

## **THE USE OF ARTIFICIAL INTELLIGENCE IN ENGLISH LANGUAGE TEACHING**

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### **Abstract**

In recent years, there has been a growing interest in the integration of artificial intelligence (AI) into various fields. Artificial Intelligence (AI) also has become a prominent technology in various fields, including education. One area where Artificial Intelligent (AI) has shown great potential is in English Language Teaching (ELT). With the rapid development of technology, Artificial Intelligent (AI) tools and applications have been integrated into language learning platforms, classrooms, and online resources, transforming the way English is taught and learned. In the realm of language teaching, Artificial Intelligent offers significant potential for enhancing the learning process and improving outcomes. English language teaching is no exception, as educators are exploring the potential of Artificial Intelligent (AI) to enhance language learning experiences. English language teaching is no exception, as Artificial Intelligent (AI) can enhance the learning experience for English language learners by providing personalized instruction, immediate feedback, and immersive language practice. This research addresses the extent to use artificial intelligence in English language teaching. Researcher used descriptive qualitative approach with questionnaire as technique of data collection. The results of this research are the Artificial Intelligence is needed in English language teaching. Artificial Intelligence also has negative and positive impact in English language teaching depend on utilized correctly and at the appropriate timing. Besides that, Artificial Intelligence also help students in improving their English skill like speaking, writing, and reading using product of Artificial Intelligence like Chat GPT, Quillbot, Grammarly, Plagiarism Checker, Paraphrasingtool.com. So, the use of Artificial Intelligent in English language teaching is very important or useful and also reducing the burden of teachers and improving teaching quality.

**Keywords:** Academic Writing, Artificial Intelligence, English Language Teaching, Students' Perception.

### **INTRODUCTION**

In recent years, the English teaching learning that used the traditional methods has been criticized due to its various problems and shortcomings. The process of English learning was still considered monotonous and do not keep up with the times in the 4.0 era. In this era, there has been a growing interest in the integration of artificial intelligence (AI) into various fields. According to Russel and Norvig as cited in Chen that Artificial Intelligence is machines or computers imitating “cognitive” functions, for example, “learning” and “problem solving,” associated with the human mind (Chen et al., 2020). According to (Zhu, 2017), Artificial intelligence refers to the computer application, in imitation of human intelligent behavior and the process of thought, forming a comprehensive discipline. Besides, (Baker et al., 2019) stated that Artificial Intelligence is computers which perform cognitive tasks, usually associated with human minds, particularly learning and problem-solving. From the definition above, we can conclude that Artificial Intelligence is computer machines or application in imitation of human

intelligent behavior usually associated with human minds particularly learning and problem solving.

Artificial Intelligence (AI) also has become a prominent technology in various fields, including education. One area where Artificial Intelligent (AI) has shown great potential is in English Language Teaching (ELT). According to Ribeiro (2020) cited in (Fitria, 2023), the utilization of Artificial Intelligence in English Language Teaching (ELT) represents the most practical approach for English language instructors. As natural language processing, machine learning, and data analysis continue to evolve, Artificial Intelligence has the potential to offer customized and adaptable learning journeys for individuals studying the English language. Meanwhile, Artificial intelligence possesses the capability to replicate human thought processes, reasoning, and the articulation of thoughts through precise processing and analysis. Consequently, within the dynamic realm of English education, artificial intelligence holds a distinctive role in shaping strategies for teaching and learning the language. (Wang, 2019) With the rapid development of technology, Artificial Intelligent (AI) tools and applications have been integrated into language learning platforms, classrooms, and online resources, transforming the way English is taught and learned.

Baker and Smith argue that Artificial Intelligence in English Language Teaching (ELT) primarily revolves around the creation of computers capable of executing cognitive tasks, commonly linked to human minds, such as learning and problem-solving. (Chen et al., 2020) In addition, AI holds the potential to efficiently analyze and deeply explore the data of teachers and students within the education industry for the advancement of future teaching and learning methodologies. (Wang, 2019) Therefore, the role of AI provides a promising aid for both teachers and learners and eases the English learning process.

There are many examples of Artificial Intelligence can improve students' English skill like machine translation, AI writing tools, and Chatbots/ Virtual Chat Agents. According to Merkert (2017) as cited in (Schmidt & Strasser, 2022) that machine translation is the process of (automatically) translating a particular text (spoken or written) from one language to another. Machine translation applications use an extensive linguistic corpus and a myriad of complex algorithms to translate written texts automatically. One of the most popular Artificial Intelligence (AI)-powered translation websites at the moment is Google Translate where in writing texts, learners might come to rely on the translations provided without developing autonomous skills in paraphrasing or writing.

In learning English writing, there are several AI-powered writing tools like Grammarly ([www.grammarly.com](http://www.grammarly.com)). Grammarly can help in spelling & grammar checks and functions that analyze the clarity, coherence, engagement, and delivery of a text, and can thus scan written text more reliably. Besides that, Plagiarism Checker is product Artificial Intelligence to check plagiarism. Students can use Paraphrasingtool.com or Quillbot to enhance their writing. Chatbot/ Virtual Agents also can be used in improving English learning process like Chat GPT. Students can find the main idea or grammar, vocabulary, diction, et.al.

A qualitative study about teachers and students' perceptions on the impact of Artificial Intelligence on English language learning (Aljohani, 2021) found that both teachers and students perceived the positive impact of using artificial intelligence in English language learning in Saudi Arabia. In her research, (Fitria, 2023) also found that

Artificial Intelligence contributes significantly to creating a conducive learning environment for English language learners. It possesses the capability to establish personalized learning environments, enabling students to actively practice English skills based on their proficiency level, professional requirements, and interests. AI offers a platform for real simulation dialogues, including spoken English, while also enhancing practical skills in writing. By promoting students' practice capacity and optimizing the impact of English language teaching in ELT, AI proves to be an effective tool for fostering English language proficiency.

Based on the previous studies, the researchers were interested to explore the role of Artificial Intelligence in English Language Teaching (ELT) especially based on students' perception because it is one of important sources in developing English language teaching. However, this study focused on exploring students' perception towards the use of AI in English Language Teaching due to the lack of studies have been carried out in the topic. Sumakul et al. (2022) assume that AI utilization aids learners in grasping theoretical concepts, provides support throughout the learning journey, and facilitates the acquisition of grammar and vocabulary elements in English language learning. Meanwhile, Jaya Hartono et.al explain that students exhibit favorable attitudes towards AI solutions in English language education. Participants view AI technologies as effective instruments for enhancing language skills, delivering tailored instruction, and increasing student engagement.(Jaya Hartono et al., 2023) Based on the explanation above, the researchers want to know how the students' perception towards the use of Artificial Intelligence in detail.

## **METHOD**

A quantitative design with 10 university students in Indonesia was carried out to answer the research questions. A purposive sampling technique was used to determine the participants. Researcher used purposive sampling with non-probability sampling approach. Purposive sampling represents a group of different non-probability sampling techniques also known as judgmental, selective or subjective sampling, purposive sampling relies on the judgement of the researcher when it comes to selecting the units (e.g., people, cases/organizations, events, pieces of data) that are to be studied (Rai & Thapa, 2015). Non probability sampling is a sampling technique that does not provide equal opportunities for each element or member of the population to be selected as a sample. (Sugiyono, 2016)

The researcher-made questionnaire was used to collect the data of students' perspectives on the use of Artificial Intelligence in English language teaching. Ten questions with a Likert scale of five points: Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), Strongly Disagree (SD) were presented in a Google Form link and delivered by WhatsApp messages to the participants. Researchers used this technique to facilitate the process of selecting answers from a wide sample to increase the validity of the data.

The data obtained from the questionnaire is presented in tabular form to explore students' perspectives on the use AI in language teaching. The participants' answers were then reported in percentage based on the questions. The report was then described based on the most and the least responses from each questions. Interpretations of the data were then presented connected with the previous studies on the subject.

## FINDINGS AND DISCUSSION

The results of this research were described in questionnaire about the engaging of using Artificial Intelligence in English language teaching. Researchers described every item question in every variable to facilitate analysis the questionnaire. There are 10 questions in the form of statements in the questionnaire. The first statement is “I think Artificial Intelligence is needed in English learning”. The second statement is “Artificial Intelligence have positive impact for learning English”. The third statement is “Artificial Intelligence has negative impact for English learning. The fourth statement is “I use Artificial Intelligence to help in learning English. The fifth statement is “I can understand how to write a good essay used Artificial Intelligence”. The sixth statement is “Artificial Intelligence help me to find the idea in English learning”. The seventh statement is “My lecturers permit me to use Artificial Intelligence in English learning.” The eighth statement is “Artificial Intelligence help me to understand about grammar and vocabulary.” The ninth statement is “I use Artificial Intelligence in learning English to help or find grammar, vocabulary, cohesion, main idea, paraphrase, text, paragraph or others.” The last statement is “I use product of Artificial Intelligence in English learning like Chat GPT, Grammarly, Plagiarism Checker, Quillbot, or others.” The questionnaire results were described as follows:

**Table 1 The Need of Artificial Intelligence in English Learning**

| Categorize        | Frequency | Percentage (%) |
|-------------------|-----------|----------------|
| Strongly Agree    | 1         | 10%            |
| Agree             | 8         | 80%            |
| Neutral           | 0         | 0%             |
| Disagree          | 0         | 0%             |
| Strongly Disagree | 1         | 10%            |

From the table about students’ perception about Artificial Intelligence is needed in English learning can be seen that 1 respondent or 10% is strongly agree, 8 respondents or 80% are agree, none respondent or 0% is neutral or disagree, and 1 respondent or 10% is strongly disagree with statement about Artificial Intelligence is needed in English learning.

Based on the table 1, it can be concluded that the most students agree that Artificial Intelligence is needed in English learning. This is appropriate with research results from (Jaya Hartono et al., 2023) that participants of their research view AI technologies as effective instruments for enhancing language skills, delivering tailored instruction, and increasing student engagement.

**Table 2 Artificial Intelligence Has Positive Impact for English Learning**

| Categorize        | Frequency | Percentage (%) |
|-------------------|-----------|----------------|
| Strongly Agree    | 1         | 10%            |
| Agree             | 6         | 60%            |
| Neutral           | 2         | 20%            |
| Disagree          | 0         | 0%             |
| Strongly Disagree | 1         | 10%            |

From the table about students' perception about Artificial Intelligence has positive impact for English learning can be seen that 1 respondent or 10% is strongly agree, 6 respondents or 60% are agree, 2 respondents or 20% are neutral, none respondent or 0% is disagree, 1 respondent or 10% is strongly disagree with statement about Artificial Intelligence have positive impact for English learning.

Based on the table 2, it can be concluded that the most students agree about Artificial Intelligence has positive impact for English learning. According to (Wang, 2019), AI holds the potential to efficiently analyse and deeply explore the data of teachers and students within the education industry for the advancement of future teaching and learning methodologies. Besides that, The findings research of (Aljohani, 2021) demonstrated that both teachers and students perceived the positive impact of using artificial intelligence in English language learning. It is appropriate that the Artificial Intelligence have a positive role to provide a promising aid for both teachers and learners and eases the English learning process.

**Table 3 Artificial Intelligence Has Negative Impact for English Learning**

| <b>Categorize</b> | <b>Frequency</b> | <b>Percentage (%)</b> |
|-------------------|------------------|-----------------------|
| Strongly Agree    | 0                | 0%                    |
| Agree             | 5                | 50%                   |
| Neutral           | 4                | 40%                   |
| Disagree          | 1                | 10%                   |
| Strongly Disagree | 0                | 0%                    |

From the table about students' perception about Artificial Intelligence has negative impact for English learning can be seen that none respondent or 0% strongly agree, 5 respondents or 50% agree, 4 respondents or 40% neutral, 1 respondent or 10%, none respondent or 0% strongly disagree with statement about Artificial Intelligence has negative impact for English learning.

Based on the table 3, it can be concluded that the most students agree that Artificial Intelligence has negative impact for English learning. It is appropriate with (Sola-leyva & Salumets, 2023) argument that the advancement of technology holds immense potential to serve as a valuable aid for both teachers and learners in the English Language Teaching (ELT) process, provided it is utilized correctly and at the appropriate timing. It means that, if students use Artificial Intelligence incorrectly and not at the appropriate timing like plagiarism so Artificial Intelligence has negative impact for the students learning process.

**Table 4 Students Use Artificial Intelligence to Help in Learning English**

| <b>Categorize</b> | <b>Frequency</b> | <b>Percentage (%)</b> |
|-------------------|------------------|-----------------------|
| Strongly Agree    | 1                | 10%                   |
| Agree             | 6                | 60%                   |
| Neutral           | 2                | 20%                   |
| Disagree          | 0                | 0%                    |
| Strongly Disagree | 1                | 10%                   |

From the table about students use Artificial Intelligence to help in learning English can be seen that 1 respondent or 10% strongly agree, 6 respondents or 60% agree, 2 respondents or 20% neutral, none respondent or 0%, 1 respondent or 10% strongly disagree with statement that students use Artificial Intelligence to help in learning English.

Based on the table 4, it can be concluded that the most students agree that Artificial Intelligence help students in English learning. According to (Wang, 2019), AI holds the potential to efficiently analyse and deeply explore the data of teachers and students within the education industry for the advancement of future teaching and learning methodologies. According to Riberio in (Fitria, 2023) also stated that the utilization of Artificial Intelligence in English Language Teaching (ELT) represents the most practical approach for English language instructors. So, it can be concluded that Artificial Intelligence help students in learning English.

**Table 5 Students Can Understand How to Write a Good Essay Using Artificial Intelligence**

| <b>Categorize</b> | <b>Frequency</b> | <b>Percentage (%)</b> |
|-------------------|------------------|-----------------------|
| Strongly Agree    | 1                | 10%                   |
| Agree             | 6                | 60%                   |
| Neutral           | 3                | 30%                   |
| Disagree          | 0                | 0%                    |
| Strongly Disagree | 0                | 0%                    |

From the table about students use Artificial Intelligence to help in learning English can be seen that 1 respondent or 10% strongly agree, 6 respondents or 60% agree, 3 respondents or 30% neutral, none respondent or 0% disagree and strongly disagree with statement that students can understand how to write a good essay use Artificial Intelligence.

Based on the table 5, it can be concluded that the most students agree that Artificial Intelligence can help students to understand how to write a good essay. It is appropriate with Merkert (2017) as cited in (Schmidt & Strasser, 2022) that machine translation is the process of (automatically) translating a particular text (spoken or written) from one language to another. One of the most popular AI-powered translation websites at the moment is Google Translate where in writing texts, learners might come to rely on the translations provided without developing autonomous skills in paraphrasing or writing like how to write a good essay.

**Table 6 Artificial Intelligence Help Students to Find the Idea in English Learning**

| <b>Categorize</b> | <b>Frequency</b> | <b>Percentage (%)</b> |
|-------------------|------------------|-----------------------|
| Strongly Agree    | 1                | 10%                   |
| Agree             | 6                | 60%                   |
| Neutral           | 2                | 20%                   |
| Disagree          | 1                | 10%                   |
| Strongly Disagree | 0                | 0%                    |

From the table about Artificial Intelligence help students to find the idea in learning English can be seen that 1 respondent or 10% strongly agree, 6 respondents or 60% agree, 2 respondents or 20% neutral, 1 respondent or 10% disagree, none respondent or 0% strongly disagree with statement that Artificial Intelligence help students to find the idea in English learning.

Based on the table 6, it can be concluded that the most students agree that Artificial Intelligence can help students to find the idea in English learning because we know that one of product of Artificial Intelligence is Chatbot/ Virtual Agents like Chat GPT. Students can find the main idea or grammar, vocabulary, diction, et.al. use Chat GPT.

**Table 7 Lecturers Permit Students to Use Artificial Intelligence in Learning English**

| <b>Categorize</b> | <b>Frequency</b> | <b>Percentage (%)</b> |
|-------------------|------------------|-----------------------|
| Strongly Agree    | 1                | 10%                   |
| Agree             | 3                | 30%                   |
| Neutral           | 4                | 40%                   |
| Disagree          | 3                | 20%                   |
| Strongly Disagree | 0                | 0%                    |

From the table about lecturers permit students to use Artificial Intelligence in learning English can be seen that 1 respondent or 10% strongly agree, 3 respondents or 30% agree, 4 respondents or 40% neutral, 3 respondent or 30% disagree, none respondent or 0% strongly disagree with statement that lecturers permit students to use Artificial Intelligence in English learning. Based on the table 7, it can be concluded that the most students neutral that lecturers permit students use Artificial Intelligence in English learning.

**Table 8 Artificial Intelligence Help Students to Understand Grammar and Vocabulary**

| <b>Categorize</b> | <b>Frequency</b> | <b>Percentage (%)</b> |
|-------------------|------------------|-----------------------|
| Strongly Agree    | 0                | 0%                    |
| Agree             | 5                | 50%                   |
| Neutral           | 3                | 30%                   |
| Disagree          | 2                | 20%                   |
| Strongly Disagree | 0                | 0%                    |

From the table about Artificial Intelligence help students to understand about grammar and vocabulary can be seen that none respondent or 0% strongly agree, 5 respondents or 50% agree, 3 respondents or 30% neutral, 2 respondent or 20% disagree, none respondent or 0% strongly disagree with statement that Artificial Intelligence help students to understand about grammar and vocabulary.

Based on the table 8, it can be concluded that the most students agree that Artificial Intelligence can help students to understand about grammar and vocabulary. It is appropriate with (Schmidt & Strasser, 2022) that there are many product can help students

to improve English learning like Google Translate and Grammarly Checker that can help students to understand about grammar and vocabulary.

**Table 9 Students Use Artificial Intelligence in Learning English to Help Find Grammar, Vocabulary, Cohesion, Main Idea, Paraphrase, Text, Paragraph, And Others**

| <b>Categorize</b> | <b>Frequency</b> | <b>Percentage (%)</b> |
|-------------------|------------------|-----------------------|
| Grammar           | 6                | 60%                   |
| Vocabulary        | 6                | 60%                   |
| Cohesion          | 0                | 0%                    |
| Main Idea         | 1                | 10%                   |
| Paraphrase        | 7                | 70%                   |
| Text              | 1                | 10%                   |
| Paragraph         | 1                | 10%                   |
| Other             | 1                | 10%                   |

From the table about Students use Artificial Intelligence in learning English to help or find grammar, vocabulary, cohesion, main idea, paraphrase, text, paragraph, and others can be seen 6 respondents or 60% use Artificial Intelligence to help or find grammar, 6 respondents or 60% use Artificial Intelligence to help or find vocabulary, none respondent or 0% use Artificial Intelligence to help or find cohesion, 1 respondent or 10% use Artificial Intelligence to find main idea, 7 respondents or 70% use Artificial Intelligence to help paraphrase, 1 respondent or 10% use Artificial Intelligence to find or help in text, 1 respondent or 10% use Artificial Intelligence to help making paragraph, 1 respondent or 10% use Artificial Intelligence to help others. Based on table 9, it can be concluded that the most students usually use Artificial Intelligence to help or find paraphrase, grammar, and vocabulary.

**Table 10 The Product of Artificial Intelligence Used by Students in Learning English.**

| <b>Categorize</b>     | <b>Frequency</b> | <b>Percentage (%)</b> |
|-----------------------|------------------|-----------------------|
| Chat GPT              | 4                | 40%                   |
| Grammarly             | 5                | 50%                   |
| Plagiarism Checker    | 7                | 70%                   |
| Quillbot              | 3                | 30%                   |
| None                  | 1                | 10%                   |
| Paraphrasing tool.com | 1                | 10%                   |

From the table about Students use product of Artificial Intelligence in learning English can be seen 4 respondents or 40% use Chat GPT, 5 respondents or 50% use Grammarly, 7 respondents or 70% use Plagiarism checker, 3 respondent or 30% use Quillbot, 1 respondent or 10% use Paraphrasingtool.com, 1 respondent or 10% use others product of Artificial Intelligence. Based on table 10, it can be concluded that the most students usually use product Artificial Intelligence Plagiarism Checker and Grammarly.



## CONCLUSION

From the findings and discussions above, it can be concluded that the engaging of using Artificial Intelligence in English language teaching based on students' perception are students agree that Artificial Intelligence is needed in English language teaching. Artificial Intelligence also has negative and positive impact in English language teaching depend on utilized correctly and at the appropriate timing. Besides that, Artificial Intelligence also help students in improving their English skill like speaking, writing, and reading using product of Artificial Intelligence like Chat GPT, Quillbot, Grammarly, Plagiarism Checker, Paraphrasingtool.com. So, the use of Artificial Intelligent in English language teaching is very important or useful and also reducing the burden of teachers and improving their teaching quality.

The limitation from given data and the main Artificial Intelligence that was used in this research can give any inaccuracies in the data will be reflected in the results. In the future study, the researchers hopes that others researchers can find the teachers perspective about using Artificial Intelligence in English Language Teaching.

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