Online Directed Activities Related to Texts (DARTs) for EFL Reading Comprehension in the University Context¹

Devi Hellystia², Gunadarma University³, Depok, West Java, Indonesia

Abstract

There is evidence that students who struggle with reading comprehension in their first language tend to struggle with reading comprehension in English as a foreign language (EFL) as well. To avoid failure in EFL reading, it is critical to prepare effective lesson plans that assist students in developing their reading skills. A suitable strategy may help them progress in their reading mastery. Considering that the current students often are technology and internet savvy, this research aims to determine the effect of online Directed Activities Related to Texts (DARTs) on the EFL reading skills of students at a private university in Indonesia. This study is a quasi-experimental design with one group pre-test and post-test. This study included 44 university students from the architecture department. Their ages ranged from 18 to 20. The research results were analyzed using an independent t-test. The main finding of the current study was that the DARTs strategy affected EFL reading comprehension. However, the online platform appeared to have been ineffective because the university system did not adequately support it. To reduce the risks of failure, incorporating online learning and learning strategies into classes is recommended using a detailed plan that considers all contingencies.

Resumen

Hay evidencia de que los estudiantes que tienen dificultades con la comprensión lectora en su primera lengua tienden a tener dificultades con la comprensión lectora en inglés como lengua extranjera (EFL) también. Para evitar el fracaso en la lectura EFL, es fundamental preparar planes de lecciones efectivos que ayuden a los estudiantes a desarrollar sus habilidades de lectura. Una estrategia adecuada puede ayudarlos a progresar en su dominio de la lectura. Teniendo en cuenta que los estudiantes actuales a menudo son expertos en tecnología e Internet, esta investigación tiene como objetivo determinar el efecto de las actividades dirigidas relacionadas con textos (DART) en línea en las habilidades de lectura EFL de los estudiantes en una universidad privada en Indonesia. Este estudio es un diseño cuasi experimental con un grupo de pre-prueba y post-prueba. Este estudio incluyó a 44 estudiantes universitarios del departamento de arquitectura. Sus edades oscilaban entre 18 y 20 años. Los resultados de la investigación se analizaron utilizando una prueba t independiente. El hallazgo principal del estudio actual fue que la estrategia DART afectó la comprensión lectora EFL. Sin embargo, la plataforma en línea pareció haber sido ineficaz porque el sistema universitario no la apoyó adecuadamente. Para reducir los riesgos de fracaso, se recomienda incorporar estrategias de aprendizaje en línea y de aprendizaje en las clases utilizando un plan detallado que considere todas las contingencias.

Introduction

The mastery of EFL reading comprehension is in high demand among university students. They must read various academic textbooks, most of which are in English. Acquiring EFL reading skills for this purpose is more than just efficiently decoding printed text; the ultimate goal is the construction of comprehension. Text comprehension is the integration of prior knowledge with the texts being read. This activity includes a surface level, the text's foundation, and a simulated situation. As a result, reading comprehension is a multifaceted process involving a reader, a text, and a context. These interactions result in a final product of comprehension (McNamara, 2004).

Yang (2011) identified three factors which assist students in taking control of their reading in blended learning: 1) The online reading activities allowed students to extensively practice what they had learned in on-site instruction without the constraints of time and location; 2) log files for students to observe and reflect on their online reading process in strategy usage engaged students in metacognition because they were not permitted to compare their reading processes with those of their peers in on-site instruction; and 3) social interaction was facilitated in blended learning. These approaches are considered when developing effective lesson plans that assist students in developing their reading skills to avoid failure in EFL reading as well as in this study. What is missing in much of the research so far is an online platform with various kinds of learning tools without the support of the lecturers who should not simply become the operator of the tools. They should understand that tools without appropriate teaching-learning methods designed for them may not give an effective result. Thus, the application of learning tools integrated with the teachinglearning method in the online platform is considered important to promote the success of reading.

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² devi hellystia@staff.gunadarma.ac.id, 0000-0001-6401-6472

³ Faculty of Letters and Cultures English Literature.

DARTs are a series of activities designed to encourage students to engage with the text. Students can read detailed information without failing and can interpret the messages conveyed in the text. DARTs online platform strategy is thought to be effective because it allows the lecturer to find a variety of English academic reading texts. The DARTs strategy has the following advantages: (a) students' interaction with text can help to increase their reading comprehension, (b) students are aware of text construction, and (c) students become more critical of various texts. It provides a low-anxiety learning environment. The online DARTs strategy is believed to help students find more texts that will help them improve their reading comprehension.

As a result, the following research question is the focus of this study: Are there any differences in the online platform's use of the Directed Activities Related to Texts (DARTs) strategy in terms of students' EFL reading comprehension skills?

Literature Review

EFL reading

Much research has been done on the characteristics of good readers. Pang (2008) concluded that there are several dimensions of skilled readers, including proper language knowledge, cognitive processing skill, and good metacognitive competency. In a more detailed elaboration, Snow (2002) elaborated that experienced readers should be able to: (1) understand every part of the reading text, (2) connect prior knowledge with the reading text, (3) understand the purpose of reading the text, (4) analyze the structure and components of the text, (5) monitor their reading, (6) understand vocabulary in the context of reading, (7) critical thinking by exploring questions that arise during the reading process, and (8) skim before rereading.

Academic reading is considered more formal in tone and content complexity. This type of text is difficult to understand. Most academic projects require students to independently and effectively read English texts from various sources. Sulistyo (2011) argues that teaching English in non-English departments in the Indonesian context is classified as English for Academic Purposes, with the main goal of preparing students to cope with academic reading skills. This demand is difficult to meet because most students have little interest in reading any books. As a result, the majority of them struggle with reading comprehension. The length of the passage is another factor that may contribute to the difficulty in EFL reading comprehension. Students intuitively believe that the longer a text is, the more difficult it will be. This could be the source of students' reluctance to continue with text comprehension. Academic reading is further complicated as students must put more time and effort into understanding grammar and vocabulary in a less-familiar language. Winarni (2005) revealed that the majority of graduate students had a basic level of English mastery. Another factor that exacerbates the situation is that students do not take English classes seriously because they believe English is unimportant. Fahim et al. (2012) asserted that university students with poor verbal skills in English often struggle to connect the information in the text with their prior knowledge. These students typically fail to integrate ideas effectively and are unable to draw logical conclusions from the text, which hinders their overall reading comprehension.

In a more detailed analysis, Ahmed (2021) asserted that some EFL reading problems encountered by students in the tertiary context included: (1) making inferences from unfamiliar words in the text, since most students reported difficulty dealing with a more complex text that is predominantly presented with foreign words; (2) taking the gist from the text, since it is challenging for students with limited English vocabulary to grasp the gist of the text, even after consulting a dictionary for difficult words; (3) making inferences from fundamental ideas, since models of reading comprehension texts from academic English do not require students to make an inference from the implied statements, which is problematic for lower-level readers; and (4) regulating reading tasks, since EFL readers find it difficult to decide which reading strategies to employ when given a set of reading passages. They do not know what to read or how to read effectively. It is critical to consider the level of anxiety that frequently occurs in EFL reading students because L2 reading is an inherently complex process (Hudson, 2007). Zoghi and Alivandivafa (2014) stated that anxiety is "mental and physical nervousness and uneasiness." It frequently causes increased tensions, typically associated with pressures to please, fear of failure, and new experiences. Anxiety reactions in L2 reading appear not to be explainable by just one or two causal factors. Campbell and Ortiz (as cited in AlNatour, 2018) found that anxiety levels in learning a foreign language are very high among university students, with 50% of all language learning students experiencing unfavorable language anxiety. Researchers agree that appropriate reading strategies that promote anxiety-free platforms are beneficial in helping poor readers. These strategies may improve students' comprehension skills (Bongratz et al., 2002; Cramer et al., 2001).

The aforementioned evidence of issues in EFL reading among students from the non-English department indicates a need for action. Poor reading skills may lead to students' failures in their academic courses, as reading comprehension is very essential in gaining success in academic and real-life contexts. In the past few decades, different strategies have been applied. Megawati (2017) used a grammar-translation method that involved several in-class activities; firstly, a text was delivered to the students, and they were asked to read every sentence, and the next step was translating the text. If students experienced difficulties with a grammar construction, they had to clarify the meaning in the context, and apply a grammar-translation method that involved several in-class activities. Sulistyo (2011) argued that the activity of translating text does not guarantee that students can comprehend the entire content of the passage.

Directed activities related to texts (DARTs)

DARTs are a series of activities designed to encourage students to engage with the text. Students can read detailed information without failing and can interpret the messages conveyed in the text. Hameed (2017) states that DARTs is a strategy for understanding information communication in reading comprehension texts. Activities in DARTs facilitate active interaction with the given text. Tierney et al. (1995, as cited in Chaemsai & Rattanavich, 2016) propose two steps for Focused Text-Related Activities. The activities include two stages. In Stage one, the teacher directs the reading-thinking process. It involves three steps; (a) students make predictions from pictures or titles about the content of the text; (b) the teacher helps students to use strategies to understand unknown vocabulary; (c) students are directed to read the text. During the activity, the teacher checks students' performance on reading predictions and helps students who have difficulty understanding words in the text. In Stage Two, the teacher gives basic skills training by observing students' critical thinking skills while reading a text and other supporting skills such as semantic analysis, observation, and reflective abilities.

Peer-Assisted Learning Strategies (PALS) increase reading anxiety and decrease reading comprehension, whereas DARTs, Title, Headings, Introduction, Each First Sentence, Visuals, End of each Part, Summary (THIEVES), and Read, Ask, and Put into your own words (RAP) improve reading comprehension and decreased reading anxiety (Zarei & Roustai, 2019). Hameed (2017) states that the DARTs strategy has many benefits in improving students' reading skills. Some of them are improving the ability to interact with the text which leads to increasing the understanding of text construction, improving critical and analytical thinking skills, enhancing creativity and cognitive abilities to understand ideas and messages in the text either explicitly or implicitly, increasing students' reading interest, enhancing creativity, and improving higher-order thinking skills. The DARTs also do not require expensive teaching media as teachers can use various teaching media provided by the institution. It can mediate peer-collaboration skills through teachers' directions using the DARTs strategy.

There has been a plethora of research about the significance of DARTs in enhancing EFL reading comprehension. It is a strategy to develop independent readers. Some researchers indicated that this strategy enables readers to equip themselves with the ability to comprehend the purposes of reading by exploring reading materials according to the purposes and gaining information from the text. Tankersley (2005) argued that the DARTs strategy leads the reading activity to the process of higher-order thinking. It provides teachers with a great deal about each student's ideas, thinking techniques, prior knowledge, and thinking skills. Moreover, it is useful for processing all types of text. Furthermore, AbiSamara (2007) argued that the DARTs strategy was effective for teaching reading comprehension. This strategy helps students set their reading objectives by predicting, actively reading, and recollecting information from the text they have read.

Schorzman and Cheek (2004) investigated the effect of the DARTs pre-reading plan combined with graphic organizers. The research findings indicate that the modification of strategies may have a significant impact on the results of the students' pre-test and post-test. El-Koumy (2006) investigated the effects of the DARTs strategy on EFL students' referential and inferential reading comprehension in Egyptian junior high schools. The study's finding indicates there is no significant difference in referential or inferential reading comprehension between the two groups on the baseline test. The research finding suggests that referential and inferential understanding can only result from using strategies that force students to apply these reading skills. He urged the objective of reading comprehension development should be in line with the development of thinking skills.

Green (2005) stated DARTs strategy includes various text-based activities such as sequencing, tabulation, word substitution, and prediction exercises. The students believe that these activities help them understand texts and groups and collect information. Classroom activities related to texts, like DARTs, enhance the students' reading comprehension. DARTs strategy enables the students to interact with the text. The students become critical and have good reading comprehension.

DARTs are made up of reconstruction and analysis activities. It is the process of reconstructing a text or diagram by filling in missing words, phrases, or sentences and sequencing jumbled text. DARTs involve reconstruction and analysis activities, such as filling in missing elements or sequencing jumbled text, which help students engage with and understand the content. The scaffolded nature of DARTs, including providing diagrams or guidance for complex tasks, has been shown to support student learning by aiding comprehension of complex concepts and procedures (Shamsulbahri & Zulkiply, 2021). Text completion, sequencing, grouping, table completion, diagram completion, and prediction activities are commonly used. Analysis activities require students to identify and group information by labelling a text or diagram. Text marking, text segmenting and labelling, table construction, diagram construction, questioning, and summarizing are examples of activities. Poems, short stories, novels, plays, magazines, newspapers, pamphlets, history, geography, science, or textbooks are just some of the texts that can be used in the DARTs strategy. Given the current nature of university students' reliance on online information search, conventional DARTs strategies do not appear to provide reliable results for improving reading comprehension levels. As a result, more research studies in this area appear appropriate, such as an alternative to integrating the DARTs strategy and an online platform that offers flexible learning.

Online learning in EFL reading at higher education classroom

It has been empirically demonstrated that the use of online learning plays a critical role for teachers in a higher education context in terms of exploring teaching materials, delivering some materials online, and even providing an online class to students so that they do not have to attend classes. Online learning is defined as the delivery of completely online courses to support educational processes. Maltz et al. (2005) and Tao et al. (2006) argued that the term online learning is applied from various perspectives, involving learning distribution, distance learning, and hybrid learning. An online platform is considered a new environment for learning that mainly focuses on electronic networks that allow university students to receive personalized support with flexible time for learning. In the academic setting, online learning is characterized by the application of multimedia in the process of learning.

Teachers can organize courses in an online classroom. Zaid (2011) indicates that an online e-learning platform can help foreign language students' progress. He stated that online learning platforms especially when integrated with an appropriate learning strategy, can efficiently give a significant improvement in learning, particularly in the higher education context which requires students to learn independently. The online platform is an anxiety-free platform that enables students to explore more in their language performance more without being worried about committing mistakes. This mode of learning is borderless with high flexibility. EFL reading is not an exception. Online platforms have become another option for EFL lecturers to provide numerous articles that students can read since reading is seen as a process, not a product (Wallace, 1992). The online platform is believed to be very suitable for teaching EFL reading. Students use their gadgets very often, which means that teaching them through the online platform will make them use their gadgets effectively. Reading through the online platform can significantly increase students' reading comprehension and motivation. As stated by Anggeraini et al. (2019) the use of technology in teaching positively affects both teachers and students. In this case, the online platform can also provide various texts with different genres. Students reading a lot on the online platform can improve their reading ability. Moreover, a teacher can use technology to find the best online learning sources for their online teaching process.

Over the past few decades, there has been growing interest in online learning mode. Masduqi (2014) revealed that the younger generation likes online learning the most. Most of the students have gadgets. The lecturer can assist the students in using them effectively. Students can read the material from online sources. Once the students have read intensively, they will have increased their reading skills. Cakrawati (2017) found that using Edmodo or Quipper in EFL teaching was effective and efficient. Despite a slow internet connection, students believed that this online learning platform could help them use language skills, vocabulary, and learning material comprehension. This research suggested that an online platform impact students positively. In her research, Yang et al. (2013) said that students preferred e-language learning to traditional in terms of effectiveness. However, they admitted a traditional class gave them a deeper understanding of language. Dehghanpour and Hashemian (2015) discussed the effectiveness of teaching reading strategies using a web-based approach. They found that students performed better in reading after they were taught using web-based learning media.

Shi (2016) explored e-learning in China. She argued that online learning can help students' professional development outside the classroom. This intervention used Moodle as a tool to increase class attendance and homework assignment submission. This platform enabled the students and the lecturer to communicate and socialize by using chats or forums. The research was conducted in Reading and Translation courses at the School of Material Science, Luoyang Institute of Science and Technology with 179 students. A pre-course survey showed that the students had a positive attitude toward the e-learning platform. The finding showed that the e-learning platform could not completely replace traditional classroom teaching, but Moodle could be an additional teaching tool for activities. The students participated in a cooperative mode of learning with a discussion where the e-learning platform was employed.

Johnson (2013) examined the effect of technology on reading comprehension in students who were native English speakers. Most of the participants were 16 years old. They were active users of television, computers, the internet, and video games. The findings showed that there was no significant relationship between reading habits and age. However, it indicated that the reading habit via the internet or cell phones had increased.

Han (2010) studied the use of multimedia to improve reading skills. The results showed that the application of internet-based media encouraged students to increase reading motivation; in this case, reading English texts. Internet-based multimedia improved students' reading comprehension skills. This learning media seemed to be effective when applied in English reading classes. However, this study had a weakness since it used inappropriate research strategies that made it difficult for students to measure their reading mastery.

Methodology

This research was quasi-experimental with a one-group pre- and post-test design. It was conducted in 2021 and took place at a private university in Indonesia. The population in this research were all first-semester students from the non-English department who took English classes. The sampling technique used was convenience sampling because all students involved in this study had expressed their consent to be involved in the research process.

This research was quasi-experimental with a one-group pre-test and post-test design. It was conducted in 2021 and took place at a private university in Indonesia. The population in this research consisted of all first-semester students from the architecture department who took English classes. The sampling technique used was convenience sampling because all students involved in this study had expressed their consent to participate in the research process.

Participants

	N	Level of English	Learning Method	Ages
Experimental Group	perimental Group 44 Intermediate		Online Directed Activities Related to Texts (DARTs)	18-20

Table 1: Participant demographic information

The sample consisted of 44 students with an age range of 18 to 20 years (Table 1). They came from the same class and they had the same level of English proficiency, namely intermediate level. The information on the students' level of English proficiency was known from the TOEFL test results. The test was conducted by the university before all students took English classes. The TOEFL test results were used as the basis for grouping students in classes with the same level of English proficiency. This grouping was done to make it easier for lecturers to organize teaching materials according to students' level of English proficiency.

Instrument

The pre- and post-test TOEFL reading comprehension tests were used. The TOEFL test is typically given to students to prepare them for academic purposes. The reading passages use academic language with a high level of vocabulary. As testing material, expository texts from the TOEFL reading section are used, and detailed descriptions of single-context clue and double-context clue patterns are provided. The results of three focus groups of students who completed the TOEFL reading comprehension task with and without learning to use the context clues reading strategy are compared and interpreted in the following study. This method provides empirical support for the facilitative effect of critical thinking strategy training on EFL learners' reading comprehension performance.

Procedures

The paired samples t-test was used in this study to determine whether there were differences in students' reading comprehension skills before and after the online DART strategy was implemented. Before the intervention, a pre-test was administered to determine the students' learning needs, strengths, and weaknesses. After the intervention, a post-test was administered so that the results before and after the intervention could be compared. The study lasted for 14 classes or the number of classes in one semester. It took place during the second semester of the academic year 2021/2022. Reading comprehension with DART strategies was tested in an online classroom using the synchronous platform Zoom meetings. It facilitated direct interaction between the lecturer and students. The Zoom platform was selected because it provided complete tools that enabled the lecturer to explore different kinds of teaching strategies in their online classroom. Those features consisted of screen sharing, recording, and a range of annotation tools. Screen sharing allowed teachers to share digital materials with their students and record lessons which enabled students to revisit learning materials at any time and at their own pace. The lecturer utilized annotation tools to get students engaged with their teaching and learning materials by making drawings, writing notes, and giving highlights on the screen. Students could use the chat box to practice and confirm any doubts about the given reading texts. Group classes were created to set up small group discussions. The members of each group were a combination of high, medium, and low achievers. During the reading course session, the lecturer encouraged students to use active questioning to analyze and evaluate their

To begin the online class activities, the host or the lecturer invited students by sending them the link to Zoom. Students were given the passcode to join the room. Before that, the lecturer set the agenda, when the meeting would be held and students were required to come on the designated date and time. Soon after the students joined the Zoom classroom, the lecturer delivered reading comprehension activities that incorporate the following stages:

The first stage activity

This stage involved the pre-reading activity which was started by activating students' background knowledge and experiences. For this purpose, the lecturer shared a picture using the screen-sharing tool. They were asked to tell what the picture was about and the lecturer asked some questions about the activities in the pictures.

The second stage activity

The second stage activity encouraged students to interact with texts and to guide students to become critical readers. Every topic consisted of several passages that had been modified with DART activities that fit the online classroom. Students were asked to choose a text of their own and they read it carefully. For example, the topic chosen for the first meeting was education, so students were provided with five texts related to education. Once students had selected a text under the topic of *Education*, the in-class activities started. In this stage, the lecturer divided students into small group discussions using the breakout rooms. This activity encouraged them to interact with the text. Some reading strategies involved were skimming the passage and indicating the main ideas and the supporting details.

The third stage was post-reading

Students were required to reconstruct text sentences. Another activity was called text modification. In this stage, the lecturer modified the original text, taking out words, phrases, and sentences, cutting the text into segments, grouping segments of text according to categories, and summarizing when students interact with the text. These activities were purposively given to improve students' reading comprehension.

In the third stage, post-reading, students were engaged in activities designed to deepen their understanding of the text. One activity involved reconstructing text sentences, where students took original sentences and rephrased them in their own words to ensure comprehension. For example, a sentence like "Education plays a crucial role in shaping the future of individuals and societies" might be reconstructed as "Education is essential for personal and societal development." Another activity was text modification, where the lecturer modified the original text by removing certain words or phrases, cutting the text into smaller segments, and grouping them according to categories. For instance, a sentence might be altered by removing a phrase like "which leads to economic growth" and students would be asked to infer or discuss the missing information. The text could also be divided into sections, such as separating the challenges of education from the benefits it provides, and students would categorize them accordingly. Finally, students were asked to summarize the modified text, putting the key ideas into their own words, such as "Education is vital for the development of both individuals and societies, contributing to social mobility and economic prosperity." These activities aimed to encourage active interaction with the text, fostering improved reading comprehension through critical engagement and reorganization of information.

Students' average score on the TOEFL reading comprehension tests before being taught with the online Directed Activities Related to Texts (DARTs) strategy was 77.75. At this initial stage, a normality test was conducted (Table 2).

			_		
		Pretest	Posttest		
N	Valid	44	44		
	Missing	1	1		
Skewness		.110	.289		
Std. Error of Skewness		.357	.357		
Kurtosis		546	-1.053		
Std. Error of Kurtosis		.702	.702		

Table 2: The result of the Normality Test

The skewness values for the pre-test and post-test data, normalized by their respective standard errors, fell within the range of -2 to 2, confirming the assumption of normal distribution. Based on this verification, the data, classified as intervals, were analyzed using a paired sample t-test to assess the effectiveness of the online DARTs strategy. (Table 3).

			Pai	red Differen	ces				
		Mean	Std. Deviation	Std. Error Mean	_	95% terval Upper	t df		Sig. (2-tailed)
Pair 1	Pre-test and Post-test	12.74205	17.27879	2.60488	7.4881	17.99528	4.892	43	.000

Table 3: Paired Samples Test

The results of the paired sample t-test show a sig value of .000. It can be said that there is a significant difference in reading comprehension performance between the pre-test and post-test. As shown in paired samples test table, the t value is 4.892, meaning that it is in the acceptance area of Ha. Thus, there is a difference between the score of reading comprehension before and after the implementation of online DARTs. Therefore, it indicates the online DARTs strategy has a positive and significant effect on students' reading comprehension.

		N	Correlation	Sig.
Pair 1	Pretest reading and Posttest reading	44	.275	.071

Table 4: Paired Samples Correlations

The paired samples correlation table (Table 4) shows the score correlation coefficient obtained from the results of students' performance before and after the implementation of online DARTs is .275. This means that there is a very weak correlation between the pretest and posttest scores as indicated by the p-value of .071 which is greater than .05. This means that there is no correlation between the two test results so the results of the tests cannot be generalized.

Discussion

Based on statistical quantification results, the current study reveals that use of the online DARTs strategy is associated with higher scores on TOEFL reading comprehension questions. This finding supports Hameed's (2017) that students benefit from DARTs strategy, which can improve students' ability to interact with texts in reading comprehension. Another enhancement, this strategy allows students to guess the meaning of unfamiliar words while interacting with the text.

The results show that reading comprehension improves following the intervention with the online DARTs strategy, especially when dealing with a more complex academic text dominated by unfamiliar words. In the pre-intervention condition, the majority of students had difficulty making inferences. According to Ibrahim and Ahmed (2020), inferring implied information in the text is difficult for EFL university students. This task model necessitated higher-order reading comprehension skills, and this skill seemed to improve since some TOEFL reading comprehension questions require inference.

Success with the reading comprehension test also indicated that students could infer the main idea of the text. Slow readers with limited vocabulary mastery gradually improved their ability to extract the gist. Online DARTs may have motivated students to use their prior knowledge. They maintained focus on the text, controlled the reading-thinking process, and ultimately improved their inferential comprehension skills. This finding supports Almasi and Fullerton's (2012) finding that inferential ability can help students focus their attention on the text. It also encourages them to think as they read.

TOEFL reading comprehension questions require students to recognize implied ideas. The online DARTs strategy requires students to think independently because they are frequently asked to make predictions throughout the reading text during the intervention. This promotes critical thinking, especially when dealing with text. Students begin to understand the language structure used by authors and begin to explore information not included in the text. This method makes it easier for them to understand the text's implied ideas. According to Orgez and Rashid (2017), it is critical to coordinate different skills and words at the sentence level or the next level to construct a comprehension of the reading text.

Students can manage their reading assignments. The significantly higher post-test scores indicate that the online DARTs strategy may have improved students' ability to handle reading tasks. Previously, the majority of students did not know how to read or what to do when given a reading text. The teacher played an important role in educating students about reading strategies and encouraging them to improve their reading comprehension skills. During this process, the lecturer must actively work to boost students' confidence and teach them how to use reading strategies when reading the text. Effective reading strategies, according to Afflerbach et al. (2008), help students regulate their reading comprehension and improve their reading skills. A similar finding was made by Ibrahim and Ahmed (2020). They stated that EFL university students struggle to connect the ideas in different sections of the text. However, teaching students effective reading strategies will help them manage their reading and improve their reading skills (Afflerbach et al., 2008)

Unfortunately, some students continued to make insufficient progress on their post-test. This demonstrates that online learning is not always appropriate for all students. Some students enjoy the learning process on an online platform, while others do not. Technology can be frustrating for some students because there are so many buttons to press. Some students may have been accustomed to working on a computer, but others must be acquainted with working on an online platform. All lecturers must be aware that online technology has the potential to cause frustration. This finding is consistent with Shi's (2016) conclusion that an elearning platform cannot completely replace traditional classroom instruction. It can be used as an extra teaching tool for activities. Students may be afraid of failing because of their stressful situation. It emphasizes that technology is the most difficult aspect of online teaching. Before implementing online learning, lecturers should develop good lesson plans and learning strategies that meet the needs of university students.

Conclusion and Suggestions

The present study reveals that DARTs can positively impact EFL reading performance for college students in Indonesia. The results of the study indicate that most students showed improvement in their EFL reading whereas a minority decreased their performance. The cause of this decrease could be that there was no proper internet connectivity on campus, making it difficult for them to join the online classroom. The English online classroom was held between the sessions of other subjects on the same day. This made it difficult for the students to find a convenient place to join the online session, and represents a limitation of this study. These circumstances may have affected the students' performance in EFL reading comprehension, since their tardiness made the class sessions not advance as planned.

An online session can be as satisfactory as a face-to-face class, but a lot depends on how much concern and effort the teacher puts into their class instruction. It is suggested to incorporate online learning and learning strategies into classes in detailed plans by considering all factors to minimize failures. A comprehensive needs analysis is very important to assess the types of students and how the teachers need to plan their courses. It is essential to find out from the students their goals, motivations, and needs. As with a regular face-to-face, the needs analysis may give clues on how teachers should develop the activities, the content, and the expected outcomes for each student. In the context of university education, it may be a good idea to give students the flexibility to choose an interesting text for the peer discussion, summarise, and share the information in a classroom discussion. This should be a student-centered learning model with the teachers as facilitators.

From the findings of the research, it can also be inferred that advanced technology provides a lot of benefits both for the lecturers and for the students in the EFL reading teaching and learning process. It helps the lecturer to make the students engaged in the learning process. However, the use of technology in the academic setting needs to be carefully planned. The students' cognitive and affective needs should be considered. The lecturer should be familiar with all the tools too. If they are not familiar with the technology tools, it may cause a technical problem that will lead to the students' failures. If properly prepared, online DARTs can improve the EFL reading comprehension skills of university students. It may also enable students to enhance their skills in reading various English academic texts.

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