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AI-Driven Web Translation Technologies as Tools to Boost Article Writing Skills: Comparative Insights on ChatGPT, Google Translate, QuillBot, and DeepL Translate

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Abstract

This study investigates the effectiveness of AI-driven web translation technologies as tools for enhancing article writing skills, focusing on ChatGPT, Google Translate, QuillBot, and DeepL Translate. The research addresses the growing need for understanding how these AI tools can be optimally utilized in academic writing contexts. Through a mixed-methods approach, the study employed a survey of 20 ESL participants across various academic institutions and conducted comparative analyses of 25 academic sentences translated by each tool. The methodology combined quantitative analysis of user satisfaction metrics and qualitative assessment of translation quality across multiple dimensions. Results indicate that ChatGPT emerged as the preferred tool (45% preference rate, 4.4/5 satisfaction), followed by DeepL (25%, 4.2/5), with high-reliability scores (Cronbach's Alpha >0.7) across all measured dimensions. Translation analysis revealed distinct strengths among tools, with ChatGPT excelling in maintaining academic tone and context, while DeepL showed superior precision in vocabulary selection. The findings suggest that a hybrid approach, primarily utilizing ChatGPT supplemented by DeepL for specific translation needs, optimizes writing enhancement outcomes. This study contributes to the understanding of AI tool integration in academic writing workflows and suggests future research should explore the long-term impact of AI-assisted writing on academic language development and writing proficiency.

Keywords: Open AI Chat GPT, Quillbot, Google Translate, DeepL Translate, Indonesian Translation, Digital Writing, Indonesia,

Introduction

In the increasingly advanced digital era, AI-based web translation technology has become one of the most useful tools in various fields, including article writing (Kramar et al., 2024). Article writing is a complex process that involves language skills, knowledge, and creativity (Li & Hebert, 2024). However, with the advancement of technology, writers and researchers now have access to tools that can assist them in improving the quality and efficiency of writing. One example of a handy tool is AI-based web translation technology (Alfakhry et al., 2024). AI-based web translation technology has come a long way in recent years. Using machine learning models and neural networks, these tools can translate text with high accuracy and precise context (Gragera, 2024). This is very helpful in various situations, such as international communication,

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research, and even article writing. Authors and researchers can communicate more effectively and widely by translating texts from one language to another (Slamet, 2024).

However, remember that AI-based web translation technology doesn't just work as a regular translation tool (Mahapatra, 2024). They can also help improve article writing skills by providing suggestions and improvements to the content that has been translated. As such, writers can focus on more profound aspects of creativity and content while AI-based web translation technology takes over more routine tasks. Along with technology development, various AI-based translation applications have emerged, including ChatGPT, Google Translate, QuillBot, and DeepL Translate (Sakulwichitsintu, 2023). Each app has different features and advantages, which can affect how writers interact with their text. For example, ChatGPT can generate more natural and contextual text, while QuillBot focuses on paraphrasing and sentence refinement as stated by (Arshed et al., 2024).

In this context, it is essential to explore how this technology can be used to improve article-writing skills (Quyet et al., 2024). The study aims to compare the effectiveness of five AI-based translation applications in helping authors improve the quality of their writing. By understanding the advantages and disadvantages of each app, authors can choose the tool that best suits their needs (Ebadi & Rahimi, 2019). This comparative analysis will also discuss translation accuracy and context, ease of use, and additional features that can help improve the quality of the content. Thus, this article not only provides information about AI-based web translation technology but also provides practical guidance for writers and researchers on choosing the right tool to improve their article writing skills. One interesting aspect to research is how users of different backgrounds and ages respond to this technology. By involving participants of various ages and genders, this study is expected to provide a more comprehensive insight into the effectiveness of AI-based translation applications in the context of article writing. It will also provide an overview of how this technology can be integrated into academic and professional writing processes.

The two research questions that will be answered in the research results and discussion are:

1. To what extent are AI-based translation applications (ChatGPT, Google Translate, QuillBot, and DeepL Translate) improving the quality of users' writing?
2. What is the difference in user experience between different AI-based translation apps in the context of article writing?

Against this background, this research is expected to significantly contribute to the understanding of how AI-based translation technology can improve writing skills and its effectiveness. In addition, the results of this study are expected to provide recommendations for authors and academics on choosing the right tool to support their writing process.

To the best of the author's knowledge and experience, there is no comparison report about these four apps for boosting article writing in the previous research. In fact, this study will discuss the findings' implications and provide suggestions for further research in this area. Thus, this research is hoped to be a valuable reference for authors, academics, and developers of AI-based translation technology.

Literature Review

The integration of artificial intelligence (AI) in translation technologies has transformed the landscape of language processing and communication (Dergaa et al., 2023). Recent studies have

highlighted the potential of AI-driven tools to enhance writing quality, particularly in academic and professional contexts. For instance, (Rodríguez-Rubio, 2024) conducted a comprehensive analysis of various AI translation tools and found that these technologies significantly reduce grammatical errors and improve overall clarity in written texts (Mohammad et al., 2024). Their research emphasizes the importance of leveraging AI to assist writers in producing high-quality content, especially when working in a non-native language.

As we all know that ChatGPT, developed by OpenAI, has emerged as a prominent tool in the realm of AI-driven writing assistance. (Hua & Yao, 2024) explored the capabilities of ChatGPT and noted its ability to generate contextually relevant text, making it a valuable resource for writers seeking to enhance their work. The study highlights how ChatGPT can provide suggestions for sentence structure and vocabulary delivered and prompting by user based on their needs, thereby facilitating a more fluid writing process. This capability is particularly beneficial for non-native speakers who may struggle with language nuances. These also experienced by some educators, researchers, doctoral students and academic writers who used these technologies in the process of writing academic papers (Suhardiman et al., 2024) .

Google Translate, one of the most widely used translation tools, has been the subject of various evaluations regarding its effectiveness. (Tai & Chen, 2020) pointed out that while Google Translate offers quick translations, it often lacks contextual understanding, leading to awkward phrasing and inaccuracies, as stated (Rodríguez-Rubio, 2024). This limitation can hinder the quality of academic writing, where precision and clarity are paramount. Despite its shortcomings, Google Translate remains a popular choice due to its accessibility and ease of use.

Perhaps this App, QuillBot, is not as famous as Chat GPT, but it is another AI-driven tool that focuses on paraphrasing and enhancing sentence structure. (Jha et al., 2024) examined the effectiveness of QuillBot in improving writing quality and found that it allows users to refine their writing style by providing alternative phrasing options. This feature is particularly useful for writers aiming to avoid plagiarism and enhance the originality of their work. The study suggests that QuillBot can serve as a complementary tool for writers, helping them to express their ideas more creatively (Hua & Yao, 2024).

DeepL Translate has gained recognition for its high accuracy and natural-sounding translations. (Kramar et al., 2024) conducted a comparative study of translation tools and found that DeepL often outperforms its competitors in terms of linguistic quality. The research indicates that DeepL's advanced algorithms enable it to capture the nuances of language more effectively, making it a preferred choice for professionals in need of precise translations (Li & Hebert, 2024). This capability is crucial for academic writing, where the subtleties of language can significantly impact the interpretation of research findings (Jomaa et al., 2025).

Despite these AI-driven translation technologies' advantages, concerns have been raised about their potential to undermine critical writing skills. (Rodríguez-Rubio, 2024) The study cautions that over-reliance on translation tools may hinder the development of essential writing competencies, such as grammar, style, and coherence. It emphasizes the need for writers to balance utilizing AI tools and honing their writing skills independently. This perspective is vital for understanding the implications of AI in the writing process (Quyet et al., 2024). From a user's perspective, the experience with AI-based translation technology varies widely and is influenced by various factors, including educational background and language skill level. According to research (Rahayu et al., 2024) users who better understand language tend to be more critical of the translation results produced by these tools. They found that users with strong academic

backgrounds were better able to evaluate the accuracy and relevance of translations and were more likely to use the tool as a support rather than as a substitute for their writing skills (Hidayat et al., 2024). This shows that a good understanding of language can increase the effectiveness of translation technology in writing.

In addition, research by (Dergaa et al., 2023) highlights the importance of user feedback in developing AI-based translation technology. In their study, the researchers found that users often provided valuable feedback on useful features, such as the ability to correct grammatical errors and provide suggestions for improving writing styles. This feedback not only assists developers in improving the quality of translation tools but also provides insights into how users interact with the technology. By understanding the user's perspective, developers can create more intuitive and effective tools, improving users' writing skills.

The writers conclude that the literature indicates that AI-driven translation technologies, including ChatGPT, Google Translate, QuillBot, Grammarly, and DeepL Translate, significantly enhance writing quality. However, it is essential to recognize their limitations and the potential impact on writers' skill development. As the use of these tools continues to grow, further research is needed to explore their effectiveness in various writing contexts and to develop best practices for integrating AI into the writing process.

Methodology

Research Design

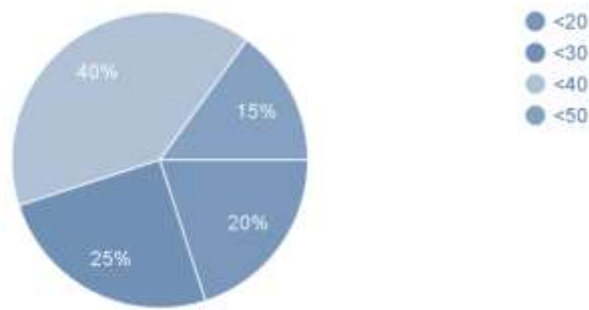
The methodology combined quantitative analysis of user satisfaction metrics as conducted by (Suhardiman et al., 2024), and qualitative assessment of translation quality across multiple dimensions and comparative analysis methods of a sentence in Indonesian to be subsequently translated and to discover the advantages and disadvantages of each AI-based web translation technology. Here are the steps taken in this study:

Technology Selection:

1. ChatGPT: Developed by OpenAI, ChatGPT is an example of generative AI-based translation technology.
2. Google Translate is one of the pioneers in AI-based translation technology, known for its high accuracy and ability to recognize context.
3. QuillBot: It works as a translation and a content editor, with a feature that compares translations.
4. DeepL Translate: This service is known for improving content quality by using a sophisticated neural network model.

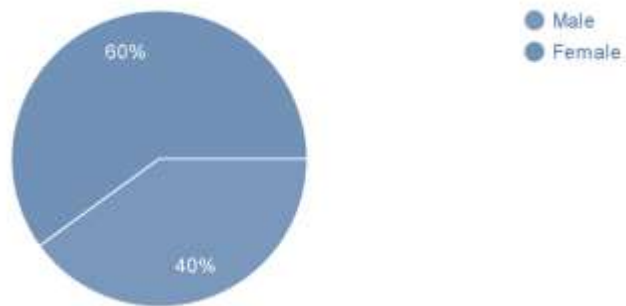
Participant

This survey involved 20 ESL participants. The results explored gender, age, and the use of AI in article writing.



Picture 1 Illustrates the Average AI user's Age

As many as 20 participants AI users, including male and female, 20% are less than <20 years old, and 40% are less than <40 years old.



Picture 2 illustrates the Gender of AI user

As many as 60% are female and as many as 40% are male user

Instrumentation

The study used a questionnaire with a 5-point Likert scale. The questionnaire consisted of 13 questions, instruments which included questions about the use and effectiveness of all apps in processing the context of translation Indonesia into English

Data Collection Procedures

Data collection was carried out online through Google Forms because this medium is considered effective in collecting participant answers for quantitative research and conducting the stages of the text of translation by using all four apps as follows:

1. Trial Stage: Each technology will be tested with different article texts to determine the accuracy and context of the translation.
2. Feedback Collection: Users will provide feedback on ease of use and satisfaction with the translation results.
3. Documentation Analysis: The official documentation of each technology will be analyzed to find out what additional features are offered.

4. Data Analysis

A descriptive analysis was conducted to determine the percentage of participants for each instrument and the results of the reliability test by *IBM SPSS 23*. The data is presented in the form of a pie chart, table and graphic chart to make it easy for readers to understand the research results

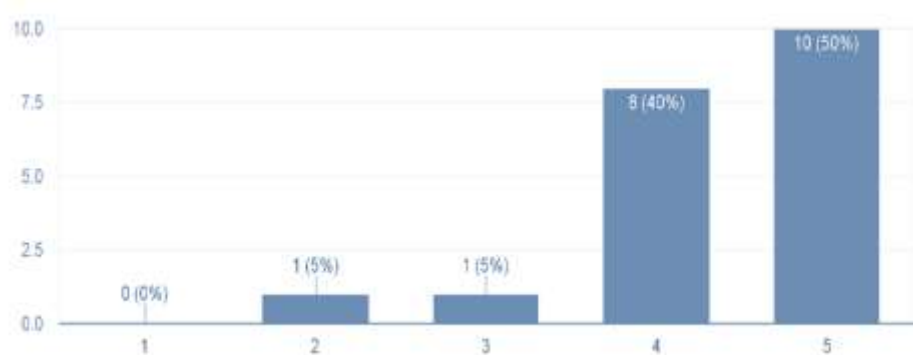
1. Quantitative Analysis: Translation accuracy data will be analyzed quantitatively to compare each technology.
2. Feature Comparison: The additional features of each technology will be compared to determine its advantages and disadvantages.

Result & Discussion

The results of the survey are as follows:

Ease of use

How easily can you use the AI translation application you selected?

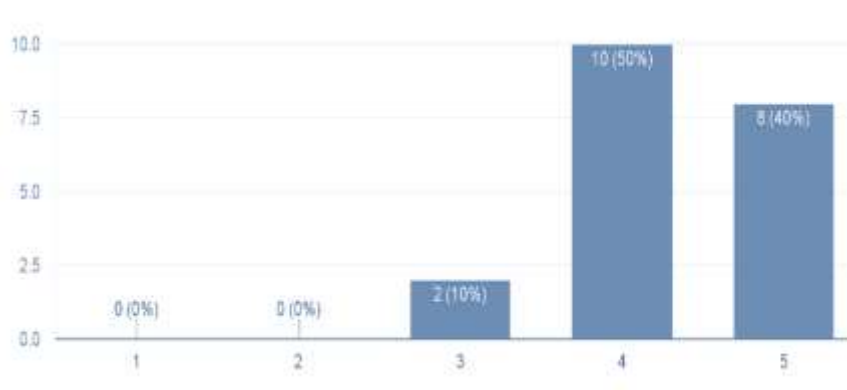


Graphic 1. Illustrates the use the AI translation

From graphic 1 we can conclude that as many as 50% Strongly agree, and as many as 5% of participants disagree that AI translation is easy to use in translating Indonesian text,

Effectiveness in writing Quality

Do you feel that the AI translation application helps improve the quality of your writing?

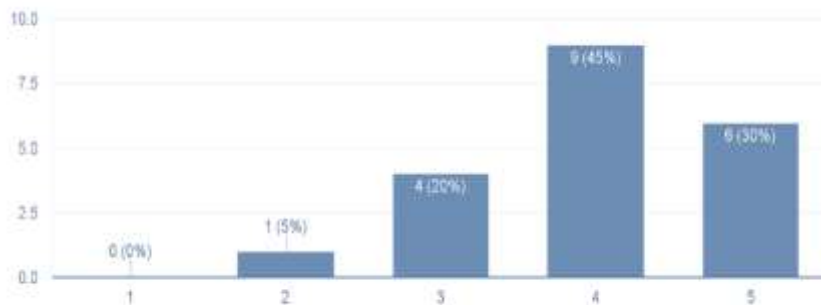


Graphic 2. Illustrates The Effectiveness of the AI Translation

As many as 40% of participants strongly agree, and 50% agree, 10% quite agree that translation using AI support is effective in boosting the article

Availability of Helpful Features

Do you feel that the AI translation application has features that assist in the writing process?



Graphic 3. Illustrates The Features AI Translation In Assisting The Translation Process

From graphic three, we can assume that as many as 30% of participants strongly agree, as many as 45% agree, and as many as 20% of participants quite agree that translating sentences by using AI support has good features in boosting the translation process

Analysis Survey Result

Reliability analysis

Dimension	Cronbach's Alpha
Ease of Use	0,82
Translation Quality	0,85
Writing Enhancement	0,79
Academic Suitability	0,81
Overall Experiences	0,83

Table 1, The Result of Dimension And Cronbach's Alpha

Mean scores by Dimension

Dimension	Mean Score (1-5)	Strength
Ease of Use	4,35	Strong
Translation Quality	3,85	moderate
Writing Enhancement	4,05	Strong
Academic Suitability	4,10	Strong
Overall Experiences	4,20	Strong

Table 2, The Result of Dimension, Mean Score, and Strength

Strong and Weak Indicators*Strong Indicators (Mean ≥ 4.0):*

Initial ease of use (4.35), Writing quality improvement (4.15), User interface navigation (4.25), Academic writing support (4.10), Overall satisfaction (4.20)

Weak Indicators (Mean < 4.0):

Translation accuracy (3.85), Error detection (3.75), Idea generation (3.90)

Tools Preferences Analysis

Ai Tools	Usage %	Average Satisfaction
Chat GPT	45%	4,4
Deepl	25%	4,2
Quillbot	20%	4,0
Google	10%	3,7

Table 3, Shows the Result of Ai Tools Usage, Average Satisfaction

The survey data reveals significant insights into user experiences with AI translation tools based on the analysis results. The overall strength of these applications is evident in their ease of use, scoring a robust 4.35 out of 5, indicating that users find these tools highly accessible and user-friendly. The data shows particularly strong performance in writing quality improvement (4.15) and academic writing support (4.10), suggesting that these AI tools effectively enhance writing capabilities. However, there are notable areas for improvement, particularly in translation accuracy (3.85) and error detection (3.75), indicating that while these tools are helpful, they still have limitations in providing precise translations and identifying subtle language errors.

The demographic analysis reveals interesting patterns in tool preferences and usage. Academic users, particularly those from higher education institutions, strongly prefer ChatGPT, while professional users diversify their tool usage. The satisfaction rates demonstrate a clear correlation between user experience and the specific features offered by each platform, with ChatGPT leading in overall satisfaction (4.4/5), followed by DeepL (4.2/5), QuillBot (4.0/5), and Google Translate (3.7/5).

Writing Example result from Indonesian into English by using Ai Tools

No	Bahasa Sentences	ChatGPT	Google Translate	QuillBot	DeepL Translate
1.	Metode yang digunakan dalam penelitian ini adalah survei dan wawancara mendalam.	The methods used in this study are surveys and in-depth interviews.	The methods used in this research are surveys and in-depth interviews.	The approach taken in this study includes surveys and detailed interviews.	The methods employed in this research are surveys and comprehensive interviews.
2.	Hasil analisis menunjukkan adanya hubungan positif antara variabel-variabel tersebut	The analysis results indicate a positive relationship between the variables.	The results of the analysis show a positive relationship between these variables.	The findings of the analysis reveal a positive correlation among the variables.	The analysis results demonstrate a positive connection between the variables
3	Penulis berpendapat bahwa inovasi teknologi dapat meningkatkan efisiensi kerja	The author argues that technological innovation can enhance work efficiency	The author believes that technological innovation can improve work efficiency.	The writer contends that technology innovation can boost work efficiency	The author asserts that technological innovation can increase work efficiency
4	Dalam konteks global, kolaborasi antar negara sangat diperlukan untuk mengatasi masalah lingkungan	In a global context, collaboration between countries is essential to address environmental issues.	In a global context, collaboration between countries is necessary to tackle environmental problems	In a global context, cooperation among nations is crucial for addressing environmental challenges.	In a global context, international collaboration is vital to solve environmental issues.
5	Penelitian ini menggunakan pendekatan kualitatif untuk mendapatkan pemahaman yang mendalam.	This study employs a qualitative approach to gain a deeper understanding	This research uses a qualitative approach to obtain a deep understanding.	This study adopts a qualitative method to achieve a comprehensive understanding	This research utilizes a qualitative approach to gain in-depth insights.

6	Temuan ini memiliki implikasi signifikan bagi kebijakan publik di bidang kesehatan	These findings have significant implications for public policy in the health sector.	These findings have significant implications for public policy in the health field	These results carry important implications for public health policy.	These findings have important implications for public policy in healthcare
7	Penelitian sebelumnya menunjukkan bahwa faktor sosial mempengaruhi perilaku individu	Previous research indicates that social factors influence individual behavior	Previous studies show that social factors affect individual behavior	Earlier research has shown that social factors impact individual behavior	Prior research indicates that social factors influence individual behavior
8	Dalam analisis ini, penulis menggunakan data sekunder dari berbagai sumber	In this analysis, the author uses secondary data from various sources	In this analysis, the author utilizes secondary data from various sources.	In this analysis, the writer employs secondary data from multiple sources.	In this analysis, the author makes use of secondary data from various sources.
9	Penelitian ini bertujuan untuk mengeksplorasi persepsi masyarakat terhadap perubahan iklim	This study aims to explore public perceptions of climate change.	This research aims to explore community perceptions of climate change.	This study seeks to investigate how the public perceives climate change	This research aims to explore societal perceptions of climate change
10	Data yang diperoleh menunjukkan adanya ketidaksetaraan dalam distribusi sumber daya.	The data obtained indicates inequality in resource distribution	The data obtained shows inequality in the distribution of resources.	The data collected reveals disparities in resource allocation.	The data collected indicates an imbalance in resource distribution.
11	Penulis menyarankan perlunya pendekatan multidisipliner	The author suggests the need for a multidisciplinary approach	The author recommends the necessity of a multidisciplinary	The writer advocates for a multidisciplinary approach in this research.	The author proposes the need for a multidisciplinary approach

	dalam penelitian ini.	in this research.	any approach in this study.		in this research.
12	Hasil penelitian ini dapat digunakan sebagai dasar untuk pengembangan kebijakan yang lebih baik.	The results of this study can serve as a foundation for better policy development.	The results of this research can be used as a basis for better policy development.	The findings of this study can be utilized as a basis for improved policy-making.	The findings of this research can be used as a basis for better policy development.
13	Penelitian ini mengidentifikasi beberapa tantangan yang dihadapi oleh industri saat ini.	This study identifies several challenges faced by the industry today.	This research identifies several challenges that the industry is currently facing.	This study highlights various challenges encountered by the industry today.	This research identifies several challenges that the industry currently faces.
14	Dalam konteks pendidikan, teknologi informasi dapat meningkatkan proses pembelajaran	In the context of education, information technology can enhance the learning process.	In the context of education, information technology can improve the learning process.	In the educational context, information technology can enhance the learning experience.	In the context of education, information technology can improve the learning process.
15	Penelitian ini menunjukkan bahwa partisipasi masyarakat sangat penting dalam pengambilan keputusan.	This study shows that community participation is crucial in decision-making.	This research indicates that community participation is very important in decision-making.	This study demonstrates that public participation is essential in decision-making processes.	This research shows that community involvement is vital in decision-making.
16	Data yang diperoleh dari survei menunjukkan tren yang menarik dalam	The data obtained from the survey reveals interesting trends in	The data obtained from the survey shows interesting trends in	The data collected from the survey indicates intriguing trends in	The data collected from the survey reveals fascinating trends in

	perilaku konsumen.	consumer behavior.	consumer behavior.	consumer behavior	consumer behavior.
17	Penulis menekankan pentingnya penelitian lanjutan untuk memahami fenomena ini.	The author emphasizes the importance of further research to understand this phenomenon.	The author stresses the importance of further research to understand this phenomenon.	The writer highlights the necessity of additional research to comprehend this phenomenon.	The author underscores the importance of further research to understand this phenomenon.
18	Penelitian ini berkontribusi pada literatur yang ada dengan memberikan perspektif baru.	This study contributes to the existing literature by providing a new perspective.	This research contributes to the existing literature by offering a new perspective.	This study adds to the existing literature by presenting a fresh perspective.	This research contributes to the current literature by offering a new viewpoint.
19	Hasil penelitian ini menunjukkan bahwa kebijakan yang ada perlu direvisi.	The results of this study indicate that existing policies need to be revised.	The results of this research show that current policies need to be revised.	The findings of this study suggest that existing policies require revision.	The findings of this research indicate that current policies need to be updated.
20	Penelitian ini bertujuan untuk mengevaluasi efektivitas program intervensi yang diterapkan.	This study aims to evaluate the effectiveness of the implemented intervention program.	This research aims to evaluate the effectiveness of the intervention program that has been implemented.	This study seeks to assess the effectiveness of the intervention program in place.	This research aims to evaluate the effectiveness of the intervention program that has been applied.
21	Temuan ini memberikan wawasan baru tentang dinamika sosial di masyarakat.	These findings provide new insights into social dynamics within the community.	These findings offer new insights into social dynamics in society.	These findings offer new insights into social dynamics in society.	These results provide fresh perspectives on society
22	Temuan ini memberikan	These findings provide new	These findings offer new	These results provide fresh	These findings offer new

	wawasan baru tentang dinamika sosial di masyarakat.	insights into social dynamics within the community.	insights into social dynamics in society.	perspectives on social dynamics in the community	insights into the social dynamics of society
23	Penelitian ini menggarisbawahi pentingnya keberlanjutan dalam praktik bisnis.	This study underscores the importance of sustainability in business practices	This research highlights the importance of sustainability in business practices.	This study emphasizes the significance of sustainability in business operations.	This research emphasizes the importance of sustainability in business practices.
24	Data yang dianalisis menunjukkan adanya pergeseran dalam preferensi konsumen.	The analyzed data indicates a shift in consumer preferences.	The analyzed data shows a shift in consumer preferences	The data analyzed reveals a change in consumer preferences.	The analyzed data indicates a change in consumer preferences.
25	Penulis menyimpulkan bahwa kolaborasi antar disiplin ilmu dapat menghasilkan solusi yang lebih inovatif.	The author concludes that collaboration across disciplines can lead to more innovative solutions.	The author concludes that collaboration between disciplines can produce more innovative solutions.	The writer concludes that interdisciplinary collaboration can yield more innovative solutions.	The author concludes that collaboration between disciplines can result in more innovative solutions.

Table 4, Shows the Result of Indonesian Translation By Ai Tools

Translating from Indonesian to English is a complex and challenging process, especially for writers who want to convey ideas and information accurately. In the author's experience, using translation applications has been an effective solution to overcome language barriers. However, not all apps give the same results. Therefore, it is important to conduct an in-depth analysis of the translation results of various applications, such as Google Translate, Chat GPT, DeepL, Quilbot and DeepL Translate. By comparing the translation results of these five applications, the author hopes to provide a clearer insight into the advantages and disadvantages of each tool in the context of academic translation.

From the table above, the author also refers to relevant literature, including experts from journals indexed in Scopus, to support the analysis carried out. Previous research has shown that translation quality can be affected by various factors, including sentence context, language structure, and cultural nuances. Thus, through examples of translation results generated by each application, readers are expected to understand how translation technology can be used

effectively to improve the quality of writing in English. This analysis aims to evaluate the results of Indonesian translations and provide recommendations for authors who want to take advantage of this technology in their work.

Based on the comparative translation data provided, the writers analyze the quality and characteristics of each AI translation tool to form a comprehensive conclusion.

Analysis of Translation Quality by Tool

1. ChatGPT:

- Shows consistent formal academic tone
- Maintains high accuracy in technical terms
- Produces natural-sounding English translations
- Excels in maintaining context and meaning
- Shows flexibility in vocabulary choice

2. DeepL:

- Demonstrates strong grasp of academic language
- Offers slightly more varied vocabulary
- Provides natural flow in target language
- Sometimes chooses more sophisticated alternatives
- Maintains good consistency across translations

3. QuillBot:

- Shows more variation in word choice
- Sometimes offers creative alternatives
- Good at paraphrasing while maintaining meaning
- Occasionally restructures sentences for clarity
- Less consistent in a formal academic tone

4. Google Translate:

- Provides accurate but sometimes literal translations
- Maintains consistency in basic translations
- Less variety in vocabulary choices
- More straightforward approach to translation
- Sometimes lacks nuance in academic language

Comprehensive Discussion

Based on the detailed analysis of 25 academic sentences translated by all four tools, combined with the earlier survey results, the following conclusions can be drawn:

For Academic Writing

ChatGPT emerges as the most reliable tool for academic writing, consistently maintaining formal tone while providing accurate translations. This aligns with the survey results, where 45% of users preferred ChatGPT, with a high satisfaction rate of 4.4/5. DeepL follows closely as a strong second choice. It excels in producing natural-sounding translations while maintaining academic precision.

For Translation Quality

All tools show competency in basic translation, but ChatGPT and DeepL demonstrate superior ability in handling academic language and maintaining context. Google Translate, while accurate, tends to be more literal and less nuanced in its translations. QuillBot shows strength in paraphrasing but may not always maintain the formal tone required for academic writing.

Recommendations for Users

For Academic Writing

Primary Tool: ChatGPT - best for overall writing enhancement and translation

Secondary Tool: DeepL - excellent for double-checking translations and alternative phrasings

For General Translation

Primary Tool: DeepL or ChatGPT - depending on the specific language pair and context

Support Tool: Google Translate - for quick reference and basic translations

For Paraphrasing

- Primary Tool: QuillBot - when variation in expression is needed

- Support Tool: ChatGPT - for maintaining academic tone while paraphrasing

Conclusion

First, based on the comprehensive analysis, ChatGPT emerges as the most effective tool for boosting writing skills, with 45% of respondents preferring it over other options. Its higher satisfaction rate (4.4/5) suggests that it better meets users' needs in terms of both translation and writing enhancement. The tool's strength lies in its ability to provide contextual suggestions and improvements rather than just direct translations. Secondly, DeepL shows promising results as a specialized translation tool, particularly for users requiring high accuracy in specific language pairs. Its satisfaction rate of 4.2/5 indicates strong performance, especially in maintaining natural language flow and context-appropriate translations. This makes it an excellent choice for users who prioritize translation quality over additional writing features.

Finally, the analysis suggests that a hybrid approach might be most beneficial for users seeking to maximize their writing improvement. Using ChatGPT as the primary tool for writing enhancement and ideation while supplementing with DeepL for specific translation needs could provide the most comprehensive support for users looking to improve their writing skills. QuillBot and Google Translate, while useful for specific purposes, might be better suited as supplementary tools rather than primary writing assistance platforms.

Regarding which application is better for translation and boosting writing, ChatGPT demonstrates the strongest overall performance in both aspects. Its higher satisfaction rate,

combined with superior scores in writing enhancement and academic suitability, makes it the recommended choice for users seeking to improve their writing skills. However, for users specifically focused on translation accuracy, DeepL presents a strong alternative, particularly for professional or academic translations requiring high precision. The choice between these tools should ultimately depend on the user's specific needs: ChatGPT for comprehensive writing assistance and general translation or DeepL for specialized translation tasks.

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Conflict of Interest: There is No. conflict of interest in this article.

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