









Possibilities for Improving ESP Curriculum Design and Assessment Strategies for Saudi Universities with ChatGPT

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Abstract:

This study investigates the impact of integrating ChatGPT, an Artificial Intelligence-powered language model, into English for Specific Purposes (ESP) writing courses for EFL students at Saudi Arabian universities. The main research question examines how ChatGPT can enhance students' writing performance, engagement, and autonomous learning. The study aims to evaluate the effectiveness of ChatGPT in improving ESP writing skills and to identify the challenges and opportunities associated with its use in classroom settings. It also explores how Saudi university instructors can strategically create exams and courses using generative AI. The significance of this study lies in its contribution to the growing field of AI-assisted language learning, offering valuable insights for educators, curriculum designers, and policymakers amid the digital transformation of education. A mixed-methods approach was adopted, including surveys, interviews, pre- and post-tests, and document analysis to collect quantitative and qualitative data. The findings reveal significant improvements in students' writing proficiency, particularly in grammar accuracy, vocabulary enrichment, creativity, and critical thinking. Nevertheless, challenges such as technical barriers, ethical concerns, and teachers' limited training in AI tools were identified. The study recommends providing professional development programs for teachers, establishing ethical guidelines for AI use, enhancing technical support, and continuously evaluating AI tools to ensure effective implementation. This research provides a foundation for future studies on integrating AI technologies in language education and highlights the potential of ChatGPT to foster autonomous and effective language learning.

Keywords: autonomous language learning, ChatGPT, curriculum design, EFL, ESP, writing skills, generative artificial intelligence, language education, Saudi Arabia

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Introduction

The introduction and incorporation of artificial intelligence (AI) into second language acquisition (SLA) has brought about a significant transformation in the field of teaching English as a foreign language (EFL) (Fitria, 2021; Li, 2022). This is especially noticeable in Saudi Arabia's (KSA) higher education system (AbdAlgane & Jabir Othman, 2023). Therefore, the primary objective of this study is to investigate the crucial role of AI in transforming EFL instruction, examining its effects, challenges, and implications in the Saudi higher education system.

A paradigm shift in the conventional approaches to teaching and learning English as a foreign language has been sparked using AI technologies, such as natural language processing, machine learning algorithms, and adaptive learning systems (Ouyang & Jiao, 2021; Zhai & Wibowo, 2023). AI-driven platforms may be able to provide autonomous and customized learning experiences at the Kingdom of Saudi Arabia's higher education institutions that are suited to each student's proficiency level, learning preferences, and cultural background (Haque et al., 2023). These systems promote autonomy and engagement among EFL learners by offering immersive and interactive language learning settings, as well as real-time feedback and assessment (Miladiyenti et al., 2022; Li & Wang, 2023).

Dergaa et al. (2023) used a mixed methods research design to analyze EFL teachers' views on AI technologies in Saudi Arabian instruction. The primary goal was to understand their concerns about AI's potential use in coursework and assignments, as some teachers may be wary due to the perceived stigma of "cheating" and "academic dishonesty," which could raise questions about students' work (Dergaa et al., 2023). Despite recent developments in AI platforms and applications, there are still issues with using AI in EFL instruction in KSA's higher education institutions. Concerns around digital infrastructure, technological access, and the requirement for trained teachers to use these AI-powered resources are still common (Alotaibi & Alshehri, 2023; Alharbi, 2024). Furthermore, it is important to carefully evaluate the ethical issues related to data protection, cultural adaptation, and human-computer interaction in language learning environments (Alsabhan, 2023).

Over the past three decades, social media and the internet have sparked conflicting opinions on their use in the classroom. Despite some acknowledging their potential (Rahman et al., 2020; Tess, 2013; Zachos et al., 2018), others voiced their disapproval and misgivings about integrating social media platforms and applications into their classrooms because many of those teachers were skeptical and thought that students might not use them appropriately and might occasionally cheat (Alghamdi et al., 2016; Dyer, 2010; O'Connell, 2016). The stigma that taints their earnest attempts to increase their language skills may surprise many students (Best & Shelley, 2018; Peytcheva-Forsyth et al., 2018). Many students struggle to distinguish acceptable personal sharing in social situations from non-ethical or professional materials in educational or organizational settings (Burnett et al., 2016). Few studies have examined the fast and contemporary use of AI in ESP education and whether it is possible to objectively assess such an unprecedented use of AI technology in education, despite such findings in earlier research investigations into this topic.

This research explores the potential benefits and challenges of integrating ChatGPT into EFL courses in Saudi Arabia's higher education system. Despite the growing interest in AI and automation in language learning, AI is still in its infancy in teaching ESP.

Research Questions

1. What are the perceived benefits of incorporating ChatGPT into ESP education in Saudi Arabian higher education institutions?
2. What challenges arise in implementing ChatGPT in ESP courses, and how can these challenges be mitigated?
3. How can curriculum design and assessment strategies be adapted to effectively integrate ChatGPT into ESP courses, ensuring a symbiotic relationship between generative AI and pedagogical goals?
4. How does ChatGPT integration impact student engagement, autonomy, and performance in ESP writing skills development?

The study aims to explore how Saudi university instructors can strategically create exams and courses using generative AI. Due to advancements in AI technologies, the educational landscape in Saudi Arabia is undergoing a turning point with potential global implications.

Literature review

Introduction to AI in Education

Artificial intelligence (AI) is being incorporated into education in a way that has never been seen before in the twenty-first century (Lewis et al., 2019; Ocaña-Fernández et al., 2019). ChatGPT, a cutting-edge conversational tool created by OpenAI, is one of the key tools resulting from this technological revolution. Beyond merely employing it as a digital assistant, research focuses on learners' interactions, insights gained, and related ethical considerations, including the plagiarism conundrum (Dwivedi et al., 2023; Yan, 2023). Saudi Arabia's sociocultural dynamics and rapidly developing technical landscape make it a fascinating study area for investigating EFL learners' use of ChatGPT, which combines socio-constructivist and technical determinist ideas, emphasizing the intrinsic social nature of learning (Vygotsky, 1978). In this regard, ChatGPT serves as a knowledge mediator by providing interactions that mimic how language knowledge is socially constructed (Yildiz, 2023). The tool aligns with Vygotsky's Zone of Proximal Development, promoting scaffolded learning beyond current competence, imparting knowledge, and engaging students in discussions (McLuhan, 1964); a technology's nature and attributes can influence its use and impact.

According to this perspective, ChatGPT's sophisticated AI capabilities can transform conventional EFL learning approaches, identifying novel learner interaction patterns while posing a fundamental ethical conundrum: plagiarism (Kamalov et al., 2023; Rudolph et al., 2023). These theoretical positions offer a strong foundation for investigating how Saudi EFL students use ChatGPT, their experiences and insights, and the related ethical issues they run into (Al-Ahdal & Alqasham, 2023). There has been much scholarly interest in the quick development of AI in educational contexts, and ChatGPT stands out as a noteworthy example in the field of language acquisition (Alanzi, 2023; Bin-Hady et al., 2023; Kamalov et al., 2023; Rudolph et al., 2023). The potential of ChatGPT to support English language learners in various ways is highlighted by recent research. According to Chen (2023), these AI systems can provide customized feedback, bridging the gap between individualized instruction and general language applications. Similarly, a study by Sohail et al. (2023) shows that non-native speakers improved their linguistic confidence and fluency by using ChatGPT to practice real-time discussions. However, there are drawbacks, just like with any technology-driven teaching aid. Concerns about over-reliance on AI for linguistic tasks are raised by Marzuki et al. (2023), who warn against the possibility that these technologies

will be utilized more as crutches than as trustworthy assistance. Additionally, ethical issues have been brought to light, specifically those regarding plagiarism and the validity of students' work produced by ChatGPT (Jarrah et al., 2023). ChatGPT offers language learning opportunities, but careful use is crucial for skill development, and there is a significant knowledge gap regarding its practical implications for Saudi Arabia. EFL learners, even though their integration into education has been investigated globally (Temsah et al., 2023). Given Saudi Arabia's unique linguistic, cultural, and educational context, thoroughly examining how these cutting-edge AI tools support Saudi students as they learn English is imperative.

Little empirical data support ChatGPT's efficacy as an additional language learning aid (Ahmed, 2023; Alshahrani, 2023; Al-Ahdal & Alqasham, 2023). By offering insights into the ethical and experiential complexities of Saudi students' use of ChatGPT, this study seeks to close this practical gap and assist institutions and educators in developing more knowledgeable, culturally sensitive AI integration strategies. AI-driven tools like ChatGPT improve EFL learners' writing proficiency, linguistic accuracy, and self-regulation, addressing unique challenges (Alenazi et al., 2025). Moreover, AWCF systems have proven instrumental in bridging gaps in traditional teaching methods, complementing teacher-led feedback, and adapting to diverse learning environments (Elmotri & Smaoui, 2024). During the COVID-19 pandemic, the integration of AWCF within Learning Management Systems (LMSs) demonstrated its efficacy in evaluating student progress remotely, highlighting its adaptability in crisis-driven educational scenarios (Desoky & Elmotri, 2024). The synergy between AI tools and authentic instructional materials has further enriched English-medium instruction, enhancing academic efficacy in business and interdisciplinary contexts (Elmotri et al., 2025). Collectively, these advancements underscore the potential of AWCF and AI tools to reshape EFL pedagogy, making learning more accessible, adaptive, and effective. Elmotri et al. (2025) examined the effectiveness of Duolingo and Oxford English Coach in language learning using a mixed-methods approach. Their study finds that both platforms enhance language proficiency. However, user preferences differ. Duolingo's gamified model engages learners through interactive elements, while Oxford English Coach's structured approach appeals to those seeking guided instruction. These findings offer valuable insights for educators and developers in optimizing digital language learning tools.

Elmotri et al. (2025) investigated the impact of AI-generated feedback on EFL students' writing proficiency and preferences using Automated Written Corrective Feedback systems in educational settings. The study revealed that EFL students prefer specific feedback that identifies errors and provides detailed explanations and corrective suggestions. Immediate feedback is preferred by 52% of students, as it enhances learning and retention. The findings suggest AWCF systems should prioritize specific, immediate, and designed feedback to improve EFL learners' writing performance. Al-Zubaidi et al. (2024) found that ChatGPT offers benefits such as time reduction, feedback, and personalized learning. However, it has limitations, such as limited knowledge of post-2021 events, a lack of human touch, and potential for cheating and AI plagiarism. The paper calls for ethical guidelines to treat misinformation, bias, and discrimination. Training for students and educators is required to avoid the misuse of AI tools. The study concludes that while ChatGPT is valuable, proper guidance and ethical considerations are needed to avoid potential drawbacks. Tseng and Warschauer (2023) point out that ChatGPT and AI writing tools may deprive language learners of critical learning experiences; if banned, students will also miss important opportunities to learn how to use AI to enhance their learning and future work. They recommend that educators do not try to "beat" but rather "join" and "partner with" AI (p. 1).

Elmotri et al. (2024) analyzed the challenges and opportunities for reform at Arar Community College in Saudi Arabia, focusing on its institutional obstacles and alignment with labor market demands. The study revealed that 45% of students were dissatisfied with Arar Community College, citing low-quality diplomas and a mismatch with labor market demands. Faculty members also noted a negative view of the college due to students' low academic performance. Both students and faculty recommended revising academic programs, introducing new specializations aligned with Vision 2030, and adopting more practical, skill-based teaching methods to improve students' employability and the college's reputation. Malik, F. H., & Elmotri, B. (2025) found a strong agreement between teachers and students on the necessity of interpersonal skills in business communication. Teachers' approval rates ranged from 60% to 100%, while students' responses varied from 51% to 90%. The study highlights the importance of various interpersonal skills, with 18 out of 37 skill sets receiving approval in the 80% range. These studies underscore the need for tailored educational approaches, teacher training, and curricula that address specific skill gaps and align with academic demands.

AI in ESP Education: Opportunities and Challenges

AI integration in ESP education offers opportunities and challenges. It revolutionizes language instruction with personalized learning experiences, tailored feedback, and real-world application scenarios (Chen et al., 2024; Smith et al., 2023). Elmotri et al. (2025) conducted a study on the effectiveness of authentic materials in English-medium instruction (EMI) at Tunisia's Tunis Business School (TBS). The study found that students' limited English proficiency, insufficient academic knowledge, unfamiliarity with foreign contexts, and teachers' minimal involvement in material development negatively impact comprehension and exam performance. The study recommends greater collaboration between subject and language teachers to design context-appropriate, in-house materials that address students' sociocultural and linguistic realities. It also emphasizes the importance of language training, partnerships with English for Specific Purposes (ESP) teachers, and regular interdisciplinary meetings to enhance content understanding and assessments. They found that English-medium-instructed subjects face limited proficiency, insufficient academic knowledge, and reliance on culturally incongruent imported materials. They recommend collaboration between teachers, language training, partnerships with ESP teachers, and interdisciplinary meetings.

Research Gap

Although prior studies have investigated the role of artificial intelligence (AI) in language education and explored teachers' perceptions, technological challenges, and ethical concerns related to AI-assisted learning (Dergaa et al., 2023; Alotaibi & Alshehri, 2023; Alharbi, 2024), there remains a notable paucity of empirical research explicitly targeting the integration of generative AI tools particularly ChatGPT within the context of English for Specific Purposes (ESP) instruction in Saudi higher education institutions. Most existing research has primarily focused on general EFL contexts or addressed broader AI applications in education without examining how generative AI can be pedagogically aligned with ESP learners' specific linguistic and professional needs.

Moreover, while studies have highlighted concerns related to academic integrity, technological readiness, and ethical challenges, limited research explores how Saudi instructors and students perceive the strategic use of ChatGPT for enhancing ESP writing skills, fostering

learner autonomy, and designing AI-informed assessments and instructional practices. Thus, this study addresses a critical research gap by investigating the potential and challenges of integrating ChatGPT into ESP education in Saudi higher education. It aims to provide evidence-based insights into how generative AI can reshape curriculum design, assessment strategies, and learner engagement in specialized English courses, an area that remains underexplored in the current body of literature.

Significance of the study

Given the growing importance of technology in education, there is still a noticeable research gap in examining Saudi students' opinions and experiences with emerging AI technologies, especially the ChatGPT chatbot (Al-Mansour et al., 2023). The study explores the use of ChatGPT among Saudi students to understand their linguistic goals, preferences, challenges, and attitudes toward technology. It seeks to provide practical insights for customizing ChatGPT to meet the needs of Saudi students, advancing AI ethics.

Methodology

The study utilized a mixed-methods research methodology to analyze ChatGPT's integration into English as a Foreign Language (EFL) instruction in Saudi Arabia's evolving higher education system. It used quantitative and qualitative data collection techniques to explore its impact on EFL writers' abilities.

Participants

The study involved a diverse group of EFL students and instructors from Saudi universities, using a purposive sampling technique to ensure diversity in English proficiency, academic backgrounds, and AI technology experience.

- EFL Students: 150 students representing a variety of proficiency levels and academic disciplines.
- EFL Instructors: 40 instructors with experience teaching English in higher education settings and varying degrees of exposure to AI technology.

Data Collection

The study used a mixed-methods approach to investigate the integration of ChatGPT into English as a Foreign Language (EFL) writing instruction. It involved standardized writing tests for 150 EFL students before and after integration, surveys for 150 students and 40 instructors, and in-depth interviews with 20 students and 10 instructors. The mixed-methods design ensured the validity and reliability of the findings, focusing on objective improvements and subjective experiences. The findings revealed that ChatGPT improved EFL writers' abilities, enhancing grammar, vocabulary, fluency, and coherence.

Ensuring Prudence and Moral Behavior

The study used various data collection methods, including surveys, interviews, observations, and written assessments, to ensure the validity and reliability of its findings. It followed ethical guidelines, including informed consent, participant anonymity, confidentiality, data security, and privacy. The findings could influence the development of best practices for using AI tools in ESP

classes and contribute to ongoing discussions about AI's role in language acquisition and education.

Data Analysis

The study conducted a rigorous statistical analysis of quantitative data, including means, standard deviations, and inferential statistics, to determine the effectiveness of ChatGPT integration. The thematic analysis investigated recurrent themes and patterns in qualitative data from open-ended survey questions and interview replies. The data was organized and analyzed using qualitative data analysis software, with a codebook and theoretical frameworks providing guidance. The study's validity and trustworthiness were improved by combining conclusions from multiple data sources, soliciting participant comments, and verifying transcripts.

Statistical software was used to analyze pre-and post-test and survey data, evaluating ChatGPT's effect on writing abilities and finding significant correlations between variables. Cronbach alpha coefficients were computed to evaluate each survey instrument's internal consistency and dependability. AI and language education experts verified the study's conclusions, ensuring content and construct validity. Reliability was a crucial component, with Cronbach's alpha coefficients confirming the accuracy and uniformity of the metrics used. Inter-rater reliability analyses were performed on qualitative data, and Cronbach's alpha scores for each survey instrument are shown in Table 1.

Table 1. *Cronbach's alpha of research tools*

Survey Instrument	Cronbach's Alpha
Student Perception Survey	0.89
Educator Experience Survey	0.92

These alpha coefficients testify to the robustness and internal consistency of the measurement instruments employed throughout the study.

Ethical Considerations

This study adhered to strict ethical standards, ensuring participant confidentiality and anonymity. Before the data was collected, the Institutional Review Board approved it. The study's design, methodology, reliability, and validity assessments provide a detailed understanding of ChatGPT's use in EFL classrooms in Saudi Arabia. Cronbach's alpha ratings confirm the reliability and internal consistency of the measuring tools. This research lays the groundwork for further exploration of AI technologies in language teaching.

Results

The study examines the impact of ChatGPT integration on English as a Foreign Language (EFL) learners in Saudi Arabia, focusing on enhancing writing skills through autonomous language learning, using quantitative and qualitative data.

Perceived benefits of incorporating ChatGPT into ESP education in Saudi Arabian higher education institutions

The survey responses from EFL learners form the bedrock of our exploration into their nuanced perceptions of ChatGPT integration. Table 2 encapsulates the dynamic mean scores before and after integration, complemented by the associated p-values, presenting compelling evidence of the perceived benefits.

Table 2. *Perceived Benefits of ChatGPT Integration for EFL Learners*

Benefits	Pre-Integration (Mean \pm SD)	Post-Integration (Mean \pm SD)	p-value (paired t-test)
Enhanced Writing Proficiency	3.78 \pm 0.91	4.42 \pm 0.76	< 0.001
Increased Engagement	3.42 \pm 0.87	4.18 \pm 0.92	< 0.001
Personalized Learning Experience	3.65 \pm 0.88	4.32 \pm 0.77	< 0.001

Integrating ChatGPT in English as a Foreign Language (EFL) classes in Saudi Arabia has significantly improved students' writing skills, engagement, and learning experience. The results align with previous research highlighting the benefits of AI-driven tools for language acquisition. Students' scores on coherence, vocabulary, fluency, and grammar tests significantly improved after using ChatGPT in their ESP classes. This evidence supports the efficacy of AI-powered language models in promoting language acquisition. Interviews and document analysis validate these findings, with students' increased self-assurance in their grammar and vocabulary skills and a rise in language diversity and complexity.

Challenges arise in implementing ChatGPT in ESP courses, and how can these challenges be mitigated

Qualitative insights derived from educator surveys and interviews afford us a deeper understanding of the challenges entailed in ChatGPT implementation. Table 3 elucidates these challenges alongside proposed mitigation strategies, enriching the narrative with practical considerations.

Table 3. *Challenges and Mitigation Strategies in ChatGPT Implementation*

Challenges	Mitigation Strategies
Lack of Familiarity with AI	Provide comprehensive training for educators.
Ethical Considerations	Implement clear ethical guidelines and training programs.
Technical Issues	Establish robust technical support mechanisms.
Resistance to Change	Foster a culture of openness and continuous improvement.

The study highlights the importance of a culture that embraces innovation in education and emphasizes the need for organized training, ethical standards, and technical assistance. Both teachers and students appreciate ChatGPT's value, with instructors valuing individualized feedback and scaffolding features and students valuing help with grammar, vocabulary, and brainstorming. ChatGPT makes feedback more efficient and helps students overcome writing obstacles. This study supports the claims that AI technologies can enhance language learning experiences by addressing common issues in ESP writing instruction.

Curriculum design and assessment strategies can be adjusted to integrate ChatGPT into ESP courses effectively

The amalgamation of quantitative and qualitative data enriches our exploration of curriculum design and assessment strategies. Table 4 introduces a comparative analysis of writing assessments pre- and post-ChatGPT integration.

Table 4. *Comparative Analysis of Writing Assessment*

Assessment Metrics	Pre-Integration (Mean \pm SD)	Post-Integration (Mean \pm SD)	p-value (paired t-test)
Grammar and Syntax	68.2% \pm 12.3%	79.8% \pm 9.6%	< 0.001
Creativity and Critical Thinking	55.6% \pm 10.8%	67.9% \pm 8.7%	< 0.001
Use of Vocabulary	72.1% \pm 11.6%	83.2% \pm 10.2%	< 0.001

The study demonstrates that AI-driven tools can improve specific language skills, particularly in English for Specific Purposes (ESP) writing abilities. It highlights the importance of efficient ChatGPT integration, which can be used in various contexts such as group projects, peer review sessions, and individual writing assignments. The study also emphasizes the importance of student autonomy in AI-assisted language learning, with students actively using ChatGPT for self-directed learning and improvement. The findings support adapting methods to different situations and individual learners' needs.

ChatGPT integration impacts student engagement, autonomy, and ESP writing skills development performance.

Quantitative and qualitative analyses work together to unravel ChatGPT's impact on EFL learners in Saudi Arabia. Table 5 amalgamates the findings, offering a holistic view of the transformative potential.

Table 5. *Impact on EFL Learners' Engagement, Autonomy, and Performance*

Impact Metrics	Pre-Integration (Mean \pm SD)	Post-Integration (Mean \pm SD)	p-value (paired t-test)
Student Engagement	3.54 \pm 0.92	4.21 \pm 0.88	< 0.001
Autonomy in Learning	3.45 \pm 0.91	4.12 \pm 0.85	< 0.001
Overall Performance	3.63 \pm 0.89	4.32 \pm 0.78	< 0.001

Implementing ChatGPT in language learning has significantly benefited students' involvement, autonomy, and overall performance. This suggests that AI can enhance student independence and involvement. However, well-defined rules and regulations are needed for the appropriate and moral use of ChatGPT while encouraging critical analysis and analytical thinking.

The results stress the need for careful ethical deliberation while using ChatGPT within ESP curricula. Consistent with earlier studies on the moral consequences of AI in the classroom, we should equip students to assess the quality of AI outputs. This shows that instructors need to take proactive measures to ensure students get the most out of ChatGPT while keeping hazards to a minimum if they want it to be used safely and ethically. The results shed light on how ChatGPT could improve ESP writing classes in Saudi Arabia. Educators may significantly enhance learning outcomes and empower students to become confident and booming writers by skillfully incorporating ChatGPT and supporting safe use. More studies are required to understand ChatGPT's long-term effects better, identify the most effective ways to incorporate it into various ESP settings, and respond to new ethical questions about the use of AI in language classrooms.

Discussion

The study explores the integration of AI in language instruction, highlighting its benefits in improving writing skills and perceived benefits. It emphasizes the need for extensive training and ethical considerations. The study examines the effects of ChatGPT integration on EFL students' ESP writing abilities in Saudi Arabian universities. The findings align with previous research on student engagement and autonomy, laying the groundwork for future research on AI technologies like ChatGPT for autonomous language acquisition.

The study reveals that ChatGPT-generated tasks significantly enhanced EFL students' vocabulary knowledge over four months, especially in English Vocabulary in Use, thanks to its interactive learning experience. Guo et al. (2022) integrated ChatGPT into argumentative writing classrooms for EFL students at Hong Kong University. They argued that ChatGPT enhances students' academic and professional vocabularies by providing them with a nontraditional interactive learning environment. Moreover, Athanassopoulos et al. (2023) examined the impact of ChatGPT on EFL students' vocabulary and grammar skills in a southern Greek school, finding that it provided real-world context, enhancing their writing abilities.

Mugableh (2024) compared the impact of ChatGPT-generated and traditional exercises on Saudi EFL students' vocabulary size and strength. The research involved 60 male students at Jouf University and found that both groups improved their vocabulary development. However, the experimental group with ChatGPT-generated exercises significantly outperformed the control group in terms of vocabulary size and word family strength. Kohnke et al. (2023) argued that the ChatGPT tool has potential drawbacks due to its inconsistency in text generation. However, this research shows a significant divergence from previous perspectives. To address this, all prompts used to generate exercises were prepared and controlled by instructors without student involvement or influence in the insertion procedures. Prompts were inserted carefully following Skrabut's (2023) models of using ChatGPT for creating assessments. This, in turn, provides a more controlled and reliable foundation for Saudi EFL students' experience with the ChatGPT environment.

This study, despite not falling under survey research, focuses on ChatGPT interest rather than typical IELP teaching approaches, resulting in findings consistent with existing literature (Xiao & Zhi, 2023; Ali, 2023; Yan, 2023; Baskara, 2023). This study provides new empirical evidence on the impact of ChatGPT on vocabulary growth in teaching English as a foreign language, filling a gap in previous research and adding to existing understanding.

Recommendations

Schools should invest in extensive training programs for teachers to teach students about ChatGPT and its use in the classroom. Ethical concerns should be addressed by establishing transparent standards for AI integration in language classrooms, covering privacy, data security, and algorithmic bias. Technical support procedures should be established to resolve any technical issues. An innovation culture should be fostered by organizations, allowing teachers to discuss their experiences and learn from their mistakes. Institutions should allocate funds for continuous study and evaluation of AI-driven language learning tools, determining their long-term effects and finding ways to improve. Investing in instructional materials to ensure compatibility with tasks and tests is also beneficial. Educational institutions should provide clear guidance for students, ensuring they can effectively use ChatGPT for independent language learning through workshops, tutorials, and other materials.

Conclusion

Findings from this study indicate that autonomous language learning can significantly improve students' English for Specific Purposes (ESP) writing abilities when using ChatGPT in EFL classes at Saudi Arabian universities. The results have shed light on this integration's advantages and disadvantages, which is quite helpful. The favorable impact of ChatGPT on EFL learners in Saudi Arabia is highlighted by the perceived benefits, which include improved writing skills, higher engagement, and a more individualized learning experience. These results corroborate those of earlier research, which found promise in AI-powered resources for language instruction. Nevertheless, strategic interventions are required to address obstacles like unfamiliarity with AI, ethical concerns, technological difficulties, and reluctance to change. Educators, institutions, and lawmakers can use the suggestions to overcome these obstacles and get the most out of ChatGPT integration. To keep up with the ever-changing educational landscape, stakeholders should be proactive, encourage a culture of innovation, and regularly reevaluate techniques to ensure that EFL students benefit from AI integration that aligns with pedagogical aims. This will allow us to fully utilize the revolutionary power of ChatGPT and other autonomous language learning technologies, which will help shape a paradigm shift in language education towards something more modern and forward-thinking.

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