

Investigating the Impact of ChatGPT as an AI Tool on ESL Writing: Prospects and Challenges in Saudi Arabian Higher Education

Samah Abdulhadi Abduljawad

 <https://orcid.org/0000-0001-9060-6660>

Royal Commission for Yanbu Colleges and Institutes, Saudi Arabia

ABSTRACT

This research explores the impact of ChatGPT, an AI tool, on ESL students' writing proficiency at a Saudi Arabian university. Using a mixed-methods approach, data from 130 students showed a significant positive effect on their writing. A focus group interview with six students highlighted opportunities such as personalized feedback, language skill development, vocabulary expansion, and greater autonomy. However, challenges included a lack of contextual understanding, loss of individuality in writing, reduced creativity, and ethical concerns. The findings offer valuable insights for educators on how to effectively integrate ChatGPT into writing instruction while addressing its challenges.

KEYWORDS

Artificial Intelligence, ChatGPT, ESL Writing

INTRODUCTION

Over the past few years, the education system has received a lot of criticism as it failed to adapt to the needs of the learners. The education system worldwide is shifting towards a student-centered, technologically advanced, personalized learning system. The most current interactive technology that has attracted the attention of educators is Artificial Intelligence (AI) (Alazemi, 2024). Educators anticipate that the utilization of the AI tool, particularly ChatGPT, will help them gain a basic understanding of student learning pathways through the provision of data. They believe AI would enhance the effectiveness of academic systems and learning structures (Aladini, 2023).

The advent of contemporary digital technologies, including the metaverse, AI agents, and ambient intelligence, has initiated a novel epoch characterized by profound inquiries (Aljabr, 2023). One example of this change is the rise of ChatGPT in 2023. Although this technology may not always be precise, it has the potential to surpass human performance in a multitude of domains, thereby upsetting the academic and scientific sectors (Lo, 2023).

This AI tool acts as a formative feedback tool as it offers feedback and assistance to learners in ways that improve their writing abilities and overall learning process. This tool allows students to develop an opinion on the areas that require development and to enhance their writing approach, thereby fostering a more active learning environment (Dahri et al., 2024). With this AI tool, learners

DOI: 10.4018/IJCALLT.367276

This article published as an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>) which permits unrestricted use, distribution, and production in any medium, provided the author of the original work and original publication source are properly credited.

can obtain valuable ideas for developing their writings, customize the textual complexity to their level, translate texts into more straightforward language, and deduct grammatical errors (Zia et al., 2019).

In educational institutions worldwide, the use of ChatGPT to fulfill learners' learning goals has risen in the post-pandemic period. The rapid development of technology and the appearance of new media tools in learning and teaching have made the English language accessible to learners. Ribeiro (2020) posits that AI offers the most substantial benefits when implemented to enhance English learning outcomes. In the present day, English is a widely used language with a well-established grammar. Hence, English as a Second Language (ESL) learners have faced challenges mastering English. ChatGPT or machine learning, intelligent search, and natural language processing can significantly improve English learning and teaching.

Utilizing ChatGPT for Saudi Arabian ESL learners in higher learning institutions is progressively significant as this tool is now widely used in domestic and global institutions (Jamshed et al., 2024). Saudi Arabia is determined to equip its future generation with skills to function in a post-industrial revolution economy, which aligns with the Kingdom's overall goals and objectives of diversifying the economy and bringing about significant social alteration. In this regard, Saudi Arabian universities and other educational institutions are now encouraging their ESL students to use ChatGPT to give them a better learning environment in this technological era (Aljabr, 2023). With this AI tool, Saudi Arabian ESL learners can enhance their language proficiency, which ensures the development of the communication skills necessary to communicate in the global and local markets.

The rationale for examining the AI formative feedback tool in Saudi ESL learners lies in the country's unique cultural and educational setting. Cultural factors, such as concerns about technology replacing human interaction and a preference for face-to-face communication, may hinder learners' engagement with the AI tool (Raheem et al., 2023). Additionally, Saudi Arabia's educational system is traditionally teacher-centered, emphasizing authority and memorization (Ali et al., 2023). These challenges highlighted the need to examine the impact of the AI formative feedback tool on the writing abilities of ESL students. Previous research has not yet investigated the effects of the AI formative feedback tool on the writing skills of Saudi Arabian ESL learners, as many Saudi Arabian higher education are slow adopters of technology and usually utilize traditional teaching approaches (Aladini, 2023). Thus, this would provide an opportunity to determine how the adoption of the AI tool increases the ESL learner's overall writing proficiency.

Although past research has determined the overall toward AI technology, there remains an important gap in understanding the direct impact of particular ChatGPT on the writing abilities of ESL students, particularly in Saudi Arabia (Ali et al., 2023). This study addresses this gap by providing focused insights into how ChatGPT can improve or diminish writing proficiency among Saudi Arabian ESL students. Given the rapid adoption of AI in education globally and Saudi Arabia's increased emphasis on digital transformation, this research is both timely and urgent. By examining the practical opportunities and challenges associated with using ChatGPT for feedback in ESL contexts, this study provides educationalists with actionable strategies for effective AI integration to enhance learning outcomes for ESL learners in the region.

Research Objective

This research is conducted to fulfill the following research objectives:

- To determine the impact of the AI formative Feedback Tool, ChatGPT, on ESL learners' writing proficiency.
- To determine the opportunities and challenges ESL learners face while using the AI formative Feedback Tool

17 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/article/investigating-the-impact-of-chatgpt-as-an-ai-tool-on-esl-writing/367276

Related Content

Enhancing Linguistic and Intercultural Competencies through the Use of Social Network Sites and Google Earth

Ellen Yehand Greg Kessler (2015). *Promoting Global Literacy Skills through Technology-Infused Teaching and Learning* (pp. 1-22).

www.irma-international.org/chapter/enhancing-linguistic-and-intercultural-competencies-through-the-use-of-social-network-sites-and-google-earth/115695

Podcasts in Four Categories: Applications to Language Learning

Ulugbek Nurmukhamedov and Randall Sadler (2011). *Academic Podcasting and Mobile Assisted Language Learning: Applications and Outcomes* (pp. 176-195).

www.irma-international.org/chapter/podcasts-four-categories/50677

"You're a Winner": An Exploratory Study of the Influence of Exposure on Teachers' Awareness of Media Literacy

J. Egbert and Leslie Huff (2011). *International Journal of Computer-Assisted Language Learning and Teaching* (pp. 33-48).

www.irma-international.org/article/you-winner-exploratory-study-influence/61345

An Investigation on the Online Learning Engagement of Malaysian Secondary School Students from Different School Types

Nurjanah Mohd Jaafar, Lay Shi Ng, Najihah Mahmud, Siew Ming Thang and Warid Mihai (2022). *International Journal of Computer-Assisted Language Learning and Teaching* (pp. 1-20).

www.irma-international.org/article/an-investigation-on-the-online-learning-engagement-of-malaysian-secondary-school-students-from-different-school-types/310079

Learning English With Texting on Social Media: The Case of Taiwanese ESL Students in the U.S

Hong-Chi Shiau and Catherine Hua Xiang (2018). *Cases on Audio-Visual Media in Language Education* (pp. 240-260).

www.irma-international.org/chapter/learning-english-with-texting-on-social-media/186534