

## THE USE OF PERPLEXITY AI IN ACADEMIC WRITING: BENEFITS, CHALLENGES, AND ETHICS

Nihdatul Patia<sup>1</sup>, Amanda Maulidiyah<sup>2</sup>, Islamiyatul Bahijah<sup>3</sup>, Olivia Wongso<sup>4</sup>, Paulin Devi Irene<sup>5</sup>, Salwa<sup>6</sup>, Eri Rahmawati<sup>7</sup>

Universitas Sultan Ageng Tirtayasa<sup>1</sup>; [nihdatulpati@gmail.com](mailto:nihdatulpati@gmail.com)<sup>1</sup>

Universitas Sultan Ageng Tirtayasa<sup>2</sup>; [amandamaulidiyah0@gmail.com](mailto:amandamaulidiyah0@gmail.com)<sup>2</sup>

Universitas Sultan Ageng Tirtayasa<sup>3</sup>; [islamiyatulbahijah@gmail.com](mailto:islamiyatulbahijah@gmail.com)<sup>3</sup>

Universitas Sultan Ageng Tirtayasa<sup>4</sup>; [oliviawongso06@gmail.com](mailto:oliviawongso06@gmail.com)<sup>4</sup>

Universitas Sultan Ageng Tirtayasa<sup>5</sup>; [paulindevi25@gmail.com](mailto:paulindevi25@gmail.com)<sup>5</sup>

Universitas Sultan Ageng Tirtayasa<sup>6</sup>; [salwaay09@gmail.com](mailto:salwaay09@gmail.com)<sup>6</sup>

Universitas Sultan Ageng Tirtayasa<sup>7</sup>; [eri.rahmawati@untirta.ac.id](mailto:eri.rahmawati@untirta.ac.id)<sup>7</sup>

**Abstract.** *The rapid advancement of Artificial Intelligence (AI) has significantly influenced academic writing, particularly through tools like Perplexity AI. This study explores the role of Perplexity AI in supporting students during the writing process by examining its benefits, challenges, and ethical implications. Findings from a literature review of four relevant studies (Akhyar et al., 2023; Rusli et al., 2024; Johnston et al., 2025; Syafiuddin et al., 2024) show that Perplexity AI contributes positively to writing efficiency, quality, research support, and language development. However, the tool also presents challenges, including contextual limitations, risk of misinformation, overreliance, and data privacy concerns. The study concludes that while Perplexity AI is a valuable academic aid, its use must be balanced with critical thinking and guided by ethical considerations. Institutions are encouraged to enhance students' digital literacy to ensure responsible use of AI in academic settings.*

**Keywords:** Artificial Intelligence (AI), Academic Writing, Digital Literacy, Perplexity AI, Writing Efficiency.

**Abstrak.** *Kemajuan pesat Kecerdasan Buatan (AI) telah memberikan pengaruh besar terhadap penulisan akademik, khususnya melalui alat seperti Perplexity AI. Studi ini mengeksplorasi peran Perplexity AI dalam mendukung mahasiswa selama proses penulisan dengan meninjau manfaat, tantangan, dan implikasi etikanya. Temuan dari tinjauan literatur terhadap empat studi relevan (Akhyar et al., 2023; Rusli et al., 2024; Johnston et al., 2025; Syafiuddin et al., 2024) menunjukkan bahwa Perplexity AI memberikan kontribusi positif terhadap efisiensi penulisan, kualitas tulisan, dukungan penelitian, dan pengembangan bahasa. Namun, alat ini juga menghadirkan tantangan seperti keterbatasan dalam memahami konteks, risiko informasi yang salah, ketergantungan berlebihan, dan isu privasi data. Studi ini menyimpulkan bahwa meskipun Perplexity AI merupakan alat bantu akademik yang berharga, penggunaannya harus diseimbangkan dengan berpikir kritis dan dibimbing oleh pertimbangan etis. Institusi pendidikan didorong untuk meningkatkan literasi digital mahasiswa guna memastikan penggunaan AI secara bertanggung jawab dalam lingkungan akademik.*

**Kata Kunci:** Kecerdasan Buatan (AI), Perplexity AI, Penulisan Akademik, Literasi Digital, Etika Penggunaan AI, Efisiensi Penulisan.

## INTRODUCTION

The digital era has brought significant changes to various aspects of life, including the field of education. One notable transformation is the widespread emergence of tools based on Artificial Intelligence (AI), which are increasingly utilized by students in academic writing. Among the many AI applications available, Perplexity AI has become a popular tool among students due to its ability to provide concise, fast, and comprehensive answers. In the context of academic writing, Perplexity AI is used by students for various purposes such as finding references, creating writing structures, and improving grammar. However, the presence of AI in academic writing also presents several challenges, including technological dependence, the risk of misinformation, and concerns over academic integrity. Therefore, this article aims to comprehensively examine the role of Perplexity AI in academic writing, focusing on its benefits, challenges, and ethical considerations.

## METHOD

This study employed a qualitative literature review approach to analyze four journal articles relevant to the use of Artificial Intelligence in academic writing, particularly focusing on the application of Perplexity AI. The selected articles—Akhyar et al., 2023, Rusli et al. (2024), Johnston et al. (2025), and Syafiuddin et al. (2024)—were reviewed to identify common themes, benefits, challenges, and ethical implications related to the integration of AI tools in higher education settings. The analysis followed a thematic approach based on the framework suggested by Creswell (2014), emphasizing the identification,

categorization, and interpretation of recurring findings across sources. The inclusion criteria for the articles were based on relevance, recency (2023–2025), peer-reviewed status, and direct focus on AI in academic writing.

## RESULT AND DISCUSSION

### *Result*

Artificial Intelligence (AI) in academic writing appears in various forms and functions. Common tools include grammar checkers for correcting grammatical and spelling errors, citation managers for organizing citations and bibliographies, and content assistants that help structure ideas and outlines. AI tools like Perplexity AI can support students in gathering information, finding references, formulating ideas, and refining sentence structure in academic texts (Akhyar et al., 2023; Rusli et al., 2024). Some users also utilize it to summarize content and develop outlines (Johnston et al., 2025). With its ability to understand the context of questions, AI supports a more efficient and higher-quality writing process (Syafiuddin et al., 2024).

The use of Perplexity AI in academic writing provides several significant benefits for students, including:

1. Increased efficiency and productivity  
Perplexity AI helps students complete assignments faster, especially in finding references and organizing ideas. Research shows that students feel it helps them save time when completing tasks (Akhyar et al., 2023; Syafiuddin et al., 2024).
2. Improved writing quality and accuracy  
Perplexity AI offers suggestions for sentence structure, grammar, and writing format that align with academic standards. This helps students produce clearer and more organized writing (Rusli et al., 2024).
3. Support in research and data analysis  
In addition to writing, Perplexity AI can be used to filter information, suggest

references, and assist in analyzing relevant literature (Akhyar et al., 2023).

#### 4. Enhanced language skills and writing style

Through the output generated by Perplexity AI, students can learn proper academic language and enrich their writing vocabulary (Johnston et al., 2025).

Despite the many benefits, the use of Perplexity AI in academic writing also poses several challenges that need to be addressed:

##### 1. Limitations in understanding context and language nuances

Perplexity AI is not yet fully capable of capturing complex contexts or culturally specific language. This can make the generated text sound rigid or less relevant (Johnston et al., 2025).

##### 2. Risk of errors and inaccuracies

Although Perplexity AI provides references, they are not always accurate. A study by Johnston et al. (2025) found that the references given did not always match the original sources.

##### 3. Overdependence

Some students tend to rely too heavily on AI to complete assignments, which may weaken their critical thinking and independent writing skills (Syafiuddin et al., 2024).

##### 4. Data security and privacy issues

The use of AI platforms also raises concerns about the security of the information entered by users. If not used carefully, personal data or academic content could be misused or leaked without permission (Syafiuddin et al., 2024).

Despite its advantages, Perplexity AI raises important ethical concerns in academic writing:

##### 1. Issues of plagiarism and originality

Students are at risk of plagiarism indirectly when copying the results of AI without editing or understanding the contents as a whole, this has the

potential to violate the principle of academic honesty (Rusli et al., 2024). Although AI like Perplexity helps compile writing, the responsibility for the authenticity of the work remains with the user.

##### 2. Transparency and Accountability in Perplexity AI use

Students need to be honest and open about the extent to which AI is used in writing. Transparency is essential to maintain accountability and help lecturers assess the extent of AI involvement in student writing.

##### 3. Considerations of copyright and intellectual property

The results of AI may contain information or quotes from other unclear sources. (Akhyar et al., 2023). Therefore, students need to continue to check manually on the references or content produced by AI.

##### 4. Long-term ethical implications

Excessive dependence on AI can reduce the ability to think critically and write manually (Johnston et al., 2025). This is an ethical challenge in maintaining the quality and academic integrity.

### **Discussion**

Based on the findings of this study, it can be concluded that the use of Perplexity AI in academic writing provides a significant positive contribution for students, particularly in terms of improving efficiency, the quality of writing, and the ability to locate and analyze information. Data reviewed from various studies (Akhyar et al., 2023; Rusli et al., 2024; Johnston et al., 2025; Syafiuddin et al., 2024) show that the majority of students feel supported by the presence of this technology in completing their academic tasks.

However, this study also identifies several important challenges that need to be considered, including limitations in understanding context, potential

inaccuracies in information, the risk of overdependence on technology, and issues related to data privacy. These findings indicate that while Perplexity AI can be a reliable tool, its use still requires oversight and critical thinking from users.

Therefore, this study recommends that students integrate the use of Perplexity AI proportionally in their academic writing process. In addition, educational institutions are encouraged to provide adequate digital literacy regarding the ethics and limitations of AI usage to ensure that the technology is used optimally without compromising academic integrity and originality. Further research may be conducted to explore the long-term impact of AI use on learning quality and students' critical thinking skills.

## CONCLUSION

Perplexity AI significantly enhances students' efficiency, writing quality, and information analysis in academic writing. Most students report feeling supported by the tool in completing tasks.

However, challenges like limited contextual understanding, misinformation, overdependence on AI, and privacy concerns must be addressed. Perplexity AI should be used responsibly and in moderation. Educational institutions should offer digital literacy training on ethical AI use. Future research could explore the long-term impact of AI on students' learning and critical thinking.

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