

**To Cite This Article:**

Sain, Z. H., & Hidayat, M. T. (2024). Pros and Cons of ChatGPT for Enhancing Writing Skills in Higher Education . *Innovations in Language Teaching Journal*, 1(1), 61–73. <https://doi.org/10.53463/innovltej.20240279>

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**PROS AND CONS OF CHATGPT FOR ENHANCING WRITING SKILLS IN HIGHER  
EDUCATION****YÜKSEKÖĞRETİMDE YAZMA BECERİLERİNİ GELİŞTİRMEK İÇİN CHATGPT'NİN  
ARTILARI VE EKSİLERİ****Zohaib Hassan SAIN<sup>1</sup>, Muhammad Taufik HIDAYAT<sup>2</sup>****Abstract**

The abstract effectively outlines the study's aim to explore the benefits and challenges of ChatGPT in enhancing writing skills in higher education. It identifies the focus on language learning and writing proficiency. However, adding the study's specific context, such as the site and target population, would make the purpose more precise. While the abstract mentions that the research was based on data sourced from digital repositories and academic databases, it lacks clarity on the specific type of research design, sampling methods, data collection tools, and analysis techniques. Explicitly stating these details, including the chosen research design, sample size, and the data collection and analysis tools, would strengthen the methodology section and provide a clear understanding of how the study was conducted. The abstract briefly discusses ChatGPT's impact's dual nature, highlighting its advantages (such as idea generation) and challenges (like ethical implications and critical thinking). However, briefly mentioning the specific benefits and drawbacks observed in the study would make the findings more tangible. While the abstract touches on some challenges faced by ChatGPT, it doesn't discuss the study's limitations or the broader implications for practice or policy. Including limitations, such as reliance on literature review data and any contextual constraints, along with the implications for educators and students, would enhance the depth of the abstract. The abstract provides a unique perspective on the role of ChatGPT in higher education, focusing on writing skills. The research aims to contribute to understanding how AI can be integrated into educational contexts. However, clearly stating the study's originality and how it differs from existing literature will further reinforce its value.

**Keywords:** ChatGPT, Ethical Implications, Language Learning, Machine Learning Model, Writing Skills.

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## Özet

OpenAI tarafından geliştirilen gelişmiş bir üretici makine öğrenimi modeli olan ChatGPT, sorulara tutarlı yanıtlar üretmek için kapsamlı veri kümelerini analiz etmede üstündür. Bu çalışma, özellikle dil öğrenimi ve yüksek öğretim düzeyinde yazma becerilerini geliştirme konusunda ChatGPT'nin sunduğu avantajları ve zorlukları incelemektedir. Bu araştırma için veriler, saygın dijital depolardan ve akademik veri tabanlarından elde edildi. ChatGPT, makaleler için fikir kıvılcımları yaratmada değerli olsa da, veri doğruluğu, etik çıkarımlar ve öğrencilerin eleştirel düşünme yetenekleri üzerindeki potansiyel etkiler gibi sorunlarla karşı karşıya kalıyor (Fuchs, 2023). Araştırma ayrıca ChatGPT'nin ne kadar etkili bir şekilde entegre edilebileceğini ve öğrencilerin yazma yeterliliğini nasıl geliştirebileceğini araştırıyor.

**Anahtar Kelimeler:** ChatGPT, Etik Çıkarımlar, Dil Öğrenimi, Makine Öğrenme Modeli, Yazma Becerileri

## 1. INTRODUCTION

The 21st century has been marked by revolutionary advancements across various sectors, with technology playing a pivotal role in driving these transformations. In education, the impact of technological innovations has been profound, particularly with the advent of AI-driven tools like ChatGPT. Developed by OpenAI, ChatGPT utilizes sophisticated machine learning algorithms to analyze extensive datasets and generate coherent responses to user queries (Kramer, 2022). This capability has proven highly beneficial in educational settings, where tasks such as writing assignments, prevalent in higher education, can be significantly enhanced. Students often culminate their academic pursuits with thesis projects that require substantial research and writing, making ChatGPT a valuable asset for facilitating these complex tasks (Yundayani, 2018).

The release of ChatGPT has garnered considerable global attention, underscored by its rapid adoption by millions worldwide within days of its launch (Yu, 2023). Its appeal lies in its user-friendly interface, where individuals can input queries and receive prompt responses. Within education, particularly in language learning contexts, students at various academic levels have embraced ChatGPT to assist with language-related challenges. While many welcome its convenience and efficiency, there are divergent views regarding its broader impact. Advocates highlight its potential to streamline learning processes, whereas critics express concerns about over-reliance on AI and its potential consequences for educational outcomes.

However, along with its advantages, ChatGPT faces significant challenges, including data quality and ethical considerations. Critics argue that excessive reliance on AI tools like ChatGPT may inadvertently impede the development of students' critical thinking skills, which are essential for deep learning and problem-solving (Fuchs, 2023). This study explores these dynamics further by examining the benefits and drawbacks of integrating ChatGPT into educational practices, particularly its impact on writing skills among higher education students. While prior research has touched on broader aspects of ChatGPT's pros and cons, this study aims to provide a focused analysis tailored to learners' specific needs and challenges in higher education settings.

In this research endeavour, we aim to illuminate both the potential benefits and pitfalls of employing ChatGPT for language learning, focusing on its role in enhancing writing proficiency at the higher education level. This article aims to offer critical insights that can inform educators and students alike, particularly those who are frequent participants in academic writing activities. Ultimately, the utility

of ChatGPT in education hinges on individual contexts and preferences, necessitating thoughtful consideration of its integration into learning environments. The introduction provides a solid foundation, discussing how technological advancements have influenced education, explicitly emphasising AI tools like ChatGPT. It highlights ChatGPT's significance and popularity, especially its rapid adoption in language learning contexts. Using credible references and specific examples, such as thesis writing, strengthens the context for exploring ChatGPT's role in higher education.

### **1.1. Research Problem**

The challenges presented by ChatGPT, including ethical considerations and the potential impact on students' critical thinking skills, are well articulated. The problem is framed as a dual exploration of ChatGPT's benefits and drawbacks in academic writing. However, a more explicit articulation of how these challenges directly impact the learning outcomes and the writing skills development process in higher education would enhance the clarity of the problem statement.

### **1.2. Impact of the Study**

The significance of this study lies in its exploration of the dual impact of ChatGPT on writing skills in higher education. By analyzing both the advantages and challenges of using ChatGPT, the research provides valuable insights into its potential to enhance language learning and writing proficiency. Understanding these dynamics is crucial for educators, students, and policymakers to make informed decisions about integrating AI tools in educational settings. The findings highlight how ChatGPT can be a powerful aid in organizing ideas and generating content while addressing concerns about data accuracy and ethical implications and developing critical thinking skills, thereby contributing to more effective and responsible use of AI in academia.

### **1.3. Research Objective**

The introduction outlines a single research objective focusing on the benefits and drawbacks of ChatGPT in enhancing writing skills. To meet the suggestion of including at least two goals, a second objective could be added to provide a broader scope:

- To analyze the benefits and drawbacks of using ChatGPT to enhance writing skills in higher education.
- To explore the potential impact of ChatGPT on students' independent critical thinking abilities and creativity in their writing.

#### **1.4. Research Question**

The research currently includes one question aimed at exploring the benefits and drawbacks of ChatGPT in writing skills enhancement. However, a second research question is crucial to provide a more comprehensive exploration:

*Research Question 1:* What are the benefits and disadvantages of using ChatGPT to enhance writing skills in higher education?

*Research Question 2:* How does using ChatGPT affect the development of students' critical thinking and creativity in their academic writing?

### **2. BACKGROUND RESEARCH OVERVIEW**

#### **2.1. ChatGPT: Enhancing Writing Skills and Academic Support**

ChatGPT, a natural language processing tool, simulates human-like conversations and responses (Deng & Lin, 2022, as cited in Surameery & Shakor, 2023). It efficiently handles student queries, offering solutions, advice, and explanations of complex concepts. Additionally, this AI can create poetry, scripts, sonnets, and essays on diverse topics (Shazhaev et al., 2023). Trained on extensive internet data, GPT undergoes rigorous evaluation by company testers to refine its responses. Future developments are expected to enhance its capabilities beyond writing, with continual updates and new features planned. The literature review provides a broad overview of ChatGPT's capabilities and applications in education. While it touches on ChatGPT's advantages and drawbacks, it would benefit from a deeper exploration of studies directly related to writing skill enhancement in higher education. The review covers multiple aspects, such as creativity, language translation, and critical thinking. Still, a more focused discussion on how these aspects influence academic writing and learning outcomes would make the literature review more robust.

#### **2.2. Writing Skill in Higher Institute Education**

ChatGPT is increasingly utilized in contemporary education for various writing tasks such as essay composition, poetry creation, and other forms of written expression, which are integral to higher school education. Many students perceive writing as the most challenging skill to master, involving procedural aspects and the formulation of coherent ideas. Proficiency in vocabulary and structural organization are crucial prerequisites for effective writing (Yundayani, 2018). Given writing assignments' complexity and demand, students often seek efficiency and utilize ChatGPT to expedite their tasks. The review generally includes a mix of sources, some recent, which is commendable for

addressing the fast-evolving field of AI. However, it's essential to ensure that all references are up-to-date, especially given the rapid advancements in AI technologies like ChatGPT. Including very recent studies (from the past 2-3 years) would enhance the currency and relevance of the literature review.

### **2.3. Artificial Intelligence in Education: ChatGPT's Impact and Potential**

The education sector is currently undergoing significant transformation due to the emergence of Artificial Intelligence (AI). This evolution is expected to influence various aspects of education, including goals, methodologies, learning resources, teaching approaches, and assessment methods, ultimately shaping learning outcomes systematically. Since its launch in November 2022, ChatGPT has prompted investigations into its impacts and challenges within the educational domain, particularly in higher education. While some educators express concerns about the potential stifling of creativity, experts argue that students can still consult textbooks alongside online resources. The review highlights the intricate and varied interplay among education, traditional values, and artificial intelligence. ChatGPT is a foundation for exploring new educational possibilities, offering detailed insights into the benefits, ethical dilemmas, and evolving landscape of integrating artificial intelligence in academic contexts. If used judiciously, ChatGPT could become a valuable educational resource. ChatGPT emerges as an innovative tool for advancing pedagogical and learning efforts, enhancing educational practices through its intelligent conversational capabilities driven by artificial intelligence. It facilitates meaningful interactions, supports personalized learning experiences, provides real-time assistance, and offers insights across diverse subjects. ChatGPT actively fosters interactive and engaging educational environments by responding to queries and explaining concepts through simulated conversations. Its adaptable nature allows for tailored training, aligning with the broader goal of harnessing artificial intelligence to enhance teaching methods and learning experiences. AI technologies have the potential to interpret educational content and create dynamic, interactive learning environments, extending beyond traditional tasks such as grading and assessment (Sain et al., 2023).

### **3. RESEARCH METHODOLOGY**

This study utilized a literature review method, preceding primary data collection through direct fieldwork. A literature review involves systematically researching, reading, analyzing, evaluating, and summarizing scholarly literature, typically from journals and articles, on a specific topic—in this case, exploring the advantages and disadvantages of utilizing ChatGPT. The methodology lacks an



explicit conceptual framework or model guiding the review. Future enhancement should include a conceptual framework that outlines the relationship between the use of ChatGPT and writing skills development and potentially identifies any mediating variables such as critical thinking and creativity. A thorough library search for relevant academic research is the initial step in conducting a literature review. This can be achieved electronically or by accessing electronic and print resources within library collections, including tools such as Google Scholar. Additionally, non-academic sources were also considered to complement the literature review. Specifically, the databases used (e.g., Google Scholar, Zandy), the keywords searched (e.g., “ChatGPT in higher education,” “AI and writing skills”), and any inclusion/exclusion criteria applied to select relevant literature should be clearly outlined to provide more rigour to the data collection process. The study sourced diverse reference materials from digital media and scientific repositories, focusing on keywords related to the impact of ChatGPT on writing skills in high school. The methodology employed by the authors was flexible, allowing for selecting appropriate reference sources across various journals and digital platforms without imposing restrictive criteria. Although this is a literature review, clarifying the context or target population, such as higher education students and educators globally or within a specific region, would enhance focus. Also, mention the type of studies reviewed (e.g., empirical studies, theoretical papers) and the approximate sample size (number of articles reviewed) to provide a more precise overview of the scope. To strengthen the methodology, describe the approach taken to analyze the selected literature, such as thematic or content analysis, and specify any tools used (e.g., NVivo, Excel) to manage the synthesis of information. Additionally, it mentions any criteria used to assess the quality or relevance of the articles, providing a transparent process for analysis.

**Table 1.** Methodology Overview: Literature Review on ChatGPT in High Institute Writing Skills

Aspect	Details
<i>Methodology</i>	Literature review approach without primary data collection through direct fieldwork.
<i>Process</i>	Systematically researched, read, analyzed, evaluated, and summarized scholarly literature from journals and articles.
<i>Literature Search</i>	Conducted a thorough library search electronically and accessed electronic and print resources including Google Scholar.
<i>Sources</i>	Included diverse reference materials from digital media and scientific repositories.
<i>Methodological Flexibility</i>	Allowed for the selection of appropriate reference sources across various journals and digital platforms without strict restrictions.

**Table 1** concisely and organizedly highlights the critical elements of the study's methodology and approach, making it easier for readers to grasp the essential details quickly.

## **4. RESULTS AND DISCUSSION**

Researchers conducted a comprehensive literature review using Google Scholar and Zendy, identifying ten pertinent articles that met the study's criteria. These articles collectively explore the advantages and challenges associated with integrating ChatGPT in higher education, focusing mainly on its impact on writing skills. The review revealed several key benefits and drawbacks of using ChatGPT.

### **4.1. Benefits of ChatGPT**

The results effectively outline the key benefits of ChatGPT in higher education, including structuring ideas, sparking creativity, bridging languages, and creating written content. These findings are supported by references to relevant literature, enhancing their validity. However, providing empirical evidence in the form of figures, tables, or charts would enhance clarity and make the results easier to interpret. Visual representation of the benefits and drawbacks also allows readers to compare findings more effectively and improve the presentation of the study's conclusions.

- *Structuring Your Ideas:*

ChatGPT allows researchers to prompt it to generate outlines for papers or other written work, aiding in organizing ideas effectively. Researchers have utilized this functionality to streamline the initial stages of writing tasks. However, researchers must often refine and adapt the generated outlines to suit specific research needs (Sok & Heng, 2023).

- *Sparking Creativity:*

Researchers have found ChatGPT invaluable for brainstorming and generating article ideas. Studies, such as Zhai's research (2022), indicate that while ChatGPT can propose comprehensive ideas, researchers must refine and verify them to ensure accuracy and relevance to their research topics (Sok & Heng, 2023).

- *Bridging Languages:*



ChatGPT demonstrates proficiency in translating between languages based on its training on bilingual datasets. Research by Wu et al. (2016) highlights its ability to produce accurate translations, which is beneficial for international research collaborations and accessing diverse sources of information.

- *Creating Written Content:*

OpenAI's research underscores ChatGPT's exceptional text generation capabilities, attributed to its extensive training with vast datasets. This enables ChatGPT to produce contextually relevant text tailored to user prompts, enhancing its utility across various writing tasks (Setiawan & Luthfiyani, 2023).

#### **4.2. Drawbacks of ChatGPT**

The drawbacks section is comprehensive, outlining issues such as the reliability of sources, over-reliance on AI, limitations in fostering creativity, and challenges in interpreting nuanced language. While these points are well articulated and supported by citations, the discussion could benefit from a balanced approach that highlights the issues and any possible solutions or strategies for overcoming these limitations. Furthermore, supporting the drawbacks with empirical evidence, where available, would strengthen the reliability of these claims.

- *Unreliable Sources:*

One significant drawback identified is the potential for ChatGPT to provide inaccurate information. Without citing sources, answers generated by ChatGPT may lack credibility and verification, posing challenges in educational contexts where accuracy is crucial (Qadir, 2022).

- *Dependence on AI Tools:*

Students may need to be more independent of ChatGPT to complete assignments, bypassing critical thinking and analytical skills development. This over-reliance hampers students' ability to independently solve problems and develop creative solutions, which are vital for academic and professional growth (Sok & Heng, 2023).

- *Human Creativity vs. Machine Automation:*

Dependency on ChatGPT can stifle students' creativity as the responses are based on learned patterns rather than innovative thinking. This limitation may hinder originality in students' work, affecting their ability to produce unique and insightful content (Baidoo-Anu & Ansah, 2023).

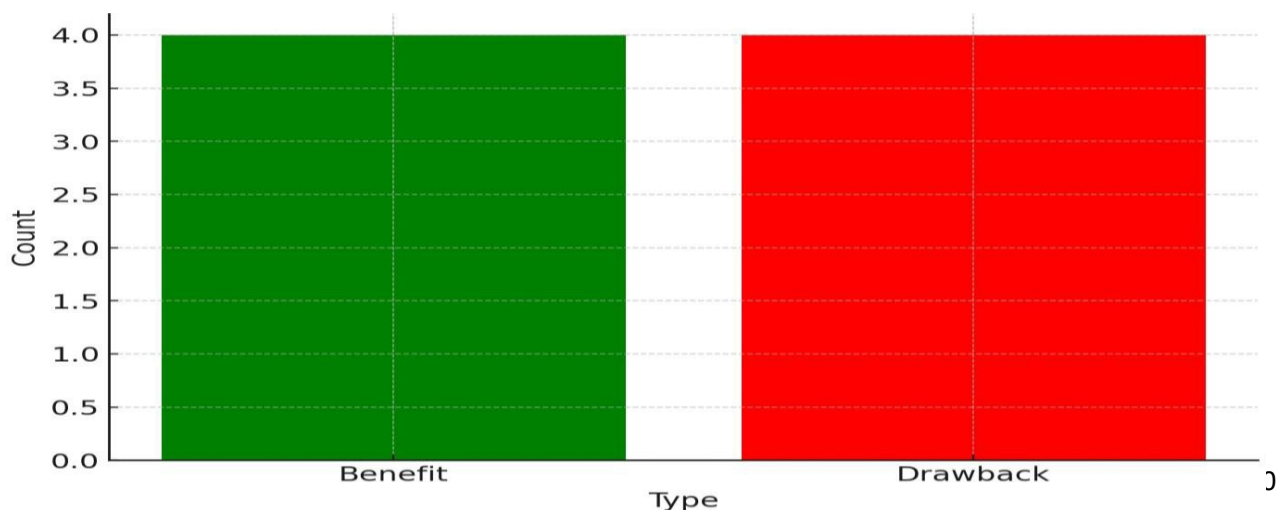
▪ *Interpreting Nuance:*

Another challenge is ChatGPT's limited ability to comprehend context and nuances in language, leading to responses that may need to be more relevant and appropriate in specific contexts. This needs to be improved in tasks requiring nuanced understanding and specialized knowledge (Perera & Lankathilaka, 2023).

ChatGPT offers significant advantages for educational settings, such as aiding in outlining, idea generation, and language translation; it also presents challenges related to accuracy, over-reliance, creativity, and contextual understanding. These findings underscore the importance of using ChatGPT judiciously and integrating it into educational contexts, carefully considering its strengths and limitations.

**Table 2.** ChatGPT Benefits and Drawbacks Table

Aspect	Type	Description
<i>Structuring Ideas</i>	Benefit	Helps organize ideas effectively for writing tasks.
<i>Sparking Creativity</i>	Benefit	Assists in brainstorming and generating ideas.
<i>Bridging Languages</i>	Benefit	Provides translation between languages for international collaboration.
<i>Creating Written Content</i>	Benefit	Generates contextually relevant text based on prompts.
<i>Unreliable Sources</i>	Drawback	Potential for providing inaccurate information without sources.
<i>Dependence on AI Tools</i>	Drawback	May lead to over-reliance, reducing independent thinking.
<i>Human Creativity vs. Automation</i>	Drawback	Responses are based on patterns, potentially stifling creativity.
<i>Interpreting Nuance</i>	Drawback	Limited in comprehending nuanced or specialized contexts.



**Figure 1.** Number of Benefits vs. Drawbacks of ChatGPT

The discussion appropriately identifies a significant drawback in ChatGPT's potential to produce inaccurate or unverifiable information. The citation of Qadir (2022) adds weight to the argument, emphasizing the need for accuracy in educational settings. However, the discussion would benefit from elaborating on potential mitigation strategies for these inaccuracies. For example, suggesting using ChatGPT as a supplementary tool rather than a primary source of information and encouraging students to cross-verify ChatGPT's responses with peer-reviewed sources would add practical value to the discussion. The current debate successfully highlights the challenges of integrating ChatGPT into education, such as the over-reliance on AI tools and the potential impact on critical thinking and creativity. However, to provide a more comprehensive analysis, discussing any existing frameworks or best practices for effectively incorporating AI tools like ChatGPT in educational settings while maintaining critical skills development would be helpful.

## **5. CONCLUSION**

ChatGPT is an advanced natural language processing tool designed to simulate human-like conversations. This AI assists students by answering inquiries, providing advice, and explaining complex concepts. Several advantages of ChatGPT have been identified through literature review research, such as creating outlines, brainstorming ideas, language translation, and summarizing text. Users can prompt ChatGPT to generate outlines for papers or summaries of research articles, facilitating efficient information retrieval. While ChatGPT shows strong capabilities in organizing and composing articles, limitations include its shallow understanding of word meanings and challenges in assessing response quality, particularly in specialized fields. Despite potential errors, ongoing updates and maintenance are expected to enhance ChatGPT's performance. It is crucial for users not to depend on ChatGPT overly; verifying answers and fostering original thinking remains essential, ensuring human control over AI-assisted tasks.

## **6. RESEARCH LIMITATIONS AND FUTURE RESEARCH**

This study primarily relied on a literature review, which may limit the depth of insights gained compared to primary data collection through direct fieldwork. Additionally, the rapidly evolving

nature of AI technology means that findings could quickly become outdated as new developments emerge.

Future research should focus on empirical studies involving direct interaction with students and educators to assess the practical impacts of ChatGPT on writing skills. Investigating long-term effects and ethical implications and exploring diverse educational contexts will provide a more comprehensive understanding of the benefits and drawbacks of integrating ChatGPT in higher education.

### **Acknowledgment and Information Note**

The authors would like to express their sincere gratitude to the academic institutions and digital repositories that provided access to this study's essential resources and data—special thanks to our colleagues and mentors for their invaluable feedback and guidance throughout the research process. We also appreciate the developers of ChatGPT and other AI technologies for their innovative contributions, which have significantly enriched our research.

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