

EXPLORING THE USE OF CHATGPT IN LANGUAGE LEARNING IN STUDENTS' WRITING SKILL

Aulia Rahma Salsabila ¹, Monica Nila Sari ², Risa Triassanti³, Christina
Innocenti Tumiar Panggabean⁴

^{1,2,3,4}Universitas PGRI Ronggolawe Tuban, Indonesia

e-mail: 1_sauliarahma@gmail.com, 2_monicanila99@gmail.com,
3_triassantirisa@gmail.com, 4_christina306.cp@gmail.com

Abstract

ChatGPT interacts realistically and can answer follow-up questions, admit mistakes, challenge incorrect premises, and reject inappropriate requests. However, its use raises ethical and practical issues, such as the potential to increase inequalities in the educational system. This study aimed to determine the use and the impact of ChatGPT on students' writing abilities. The approach used in this research is a descriptive quantitative approach using a questionnaire. The findings showed that The participants mostly gave neutral responses in several questions, indicating that they use ChatGPT passively. However, in other questions students gave positive and negative responses.

Keywords: Artificial Intelligence, ChatGPT, Students' Writing Learning

INTRODUCTION

Artificial intelligence has led to a new age of innovation and transformation in many fields, including education. AI has a wide variety of potential uses in education, including improving productivity, learning outcomes, personalized instruction, instant feedback, and student engagement. According to Kurzweil (1990) characterizes AI as the art of developing machines that can perform tasks that typically necessitate human intelligence (Adiguzel, 2023).

AI is designed as virtual assistance in executing and easing human tasks (Russel & Norvig, 2016). When this idea is brought into an educational setting, it can help both teacher and students teaching and learning process. In the last decade, the research and development of AI in Education has progressed rapidly (Hwang et al., 2020), especially in academic writing. Having academic writing skills is very important at the higher education level. Across all disciplines, it is evident that students have a high demand for services and support to improve scientific writing skills.

In November 2022, OpenAI, a lab that studies artificial intelligence, came out with a chatbot called ChatGPT (Generative Pre-trained Transformer). ChatGPT can be a valuable tool for improving writing skills. One of its main benefits is the personalized feedback it provides. ChatGPT can identify areas where a writer needs improvement, such as grammar, vocabulary, and syntax, and offer suggestions on how to improve. This feedback can help writers refine their skills and produce better quality writing. Despite all its benefits, using AI in education also raises significant ethical and practical issues. These issues include the possibility that it might increase the already-existing inequalities in the educational system. They expressed worries that students may outsource their work to ChatGPT because of its ability to rapidly generate acceptable texts. Therefore, through this research, researchers want to find out whether ChatGPT has a good or bad impact on the development of students' abilities, especially in terms of writing, according to Kroll J. (2013), creative writing can be a very important medium of thought in many ways.

There is limited literature available on the use of ChatGPT specifically in students' writing learning. However, there are studies that explore the use of chatbots and conversational agents in education. Unfortunately, there is currently no literature available on the use of ChatGPT specifically in students' writing learning. As ChatGPT is a relatively new technology, there may not yet be enough research on its potential applications in education. However as an AI language model, ChatGPT has gained popularity in various fields, including language learning. The study also found that

ChatGPT can help learners overcome the fear of making mistakes and increase their confidence in writing. Similarly, a study by Huang et al. found that ChatGPT can enhance the quality of students' writing by providing feedback on grammar, vocabulary, and coherence. The study also highlighted the importance of integrating ChatGPT with human feedback to provide a more comprehensive and effective tutoring system.

As students in technology rapidly era, we must be able to adapt, Tjahyanti (2022) stated, schools in the current era must take advantage of the birth of technologies that facilitate the work of teachers or students. Another study by Karampiperis and Demetriadis (2017) investigated the use of a chatbot in a university course. The chatbot was designed to provide immediate feedback and answer students' questions. The study found that students who used the chatbot had higher grades than those who did not. Another review by Xue et al. (2020) examined the use of chatbots and conversational agents in education. The review found that these tools can enhance students' learning experience by providing personalized feedback, facilitating communication, and creating interactive learning experiences. Overall, the literature suggests that chatbots and conversational agents can be effective tools in enhancing students' learning experience. However, more research is needed to explore the specific benefits and limitations of ChatGPT in education.

According to Richards (1985:11), language teaching is hence a complex issue, encompassing socio-cultural linguistic, psycholinguistics, as well as curricula and instructional dimensions. Concerning to the foreign language teaching, there are some experts point out that second or foreign language teaching is any activity on the part of one person intended to facilitate the learning by another person of a language which is not his native one. Furthermore, the predominant line of thinking in many theoretical understandings of language acquisition is also that learning occurs through meaningful use of the language. As such, it is apparent why learner engagement has come to be of particular interest to scholars and practitioners in the field of language learning. The domain of language learning has begun to build on the considerable body of work in the learning sciences and

educational psychology , (Fredricks et al.,2019), extending it in domain-specific ways (Hiver, Al Hoorie& Mercer,2021b).

Writing is an essential skill that students need to develop in order to succeed academically and professionally. Over the years, several studies have explored the factors that influence students' writing skills and the strategies that can be used to improve their writing proficiency. One factor that has been found to influence students' writing skills is their motivation to write. A study by Ryan and Deci (2000) found that students who are intrinsically motivated to write are more likely to produce high-quality writing than those who are extrinsically motivated .

Another factor that has been found to influence students' writing skills is their prior knowledge and experience with writing. A study by Bereiter and Scardamalia (1987) found that students who have more knowledge about a topic are better able to write about it than those who have less knowledge. For example, a study by Graham and Perin (2007) found that teaching students specific writing strategies can improve their writing proficiency.

The purpose of this research includes collecting data about the use of ChatGPT as a writing teaching tool among English Language Education Students at UNIROW Tuban. Additionally, this study aims to gather detailed insights regarding students' attitudes and perceptions regarding the impact of ChatGPT on their writing education. This includes exploring how ChatGPT is integrated into writing curricula, understanding students' experiences using ChatGPT, and identifying potential benefits or challenges associated with its use in writing instruction.

RESEARCH METHODOLOGY

This study used descriptive quantitative research to analyze student's views and experiences on the use of ChatGPT in learning. The aim is to find out how ChatGPT gives benefit for students learning activities in writing. According to Sudjana and Ibrahim (2004:64) descriptive research is research that trying to describe a symptom events, events that happened at the time now». For a quantitative

approach explained by Arikunto (2013:12) that approach using quantitative because it uses numbers, starting from data collection, interpretation of data and the appearance of the results. The participants in this study were English Language Education students in the second semester at UNIROW Tuban. So that, only 12 students were involved. Then, the participants answered the questions by google form. This research was carried out at Universitas PGRI Ronggolawe, Tuban, East Java, Indonesia. This research was done for a week.

The researchers used a questionnaire in google form application. Google form is a part of google drive. Google form application which is practical for students, teachers, lecturers, office workers and professionals who frequently create online quizzes, forms and surveys. Google form can also be used to conduct surveys assisted by questionnaire instruments. By using Google form, the survey form filling becomes faster, easier, and can be accessed by anyone without having face to face (Ruliyanti et al., 2022).

Google Forms provides users with the ability to analyze responses using either the in-built analysis tools or by exporting them to a new or existing Google Sheets spreadsheet that updates automatically as new responses are received. Additionally, Google Forms offers all the collaboration and sharing features present in Docs, Sheets, Slides, Drawings, and Sites. In this stage, the researchers prepare materials and questions about ChatGPT for participants and request permission from the lecturer of Intermediate English Grammar. Intermediate English Grammar is a required subject for English education students of the second semester. The researchers observe the class to determine if ChatGPT is used as a learning tool. They find that traditional TPACK-based methods are used instead, with students presenting material using a Smart TV and asking questions without ChatGPT. 12 students as participants filled out the questions about the used ChatGPT in writing learning activities. The data was collected on May 15, 2023.

According to Sugiono (2007:427) data analysis is the process of systematically searching and arranging the interview transcripts, fieldnotes, and other materials that you accumulate to increase your own understanding of them and to enable you to present what you have discovered to others. The first step, the researchers make 10 questions in google form. The purpose of this study is to find students' perception in using ChatGPT in writing learning activities. After the respondents filled out the questionnaire answers, the researchers arrange the results of these answers into excel table based on its aspects. In quantitative descriptive research, the data collected and analyzed can be presented in various forms of presentation. Syamsudin [2002:01] in his book entitled Descriptive Statistics, states that descriptive statistics are activities that cover about data collection, processing, and presentation of data in good form for easy analysis and analysis descriptive data.

The assessment given by the respondents used a Likert scale as an instrument for measuring the collected data. Likert scale is a measurement scale developed by Likert (1932). Scale Likert has empathy or more points question that combined so form a score represents an individual trait, for example knowledge, attitude, and behavior. In data analysis process, composite score, usually sum or average, of all items questions can be used. Likert (1932) also argue that Scale the easiest to use is likert scale. Likert scale using several item questions to measure individual behavior by responding 5 point choices for each question, strongly agree, agree, no decide, disagree, and strongly disagree. According to Ariyawati et al. (2017), Translation of the results of the Likert scale was carried out using the following formula :

$$\text{Percentage of Responses} = \frac{\text{Number of Respondents' / answers Total Score}}{\text{Total Score}} \times 100\%$$

Positive questions are rated on a scale of 1 to 5, while negative questions are rated on a scale of 5 to 1 . In ths study, researchers used positive questions, so table 1 below is interpretation percentages criteria.

Tabel 1 Interpretation Percentages Criteria (Pranatawijaya et al., 2019)

No	Interval Percentage	Criteria
1	0%-19,99%	Strongly disagree
2	20%-39,99%	Disagree
3	40%-59,99%	Neutral
4	60%-79,99%	Agree
5	80%-100%	Strongly agree

RESULTS

After totalling and analyzing the questionnaire, it is known that students in Intermediate English Grammar class at UNIROW Tuban use multiple language learning strategy in writing skill. Table 1 below shows the language learning strategies implemented the most by 12 students in English Grammar Class at Unirow Tuban. The researchers conducted a survey by sharing a questionnaire link using google form which contains 10 questions. Five questions are represent point of experience and five other questions are about perception.

EXPERIENCE

The following below are questions that were given to respondents to see how is students' experience in using chatgpt for language learning in writing activities :

- 1) I often use ChatGPT for language learning in writing skills.
- 2) My writing task is easier to do by using ChatGPT as an assistant.
- 3) I prefer to use ChatGPT on open AI website than on telegram bot.
- 4) I use ChatGPT only when my ideas run out.

- 5) I am more motivated to cultivate my writing skills by using ChatGPT as a tool.

Bar Chart 1. Experience

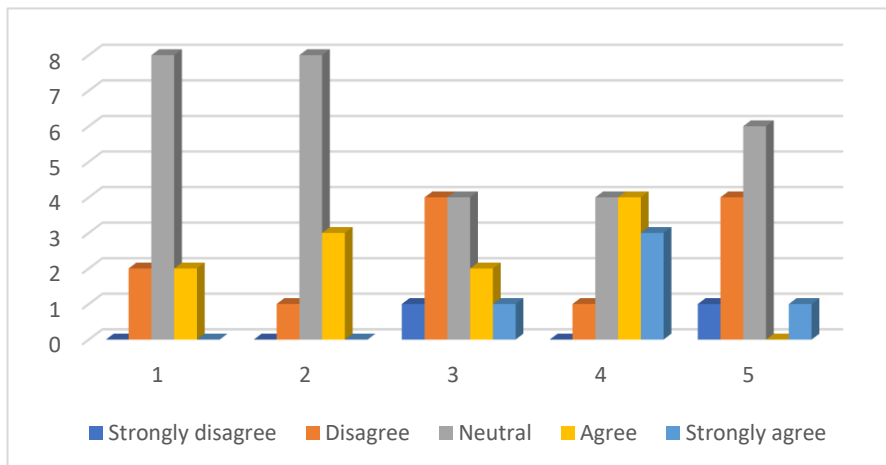


Table of Frequency 1. Experience

	Q1	Q2	Q3	Q4	Q5
1	0	0	1	0	1
2	2	1	4	1	4
3	8	8	4	4	6
4	2	3	2	4	0
5	0	0	1	3	1
TOTAL	12	12	12	12	12

Table of Percentage 1. Experience

	Q1 (%)	Q2 (%)	Q3 (%)	Q4 (%)	Q5 (%)
1	0,00	0,00	8,33	0,00	8,33

2	16,67	8,33	33,33	8,33	33,33
3	66,67	66,67	33,33	33,33	50,00
4	16,67	25,00	16,67	33,33	0,00
5	0,00	0,00	8,33	25,00	8,33
TOTAL (%)	100	100	100	100	100

Q = questions of questionnaire

1 = Strongly disagree

2 = Disagree

3 = Neutral

4 = Agree

5 = Strongly agree

■ = Most Percentage

In the first set of questions, the researcher found that the majority of the respondents gave neutral responses. These respondents were second-semester students who used ChatGPT to learn writing. However, they were not very active in using ChatGPT and primarily used it passively as a writing learning tool. The first question, "I often use ChatGPT for language learning in writing skills," resulted in no strongly disagree responses, 16.67% disagree, 66.67% neutral, 16.67% agree, and no strongly agree responses. The students were undecided and chose the neutral option, indicating neither agreement nor disagreement.

The second question, "My writing task is easier to do by using ChatGPT as an assistant," resulted in no strongly disagree responses, 8.33% disagree, 66.67% neutral, 25% agree, and no strongly agree responses. Like the first question, most students chose the neutral response, indicating uncertainty. However, a smaller percentage of students (25%) agreed that ChatGPT made their writing tasks easier.

Moving on to the third question, "I prefer to use ChatGPT on the OpenAI website than on the telegram bot," the responses were as follows: 8.33% strongly disagree, 33.33% disagree, 33.33% neutral, 16.67% agree, and 8.33% strongly agree. The data shows that students had a negative response to this question, indicating a preference for using ChatGPT on the telegram bot rather than the OpenAI website.

Fourth question, "I use ChatGPT only when my ideas run out," resulted in no strongly disagree responses, 8.33% disagree, 33.33% neutral, 33.33% agree, and 25% strongly agree. Based on the data, it can be concluded that students gave a positive response to this question. A significant percentage (33.33%) agreed that they use ChatGPT when their ideas run out, and 25% strongly agreed with this statement.

Finally, the fifth question, "I am more motivated to cultivate my writing skills by using ChatGPT as a tool," had the following responses: 8.33% strongly disagree, 33.33% disagree, 50% neutral, no agree responses, and 8.33% strongly agree. The data indicates that most respondents chose the neutral option, suggesting an undecided response regarding their motivation to improve writing skills using ChatGPT. Conversely, students expressed a preference for using ChatGPT on the telegram bot rather than the OpenAI website.

PERCEPTION

The following below are questions that were given to respondents to see how is students' perception about the impact of using ChatGPT for language learning in writing activities :

1. ChatGPT is a valuable tool for my writing skills development.
2. I believe that ChatGPT can improve my writing skills.
3. The responses provided by ChatGPT for language learning in writing skills are accurate.
4. I stay away of relying on chatgpt for writing learning to avoid some potential drawbacks.
5. I will recommend ChatGPT to my friends for writing skills purposes.

Bar Chart 2. Perception

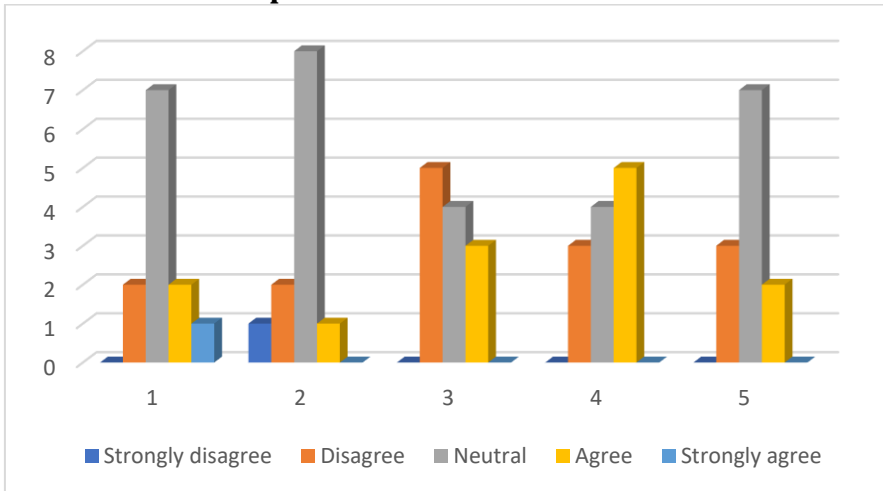


Table of Frequency 1. Experience

	Q1	Q2	Q3	Q4	Q5
1	0	1	0	0	0
2	2	2	5	3	3
3	7	8	4	4	7
4	2	1	3	5	2
5	1	0	0	0	0
TOTAL	12	12	12	12	12

Table of Percentage 1. Experience

	Q1 (%)	Q2 (%)	Q3 (%)	Q4 (%)	Q5 (%)
1	0,00	8,33	0,00	0,00	0,00
2	16,67	16,67	41,67	25,00	25,00
3	58,33	66,67	33,33	33,33	58,33
4	16,67	8,33	25,00	41,67	16,67
5	8,33	0,00	0,00	0,00	0,00
TOTAL (%)	100	100	100	100	100

Q = questions of questionnaire

1 = Strongly disagree

2 = Disagree

3 = Neutral

4 = Agree

5 = Strongly agree

■ = Most Percentage

The first question is “ChatGPT is a valuable tool for my writing skills development.”. It is known that of the 12 students who answered the questions, no one students answered strongly disagree (0%), 2 students answered disagree (16,67%), 7 students answered neutral (58,33%), 2 students answeres agree (16,67%), and 1 student answer strongly agree (8,33%). From this data, we know that the respondents answer neutral mostly, it’s undecided responses.

The second question is “I believe that ChatGPT can improve my writing skills.”. It is known that of the 12 students who answered the questions, 1 student answered strongly disagree (8,33%), 2 student answered disagree (16,67%), 8 students answered neutral (66,67%), 1 students answered agree (8,33%), and no one students answered strongly agree (0%). Same as the first question, the respondents mostly answered neutral, it’s undecided responses

The third question is “The responses provided by ChatGPT for language learning in writing skills are accurate.”. It is known that of the 12 students who answered the questions, no one students answered strongly disagree (0%), 5 student answered disagree (41,67%), 4 students answered neutral (33,33%), 3 students answered agree (25%), and no one students answered strongly agree (0%). This mean that students’ responses in this question is negative. Contrary to the statement, in students’ perception the accuracy of ChatGPT’s responses needs to be asked.

The fourth question is “I stay away of relying on chatgpt for writing learning to avoid some potential drawbacks”. It is known that of the 12 students who answered the questions, no one student answered strongly disagree (0%), 3 student answered disagree (25%), 4 students answered neutral (33,33%), 5 students answered agree (41,67%), and no one students answered strongly agree (0 %). Based on the data, it can be concluded that students gave a positive response to this question, 41,67% of students were agree with the statement.

The fifth question is “I will recommend ChatGPT to my friends for writing skills purposes”. It is known that of the 12 students who answered the questions, no one students answered strongly disagree (0%), 3 students answered disagree (25%), 7 students answered neutral (58,33%), 2 students answered agree (16,67%), and no one student answered strongly agree (0 %). Based on the data, it can be concluded that the respondents mostly answered neutral (58,33%), it’s undecided responses.

In summary, the data indicates that students provided predominantly neutral and undecided responses across the five questions, except for the question about potential drawbacks, where a

significant portion of students agreed. There were also concerns raised regarding the accuracy of ChatGPT's responses.

DISCUSSION

The researcher conducted a survey on the twelve second semester students of English Language Education UNIROW who use ChatGPT in writing learning. In the first question of experience aspects, The respondents mostly gave neutral responses in indicating that they use ChatGPT passively as a writing tool. Likewise with student responses in answered questions number 2 and 5, they gave neutral responses to address the question of whether their writing learning activities be easier when using ChatGPT or not and how ChatGPT motivated students in improving their writing skills. Neutral responses is could mean that the people surveyed were very undecided on how to answer. However, Fernandez & Randall (1991) state that By giving responders a neutral response option, they are not required to decide one way or the other on an issue; this may reduce the chance of response bias, which is the tendency to favor one response over others. The researchers put neutral point to give the respondents a freedom in opinion .

The other responses given by the respondents in number 3 and 4. In the third question, the respondents give a negative answered. Based on the data, the students preferred to use ChatGPT on telegram bot than OpenAI website. Due to the ease of using ChatGPT bot access that offered by telegram. The students of course prefer to open ChatGPT on telegram bot because it is more practical and simpler. While in the fifth question, the students gave a positive response. They agreed that they used ChatGPT only when their ideas run out, It means that students wouldn't rely on the using of ChatGPT because of its bad impact. According to A.Tilli & B. Shehata (2023),, the abuse of ChatGPT by learners can also diminish their innovative capacities and critical thinking.

Likewise in experience aspects, in perception aspects the researcher found the same response, where students responded neutral to several questions such as questions in numbers 1, 2 and 5. Generally, the questions of number 1 and 2 asked about the impact of using ChatGPT on students' writing skill developments. Students already use

ChatGPT in writing learning passively, but because of using it passively, students doubt whether ChatGPT can improve their writing skills or not. However, the convenience offered by ChatGPT in writing learning should indeed make it easier for students to improve their skills if it used correctly. According to Alonso (2022), Across all disciplines, it is evident that students have a high demand for services and support to improve scientific writing skills. In general, AI is needed for translation, paraphrasing, grammar correction, and searching for ideas and checking for plagiarism which contribute to improving the quality of academic writing. The same in the fifth question of this questionnaire, the respondents mostly answered neutral about whether the students will recommend ChatGPT on their friends for writing skills purposes. Based on the data, the researchers concluded that students answered neutrally because they were less active in using ChatGPT, so they may be confused how to answer. Meanwhile, in the third question, the students gave negative responses. Students prefer to use traditional methods to learn writing.

In addition, the researchers will discuss the result compared with the previous studies. The result of this study does not have similarities with the previous studies. Previous studies about ChatGPT in writing learning by Li et al. (2021) state that ChatGPT can provide personalized and immediate feedback to language learners, which can improve their writing skills. The study also found that ChatGPT can help learners overcome the fear of making mistakes and increase their confidence in writing. Another review by Xue et al. (2020). examined the use of chatbots and conversational agents in education. The review found that these tools can enhance students' learning experience by providing personalized feedback, facilitating communication, and creating interactive learning experiences. Meanwhile, the students' finding of this study states that the second semester English education students at UNIROW did not quite trust ChatGPT's used in writing learning because students fear of its mistake. They are doubtful about the impact of ChatGPT in increasing motivation of improving writing skills.

ChatGPT is a new technology that is not widely used by students at UNIROW. The students may use ChatGPT as an assistant in doing writing assignments, but they did not use ChatGPT actively.

CONCLUSION

A survey was conducted on twelve second-semester English Language Education students at UNIROW who use ChatGPT in writing learning. The respondents mostly gave neutral responses, indicating that they use ChatGPT passively and question the ease of using it. However, they also agreed that they only use ChatGPT when their ideas run out, which may diminish their innovative capacities and critical thinking. In experience and perception aspects, the respondents responded neutral to several questions. The study also found that students are still unsure about using ChatGPT in writing learning activities and prefer traditional methods for learning.

Students at UNIROW have not yet adopted ChatGPT as a common tool, and while they may use it to help with writing tasks, they are less likely to comprehend how it might actually help them develop their skills, particularly in writing.

REFERENCES

- Adiguzel, T. (2023). *Revolutionizing education with AI: Exploring the transformative potential of ChatGPT*. 15(3).
- Alonso-Betanzos, A., Bugarín, A., & Fernández-Vilas, A. (2019). Chatbots for language learning: State-of-the-art and future prospects. *Journal of Educational Technology & Society*, 22(3), 1-14.
- Triassanti, R., Panggabean, C. I. T., Susatyo, B., Wardhono, A., Rohmadtis, Y., & Al Magribi, S. (2022). TEACHERS AND STUDENTS' PERCEPTIONS ON THE USE OF ICT IN LEARNING ENGLISH AT A JUNIOR HIGH SCHOOL IN TUBAN. *DIDAKTIKA: Jurnal Pemikiran Pendidikan*, 28(2), 60-71.
- Alonso-Betanzos, A., Bugarín, A., & Fernández-Vilas, A. (2019). Chatbots for language learning: State-of-the-art and future prospects. *Journal of Educational Technology & Society*, 22(3), 1-14.
- Panggabean, C.I.T., & Triassanti, R. (2020). The Implementation of Metacognitive Strategy training to Enhance EFL Students Oral Presentation Skill. *Journal of English Teaching and Research*, 5(1), 32-40.

- Bektik, S., & Baykara, B. (2020). The effect of artificial intelligence on language learning: A systematic review. *International Journal of Emerging Technologies in Learning (iJET)*, 15(21), 55-67.
- Creswell JW. 2013. *Qualitative inquiry and research design: Choosing among five approaches*. (3rd ed.). Thousand Oaks, CA: Sage
- Chiu, T. K. F., Meng, H., Chai, C. S., King, I., Wong, S., & Yeung, Y. (2022). Creation and evaluation of a pre-tertiary Artificial Intelligence (AI) curriculum. *IEEE Transactions on Education*, 65(1), 30-39. <https://doi.org/10.1109/TE.2021.3085878>
- Clarizia, F., Colace, F., Lombardi, M., Pascale, F., & Santaniello, D. (2018). Chatbot: An education support system for student. *International symposium on cyberspace safety and security*. Springer. https://doi.org/10.1007/978-3-030-01689-0_23
- Fernandes, M., & Randall, D. (1991). The social desirability response bias in ethics research. *Journal of Business Ethics*, 10 (11), 805-807.
- Hwang, G. J., Xie, H., Wah, B. W., & Gasevic, D. (2020). Vision, challenges, roles and research issues of artificial intelligence in education. *Computers & Education: Artificial Intelligence*, 1, 100001. <https://doi.org/10.1016/j.caeai.2020.100001>
- Kroll, J. (2013). Creative writing and education. *A Companion to Creative Writing*, 245-262.
- Liu, Q., & Liu, L. (2020). Artificial intelligence and language learning: A review of the literature. *Educational Technology Research and Development*, 68(5), 2537-2560.
- Mhlanga, D. Open AI in Education, the Responsible and Ethical Use of ChatGPT Towards Lifelong Learning. SSRN 2023, 4354422.
- OpenAI. (2023, March). GPT-4 Developer Livestream [Video]. YouTube. <https://www.youtube.com/watch?v=outcGtbnMuQ>
- Russell, S, & Norvig, P. (2016). *Artificial Intelligence A Modern Approach* Third Edition In Person. <https://doi.org/10.1017/5026988888900007724>

Tjahyanti, L. P. A. S., Saputra, P. S., & Santo Gitakarma, M. (2022). Peran Artificial Intelligence (AI) Untuk Mendukung Pembelajaran di Masa Pandemi Covid-19. KOMTEKS, 1(1).