

## EXPLORING THE POSITIVE IMPACT OF CHATGPT ON ENGLISH LANGUAGE LEARNING

Asri Purba<sup>1</sup>, Benedicta Eleanora Putri<sup>2</sup>, Dwi Panggabean<sup>3</sup>,  
Sandrina Amelia Angelica<sup>4</sup>, Shinta Bella Simanjuntak<sup>5\*</sup>

Medan State University, Indonesia<sup>12345</sup>

<sup>1</sup>asripurbaasri@gmail.com, <sup>2</sup>benedictaelnrrr@gmail.com;

<sup>3</sup>dwipanggaben26@gmail.com

,<sup>4</sup>sandrinangelica18@gmail.com <sup>5</sup>sshinta565@gmail.com\*

\* corresponding author

---

### ARTICLE INFO

### ABSTRACT

#### Keywords

Keyword\_1 ChatGPT

Keyword\_2 Language learning

Keyword\_3 AI education

Keyword\_4 Positive Impact

Keyword\_5 Technology

The study discusses the merits of ChatGPT in the capacity of English Language learners. Research in this context makes use of a quantitative descriptive design where a significant amount of articles and reference material concerning the usage of ChatGPT in context of language learning is collected and critiqued. The study indicates that ChatGPT has a number of positive effects that improve the language skills of the users such as speaking, listening, vocabulary learning and even offering the possibility to give immediate feedback on writing correction. However, it is ChatGPT which also supports and encourages students so that their grammar improves within a short amount of time and it also meets students with individual characteristics. The study concludes emphasizing that ChatGPT is an important rather than a glitch or complication in language learning, at least when the child activities commence.

---

### 1. INTRODUCTION

In this technology era, there are always new things that researchers found and develop year by year. With the help of advancement of time and human intelligence, everything is possible to be make by people who want big changes. One of the most notable innovations in technology is the emergence of chatbots, which are increasingly used to facilitate human-machine interactions. Chatbots, based on artificial intelligence (AI), is a computer program that is designed to make

conversation with the real human through internet (King, 2022). Chatbot is considered as advance tool because it can otomatically answer any kind of answer and useful to fasilitate any kind of needs.

One of the chatbot that is familiar among people is ChatGPT. This tool was succedeed attracting many people since being introduced in November 2022 as part of a series of generative language models that utilize Transformer architecture by research organization named OpenAI. ChatGPT makes everything easier, it can provide any type of question based on the exact instruction and prompt. ChatGPT also can understand the context of conversations and generate relevant and natural responses. All of this benefit makes the use of ChatGPT more increase in any kind of work field or education. AI is relevant to any human task and really universal to be used (Russel, S & Norvig, P 2010:1), so it is suitable for any purpose.

## **1. LITERATURE REVIEW**

### **1.1 Language**

Language is a mode of speaking, a way of transmitting information and feelings between individuals. It is a system for constructing sentences out of words and combining those sentences together. Using language, a person is able to convey knowledge and opinion (Cameron 2001:17). (Chaer 1995:14) maintains that language as a human sound system which is arbitrary in the sense that it does have meaning, is productive, it is dynamic, it is varied and above all it is a mirror of society.

Historically, it has been thought that language is a means of social unity or a means of communication which provides the access and exchange of people's thoughts, ideas, notions, or feelings. This view has for a long time existed even if some sociolinguistic approaches find it a bit narrow by considering language use as 'context-bound'—attending to “who talks to whom, when and where, and to what end”. In sociolinguistics, similar to meaning in general and language in particular, the functions can be examined from different viewpoints, be it who speaks, who listens, what subject is raised, and what was the intention of the talk (Chaer & Agustina 2004:15). On the other hand, (Halliday 1996:63) understands that the term means more than language; it includes literary language because language is used for specific purposes and should be understood in context.

Nor must one forget to refer to whose authors are (Gorys Keraf 1997:1), who adds further that language is a system of human interaction used by a society which consists of symbols of noise produced by organs of speech.

### **1.2 Technology**

The concept of technology has been defined in many aspects by different scholars. (Grossberg Dyer et al, 1999) argue that there are two important aspects of technology. First, it is the physical component which includes various tangible items like products, tools, equipment, diagrams, methods, and procedures and second, it is the non-physical analysis and data which includes management, production, quality management and assurance, reliability, labor and working

methods. Quite a few years later, (Mascus, 2003) provides even broader definition of technology, arguing it is any information a person needs in order to produce a particular output from processed inputs such as increasing leveraged capital through production techniques, organizational management structures if the two work in unison to bring about a desired output or any other method in production.

### **2.3 ChatGPT**

ChatGPT is an AI generative chatbot, developed by the company Open AI. ChatGPT is called to participate in the conversation with a human and also provide help in answering the questions posed or other tasks such as composition of the text: recipes, source code, essays, letters and many more. As well, it is capable of document reviewing, thick substance condensing, and language conversion. The paid version of ChatGPT has some advanced features that include image and voice inputs, integration with other OpenAI services DALL- E which helps in image generation.

Upon its launch, the algorithms of ChatGPT relied on a combination of supervised and unsupervised learning processes borrowing principles from the organic and physical characteristics of natural phenomena to solve intricate and data-heavy tasks (Kar, 2016). With time, other AI algorithms have been developed that have made it possible for ChatGPT to utilize information in its crude state which includes unstructured types of data such as text and imagery which was not easy before. In today's world, better algorithms, which include computational as well as deep learning, have improved the problem-solving skills.

The field of reinforcement learning has progressed such that now algorithms like convolutional and recurrent neural networks are routinely employed for image analysis, audio analysis, and video analysis (LeCun et al., 2015).

In this study, we employed a quantitative descriptive approach to summarize what has been done in the literature and to extract information from chosen sources that understudied the benefits of ChatGPT in the language learning context. All of the articles were obtained from other various open-access journal databases.

**Research Findings Research Results** The table below summarizes the research results related to the journal articles pubs in the last five years on the double edged sword use of ChatGPT towards language learning. Titles of these journals are enumerated in the table.

## **2. RESEARCH METHODOLOGY**

In this study, researchers used quantitative descriptive to provide summary of specific event and information based on chosen articles from last five years to analyze the positive impact of using ChatGPT on language learning. The articles were collected from some open-access journal resources.

### 3. FINDINGS

#### 3.1 Research Results

The table below show the research result based on last five years journal article that explain about the dual impact of using ChatGPT on English language learning. The list of the journal title is in the table below.

Table 4. Research results about the positive impact of using ChatGPT for language learning.

| No. | Author   | Journal Tiltle  | Year |
|-----|--|---|------|
| 1   | Arif Nugroho, Setyo Putro Nur Hidayanto Pancoro, and Kastam Syamsi                               | The Potentials of ChatGPT for Language Learning: Unpacking its Benefits and Limitations.  | 2023 |
| 2   | Brady D. Lund with Ting Wang   | Chatting about ChatGPT: How may AI and GPT impact academia and libraries?   | 2023 |
| 3   | Harry Barton Essel, Dimitrios Vlachopoulos, Albert Benjamin Essuman, and also John Opuni Amankwa | ChatGPT effects on cognitive skills of undergraduate students: Receiving instant responses from AI-based conversational large language models (LLMs). | 2023 |
| 4   | Jinming Du and Antonie Alm   | The Impact of chatGPT on English for Academic Purposes (EAP) Students' Language Learning Experience: A Self-Determination Theory Perspective.         | 2024 |
| 5   | Joel C. Meniado  | The Impact of ChatGPT on English Language Teaching, Learning, and Assesment: A Rapid Review of Literature.  | 2023 |
| 6   | Josephine Oranga.  | Benefits of Artificial Intelligence (ChatGPT) in Education and Learning: is ChatGPT Helpful?  | 2024 |
| 7   | Joshua Ebere Chukwuere.  | Today's Academic research: The Role of ChatGPT Writing.   | 2024 |
| 8   | Tenri Ugi Irianto, Annita Sari, and Izzatul Laili  | Exploring Learners' Perceptions with ChatGPT as an English Language Learning Tool.  | 2024 |
| 9   | Tira Nur Fitria.   | Artificial Intelligence (AI) technology in OpenAI Chat GPT application: A review of ChatGPT in writing English essay.                                 | 2023 |

#### **4. DISCUSSION**

Based on several journal that is collected related to ChatGPT usage, it is shown that ChatGPT has good impact for supporting language learning in many aspects. This tool could enhance students competencies in English such as speaking practice, listening comprehension, vocabulary, writing, also getting error correction and feedback.

Speaking exercises can be trained using calls and voice feature in the ChatGPT application, they are free to choose what kind of ChatGPT voices style that is provided. Whether it is man or woman voice, each of style has its own different vibes, tone, and accent; it is mean the calls feature not only useful for speaking practice, but also support student's listening comprehension. Calls feature could make student's as if they were talking with the real native speaker without afraid of making mistakes, it is makes students more comfortable of expressing themselves and boosting the communication.

Through the conversations, learners could also notice if there is any unfamiliar new words or phrases that they do not know the meaning, this problem could be simply solved by asking ChatGPT to translate and explain the word so that learners' vocabulary knowledge would be expand. By using this technology, learn new vocabulary would be easier and detailed compared to using traditional learning method. Other problem that students faced are sometimes they struggle to find an idea to start their writing, but by using ChatGPT, it could open many ideas for academic writing purpose easily because ChatGPT provide a lot of learning materials to spark learners creativity. It would also be enhancing their writing quality by asking a feedback and error correction.

The feedback and error correction can students recieve in very short time, ChatGPT would reply with whatever kind of feedback style that learners want using the custom prompt, so it is personalized for each user. This feedback and error correction could enhance learners grammar skills, it would be useful for students know where the mistakes that they made in speaking or writing to avoid the same error in the next time.

#### **5. CONCLUSION**

In conclusion, using of ChatGPT can really make a difference in language learning. All of the features in ChatGPT support language learners to be better and more fluence, such a voice call that helps students practice speaking and listening in a relaxed way and make it easier for them to express themselves without the fear of making mistakes. ChatGPT also helps expand vocabulary and boosting creative writing and easily recieve feedback to help improve their work and grammar skills. Overall, ChatGPT is not just a tool but a supportive companion in the language learning journey, making the process more engaging and effective.

## REFERENCES

- Abdul Chaer and Leonie Agustina. (2004) Early Introduction Sociolinguistic. Jakarta: Rineka Cipta 15.
- Arif Nugroho, N. H. (2023). The Potentials of ChatGPT for Language Learning: Unpacking its Benefits and Limitations. 224-247.  
<https://doi.org/10.18326/register.v16i2.224-247>
- Josephine Oranga. (2023). Benefits of Artificial Intelligence (ChatGPT) in Education and Learning: is Chat GPT Helpful?. International Review of Practical Innovation, Technology and Green Energy (IRPITAGE), 3(3), 46–50.  
<https://doi.org/10.54443/irpitage.v3i3.1250>
- Cameron, L. (2001). Teaching Languages to Young Learners. Cambridge: Cambridge University Press
- Chaer, Abdul and Leoni Agustina. 1995. Sociolinguistics: An Introduction. Jakarta: Rineka Cipta.
- Chukwuere, J. E. (2024). Today's Academic Research: The Role of ChatGPT Writing . 30-46.  
<https://doi.org/10.51519/journalisi.v6i1.639>
- Fitria, T. N. (2023). Artificial intelligence (AI) technology in OpenAI ChatGPT application: A review of ChatGPT in writing English essay. 44-58.  
<https://doi.org/10.15294/elt.v12i1.64069>
- Halliday & Ruqaiya Hasan. 1994. Language, Context, and Text: Aspects of Language in a Social Semiotic Perspective. Yogyakarta: Gajah Mada University Press.
- Harry Barton Essel, D. V. (2023). ChatGPT effects on cognitive skills of undergraduate students: Receiving instant responses from AI-based conversational large language . 1-13.  
<https://doi.org/10.1016/j.caeai.2023.100198>
- Du J, Alm A. The Impact of ChatGPT on English for Academic Purposes (EAP) Students' Language Learning Experience: A Self-Determination Theory Perspective. Education Sciences. 2024; 14(7):726.  
<https://doi.org/10.3390/educsci14070726>
- Kar, A. K. (2015). A hybrid group decision support system for supplier selection using analytic hierarchy process, fuzzy set theory and neural network. 23-33.
- Keraf, Gorys. 1997. Composition: An Introduction to Language Proficiency. Ende: Nusa Indah
- King, M. (2023). The Future of AI in Medicine: A Perspective from a Chatbot. Ann Biomed Eng 51. 291-295.  
<https://doi.org/10.1007/s10439-023-03102-5>
- Kumar, V., Kumar, U., & Persaud, A. (1999). Building Technological Capability through Importing Technology: The Case of Indonesian Manufacturing Industry. Journal of Technology Transfer, 24, 81-96.  
<https://dx.doi.org/10.1023/A:1007728921126>

- Maskus, K. E. (2003). Encouraging International Technology Transfer. UNCTAD/ICTSD Capacity Building Project. On Intellectual Property Rights and Sustainable Development.
- Meniado, J.C. (2023). The Impact of ChatGPT on English Language Teaching, Learning, and Assessment: A Rapid Review of Literature Arab World English Journal, 14 (4). 3-18.  
<http://dx.doi.org/10.24093/awej/vol14no4.1>
- Rabiah, S. (2018). Language as a tool for communication and cultural reality discloser .
- Russel, S. J. (2010). Artificial Intelligence: A Modern Approach, 3<sup>rd</sup> ed., Pearson Education.
- Sazali Abdul Wahab, R. C. (2012). Defining the Concepts of Technology and Technology Transfer: A Literature Analysis. 61-71.
- Tenri Ugi Irianto, A. S. (n.d.). Exploring Learners' Perceptions with ChatGPT as an English Language Learning tools.
- Lund, B.D. and Wang, T. (2023), "Chatting about ChatGPT: how may AI and GPT impact academia and libraries?", Library Hi Tech News, Vol. 40 No. 3, pp. 26-29. <https://doi.org/10.1108/LHTN-01-2023-0009>
- Yann LeCun, Y. B. (2015). Deep learning. 436-444.