

## **CHAPTER IV**

### **FINDINGS AND DISCUSSION**

#### **A. Findings**

This research aims to explain artificial intelligence-powered applications and websites that can be used by learners for their reading comprehension and to assist them in their reading process as stated in the research' objective. The research' findings are presented in this chapter in which are divided into two: Findings and Discussion. In this section, the researcher grouped the artificial intelligence-powered applications and websites for reading process such as Pre-reading Stage, During Reading Stage, and After Reading Stage. The researcher also grouped the artificial intelligence-powered tools that can be used as assistant in reading skills such as Skimming, Scanning, Intensive and Extensive Reading. The list is as follows:

1. Artificial Intelligence-powered Tools for Pre-Reading Stage
  - a. ChatGPT

ChatGPT is one of the chatbots that the researcher chooses. It uses seamless language processing in order to create human-like conversation. Learners can ask questions about certain topics which includes articles, essays, and just a little bit about everything. ChatGPT is also available on smartphones and PC.



*Figure 1 ChatGPT's Home Page.*

ChatGPT supports the Generative Pre-training Transformer (GPT) 4 language model which offers faster response time and widely available internet plugins. GPT-4 also enables users to do more complex tasks compared to previous and or other models.

Learners can do the steps below to use ChatGPT:

- 1) Go to [chat.openai.com](https://chat.openai.com) or the mobile app, log in or sign up for free.
- 2) Type the prompt, in this case the topic of learners' choosing in the message box on the home page of ChatGPT.
- 3) The artificial intelligence-powered tool will generate a response and based on that, learners have a handful of options, such as edit or change the original prompt, enter a new prompt, regenerate the

response, copy the response, share the response or dislike the response.

Learners can use ChatGPT's search engine for the pre-reading stage of reading process to find information about the topic of their reading. Furthermore, they can ask questions regarding the details of the topics. For example, if they need to list the accomplishments of Indonesian Presidents, learners can ask just that to the artificial intelligence-powered tool and it will generate the answers for them to take notes or read.

Based off of ChatGPT's development team notes, there are several notable upgrades from previous and or other similar models such as:

#### 1) Faster Search Engine

The most notable upgrade of GPT-4 is its search engine, this makes it easier for users to engage in a conversation with the chatbot, an important feature for learners who are looking for AI tools to assist them in their reading. The AI also able to learn from algorithms, that is to keep track of what the users' need via recommendations and topic suggestions to read. Academics can also use ChatGPT for their research purposes, whether they are looking for definitions of certain terms or full explanation on how to do research e.g types of research methods for descriptive research design.

#### 2) Wide Availability of Internet Plugins

This is aligned with the ease-of-use factor for the object of the research, it means that ChatGPT is widely available for learners to access. Whether they are using ChatGPT from their smartphones or computer, ChatGPT is accessible to most types of devices and versions. This results in a cost-effective and efficient learning as learners just need a smartphone and internet connection to be able to look for their desired topics of reading.

### 3) Personalized Use

The AI chatbot of ChatGPT enables a tailored responses and or results based on the behavior and search history of the users. It also supports multilingual users if they need to translate texts from one to other languages. Like many other AI-powered tools, ChatGPT also shows recommendations and or suggestions of articles, documents or topics available for reading.

Based on the features and advantages found during the analysis for ChatGPT, learners can use ChatGPT using their smartphone or computer as long as they have internet connection available for them. The artificial intelligence-powered tool is beneficial for learners during their pre-reading stage to find ideas or topic to read. They can also use ChatGPT to ask questions regarding key points of a text if they need to find certain information quickly.

2. Artificial Intelligence-powered Tools for During Reading Stage
  - a. Quillbot

Quillbot is widely known as a tool that uses artificial intelligence to help with writing process. Its ability is well known for the use of paraphrasing, summarizing, and to correct grammar in a text. The tool is good to use for students or academics in their learning, especially reading. While it is known for its use to assist learners in their writing.

Quillbot is quite easy to use, learners only need to do these steps:

- 1) Search “quillbot” using a web browser from a smartphone or computer.
- 2) If learners want to paraphrase, click on the Quillbot Paraphraser.
- 3) Learners can either type or paste the text they want to change in the left section.
- 4) Once they are done typing or pasting the text, they can click the “paraphrase” button at bottom of the user interface. It will take a few moments to process.

There are also a few settings that learners can change according to their preference such as:

- 1) Modes, these are settings to change what the artificial intelligence focuses on learners’ text.
- 2) Synonym Slider, this setting directly affects how many words are replaced with synonyms in the text.
- 3) General Settings, these are the settings to change the dialect, paraphrasing of quotations and contraction usage.

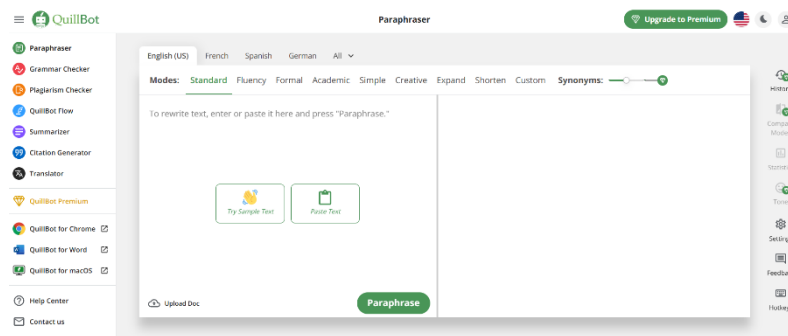


Figure 2 Quillbot's Paraphraser.

Quillbot has several advantages as a reading assistant for English language learners, such as:

### 1) Personalized Paraphrasing

Reading is a process of constructing meaning of words, a skill that leads a person to interact and gain meaning from written language. Therefore, using the paraphrase feature of Quillbot that helps learners understand and read better in order for them to learn faster but also accurate. The paraphrasing feature is Quillbot's main function, learners can input text into the tool and just in one click, the AI-powered tool will generate a new and improved text for the reader, often better than the original because Quillbot' paraphraser has several customizable options, writing styles, the option to adjust the synonyms used and many more.

### 2) Translation

In order to understand and construct a meaning behind the text, learners often have to translate the text to their native language to have better understanding of the topic. Quillbot's translates text into multiple different languages of choice, it is also completely free with

good translation quality making it one of the best tools to assist learners in their reading process.

Quillbot is a great assistant overall, not just for reading but also other English language learning activities since it can translate long texts for free, paraphrase for free and also do a quick plagiarism check for academics who are in the process of writing an academic-related text.

#### b. Paraphraser.io

Paraphraser.io is an artificial intelligence-based paraphraser developed using state-of-the-art technology. It functions as a rewriter for articles, documents and rewords sentences. It also helps to reduce plagiarism. Learners can use this tool for their reading comprehension as it stimulates them with better structured sentences, terms and synonyms. It leads to faster and more accurate understanding of certain topics.

Paraphraser.io can be used by learners to paraphrase text by following these steps:

- 1) Simply go to [paraphraser.io](https://paraphraser.io)
- 2) Type or paste the text that needs paraphrasing in the box.
- 3) Complete the captcha.
- 4) Click on the “paraphrase” button at the bottom.
- 5) Wait a few moments in order for the artificial intelligence-powered tool to paraphrase the text.

- 6) Learners can also find information regarding the paraphrased text such as, reading level, reading time, and speaking time.

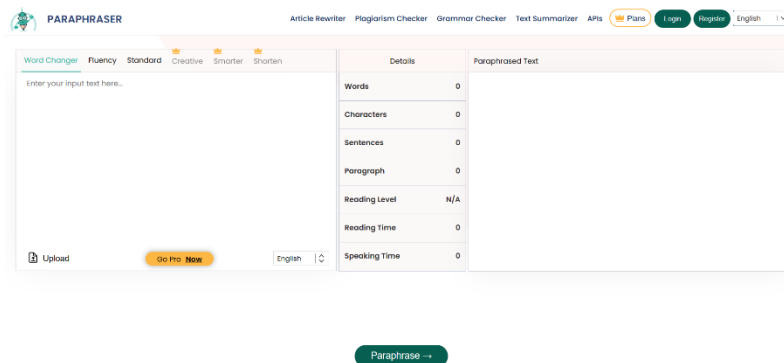


Figure 3 Paraphraser.io's User Interface.

Overall, it functions the same as Quillbot' paraphraser but has a more customized look to the paraphraser as it is the main and only function of paraphraser.io compared to Quillbot's multi purpose assistance for language learning.

3. Artificial Intelligence-powered Tools for After Reading Stage
- a. Myreader AI

Reading is a process of making sense of written text, getting the main idea and taking away important points in order to fulfill certain needs, be it casual or academic purposes. Using Myreader AI, learners can have an environment that isn't only comfortable but also effective. It is a tool in which the AI reads the book or documents for the users to explore what is in the text via the ask questions or generate questions feature.

These are the simple steps to use Myreader AI:

- 1) Go to myreader.ai from a web browser.



- 2) Upload a .pdf, .epub, or another document format.
- 3) Ask questions about the topic, contents, highlights of the document.
- 4) The artificial intelligence-powered tool will provide answers by analyzing the content.

Using this AI tool, learners can upload a book or document, ask questions about the book and explore the answers based on the contents of the book.

## Let an AI read books, documents, papers for you

Just upload pdf, epub or any doc, ask questions and get answers along with relevant sections to read more.

Get started →

*Figure 4 MyReader AI's Feature.*

Myreader AI has benefits for reading process, which are:

- 1) Ease of Use

Myreader AI can be used for reading process in the Pre-reading stage, it supports a wide variety of documents' extension to read for the learners, including .pdf, .epub, .azw, .doc, and .ppt. This translates to the ability of learners to glance at the topic's title and get a sneak peek at the beginning so that they are able to think of details that comes to mind about the topic which will help in the During Reading and After Reading stages.

## 2) Affordability

While there are paid plans that offer extra features, Myreader AI starts free for the learners to use. This is an important benefit as learners often expect a free but capable AI tool to assist their English language learning.

### b. Storywiz.io

Learners face certain challenge in their reading such as being overloaded with information. This makes them unable to find the main idea of the text. Storywiz.io turns texts to summaries so that the learners are able to take the main idea and important points of the text. Storywiz.io offers two types of formats for effective and efficient reading, summary and visual presentation.

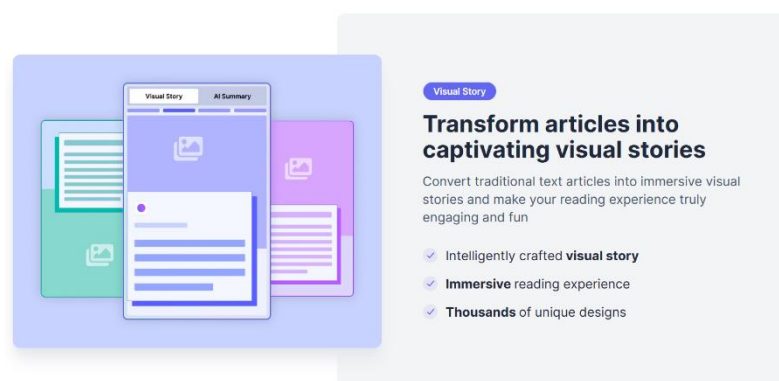


Figure 5 Storywiz.io' Visual Summarize.

In order to use Storywiz.io, learners can simply do these steps:

- 1) Go to storywiz.io web app on a web browser or via Chrome Extension or iPhone shortcut to use Storywiz seamlessly, anywhere the learners want to read.

- 2) Copy and paste any article URL into the input box in the Storywiz web app.
- 3) Depending on the choice, Storywiz will generate either a text summary or a visual summary of the article from the URL.
- 4) Storywiz offers a free that can be used up to 20 story credits, after that the users can choose any subscription to continue the use without limits.

The attractiveness and power of the material are increased by the thousands of distinct designs available for this visual storytelling. Furthermore, Storywiz.io provides instantaneous summaries of internet articles using AI, giving readers access to important information in a matter of seconds.



74% reduced (2311 words)

## The future of cities, according to the experts

Vox • 7 months ago

### Mixed signals cities pandemic

Since the pandemic upended the world, we've been getting plenty of mixed signals about cities. We've heard both that cities like New York are over and that they're immensely popular. Are they bastions of disease that people will forever avoid? Then why is the rent so damn high? Remote work means that people can work from anywhere and yet companies keep calling people back to the office.

Figure 6 Storywiz' AI Summary

These excellent summaries offer a quick and effective approach to comprehend an article's essential ideas. Users can learn key ideas more quickly by using Storywiz' AI Summary or Visual Story. These two features not only able to help readers understand the materials better but also save time. Storywiz is able to determine how much time is saved after the reading using the summary and visual story.

Based on the functions and capabilities of the artificial intelligence-powered tools for reading mentioned above, it is apparent that the tools are still in development and is a machine that is programmed based on algorithm, data, history and experience of human being. The researcher finds that while the tools are useful and able to handle the most complex tasks, the tools still need to be supervised, or rather the work from the tools still need to be revised by the users. Whether the users are doing translation, paraphrasing, or summarizing a text they will need to take a closer look at the results from the tools.

## **B. Discussion**

In this section, the researcher has gathered and examined the data in the earlier stage of the research to be able to answer the research question: what is the artificial intelligence-powered tools that can be used on reading process.

Based on the findings, there are several artificial intelligence-powered tools that can be used to assist learners' reading process. As stated by Dewi (2021) students' English language proficiency can be improved by

using AI-based tools, including apps, websites, and virtual reality. In this case, AI-based tools are used in reading process.

To bridge the gap found in the research question and in accordance with the findings of the research, the researcher divided the use of artificial intelligence-powered tools on reading process into several different categories based on the stages of reading, that is Pre-reading, During Reading and After Reading. The researcher also divided the applications and websites deemed suitable for reading techniques such as Skimming, Scanning, Intensive and Extensive Reading. Therefore, the researcher presented artificial intelligence-powered tools for reading process as follows:

1. Artificial Intelligence-powered Tools for Pre-reading Stage

Pre-reading stage is identical to the process of finding the topic of the reading, gathering all information about the title of the text and preparing to read based on the existing knowledge about the topic. Artificial intelligence-powered tools can be used by learners in this stage to find the topics of the reading, be it a personal preference or based on other purpose e.g., homework, upcoming presentation, and other types of academic writing.

Keertiwansha (2018) argued that the use of artificial intelligence can minimize teachers' involvement while also enabling the learners to looking up at materials themselves. Artificial intelligence-powered tool such as ChatGPT can be used by learners who wants to find their desired

topic of reading and based on the advantages mentioned in the findings, the search engine of ChatGPT, especially GPT-4 enables a more personalized and customized results. Thus, the process of Pre-reading is cost-effective and time efficient.

During this stage, learners who use artificial intelligence-powered tool in order to prepare for reading is able to gather information needed about the topic faster because of the way the system works. It generates not only the result for the topic of the search, but also key points to take away. Therefore, it's easier for learners to prepare whether they want to scan or skim the text.

## 2. Artificial Intelligence-powered Tools for During Reading Stage

In this stage, learners tend to read and modify their memories or knowledge about the text as they go. This is the stage where learners process the information found from pre-reading stage and combine it with the new ones as they read. Artificial intelligence-powered tools such as Quillbot and Paraphraser.io are the most suitable for this stage of reading process.

During this stage, learners can use Quillbot' paraphrase and summarize feature in order to get a better grasp of the text. During Reading stage's goal is to improve comprehension and analysis of the text and to practice meta-cognitive skills. Artificial intelligence-powered tools such as Quillbot and Paraphraser.io helps learners to discover the main ideas and key concepts faster by highlighting the

essential words. Furthermore, learners can write marginal notes to aid in comprehension, analysis, and interpretation.

Artificial intelligence-powered tools can also help learners develop fluency, comprehension, and vocabulary by reading aloud the text with the artificial intelligence-powered tool used. According to Meliyawati (2016) reading is a process and skill that is a part of a rather complicated action. Some AI tools can read texts and learners can join them to understand subtle meanings found in text. This is done by paying attention to the fast and slow lines, loud and soft lines, high and low voices, and the emphasize of key words or phrases by the artificial intelligence-powered tool. This works well with poetry or other rhythmic passages.

Paraphraser found in artificial intelligence-powered tools can also be used by learners to begin constructing meaning from a text. Artificial intelligence-powered tools can be used to highlight important contents and learners can group them into relevant categories in order to find the main idea of a text. Say a learner must find the accomplishments of Indonesian Presidents throughout the years, they are able to group the key points and construct a concise and meaningful text about it using the highlights done by the artificial intelligence-powered tools.

In this stage, the use of artificial intelligence-powered tools can also benefit teachers to highlight certain key words and analyze the content of the text. For example, teachers can highlight all of the verbs used in

a text and organize the verb tenses for the learners to review prior to reading the text. Thus, teachers can use this as a material for quick quizzes or questions for the learners to engage and enrich them with essential information prior to reading the text.

### 3. Artificial Intelligence-powered Tools for After Reading Stage

Andoko et al. (2021) stated that in order to obtain knowledge the learners must know how to read and reading is a rather active and fluent process that involves both readers and materials. The use of artificial intelligence-powered tools for this stage depends on the readers' goal, whether they need to summarize, paraphrase, or just to analyze the text. Storywiz.io can be used as the artificial intelligence-powered tool by learners to create an engaging summary of a story in form of text or visual. The point of summarizing is to shorten the longer texts but still be able to retain the main ideas and key points of the topic.

Learners can use Storywiz.io to do just that, only better. Storywiz.io provides a quick and efficient way to understand the main points of a text by cutting through information overload and enhance the learning experience. Researchers can also use Storywiz.io to extract key insights and information quickly from a wide range of articles and studies.

Post-reading stage typically involves learners to critically analyze what they have read and that is to identify the main ideas, summarize and to check if the purpose of reading was met. Furthermore, successful readers tend to ask questions regarding the topic. Artificial intelligence-



powered tool such as ChatGPT can be a good assistant when learners want to ask questions regarding the main ideas of the text. Using the chatbot, learners can respond to the text by participating in a conversation with the AI. When used correctly, learners are leading their thinking and discussions while the AI is there to facilitate, much like teachers.

Comprehension is the ultimate goal of reading and writing about reading is the most advanced post-reading activity learners can complete. Writing about reading provides the opportunity to analyze and interpret a text e.g., accomplishments of a president, alternate ending to a story, or any academic purpose written text. In this case, writing cannot be an effective post-reading activity without the process of three reading stages mentioned above.

Artificial intelligence-powered tools are widely available for learners to use with various functions and features that are packed into an often-free package in form of applications or websites. These tools complement the reading process very well from the Pre-reading, During Reading and After Reading. Although, the use of each tools mentioned depends on the purpose of the learners, artificial intelligence-powered tools are able to accommodate the many needs of a learner. Nurdina (2018) concluded that before, during and after reading had a significant effect on students' reading comprehension and to be of help for reading process.

Artificial intelligence-powered tools can be used in unison to support learners in their reading process as mentioned above. For starter, ChatGPT can manage learners' need to find the desired topic for their reading and also able to summarize the text if needed. Quillbot and Paraphraser.io are the ones to use when learners need to get better understanding of the topic during their reading process by paraphrasing and translating when needed. Storywiz.io can be used by learners who wants to summarize, prepare for presentation, or get key points from a text as soon as possible by using the highlights feature.

Techniques of reading such as Skimming, Scanning, Intensive and Extensive reading can also be practiced using artificial intelligence-powered tools. Wang (2022) stated that students' have a rather high expectations for the computer-assisted tools which can increase their English language proficiency. Therefore, the researcher grouped the suitable AI tools as follows:

1. ChatGPT, Quillbot and Paraphraser.io

Learners often use several techniques of reading at once in order to construct a meaning based on the words they are reading. ChatGPT, Quillbot and Paraphraser.io are the artificial intelligence-powered tools that can assist them while skimming and scanning the text. The paraphraser feature from ChatGPT and Quillbot can highlight important words or sentences based on the prompt. This means that skimming and scanning are far more effective because the artificial intelligence-

powered tools are showing not only the text but also the important words, sentences, key points for the readers. Learners can also look for specific information instantly using the prompt in order to perform scanning activity. The use of artificial intelligence-powered tools like ChatGPT, Quillbot and Paraphraser.io also translates well with Intensive and Extensive reading.

## 2. Storywiz.io and Myreader AI

Intensive reading is a comprehensive and engaging reading technique that encourages learners to actively interact with the text. Instead of passively absorbing information, active reading involves asking questions, making connections and taking notes. In this research, the researcher found that using artificial intelligence-powered tools such as Storywiz.io and Myreader AI can help learners breeze through by actively and extensively reading the text.

Active reading can be achieved through various strategies such as highlighting key points or summarizing the materials. Artificial intelligence-powered tools such as Storywiz.io and Myreader AI are suitable for learners to engage in active reading. Learners can summarize, ask questions, making connections and taking notes using the visual or text summarize and by actively participating in reading process using the artificial intelligence-powered tools mentions, readers can develop a deeper understanding and long-lasting knowledge.

Extensive reading or analytical reading is a technique that requires learners to analyze the text they are interacting with. In other words, this technique goes beyond comprehension and moves towards evaluating and critique of the text. Extensive reading is time-consuming but crucial for developing critical mindset and forming well-founded opinions. Learners can opt to use artificial intelligence-powered paraphraser and summarizer in order to analyze the text, ask questions, take notes or evaluate their progress.

The work from the tools for reading process such as ChatGPT, Quillbot, Paraphraser.io etc. still need to be revised by the users before they can use the results for a more serious purpose such as academic writing as the tools is still in development, they are prone to make mistakes in translation, paraphrasing, or summarizing. Therefore, when using the tools, it is advised for the users to take a closer look into the results. This is done in order to minimize the unnecessary mistake such as when they are paraphrasing, they would want to check the words used by the tools if they suit the theme of the text or not.