehension in an online context? In Coiro (2011), the structure of the think-aloud lesson was introduced in a four-stage, flexible online reading plan as follows:

- *Approaching*: Readers approach reading tasks with a problem-solving mindset that prompts them to determine their purpose, anticipate the challenges, and make a flexible plan.
- *Negotiating*: Determining important ideas, judging the relevance of those ideas in relation to their purpose, investigating author credentials, detecting author agendas, and corroborating questionable claims.
- *Monitoring*: At several points in the thinking process, readers stop to revisit their purpose while monitoring both their understanding of the content and the relevance of their chosen reading path.
- *Responding*: It involves summing up key ideas, making connections, looking deeper, asking questions, and contributing their own ideas in response to the posed challenge.

That is, the think-aloud strategy explicitly teaches students thinking while reading a text. In a sense, the think-aloud strategy helps students recognize, label, and define a range of more and less familiar cueing systems. Engaging in this type of conscious think-aloud strategy focuses attention on aspects of reading comprehension that might otherwise go unnoticed. That is, in this strategy, a teacher pauses while reading to verbally model the thought processes of a skilled reader as they interact with a text.

On March 14th, 2020, the RCT was administered to the study participants to make sure that they were equal in their reading comprehension before the experiment. The results of the pre-test are included in Table 1. A *t*-test for independent samples was also calculated which shows that the *t* value was not significant ($p > .05$). The results of the pre-test are included in Table 1.

Table-1. t Value of the EG and CG on the reading comprehension pre-test.

Group	No. of Students	Means	St. Deviations	Degree of Freedom	t Value	p
Experimental	36	9.39	2.979	70	.452	.653
Control	36	9.69	2.755			

On May 3rd, 2020, the RCT was administered to the EG and the CG as a post-test to answer the second question. Table 2 shows the results obtained in the *t*-test analysis for independent samples.

Table-2. t Value of the EG and CG on the reading comprehension post-test.

Group	No. of Students	Means	St. Deviations	Degree of Freedom	t Value	p
Experimental	36	49.67	5.116	49.243	10.383	.000
Control	36	28.53	11.093			

The results depicted in Table 2 show that the *t* value (10.383) is statistically significant at the level (.01) favoring the EG. This means that the EG highly outperformed their colleagues in the CG. This led to refuse the null hypothesis and accept the alternative one, stating that: "There was a statistically significant difference between the mean scores of the EG and that of the CG on the post-RCT at the level (.01) favoring the EG".

The think-aloud strategy provided the participants with a means to obtain the mental data, which can lead to new insights into their responses and interpretation of a text, as well as the influence of situational variables. Thus, it required them to express their thoughts while reading; this made covert mental processing overt and showed

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direct evidence of the internal reading process (Coiro, 2011; Wang, 2016). Therefore, it could be concluded that a highly focused and well-planned think-aloud strategy can provide readers with a common language for sharing important metacognitive strategies that facilitate comprehension.

4.2. For Answering the Second Question

The second question stated: What are the perceptions of EFL instructors towards teaching the think-aloud strategy in an online context? Three instructors participated in the study. They taught six sections divided into EG and CG. Table 3 shows the instructors' distribution according to the study groups.

Table-3. Distribution of the instructors according to the study groups.

Instructors	Experimental Group	Control Group
Instructor 1	--	14 students (Business Department)
Instructor 2	6 students (English Department) 18 students (Business Department)	--
Instructor 3	12 students (Law Department)	15 students (Law Department) 7 students (English Department)

Thus, two instructors taught the reading passages in the textbook *Q Skills for Success Reading and Writing Intro* to the EG following the think-aloud strategy while the CG was taught simply what was mentioned in the prescribed textbook. The researchers interviewed the two instructors who taught the EG a day after the experiment was over. These were semi-structured interviews using ten guiding questions, (Appendix A), each session lasted around 50 minutes. This method was adopted based on the assumption that the interview is one of the best methods of getting an in-depth and profound description of the instructors' perceptions toward reading in a virtual classroom.

For the thematic analysis of the data collected from each interview, MAXQDA 2020 was used for descriptive coding. The researcher imported the recording of the two interviews into the software to be transcribed. Going through the transcripts, a list of the recurring themes was formed and a certain code was given. The recurring themes were:

- Fluidity of the strategy.
- Teaching materials: using textbook & PowerPoint Presentations.
- Challenges: technical, self-related, student-related.
- Student-student and teacher-student interaction compared to the traditional classroom.
- Factors active hinder participation and interaction.
- Period Timing.
- Overall experience.
- Adaptation in case of repeating the experience.

Both instructors confirmed the fluidity of the strategy procedures. Instructor 2 stated, "at the beginning, it wasted more time… later it was quick and easy to get feedback". Instructor 3 stated that "It's easy and effective… I come to know what a student has understood." They agreed that the students were engaged by the end as they were more familiar with the procedures.

The think-aloud strategy also helped the instructors in keeping learners engaged throughout the entire learning session. This was also confirmed by Instructor 3 "…it's really helpful…. Each student can share what goes on in her mind…the strategy turned reading as a shareable and visible skill." Similarly, Instructor 2 supported this argument and said, "I feared weak net connectivity … But problems related to connectivity were least." Instructor 2 stated "…students have better skills than when they started the strategy … I quickly became a technical expert, adviser, constant motivator, and a prompt feedback provider".

These expressions are their positive perception of the learning strategy which helped the students learn easily and share whatever they had learned with their colleagues. One thing noted from the interview was that even though the respondents expressed their fears regarding the monitoring of learners, the strategy was efficient. Instructor 3 said, "Previously, I used to work 8 hours a day; now I work 24/7 … I can go online and look at what the students did in the team, sometimes explore students' assignments submission… there's a lot of management".

Overall, the instructors expressed their happiness with participating in this study as the teaching think-aloud while reading a comprehension passage was disciplined and organized. Students were aware of the teaching process as they were acquainted with all the procedures. Moreover, Instructor 2 pointed to a great achievement that her students' absence tapered in a distinguished manner as they no longer had problems with transportation to college.

In sum, both instructors appreciated using the think-aloud strategy in an online context. Instructor 3 could compare between the performance of the CG of Law students with that of the EG of the same department. She stated, "My EG students were much more engaged in learning, and excited to use technology in learning. I think it has made it easier to keep collaboration among students even if I wasn't there. Their interaction highly differed from that of the CG. Students quickly became engaged in solving problems while working collaboratively with their peers, and they draw on the think-aloud strategy". That is, this leads to refuse the null hypothesis and accept the alternative one, stating that: "EFL instructors have positive attitudes towards giving a reading course in an online context."

4.3. For Answering the Third Question

The third questions stated: What are the perceptions of EFL learners towards learning through the think-aloud strategy in an online context?

For answering this question, only 19 EG students' responses were collected three days after the experiment was over. The remaining students were reluctant to participate in the interview as their vacation had started. Each interview lasted 15-20 minutes. At the beginning of the interview, each student was informed that the data gathered would be used for research purposes only. The interviews took place in Arabic according to the preference of some students to make sure that they understood and answered the questions clearly and felt comfortable sharing their perceptions about the course. Students' opinions and perceptions were transcribed and translated into English.

For the thematic analysis of the data collected from each interview, MAXQDA 2020 was used for descriptive coding. The researcher imported the recording of the interviews into this software to be transcribed. Going through the transcripts, she formed a list of the recurring themes to each she gave a certain code. The recurring themes were:

- Ease of the strategy.
- Teaching materials: Using the textbook & PowerPoint Presentations.
- Usage of MS Teams App: User-friendly App, chats, instant messages.
- Challenges: Collaborating with peers, technical, autonomy.
- Interaction: Compared to the traditional or face-to-face classroom.
- Time investment: Very time-consuming.
- Overall experience.
- Repetition of experience.

Since the study was accomplished in online context, students' autonomy was highly achieved as they took more responsibility for their learning. The analysis showed that some students perceived that this course represented a challenge at the beginning. However, it was conducive to learning and autonomy overall. A student said, "… implementing this effective reading comprehension strategy inside the classroom was a great challenge as it provided me with enough elements to create meaning when I interacted with English passages". Further, it was difficult for four of them to mention the procedures of the strategy.

Most of students agreed that they felt more comfortable working with others and with the instructor's guidance. A student said, "I liked being at home and contacting my colleagues … I was very happy seeing my mum very proud of me responding to questions in English." Another student mentioned, "My instructor was very helpful to answer my questions promptly whenever I needed her feedback day and night than before." Another student mentioned, "It is challenging. It shows me that comprehension increases the enjoyment and effectiveness of reading and helps me not only academically, but in my personal life." Another one added, "After my first reading course, I feel that I have built some fluency, vocabulary, and I managed to easily understand the important ideas when reading passages".

As shown by the post-test results, they improved their reading comprehension by consciously applying the think-aloud strategy. In addition, there was a significant advancement in self-efficiency and communication in general as they were able to share their difficulties and achievements, and look for possible solutions based on their knowledge while interacting with their colleagues and the instructor. The collaborative work implied students were working together as well as with the instructor, who highly supported them. It is worth mentioning that their relationships became stronger and closer during the pandemic. Moreover, the teaching process was personalized because it was always available on the course Team, and there was constant and direct contact with the instructor whenever they needed help. Generally, they mentioned that they spent more time studying. At the beginning of the course, the students had the perception that the level of difficulty would be very high; but after having taken the course, they discovered the ease of the strategy because of the collaboration and feedback they got from their colleagues and the instructor. In addition, they reported that the instructor's constant support motivated them to finish all the required assignments and tasks. This leads to refuse the null hypothesis and accept the alternative one, stating that: "EFL learners have negative attitudes towards having a reading course in an online context ".

Having a reading course online entailed several unintended benefits such as saving time and money because students did not have to travel to attend classes at a specific time, which motivated them to study more. A student said, "The merit I got is not asking my brother or the driver to drop me at college besides saving travel time." Moreover, these classrooms helped students learn time management as it enabled them to manage their schedules according to their convenience. One student pinpointed that "My instructor was available 24/7 because she answered the messages, sent marks of the assignments, and posted messages on the team to respond to our inquires and interaction daily."

This confirms what Coiro (2012) concluded that as learners' transition from reading printed texts to making sense of information in an online reading environment, positive perceptions are key factors of effective learning. Learners with positive perceptions enjoy challenging reading tasks, and each successful task reinforces their use of the think-aloud strategy procedure.

5. CONCLUSION

Although the abstract nature of reading was the impetus of this research, it contributes several different perspectives from the participants in addition to finding statistically significant differences between the EG and CG students in reading comprehension. For instance, a few EFL students were encouraged to gradually accept responsibilities about their learning. They also played an integral role in creating an environment conducive to their learning by being able to manage time for assignments and tasks at their own pace.

Understanding the nature of implementing the think-aloud in an online context would also make it possible to provide instructors with extensive professional development to enhance their new literacy skills, along with teaching in traditional classrooms. In addition, future research should investigate the perception of a larger number of students from different academic programs about using the think-aloud strategy in virtual classrooms. Moreover, it would be interesting to have gender as a research variable. Besides, it is recommended that teachers can support their students' positive perceptions towards reading habits in EFL. Teachers have to bear in mind that the students

will not improve their use of metacognitive strategies without explicit training. In a sense, they have to provide the think-aloud strategy for effective reading.

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Appendix A
Guide of the Interview with the Instructors

Instructor's name: _____

Date: _____

Introduction: Since your experience in e-teaching matters, I request you to kindly share your experience in this reading course by responding to this short interview. I respect your confidentiality and assure you that the information recorded will be handled in a discreet manner. Only summaries of your responses will be reported for the purpose of the research.

Guiding questions:

1) Make a brief description of your experience regarding the implementation of the think-aloud strategy in your reading course.

2) What teaching materials have you been using in delivering your online lectures to students? (e.g., textbook, PowerPoint, a combination of both, other)?

3) Have you encountered any challenge(s) in accessing the MS Teams App to deliver your lectures online? (If yes, kindly state them)

4) Are the challenges you have faced in the e-teaching relevant to these categories (e.g., Technical, Self-Related, Student-related, Other)? Can you state them?

5) How would you evaluate your students' interaction with you and with peers during the online lectures compared to the traditional or face-to-face classroom teaching sessions?

6) Are there any factors you may have observed that hinder your students' online active participation and interaction?

7) Was your timing of teaching procedures affected in virtual classrooms?

8) If you are dissatisfied, please state the reason(s) behind your dissatisfaction with e-teaching?

9) Overall, how do you evaluate your experience in this reading course?

10) If you are going to restart the course, what would you change about the course?

Appendix B
Guide of the Interview with the Students

Student's name: _____

Date: _____

Introduction: Since your experience in e-learning matters, I request you to kindly share your experience in this reading course by responding to this interview. I respect your confidentiality and assure you that the information

received will be handled in a discreet manner. Only summaries of your responses will be reported for the purpose of research.

Guiding questions:

1) Tell me the steps you followed in learning a reading comprehension passage.
2) What teaching materials have you preferred in online lectures? (e.g., textbook, PowerPoint, a combination of both, other)?
3) Do you consider that the implementation of reading comprehension (think-aloud) strategy in a virtual classroom contributed to your English more than traditional classrooms? Why?
4) What kind of problems or challenges have you experienced in this course?
5) How could you define the role of your instructor in a virtual classroom?
6) How have you interacted with your instructor and peers in the virtual classroom? Was it as actively as you used to do in the traditional classroom?
7) What did your instructor use to make you active in virtual classrooms?
8) What about the time consumed in learning than you used to do in traditional reading classrooms?
9) Overall, how do you evaluate your experience (advantages and disadvantages) in this reading course?
10) What would you change about the course if you were going to take it again?

دليل المقابلة مع الطالبات

اسم الطالبة: ـــ

التاريخ: ـــــــــــــــــــــــــ

مقدمة: بما أن خبرتك في التعلم الإلكتروني مهمة، أطلب منك التفضل بمشاركة تجربتك في مقرر القراءة من خلال الرد على أسئلة هذه المقابلة. أحترم سريتك وأؤكد لك أن المعلومات الواردة سيتم التعامل معها بطريقة سرية، سيتم أخذ الردود الخاصة بك فقط لغرض البحث.

أسئلة مساعدة:

1) قولي لي الخطوات التي اتبعتيها في تعلم قطع الفهم القرائي.
2) ما هي المواد التعليمية التي فضلتيها في المحاضرات على الإنترنت؟ (على سبيل المثال، كتاب دراسي، باور بوينت، مزيج من الاثنين، وغيرها)؟
3) هل تعتبرين أن تنفيذ استراتيجية الفهم القرائي (التفكير بصوت عال) في الفصول الدراسية الافتراضية ساهم في تنمية لغتك الإنجليزية أكثر من الفصول الدراسية التقليدية؟ لم؟
4) ما نوع المشاكل أو التحديات التي واجهتيها في هذا المقرر؟
5) كيف يمكنك تحديد دور مدرستك في الفصل الدراسي الافتراضي؟
6) كيف تفاعلت مع مدرستك وزميلاتك في الفصل الدراسي الافتراضي؟ هل كان ذلك بمثل النشاط الذي تقومين به الفصول الدراسية التقليدية؟
7) ما الذي استخدمته مدرستك لجعلك نشطةً في الفصول الدراسية الافتراضية؟
8) ماذا عن الوقت الذي استغرقتينه في التعلم؟ هل كان أكثر مما اعتدتِ عليه في مقررات القراءة التقليدية؟
9) عموما، كيف تقيمين تجربتك (المزايا والعيوب) في مقرر القراءة؟
10) ماذا تودين تغييره في هذا المقرر إذا كنتِ ستأخذينه مرة أخرى؟