The Use of Chat GPT in ELT

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Abstract. *As Chat GPT rose to fame rapidly, it has drawn attention of researchers around the globe to conduct studies related to the use of Chat GPT in various sectors including education. This study aims to investigate the use of Chat GPT in ELT through reviewing numerous previous related journal articles. In this review study, the researchers collected thirty journal articles from several primary online databases, such as: ERIC, Google Scholar, Sage Pub, ProQuest, Elsevier, Academia, and Research Net. To analyze the data, the researchers performed a set of procedures, namely data selection, classification, analysis, and conclusion. The results indicate that Chat GPT is a powerful tool that potentially brings benefits yet it requires more consideration and caution to be properly and effectively implemented. In a nutshell, the role of human resources is required to remain dominant and Chat GPT is probably used as a supporting element in ELT. It is expected that this study provides fruitful insights that are highly beneficial to promote proper understanding and implementation of Chat GPT in ELT.*

Keywords: AI, Chat GPT, ELT, Technology

INTRODUCTION

Technology has been an integrated part of human life. Throughout the history, the evolution of technology brings massive impacts to multi sectors including education, health, business, etc. In education sector, technology is an essential part of teaching and learning process. The use of technology in teaching and learning activities not only promotes the advancement of teaching material delivery but also the enhancement of material acquisition. In other words, technology plays important role in human life that influences many sectors including education.

The advancement of technology facilitates the emergence of Artificial Intelligence (AI). The rise of AI has brought dramatical changes in many ways across the globe (Zhu, et., al., 2023). The constant progress of AI impacts different aspects of lives (Tili, et., al., 2023). It is applied from medical diagnosis to autonomous vehicles (Deng & Lin, 2022). In education context, the integration of AI into teaching and learning context brings significant impacts since it provides highly potential benefits that support the education improvement (Grassini, 2023). In short, AI constantly develops and brings significant benefits including in education.

In recent decades, AI has developed rapidly and initiated the emergence of a phenomenal application, namely Chat GPT (Tlili, et., al., 2023). Chat GPT is a type of natural language processing (NPL) and an Open AI based application. It provides direct insight based on the instruction in a natural language like communicating between humans (Julianto, et., al., 2023). This application has invaded many sectors and successfully competed with other AI based applications, such as: search engine (Google), personal assistant (Alexa and Siri),

personalized entertainment, and software as a service (Taecharungroj, 2023). Chat GPT has been widely used by millions of people around the world since its release in 2022 for the benefits provided by this application. In a nutshell, Chat GPT is a potential application that is possibly used to support the needs and activities of people in various sectors.

As Chat GPT rose to fame, it has drawn attention of researchers around the globe to conduct studies related to the use of Chat GPT in various sectors including education. Numerous studies highlighted the use of Chat GPT in education especially in ELT context. The studies mainly focus on the pros and cons of Chat GPT. A study conducted by Dempere, et., al., in 2023 shows that the benefits of using Chat GPT are supporting research, automating grading, and enhancing human-computer interaction. Meanwhile, the drawbacks of implementing Chat GPT are exposing plagiarism, providing misinformation, causing biases, and decreasing of human's interaction. The other study conducted by Zhu et., al., in 2023 indicates that Chat GPT provides human-like conversation and content, offers potential solution and guidance, and assesses task performance and gives feedback. On the contrary, Chat GPTS also potentially presents inaccurate, fabricated, and biased information and decreases critical thinking as well deep understanding.

Since Chat GPT rose to fame rapidly, it has encouraged researchers around the world to conduct studies related to the use of it in various fields including education. Most of similar research focused on the use of Chat GPT in enhancing students' English skills, abilities, or competence (Athanassopouls, 2023; Marzuki, et., al., 2023; Sonderegger, 2022; Xiao & Zhi, 2023. Meanwhile, the other studies concerned with the impacts of Chat GPT on students' learning motivation, interest, autonomy (Baskara, 2023; Firat; 2023, Fuchs; 2023). In short, the previous studies mostly provided limited discussed on small parts use and effects of chat GPT.

This literature review study investigates the use of Chat GPT in English Language Teaching (ELT). It provides not only various information but also comprehensive updated data related to how Chat GPT is used in ELT, what are the positive impacts of the implementation of Chat GPT in ELT, and what are the negative impacts of the application of Chat GPT in ELT. These data are highly beneficial especially for both future researchers that intend to conduct similar research and teachers that are interested in using Chat GPT as a supporting tool for teaching English. This research presents fruitful information, general understanding, and comprehensive review to the future researchers and teachers. Therefore, it potentially supports the future researchers and teachers to understand how to use Chat GPT in ELT effectively and efficiently, what action requires to maximize the positive impacts of Chat GPT use in ELT, and what strategy needs to minimize the negative impacts of Chat GPT use in ELT.

LITERATURE REVIEW

Nowadays, AI is not only growing rapidly in computer science field that focuses on generating intelligent machines that can act and think like human being but it is also used in various applications from medical field to engineering field (Deng & Lin, 2022). The emergence of AI in educational field has contributed to the transformation of the use ICT as a tool for improving teaching and learning. (Chinonso, et.al., 2023). In a nutshell, AI has brought dramatical changes and transformation in many sectors related to human needs in daily life including education.

The advancement of AI has contributed to the emergence of Chat GPT. Since its release in 2022, it has been a global phenomenon and used by the people around the world (Tlili et al., 2023). Chat GPT is an Open AI based-tool which is designed to understand and generate relevant responses to natural language used in communication (Halaweh, 2023). Producing text similar human language and providing relevant feedback in the level of human comprehension are among the abilities of Chat GPT (Bozkurt, 2023). Chat GPT is a kind of language that enables people to communicate with computer naturally and interactively (Sabzalieva & Valentini, 2023). In short, Chat GPT is a worldwide known and used AI-based tool that allow people build natural communication and give relevant and natural responses in communication.

Dealing with educational sphere, there has been a growing enthusiasm to support the integration of ChatGPT into variety of educational contexts (Zhu, et., al., 2023). Although Chat GPT is considered as an important tool to support education, it must be used responsibly (Halaweh, 2023). In terms of ELT, Chat GPT is a potential tool to support teaching and learning process (Hong, 2023). It is a powerful tool yet it requires more guidelines and caution (Tlili, 2023). Therefore, it only promotes teacher's work not replace their role (Koraishi, 2023). In other words, Chat GPT is a potential AI-based tool to support ELT. However, it should be wisely used and teacher's role is still central.
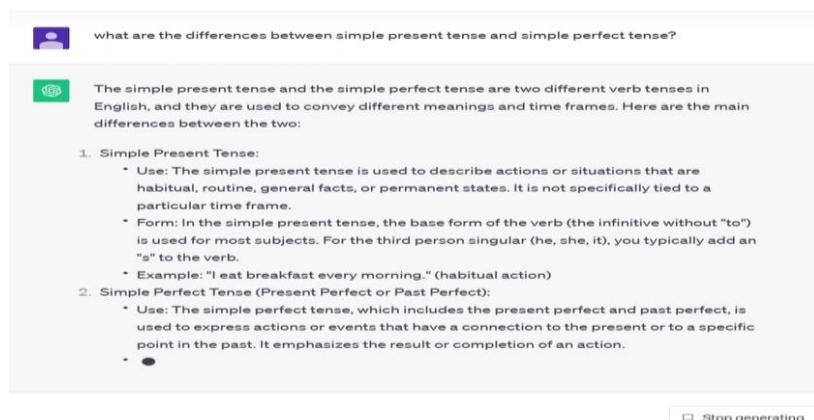
Gambar 1. Sample Interaction with Chat GPT

METHODS

This study applied literature review method. It is an ideal way to summarize the results of the research to discover areas that is more required in the certain research field and it is also an essential element of generating fundamental theory and creating conceptual models (Snyder, 2023). This literature study is conducted through several steps, namely: (1) Selecting the relevant articles, (2) classifying the articles into several categories, (3) analyzing the articles, (4) concluding the essential points of the articles.

On the first phase of this research, the researchers conducted electronic searching to collect the journal articles from several primary online databases, such as: ERIC, Google Scholar, Sage Pub, ProQuest, Elsevier, Academia, and Research Net. These data bases are considered reliable and trustworthy. Therefore, the researchers searched the articles on the data bases. Next, to discover relevant articles, the researchers used key word search strategy, such as; the Chat GPT and Language Teaching, Using Chat GPT to Teach English, The Benefits of Using Chat GPT in Teaching English, The Drawbacks of Using Chat GPT in Teaching English, and other related keywords. After that, the researchers downloaded sixty-five journal articles and read the abstract of the articles carefully. Finally, out of sixty-five journal articles, the researchers only selected thirty articles by considering the relevancy and current publication.

The second phase of this research is classification. Before classifying the thirty journal articles into two main categories, the researchers read the articles and review the important points of the articles carefully. After that, the researchers classified the articles into two main categories, namely the positive impacts of Chat GPT use in ELT and the negative impacts of Chat GPT use in ELT.

The third phase of this research is analysis. In analyzing the journal articles, the researchers focused on evaluating the main components and fruitful information presented in the journal articles. Next, the components and information were transformed into comprehensive summary. The summary cover four important points of the articles, namely: author and year, research objective, research method, and research result.

The last phase of this research is making conclusion. After selecting, classifying, and analyzing the journal articles, the researchers made conclusion by describing the most important points of the findings. In addition, the researchers added some recommendation for better understanding and implementation of Chat GPT in ELT.

RESULT AND DISCUSSION

After conducting a set of procedure of data collection and analysis, there are two major themes and relevant sub-themes of this research which are described in table 1.

Tabel 1. The List of Themes and Relevant Sub-themes

No	Themes	Sub-themes
1	The positive impacts of Chat GPT use in ELT	The use of Chat GPT provides positive impacts to the enhancement of language skills, language competence, vocabulary mastery, grammar mastery, learning interest, learning motivation, learning experience and achievement, autonomous learning, efficiency, effectiveness, easiness, translation skill, communication skills, error analysis, distance education, attractive, adaptive, and interactive learning environment. It also facilitates formal assessment, proper teaching aids, document summary, idea generator, effective learning strategies, suitable dialogue, and proper lesson plan.
2	The negative impacts of Chat GPT use in ELT	The utilization of Chat GPT in ELT potentially brings negative impacts dealing with inaccurate and biased information exposure, students' creativity decline, potential ethical issue, analytical and critical thinking skills decrease, academic integrity, and plagiarism.

Meanwhile table 2 presents the summary of Chat GPT use in ELT that is collected from many related studies from different sources.

Table 2. The Summary of Chat GPT use in ELT Studies

No.	Author & Year	Research Objective	Research Method	Research Result
1.	Xiao, Y & Zhi, Y. 2023)	To investigate students' experience and perceptions towards the use of Chat GPT in language learning context.	Explanatory Study	The use of GPT in language learning enhance students' language competence.
2.	Perkins, M (2023)	To explore the implementation of Chat GPT to support the generation of formal assessment.	Experimental Study	Chat GPT supports the generation of coherent and systematic formal assessment.
3.	Boner, E., Lege, R., & Frazier, E. (2023)	To illustrate that the utilization of Chat GPT in language learning provides feedback for the learners.	Literature Review	Utilizing Chat GPT in language learning provides fruitful feedbacks for the learners.
4.	Firat, M. (2023)	To identify the best practice and approach in using Chatbots like Chat GPT.	Descriptive Study	Chat GPT promotes autonomous learning and guides the students in language learning.
5.	Baskara, F., X., R. (2023)	To provide overview of the benefits and challenges of integrating Chat GPT into EFL learning.	Literature Review	The integration of Chat GPT into EFL learning cultivates the students' learning interest and motivation.
6.	Chinonso, O, E., Theresa, A, M., & Aduke, T, C. (2023)	To evaluate the capabilities, possibilities, and limitations of Chat GPT use.	Literature Review	The use of Chat GPT increases efficiency and effectiveness in conducting research, teaching, and learning.
7.	Fuchs, K. (2023)	To discover the challenges and opportunities of applying Chat GPT in ELT.	Literature Review	Applying Chat GPT in ELT encourages the students to stay motivated in learning.

8.	Koraishi, O. (2023)	To describe the potential benefits of integrating Chat GPT into EFL learning.	Descriptive Study	The integration of Chat GPT into ELT provide a proper teaching aids for the teachers.
9.	Jiao, W., et., al. (2023)	To test Chat GPT translation performance to support language learning.	Experimental Study	Chat GPT shows good performance in translation. It facilitates translation activities in language learning.
10.	Grassini, S. (2023)	To delve the potential benefits of Chat GPT use in language learning.	Literature Review	Using Chat GPT in language learning activity fosters attractive and adaptive learning environment.
11.	Al Garaady, J., & Mahyoob, M. (2023)	To provide fruitful insight related the advantages of using Chat GPT in ELT.	Mixed Method Study	The implementation of Chat GPT in ELT assists the teachers and students to conduct error analysis.
12.	Baskara, F., X., R., & Mukarto, F., X. (2023)	To provide fruitful insights on general overview of Chat GPT use in learning activity.	Mixed Method Study	Using Chat GPT in learning activity enhance students' reading comprehension.
13.	Hong, W. (2023)	To investigate the impact of Chat GPT in language teaching and learning.	Literature Review	The use of Chat GPT in language teaching and learning develop students' communication skills.
14.	Aljanabi, M. (2023)	To discuss the potential of Chat GPT in generating and summarizing documents.	Literature Review	Chat GPT generates and summarizes academic documents properly.
15.	Marzuki, et., al. (2023)	To assess the influence of AI tool like Chat GPT on students' writing skill.	Case Study	The use of Chat GPT enhance students' writing skills.
16.	Halaweh, M. (2023)	To explore the potential use of Chat GPT in educational context.	Literature Review	Chat GPT is a potential generator idea and concept that can be used to support teaching and learning activities.
17.	Kılınç, S. (2023)	To understand how ChatGPT can influence and shape the landscape of distance education.	Exploratory Study	Chat GPT facilitates distance education and it is important to consider the supporting elements related to it.
18.	Sonderegger, S. (2022)	To examine whether the use of Chat GPT promotes the improvement of speaking skills.	Case Study	Utilizing Chat GPT into teaching and learning activities provide interactive atmosphere and elevate speaking skills.
19.	Ausat, A., M., M., et., al. (2023)	To investigate the impacts of technological tools in classroom activities.	Mixed Method Study	The integration of Chat GPT into ELT assists the teacher and students to simplify their tasks.
20.	Baidoo A., D., & Ansah, L., O. (2023)	To assess the interactivity of Chat GPT in teaching and learning process.	Exploratory Study	Chat GPT foster the realization of interactive teaching and learning atmosphere.
21.	Fütterer, T., et., al. (2023)	To discover Chat GPT users' perceptions and experiences in educational context.	Descriptive Study	The use of Chat GPT in teaching and learning activities promotes effective learning strategies.

22.	Athanassopoulos, S., et., al. (2023)	To check the effectiveness of using Chat GPT as a feedback tool in writing.	Experimental Study	Utilizing Chat GPT into writing activity improve students' vocabulary and grammar mastery.
23.	Young, J., C. & Shishido, M. (2023)	To assess the effectiveness of ChatGPT in generating high-quality dialogue materials suitable for EFL students.	Analysis Study	ChatGPT provide suitable dialogues for students at the Common European Framework of Reference for Languages (CEFR) level A2.
24.	Rueda, M., M., et., al. (2023)	To investigate the impacts of Chat GPT use in teaching and learning activities.	Descriptive Study	The utilization of Chat GPT into teaching and learning activities elevate students' learning experience and academic achievement.
25.	Javaid, M., et., al. (2023)	To identify and discuss the significant applications of ChatGPT in education.	Descriptive Study	Using Chat GPT enables the teacher to create more proper and suitable lesson plan for the students.
26.	Zhu, I., C. et., al. (2023)	To describe the way to harness the potential of Chat GPT.	Descriptive Study	Inaccurate and biased information might be presented by Chat GPT. Use COST to harness the potential of Chat GPT.
27.	Shidiq, M. (2023)	To discuss the ChatGPT system and its impact on students' lack of creativity in writing skills.	Descriptive Study	Chat GPT potentially reduces students' creativity.
28.	Stepanechko, O., & Kozub, L. (2023)	To explore English teachers' concern about the ethical use of ChatGPT by university students.	Descriptive Study	The use of Chat GPT exposes students to ethical issue and hinder the development of analytical and critical skills.
29.	Waltzer, T., Cox, R., L., & Heyman, G., D. (2023)	To address gap between teachers' and students' perspectives related to Chat GPT.	Analysis Study	Chat GPT exposes the students to academic integrity.
30.	Eke, D., O. (2023)	To provide an overview about the impacts of Chat GPT on Academic Integrity.	Literature Review	Using Chat GPT possibly makes students involve in plagiarism.

The Overview of the Findings

The researchers selected thirty journal articles from various data bases with relevant topics. The journal articles are currently published. Out of thirty articles, twenty-nine of them were published in 2023 and the other one was published in 2022. The studies were conducted for various objectives and research design. The research mainly aims to investigate the perspectives, benefits, drawbacks, opportunities, or challenges related to the Chat GPT and ELT. The research designs used are explanatory study, experimental study, case study, descriptive study, analysis study, mixed method study, and literature review. The studies also highlight about how to use Chat GPT in ELT context which lead to the point that Chat GPT is a potential AI based tool to support the success of teaching and learning activities. It should be

used wisely through considering the benefits, drawbacks, opportunities in using it. In addition, it is important to understand and consider the positive and negative impacts of using Chat GPT in ELT.

The Positive Impacts of Chat GPT Use in ELT

Data from table 2 presents the positive impacts of Chat GPT integration into ELT. First, it enhances students' language competence as it provides numerous information that can be used by the students to learn (Xiao & Zhi, 2023). Second, it facilitates the formulation of coherent and systematic formal assessment. Since Chat GPT enables text generating, it is therefore potentially used as a part of assessments (Perkins, 2023). Third, it provides useful responses and feedbacks towards the students' questions. Using Chat GPT in learning process gives the students' opportunity to deepen their knowledge and understanding (Bonner, Lege, & Frazier, 2023). Fourth, it supports autonomous learning. When the students access Chat GPT, they have opportunity to personalized access and direct the students to have self-directed learning experiences. Thus, Chat GPT promotes autonomous learning for the students (Firat, 2023). Fifth, it elevates learning motivation of the students. The use of technological tool like Chat GPT is a potential solution to maintain students' motivation in learning (Baskara, 2023).

Sixth, it also helps students to stay interested in learning because the students build stronger connection to their learning journey (Fuchs, 2023). Seventh, it improves learning, teaching, and research effectiveness and efficiency. AI language model like Chat GPT normally provides fast responses and feedbacks. Thus, it supports to conduct effective and efficient learning, teaching, and research (Chinonso, Theresa, & Aduke, 2023). Eighth, it is a potential teaching aids that promotes student centered learning. Using Chat GPT in ELT aids teachers in teaching process. Chat GPT is a valuable teaching medium (Koraishi, 2023.) Ninth, it is a good translation tool to support language learning. Many studies approved that Chat GPT has competitive performance compare with other commercial translation tools, such as: Google Translate, Bing Microsoft Translator, or DeepL Translator (Jiao, W., et., al., 2023). Tenth, it fosters attractive and adaptive learning environment. Chat GPT is an AI based tool that follows the advancement of technology. Therefore, it cultivates interesting and flexible learning atmosphere (Grassini, 2023).

Eleventh, it assists to identify errors and provides proper feedbacks to correct the errors. The error analysis process is important to generate supportive learning environment (Al garaaady & Mahyoob, 2023). Twelfth, it enhances students' reading comprehension. Chat GPT exposes students to authentic texts. It provides potential materials to improve students' reading comprehension (Baskara & Mukarto, 2023). Thirteenth, it increases students' communication

skills. The use of Chat GPT in ELT provides opportunity of discussion between teachers and students. This type of interaction supports the students to develop their communication skills (Hong, 2023). Fourteenth, it summarizes academic documents properly. Utilizing Chat GPT in ELT helps the users to summarizes documents effectively and efficiently. Thus, it helps the students to improve their academic achievement (Aljanabi, 2023). Fifteenth, it improves students' writing skills. Chat GPT potentially brings positive outcomes to students' writing skills especially in terms of clarity, logical progression, and quality (Marzuki, et., al., 2023).

Sixteenth, it is a source of potential concept and idea that can be used to promote teaching and learning. Using Chat GPT in ELT exposes the user to a variety of information and knowledge that can be used to support teaching and learning activities (Halaweh, 2023). Seventeenth, it promotes distance learning. Teaching and learning during and after pandemic still rely on technological tools and applications, Chat GPT is one of the AI based-tools that facilitates distance education (Kılınç, 2023). Eighteenth, it helps students to enhance their speaking skills. Since Chat GPT exposes the users to question and response, it aids to increase the conversational skills (Sondregger, 2022). Nineteenth, it eases students' tasks through simplifying it. In educational context, Chat GPT enables the students to learn easier and the teacher to teach simpler (Ausat, et., al., 2023). Twentieth, the implementation of Chat GPT in ELT facilitates the creation of interactive teaching and learning environment. The way of accessing Chat GPT provides opportunity to students and teacher to build the interactive teaching and learning atmosphere (Baidoo & Ansah, 2023).

Twenty first, it supports effective teaching and learning strategies. Integrating Chat GPT into ELT promotes practical ways in teaching and learning activities as it provides feedbacks that is fundamental element to support effectiveness in teaching and learning process (Fütterer, 2023). Twenty-second, it promotes the enhancement of students' vocabulary and grammar mastery. Chat GPT is designed to have the ability to provide feedback by using human like language. The language covers correct sentences and sophisticated vocabulary. Hence, it helps the students to elevate their vocabulary and grammar mastery level (Athanassopouls, et., al., 2023). Twenty-third, it provides high-quality materials for EFL learners. The materials or texts used by Chat GPT is adjusted with CEFR standard (Young & Shishido, 2023). Twenty-fourth, it improves students' learning experience and academic achievement. One of attractive aspects of Chat GPT is enriching students' learning experience and facilitating the improvement of academic achievement (Rueda, et., al., 2023). Twenty-fifth, it assists the teachers in creating more appropriate lesson plan for the students. Chat GPT is an ideal tool for teachers in creating good lesson plans to support teaching and learning activities.

To sum up, the use of Chat GPT in ELT provides many positive impacts both to students and teachers. For instance, Chat GPT promotes the enhancement of students' skills, competence, interest, and motivation that bring potential changes and contributes to their academic achievement. Chat GPT also assists the teachers through providing not only authentic materials but also suitable lesson plans for teaching and learning activity. Therefore, it is considered as a potential and valuable teaching and learning tool.

The Negative Impacts of Chat GPT Use in ELT

Data in table 2 also illustrates the negative impacts of utilizing Chat GPT in ELT. First, it probably exposes the users to inaccurate and biased information and data. The limited quality of the Chat GPT's feedbacks potentially leads to inaccurate and biased information (Zhu, et., al., 2023). Moreover, it potentially decreases the students' creativity. Since Chat GPT provides instant feedbacks to students, it does not encourage students to use their maximum creativity (Shidiq, 2023). Furthermore, it possibly exposes students' ethical issues and declines their analytical and critical skills development. The use of Chat GPT in ELT may interfere successful educational process through preventing the development of students' analytical and critical skills (Stepanechko & Kozub, 2023). Additionally, it brings integrity issues. Chat GPT obviously presents challenge to integrity because sometimes students tend to rely on Chat GPT answers to complete their homework instead of using it as a reference only (Walter, Cox, & Heyman, 2023). At last, it possibly involves plagiarism. The urge to find instant solution without giving bigger effort may expose the students to plagiarism issue as it is simple to copy paste the answer then paraphrase it (Eke, 2023).

The findings of the study reveals that there are potential challenges that are potentially brought by using Chat GPT in ELT. Some of them are the exposure to inaccurate information, integrity issues, and plagiarism. Other are causing the decline of creativity, analytical and critical thinking skills. Thus, it is important to build students' awareness in using Chat GPT in learning activities to minimize the potential negative effects of Chat GPT use in ELT.

CONCLUSION AND SUGGESTION

This research reveals that using Chat GPT in teaching and learning language activities should be wise as it potentially brings both positive and negative impacts especially to students and teachers. Therefore, it is important for the teachers to wisely apply Chat GPT as a medium or learning material, meanwhile, for the students, Chat GPT is highly recommended to utilize as a reference for learning to maximize the positive impacts and minimize the negative impacts. At last, it is also suggested for the future researchers to conduct more quantitative research to

investigate the effectiveness of using Chat GPT to support students' language proficiency improvement.

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REFERENCES

Al Garaady, J., & Mahyoob, M. (2023). Chat GPT's capabilities in spotting and analyzing writing errors experienced by EFL learners. *Arab World English Journal (AWEJ)*, *(9)*, 3-17. DOI: *https://dx.doi.org/10.24093/awej/call9.1*

Aljanabi, M., et al. (2023). Chat GPT: Open possibilities. *Iraqi Journal for Computer Science and Mathematics, 4*(1), 62-64. DOI: *https://doi.org/10.52866/ijcsm.2023.01.01.0018*

Athanassopoulos, et., al. (2023). The use of ChatGPT as a learning tool to improve foreign language writing in a multilingual and multicultural classroom. *Advances in Mobile Learning Educational Research*, *3*(2), 818-824. DOI: *https://doi.org/10.25082/AMLER.2023.02.009*

Ausat, A, M, A. et al. (2023). Can chat GPT replace the role of the teacher in the classroom: a fundamental analysis. *Journal on Education*, *5*(4), 16100-16106. DOI**:** *https://doi.org/10.31004/joe.v5i4.2745*

Baidoo, A, D., & Owusu, A., L. (2023). Education in the era of generative Artificial Intelligence (AI): Understanding the potential benefits of chatgpt in promoting teaching and learning. *Journal of AI, 7*(1), 52-62. DOI: *http://dx.doi.org/10.2139/ssrn.4337484*

Baskara, F, R. (2023). Integrating Chat GPT into EFL writing instruction: Benefits and challenges. *International Journal of Education and Learning*, *5*(1), 44-55. DOI: *https://dx.doi.org/10.31763/ijele.v5i1.858*

Baskara, R., & Mukarto, M. (2023). Exploring the implications of Chat GPT for language learning in higher education. *Indonesian Journal of English Language Teaching and Applied Linguistics*, *7*(2), 343-358. DOI: *10.4018/IJCALLT.326135*

Bonner, E., Lege, R., & Frazier, R. (2023). Large language model-based artificial intelligence in the language classroom: Practical ideas for teaching. *Teaching English with Technology*. *23*(1), 23-41, DOI: *https://doi.org/10.56297/BKAM1691/WIEO1749*

Bozkurt, A. (2023). Generative Artificial Intelligence (AI) powered conversational educational agents: The inevitable paradigm shift. *Asian Journal of Distance Education*, *18*(1), 198-204.

Chinonso, O, E., et., al. (2023). Chat GPT for teaching, learning and research: Prospects and challenges. *Glob Acad J Humanit Soc Sci*, *5*(2), 33-40.

Dempere, J, et al. (2023). The impact of Chat GPT on higher education. *Frontier in Education, 8*, 1-13. DOI: *https://doi.org/10.3389/feduc.2023.1206936*

Deng, J., & Lin, Y. (2022). The benefits and challenges of Chat GPT: An overview. *Frontiers in Computing and Intelligent Systems*, *2*(2), 81-83.

Eke, D, O. (2023). ChatGPT and the rise of generative AI: Threat to academic integrity? *Journal of Responsible Technology,13,* 1-4.

Firat, M. (2023). How chat GPT can transform autodidactic experiences and open education? Accessed from OSFPreprint on August 10, 2023.

Fuchs, K. (2023). Exploring the opportunities and challenges of NLP models in higher education: Is Chat GPT a blessing or a curse? *Frontiers in Education*, 1-4. DOI *10.3389/feduc.2023.1166682*

Futterer, T. et al. (2023). Chat GPT in education: Global reactions to AI innovations. *Scientific Report, 13*, 1-14. DOI: *https://doi.org/10.1038/s41598-023-42227-6*

Grassini, S. (2023). Shaping the future of education: exploring the potential and consequences of AI and chatGPT in educational settings. *Education Sciences, 13*, 1-13. DOI: *https://doi.org/10.3390/educsci13070692*

Halaweh, M. (2023). ChatGPT in education: Strategies for responsible implementation. *Contemporary Educational Technology*, *15*(2), 1-11. DOI: *https://doi.org/10.30935/cedtech/13036*

Hong, W. (2023). The impact of ChatGPT on foreign language teaching and learning: Opportunities in education and research. *Journal of Educational Technology and Innovation, 5*(10), 37-45.

Javaid, M., et., al. (2023). Unlocking the opportunities through ChatGPT Tool towards ameliorating the education system. *KeAi Chinese Roots Global Impact*, 3(1), 1-12. *https://doi.org/10.1016/j.tbench.2023.100115*

Jiao, W. et al. (2022). Is ChatGPT A Good Translator? Yes With GPT-4 As The Engine. DOI: *https://doi.org/10.48550/arXiv.2301.08745*

Julianto, I, T. et al. (2023). Alternative text pre-processing using Chat GPT open AI. *Jurnal Nasional Pendidikan Teknik Informatika : JANAPATI,* 12(1)*,* 68-77. DOI: *https://doi.org/10.23887/janapati.v12i1.59746*

Kilinc, S. (2023). Embracing the future of distance science education: opportunities and challenges of Chat GPT integration. *Asian Journal of Distance Education*, *18*(1), 205-237.

Koraishi, O. (2023). Teaching English in the age of AI: Embracing chatGPT to optimize EFL materials and assessment. *Language Education & Technology (LET Journal)*, *3*(1), 55-72.

Marzuki, et al. (2023). The impact of AI writing tools on the content and organization of students' writing: EFL teachers' perspective. *Cogent Education*, *10*(2), 1-17, DOI: *https://doi.org/10.1080/2331186X.2023.2236469*

Rueda, M., M., et., al. (2023) Impact of the Implementation of Chat GPT in Education: A Systematic Review. *Computers*, *12*, 1-13. DOI: *https://doi.org/10.3390/computers12080153*

Perkins, M. (2023). Academic Integrity considerations of AI large language models in the post-pandemic era: Chat GPT and beyond. *Journal of University Teaching & Learning Practice*. *20*(2), 1-14. DOI: *https://doi.org/10.53761/1.20.02.07*

Sabzalieva, E. & Valentini, A. (2023). Chat GPT and artificial intelligence in higher education. UNESCO. Accessed on August 2023 on *https://unesdoc.unesco.org/ark:/48223/pf0000385146*

Shidiq, M. (2023). The use of artificial intelligence-based Chat GPT and its challenges for the world of education and from the viewpoint of the development of creative writing skills. *Proceeding of International Conference on Education, Society, and Humanity*, *1*(1), 353-357.

Snyder, H. (2023). Designing the literature review for a strong contribution. Journal of Decision Systems, 1-8. DOI: https://doi.org/10.1080/12460125.2023.2197704

Sonderegger, S. (2022). How generative language models can enhance interactive learning with social robots. *19th International Conference on Cognition and Exploratory Learning in Digital Age (CELDA 2022)*, 89-96.

Stepanechko, O., & Kozub, L. (2023). English teachers' concerns about the ethical use of chatgpt by university students. *International Scientific Journal,* 297-302. DOI: *https://doi.org/10.36074/grail-of-science*.

Taecharungroj, V. (2023). What can Chat GPT do? Analyzing early reactions to the innovative AI chatbot on Twitter. *Big Data Cognitive Computing*, *7*(1), 1-10. DOI: *https://doi.org/10.3390/bdcc7010035*

Tlili, A. et al. (2023). What if the devil is my guardian angel: Chat GPT as a case study of using chatbots in education. *Smart Learning Environments, 10*(15), 1-24. DOI: *https://doi.org/10.1186/s40561-023-00237-x*

Waltzer, T., Cox, R, L., & Heyman, G, D. (2023). Testing the ability of teachers and students to differentiate between essays generated by Chat GPT and high school students. *Human Behavior and Emerging Technologies*. *2023*, 1-9. DOI: *https://doi.org/10.1155/2023/1923981*

Xiao, Y., & Zhi, Y. (2023). An exploratory study of EFL learners' use of Chat GPT for language learning tasks: Experience and perceptions. *Languages, 8*, 1-12. DOI: *https://doi.org/10.3390/languages8030212*

Young, J., C., & Shishido, M. (2023). Investigating openAI's Chat GPT potentials in generating chatbot's dialogue for English as a foreign language learning. *International Journal of Advanced Computer Science & Applications*, *14*(6), 65-72. DOI: *https://dx.doi.org/10.14569/IJACSA.2023.0140607*

Zhu, I., C., et., al. (2023). How to harness the potential of Chat GPT in education? . *Knowledge Management & E-learning Journal, 15*(2), 133–152. DOI: *https://doi.org/10.34105/j.kmel.2023.15.008*