

Preserving Academic Integrity in the Age of AI

Afifah, Yogyakarta State University, Indonesia

The Asian Conference on Education & International Development 2024
Official Conference Proceedings

Abstract

Integrating Artificial Intelligence (AI) tools into academic writing has the potential to revolutionize the process of composing academic works. As these tools become more prevalent, concerns about academic integrity arise, prompting the need to explore strategies that uphold ethical standards and academic norms. This qualitative study aims to investigate the use of AI tools in academic writing, focusing on three key research questions: (1) what common AI tools are used, (2) what are the perceived benefits of AI tools, and (3) what strategies are employed to preserve academic integrity. This study involved graduate students (n=10) engaged in academic writing, and data collection was conducted through semi-structured interviews with each participant. The interview transcript was then analyzed using thematic analysis. The study revealed that graduate students employed a range of AI tools: Quillbot, Grammarly, ChatGPT, Easy-Peasy AI, Rytr AI, Humata, and DeepL. These tools are used for several writing processes, from generating ideas, drafting, enhancing content, paraphrasing, and grammar checking. Participants acknowledged the positive impact of AI tools on writing quality (grammar and organization improvements) and efficiency (reduced writing time). To preserve academic integrity, participants emphasized the responsible use of AI tools as supportive aids rather than replacements for their efforts. Strategies included editing and proofreading AI-generated content to align with personal writing style, cross-referencing, evaluating AI suggestions, and upholding authentic voice in writing. In conclusion, AI offers valuable benefits but necessitates a thoughtful and responsible approach to maintaining academic integrity. Scholars must balance using AI as supportive tools while preserving the ownership of their academic works.

Keywords: Artificial Intelligence, AI Tools, Academic Writing, Academic Integrity, Ethics

iafor

The International Academic Forum
www.iafor.org

Introduction

The emergence of artificial intelligence (AI) is not relatively new. The development of AI has been ongoing since amid 20th century, which was primarily started by a British logician and computer pioneer, Alan Turing and his peers (Marchev & Piryanova, 2022). Nevertheless, the use of AI has just gained significant attention, marked by the release of ChatGPT (Roe et al., 2023). People gain high interest in using such tools that promises automation in various task. 250 million people have used AI tools in 2023, and the number is estimated to triple in the next ten years (Thormundsson, 2023). Public show high interest due to AI's ability to do various task in shorter time, resulting in less effort for getting work done.

The incorporation of AI tools is also happening in the academia, particularly for academic writing. It is a common knowledge that academic writing is challenging to many scholars, moreover to students and novice researchers. The existence of AI tools, such as ChatGPT, Grammarly, and Quill Bot, offers assistance in the laborious of academic writing process. These AI tools are diverse in type, and it can serve as grammar, spelling, and plagiarism checkers, paraphrasers, as well as search engines for academic literature. Previous studies confirmed that the use of AI significantly decreased the time spent to write paper (Bahammam et al., 2023; Cardon et al., 2023; Kacena et al., 2024). AI can search potential sources on the internet and generate easy-to-understand text of certain topic effortlessly and in a very short time (Kacena et al., 2024; Korteling et al., 2021). Other benefits of AI in academic writing include improved consistency and style (Bahammam et al., 2023), better idea generation (Cardon et al., 2023), and better writing quality (Ghufron, 2019).

Despite the many advantages of AI for academic writing, the use of AI has also been linked to academic integrity violations. Kacena et al., (2024) found that the article written with AI-only (ChatGPT) includes 70% of inaccurate citations. ChatGPT is a large language model (LLM) which was trained with a large library of information or text from the internet. The answer or text generated by ChatGPT depends only on its training data; thus, it does not have ability to provide real-time data beyond what has been trained. With this in mind, AI like ChatGPT may present ideas without citing to the source text properly and lead to plagiarism. In addition, AI may also provide false information as a result of limited understanding to certain scientific concept and unintentional prejudices found in the training data (Bahammam et al., 2023). When writers solely count on AI to write, It clearly becomes a serious threat to the accuracy of the information and accountability of the article.

The use of AI for writing scholarly works indeed becomes a controversy. However, looking at the constantly growing number of AI tools users, it is more likely that people will also keep using them to assist academic writing. Given the undeniable potential benefits of AI assistive writing tools, and the absence of rules or certain policies that regulate the use of AI in academic writing. It is essential to investigate on how to use this technology in appropriate ways. Therefore, this study aims to look closely at how AI tool users maximize the potential of AI tools for academic writing while not violating academic integrity. The results of this study will give insight into how to use AI responsibly and how to make sure the benefit of AI outweighs its limitations.

Literature Review

Academic Integrity

In the literature, academic integrity has complex interpretation. The term “academic integrity is often used to describe the conducts of students and the body of the literature mostly also has negative association with this term. It is often linked with unethical practices in academia such as students’ misbehaviour or misconduct (i.e.; cheating and plagiarism) (Macfarlane et al., 2014). However, (Turner & Beemsterboer, 2003) emphasized that academic integrity binds everyone in the academia who are involved in the process of “the teaching and learning of knowledge, skills, and values and the discovery and dissemination of new knowledge.” In line with this notion, Jones (2001) defines academic integrity as “a personal choice to act responsibly and to take responsibility for one’s actions”. Academic integrity serves as a social contract in which people in the academia are bound to follow a set of rules and norms. It is expected that everyone behaves according to these rules to achieve equitable atmosphere.

The next question is, what set of rules to follow to be considered as upholding academic integrity? (Löfström et al., 2015) stated that how academic integrity should be addressed remains subjective. Universities and other institutions may have different policies regarding academic integrity. In addition, Bretag et al., (2014) also emphasized the varied perceptions of what constitutes academic integrity between staffs and students and that this understanding may evolve over time. In their study, (Bretag et al., 2014) also highlight a holistic approach to academic integrity which emphasizes the promotion of integrity in all aspects of academia, from conducting marketing and university admissions, holding staff professional development, to providing support to students for avoiding academic misconducts.

Comparing from six universities’ academic integrity policies, they all agree that academic integrity constitutes the principles of honesty and responsibility. Some universities also associate principles of fairness, ethical, respect and trust to academic integrity. When a person does not act with academic integrity, he is considered as committing academic dishonesty (TASC, 2023). Several actions that are categorized as academic dishonesty include plagiarism, using previously submitted assignments/recycling, contract cheating, collusion, facilitating academic misconduct, falsification, fabrication, impersonating someone else, and gratification (Brennecke, 2018; Harwani et al., 2018; Sefcik, 2019; TASC, 2023). These university policies give emphasis on plagiarism issue, and they also include strategies to avoid plagiarism in their students’ guidelines. In short, academic integrity-although not limited to this- is closely related to plagiarism issues in doing scholarly works.

Academic Writing

Academic writing has been an integral part of higher education. It is a common form of assignment used to assess university students understanding of certain topics or subjects. The practice of academic writing, however, is far from simple, it requires a complex cognitive activity (Al Badi, 2015). Firstly, students need to navigate the literature, read previous studies, and understand the ideas on the topic being discussed. Then, they need to synthesize their own ideas and write them in their own words and connect and cite from the existing literature. As noted by Al Fadda, (2012), reading and evaluating relevant sources, analyzing the diverse notions existed, and synthesizing them into authentic academic voice are among basic skills needed for success in academic writing. Not only that, but students also need to have other ‘technical’ writing skills, such as paraphrasing and summarizing (Abdulkareem,

2013), making outline (Aldabbus & Almansouri, 2022)organizing ideas (Amin Ahmed & Alamin, 2012), and editing (Alsamdani, 2010) to successfully convey their idea into a good piece of writing.

Brennecke (2020) recognizes that academic writing is a challenging task, and it might seem contradictory to students. On one hand, students are asked to search the literature and report it. But they are also required to originally write their paper. Students are needed to bring experts opinion to the paper, but they are demanded to do more than simply reporting. Further, students should learn how to articulate ideas from existing papers, but they need to use their own words when quoting the ideas. Previous studies confirmed that academic writing is perceived difficult by university students worldwide (see (Aldabbus & Almansouri, 2022; AlMarwani, 2020; Chou, 2011; Fadhel, 2019). A study by AlMarwani, (2020) uncovered the challenges of academic writing which sources from three categories: source managing skills, academic writing skills, and language skills. Students report difficulties in evaluating references and using them to create new piece of writing. They also experience difficulty to communicate ideas due to poor language skills. Align with this, Vyncke & Wingate, (2012) added that students generally face difficulties in expressing criticality in academic writing. Several factors behind this includes insufficient subject knowledge, uncertainty of the essay writing requirements, and inability to express authorial voice.

AI-Assistive Writing Tools

With the pitfalls of academic writing, artificial intelligence tools emerge and promise to ease the writing process. To date, there have been various AI-assistive writing tools available on the internet. Roe et al., (2023) divided AI-assistive writing tools into Large Language Model (LLM), Machine Translator, Digital Writing Assistance, and Automated Paraphrasing Tools. Large Language Model are AI tools which are trained with enormous amounts of data and then able to generate text when giving prompt or questions (Kasneci et al., 2023). An example of LLM is ChatGPT which is well-known for its ability to answer questions and perform other language related tasks. Machine translator (MT) is another beneficial tool for writing. It has the ability to translate text between different languages, thus facilitate learners to understand articles written in their non-native language. Common MT which is widely used is Google Translate. Then, there is tool like Grammarly which help edit and proofread written text. This tool can check errors in word spelling, sentence structure, and grammatical errors and provide suggestions that can automatically correct the errors. Lastly, automated paraphrasing tool (APT), like QuillBot, can provide instant paraphrase of a given text.

The use of AI-assistive writing tools is proven to be effective to improve writing quality (Fitria, 2021; Marzuki et al., 2023; Nobles & Paganucci, 2015). However, some concerns regarding ethical issues arises with the use of AI in academic writing. For instance, LLM may give inaccurate information, resulting in unreliability of the paper when incorporated into someone's work. In addition, when using LLM to write, it is more likely that someone copy paste the AI-generated text and claim it as his own writing. This act may lead to plagiarism issue as the writer take credit of the generated text. This case can also occur when someone use MT or APT and then use the translated or paraphrased version without properly citing it the original source. Not to mention other negative impacts caused by AI such as threat to creativity loss, over-reliance on AI tools, and other potential for abuse (Bahammam et al., 2023). Therefore, it is imperative to look for ways of utilizing AI tools properly so that it gives more benefits rather than negative impacts.

Methodology

Research Design

This research is a descriptive qualitative study. Descriptive qualitative study is a type of study aims to describe the existing phenomena as accurately as possible (Atmowardoyoy, 2018). In this type of research, the phenomena are already existed, thus the researchers observe and collect the available data to understand and explain the phenomena. The researcher decided to use descriptive design to investigate and understand the phenomenon through getting information from the students involved in the use of AI for academic writing.

Participant

The participants involved in the study were 10 master students majoring in English Education. The participants consisted of 7 female students and 3 male students. All of the participants are engaged in using AI for writing paper assigned by their lecturers in university.

Data Collection

The data was obtained through semi-structured interviews. The researcher interviewed each participant following the exact same interview guideline. The interview was audio recorded and it lasted for around 20-25 minutes for each interviewee. The recording was then transcribed for analysis.

Data Analysis

Thematic analysis was used to analyse the data obtained from the interviewee. Thematic analysis is a method of discovering patterns or themes of qualitative data (Maguire & Delahunt, 2017) In this study, inductive thematic analysis was employed as the researcher is more driven by the data acquired from the interviews itself. The process of thematic analysis comprises six steps: 1) Familiarization with the data, 2) generating initial code, 3) searching for themes, 4) reviewing themes, 5) defining themes, and 6) writing up (Braun & Clarke, 2006).

Results

RQ 1: What common AI tools were used for academic writing?

Seven AI-assistive writing tools were identified for the common tools used by graduate students for academic writing (Table 1).

No	AI tool	Purpose
1	ChatGPT	<i>Generating ideas, Drafting, Outlining, Reviewing Article,</i>
2	Quillbot,	<i>Paraphrasing, Rewriting, Suggesting Word Choice</i>
3	Grammarly	<i>Grammar check, Revising</i>
4	Easy-Peasy AI	<i>Generating ideas, outlining, analyzing data, grammar check</i>
5	Rytr AI	<i>Generating ideas, outlining, analyzing data, grammar check</i>
6	Humata	<i>Summarizing articles</i>
7	DeepL	<i>Translation</i>

Table 1. AI writing tools used by graduate students.

The AI tools were used for various stages of academic writing. Generally, AI tools were employed for pre-writing stages like generating ideas, outlining, and reviewing journal articles. Some others were used for editing phase; to paraphrase, check grammar mistakes and revise the paper. In addition, some AI tools also offer assistance for data analysis and translation. AI tools like DeepL and Humata are used for specific purpose. While other tools like ChatGPT, Rytr AI, and Easy-Peasy AI can be used for multiple purposes.

RQ 2: What are the impacts of AI tools on academic writing?

Two themes arose in relation to the perceived impact of AI tools on academic writing: impact on efficiency and impact on writing quality. For the second theme, four subthemes were identified.

1. Impact on Efficiency

Students expressed that incorporating AI tools for writing significantly decreased the time needed to finish writing paper:

“AI saves my time a lot. I believe that AI tools for academic writing creates a more efficient writing process.” (S4)

“I think AI just gives me a chance to save my time.” (S2)

“It helps me speed up my writing process.” (S1)

One student echoed that AI could shorten the time spent to write due to its multiple abilities to assist in writing. AI can help from the initial process of writing by suggesting ideas on what to write to the final stage of writing: editing and revising:

“I think overtime, students may become more efficient in producing written content, as AI tools can help with tasks like grammar correction, formatting, and generating basic ideas.” (S10)

2. Impact on Writing Quality

a. Word Choice

The participants of this study are English as a Foreign Language (EFL) students, and they stated that writing in English can sometimes be a challenging process. As it is not their native language, students countered difficulty like writing complex sentences and using academic words:

“I can only write simple sentences and the AI helps me find and use more advanced vocabulary.” (S8)

One of the beneficial features of AI is its ability to generate text with appropriate language and word use to a specific context. EFL students may lack knowledge on suitable words to use in writing. With the help of AI, students can get suggestion on more suitable words to incorporate:

“AI suggest me better word choices.” (S1)

“I feel like AI make my writing sounds more academic.” (S4)

Consequently, students see improvement in writing quality as AI offers assistance in the selection of vocabulary within their writing.

b. Grammar and Sentence Accuracy

Students reckoned that AI could serve as proofreading tool. This AI tool makes students notice of the error by detecting which sentences contain grammar and sentence mistakes. The tool makes it possible for students to produce error-free writing:

“After using AI, the quality of my writing is improving. For example, my grammar accuracy.” (S6)

“AI helps me to correct my sentence error.” (S8)

In addition, students highlighted the ease of use of AI proofreading tool (Grammarly). When sentence error is detected, the tool gives suggestion to correct the error. Students can revise the error only by one click, making it effortless to polish their writing:

“When I want to revise the mistakes, I don’t need to rewrite but just by clicking the recommendation of Grammarly.” (S6)

c. Content Writing

Students articulated that AI help them in initiating the writing process. Students use AI to generate ideas and get general knowledge on the topic that they will work on.

“I use AI To help me in finishing my assignment. Usually when I am stuck and don't know what to write for my assignment.” (S3)

“I use AI to get a big picture in relation to imagining what to write.” (S6)

“I usually use AI to look for some references and wider view about a problem or topic to work on.” (S2)

Seeing from the above comment. It suggests that AI can inform what has been known in the literature about a certain topic. It then assists students to decide what topic or subtopic to include in the paper.

Students also stated that although they already have some initial ideas on what to write, AI allows them to elaborate their ideas and offer different perspectives about the given topic:

“AI helps me a lot with enriching my ideas.” (S1)

“AI have been helpful in generating ideas and expanding my thinking process. They can suggest related topics or provide alternative perspectives that I may not have considered initially.” (S7)

d. Writing Structure/Organization

Students uttered that AI aids in organizing their ideas. In the beginning of the writing process, AI allows students to create outlines that become the framework for their content:

“It helps me improve the quality of my writing, such as getting more organized.” (S10)

“AI have assisted in organizing my thoughts by creating outlines and structuring my writing.” (S7)

In fact, AI is likely assists in ordering the content logically. Therefore, students can visualize the structure of their writing even before they begin to write. AI can also help reorganize the ideas so that the writing becomes more structured and coherent.

RQ3: What strategies are employed to preserve academic integrity?

Students deployed several strategies to maintain academic integrity while using AI for academic writing. The strategies comprise evaluating AI suggestions, cross-referencing, Editing AI-generated content to align with personal writing style, and upholding authentic voice in writing.

1. Evaluating AI Suggestions

Prior to using the content produced by AI, students mostly evaluate if the generated text is relevant to what they want to write:

“I usually ensure the suggestions made by AI align with the intended meaning I want.” (S1)

“Like in using chat GPT for getting the outlines, I have to really consider whether their suggestion already fills my expectation.” (S6)

“I read and reread the text generated by AI, If there is something useful and align with my writing context, I can add it to my writing.” (S9)

From the comments, they reflected how students maintain control over the content and carefully assess the AI-generated text so that it conveys the intended message of the students as the author of the paper. Rather than copy-pasting the AI text, students emphasized the need for critically evaluating them to ensure the message are maintained throughout the writing process.

2. Cross-Referencing

Another strategy implemented by the students are fact-checking the information produced by AI tools. It is imperative to make sure that the information included in the paper is accurate, therefore students cross check them:

“I also verify the accuracy and reliability of any information provided by AI tools through independent research and cross-referencing.” (S7)

However, a student showed concern related to the accuracy of information generated by AI. She uttered personal experience in using ChatGPT. She asked ChatGPT to provide references along with the generated text. Unfortunately, the references given were fabricated by ChatGPT:

“AI generative can offer good answers, but the answer and description provided are not reliable. It does not provide references, even if we ask it to attach the references, they are often fake references. I checked them on google scholar and they do not exist.” (S10)

Knowing that AI may give bogus citations, a citation to non-existed sources or a citation attributed to inaccurate author, it is highly recommended to always double check the information given. It may become a serious threat to the credibility of the paper written with such inaccuracies.

3. Editing AI-Generated Content to Align With Personal Writing Style

Students reported that they edit and paraphrase the AI-generated content prior to including it in their writing:

“I edit and proofread the generated text from AI. I make sure the AI generated content blend with my own writing style.” (S3)

Students show effort to rewrite the generated text with their own writing style to avoid plagiarism. Editing the generated text allows students to incorporate it to their work and seems effective to ensure proper citation. Students also point out that rewriting with authors' own word is an attempt to maintain authorship of the work:

“When I use QuillBot, even though this AI let me have an instant paraphrasing, I still need to do my proofreading and editing process to make my ‘effort’ joining the show.” (S2)

A concern was also raised about hard-to-read sentences produced by AI. Therefore, a student said editing is necessary to make writing more readable:

“The generated text sometimes offers sophisticated words/hard to read sentences. I revised it with simple words to make my writing easier to read.” (S4)

4. Upholding Authentic Voice in Writing

Students agreed to make AI only as a writing assistance, rather than a substitute of the author. Students reckoned that they are the author of the paper, thus they are responsible to bring their original viewpoints and arguments to their work. AI is merely tool to help enhance and improve the quality of their writing:

“I use ChatGPT wisely, only as my writing assistant. The main idea of my writing is originally from my own thought.” (S10)

“We have to keep in mind that the main actor is the author, not the ‘machine’. So that, at the writing process, the author has a responsibility to keep their authentic voice.” (S2)

“Although AI tools help me make my writing better, I should enhance my point of view, understanding, and critical thinking.” (S4)

All in all, students acknowledged that they have to use their critical thinking and bring their own voice to take ownership of the scholarly work written. This way, students can ensure the use of AI does not dominate their own effort and violate academic integrity.

Discussion

The findings of this study provide insight into the common AI tools used for academic writing. Students employed numerous AI tools which fall into four categories: automatic text generation, automatic writing evaluation (AWE), automatic writing corrective feedback (AWCF), and AI-enabled machine translation (see Alharbi, 2023). These tools were used for different purposes in different parts of the writing process. Notably, students mainly use AI to assist them in the pre-writing stage. AI was employed to get common knowledge, provide a wide picture of a certain topic, and turn them into an outline for their writing. For this kind of purposes, they utilize automatic text generation like ChatGPT, Rytr AI, and Easy-Peasy AI. Students also used Humata, which basically is another automatic text generation, to summarize and extract information from PDF files. This tool also helps students in the pre-writing stage, specifically to collect important information and citations for the paper. AI-enabled machine translation used by students was DeepL. In addition, students also reported that AI tools were primarily used for revising and editing. AI tools employed are AWE and AWCF like Grammarly, and QuillBot.

Among all AI tools used, ChatGPT emerged as the most popular choice as it can help in doing multiple writing tasks. ChatGPT can be used almost in every stage of writing. For pre-writing, it can provide background information of the topic and generate ideas and outlines. During the writing process, it can assist students to elaborate or develop arguments and provide further explanation. It also provides suggestions on the phrasing level, benefiting those students who have language barrier. Once the draft is finished, student can get feedback on the grammar and sentence errors. ChatGPT is also able to reorganize the paragraph, ensuring that they are logically coherent and effective. ChatGPT is like a real-time writing assistance for students. Nevertheless, this AI is limited in terms of the accuracy of information given. ChatGPT cannot provide direct links to sources. When asked to include references, it often supplies users with fake references. Consequently, students cannot rely only on the generated text for writing. Students need to consult academic search engines, like Google Scholar and Scopus, to find reliable information from reputable journals.

Generally, the use of AI writing tools can also promote learning. Students reported that QuillBot as AWCF not only give paraphrased sentences, but also make them learn better word choices. Similarly, text produced by AI becomes a model which show what appropriate words to incorporate in academic writing. Then, Grammarly as AWE highlights common errors in students writing. Students will be more aware of sentence errors the next time they write. As (Nazari et al., 2021) asserted, feedback received from AWE allows students to inspect sentence errors and incorrect writing patterns. It then results in better ability to detect and revise sentence errors which contribute to higher writing autonomy. Scholars have also

suggested educators to use AI writing tools for teaching (Ranalli, John and Woll, Pellet and Myers). They believe that these tools will be of great benefits if educators incorporate them in classroom settings.

Regarding the perceived benefits of AI writing tools, the finding of this study is in line with the work of (Marzuki et al., 2023). AI writing tools is proven to be effective to improve students writing quality, specifically for writing content and organizations. These are mostly supported by automatic text generation features of AI which allow students to brainstorm ideas, enhance the content of the written work, and polish the draft of the paper. Incorporating AI for writing does significantly reduce time spent. This key finding supports previous research by Kacena et al., (2024). In addition, the results of this study also added to the literature that AI tools promote better word choice. Students acknowledge that they learned word selection through the feedback received from AWCF.

Chen (2023) pointed out that the role of AI in scientific writing is inevitable. Thus, AI writing tools should be embraced with a holistic perspective. Rather than banning or boycotting these tools, researchers, educators, and students are expected to know how to exploit the tools to help the writing process. Off course, with understanding on how to utilize them without violating academic integrity. The findings from this study revealed several acceptable strategies for maintaining academic integrity with the use of AI for writing. Students need to evaluate the generated text and critically evaluate its accuracy and relevancy with the message that is trying to be delivered. AI generated text can serve as a model or insights on how to write, giving inspiration to novice writers and helping them overcome the writers' block. Again, students need to maintain authorship of the written work and make sure to pay attention to the principle of honesty, respect, and responsibility throughout the writing process.

Conclusion

The results of this study highlight the significant roles of AI-assistive writing tools in academic writing endeavours. While these tools offer benefits in terms of efficiency and writing quality, their integration requires careful consideration of ethical implications. Therefore, the strategies described in this study can be thoughtful ways to preserve academic integrity when writing with AI tools. The author would like to acknowledge the limitations of this study. This study only includes a small number of samples and may not represent other contexts. Future research may reproduce this research with bigger numbers of participants. Further exploration is also needed to address the acceptable strategies according to educational institutions.

Acknowledgements

The author would like to express gratitude to State University of Yogyakarta for supporting this research.

References

- Abdulkareem, M. (2013). Investigation study of academic writing problems faced by Arab postgraduate students at Universiti Teknologi Malaysia (UTM). *Theory and Practice in Language Studies*, 3(9), 15552–15557.
- Al Badi, I. A. H. (2015). *Academic Writing Difficulties of ESL Learners*. WEI International Academic Conference Proceedings.
- Al Fadda, H. (2012). Difficulties in academic writing: From the perspective of King Saud University postgraduate students. *English Language Teaching*, 5(3), 123–130.
- Aldabbus, S., & Almansouri, E. (2022). Academic Writing Difficulties Encountered by University EFL Learners. *British Journal of English Language Linguistics*, 10(3), 1–11. <https://doi.org/10.37745/bjel.2013/vol10n3111>
- Alharbi, W. (2023). AI in the Foreign Language Classroom: A Pedagogical Overview of Automated Writing Assistance Tools. *Education Research International*, 2023. <https://doi.org/10.1155/2023/4253331>
- AlMarwani, M. (2020). Academic Writing: Challenges and Potential Solutions. *Arab World English Journal*, 6, 114–121. <https://doi.org/10.24093/awej/call6.8>
- Amin Ahmed, S., & Alamin, A. (2012). Skills and Strategies Used in the Comprehension and Production of Academic Writing in Taif University. *English Language and Literature Studies*, 2(3). <https://doi.org/10.5539/ells.v2n3p134>
- Atmowardoyoy, H. (2018). Research Methods in TEFL studies: Descriptive research, case study, error analysis, and R&D. *Journal of Language Teaching and Research*, 9(1), 197–204.
- Bahammam, A. S., Trabelsi, K., & Pandi-Perumal, S. R. (2023). Adapting to the Impact of AI in Scientific Writing: Balancing Benefits and Drawbacks while Developing Policies and Regulations Hot Topic. Article in *Journal of Nature and Science of Medicine*. https://doi.org/10.4103/jnsm.jnsm_89_23
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Brennecke, P. (2018). *Academic Integrity at MIT A Handbook for Students* Massachusetts Institute of Technology.
- Bretag, T., Mahmud, S., Wallace, M., Walker, R., McGowan, U., East, J., Green, M., Partridge, L., & James, C. (2014). “Teach us how to do it properly!” An Australian academic integrity student survey. *Studies in Higher Education*, 39(7), 1150–1169. <https://doi.org/10.1080/03075079.2013.777406>

- Cardon, P., Fleischmann, C., Aritz, J., Logemann, M., & Heidewald, J. (2023). The Challenges and Opportunities of AI-Assisted Writing: Developing AI Literacy for the AI Age. *Business and Professional Communication Quarterly*, 86(3), 257–295. <https://doi.org/10.1177/23294906231176517>
- Chen, T. J. (2023). ChatGPT and other artificial intelligence applications speed up scientific writing. In *Journal of the Chinese Medical Association* (Vol. 86, Issue 4, pp. 351–353). Wolters Kluwer Health. <https://doi.org/10.1097/JCMA.0000000000000900>
- Chou, L. (2011). An Investigation of Taiwanese Doctoral Students' Academic Writing at a U.S. University. *Higher Education Studies*, 1(2). <https://doi.org/10.5539/hes.v1n2p47>
- Fadhel, A. (2019). Writing Challenges Among Secondary School Students. *Altarbawi Journal*, 3(1), 23–43.
- Fitria, T. N. (2021). Grammarly as AI-powered English Writing Assistant: Students' Alternative for Writing English. *Metathesis: Journal of English Language, Literature, and Teaching*, 5(1), 65. <https://doi.org/10.31002/metathesis.v5i1.3519>
- Ghufron, M. (2019, July 9). Exploring an Automated Feedback Program 'Grammarly' and Teacher Corrective Feedback in EFL Writing Assessment: Modern vs. Traditional Assessment. <https://doi.org/10.4108/eai.27-4-2019.2285308>
- Harwani, Y., Hesti, M. M. S., Kom, S. I., Kom, M. I., Rekarti, E., Atep, M. E. I., & Hidayat, A. (2018). Academic Integrity Guidance for Student Drafting team Directorate of Learning.
- Jones, L. R. (2001). *Academic Integrity & Academic Dishonesty: A Handbook About Cheating & Plagiarism*. https://repository.fit.edu/library_publications
- Kacena, M. A., Plotkin, L. I., & Fehrenbacher, J. C. (2024). The Use of Artificial Intelligence in Writing Scientific Review Articles. In *Current Osteoporosis Reports*. Springer. <https://doi.org/10.1007/s11914-023-00852-0>
- Kasneci, E., Sessler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., Gasser, U., Groh, G., Günemann, S., Hüllermeier, E., Krusche, S., Kutyniok, G., Michaeli, T., Nerdel, C., Pfeffer, J., Poquet, O., Sailer, M., Schmidt, A., Seidel, T., ... Kasneci, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. In *Learning and Individual Differences* (Vol. 103). Elsevier Ltd. <https://doi.org/10.1016/j.lindif.2023.102274>
- Korteling, J. E. (Hans), van de Boer-Visschedijk, G. C., Blankendaal, R. A. M., Boonekamp, R. C., & Eikelboom, A. R. (2021). Human- versus Artificial Intelligence. *Frontiers in Artificial Intelligence*, 4. <https://doi.org/10.3389/frai.2021.622364>
- Löfström, E., Trotman, T., Furnari, M., & Shephard, K. (2015). Who teaches academic integrity and how do they teach it? *Higher Education*, 69(3), 435–448. <https://doi.org/10.1007/s10734-014-9784-3>

- Macfarlane, B., Zhang, J., & Pun, A. (2014). Academic integrity: a review of the literature. In *Studies in Higher Education* (Vol. 39, Issue 2, pp. 339–358).
<https://doi.org/10.1080/03075079.2012.709495>
- Maguire, M., & Delahunt, B. (2017). *Doing a Thematic Analysis: A Practical, Step-by-Step Guide for Learning and Teaching Scholars*. * (Issue 3).
<http://ojs.aishe.org/index.php/aishe-j/article/view/335>
- Marchev, A., & Piryanokova, M. (2022). Evolution of the Concept of Self-Organization by the Founding Fathers of A.I. 2022 10th International Scientific Conference on Computer Science, COMSCI 2022 - Proceedings.
<https://doi.org/10.1109/COMSCI55378.2022.9912577>
- Marzuki, Widiati, U., Rusdin, D., Darwin, & Indrawati, I. (2023). The impact of AI writing tools on the content and organization of students' writing: EFL teachers' perspective. *Cogent Education*, 10(2). <https://doi.org/10.1080/2331186X.2023.2236469>
- Nazari, N., Shabbir, M. S., & Setiawan, R. (2021). Application of Artificial Intelligence powered digital writing assistant in higher education: randomized controlled trial. *Heliyon*, 7(5). <https://doi.org/10.1016/j.heliyon.2021.e07014>
- Nobles, S., & Paganucci, L. (2015). Do Digital Writing Tools Deliver? Student Perceptions of Writing Quality Using Digital Tools and Online Writing Environments. *Computers and Composition*, 38, 16–31. <https://doi.org/10.1016/j.compcom.2015.09.001>
- Roe, J., Renandya, W. A., & Jacobs, G. M. (2023). A Review of AI-Powered Writing Tools and Their Implications for Academic Integrity in the Language Classroom. *Journal of English and Applied Linguistics*, 2(1). <https://doi.org/10.59588/2961-3094.1035>
- Sefcik, L. (2019). *Academic Integrity GUIDE FOR STUDENTS 2*.
- TASC. (2023). *Academic Integrity Guide for Students*. TASC.
- Thormundsson, B. (2023, November 29). Growth of artificial intelligence (AI) tool users worldwide from 2020-2030.
- Turner, S. P., & Beemsterboer, P. L. (2003). Enhancing Academic Integrity: Formulating Effective Honor Codes. *Journal of Dental Education*, 67(10), 1122–1129.
<https://doi.org/10.1002/j.0022-0337.2003.67.10.tb03705.x>
- Vyncke, M., & Wingate, U. (2012). *The Concept and Practice of Critical Thinking in Academic Writing: An Investigation of International Students' Perceptions and Writing Experiences* The concept and practice of critical thinking in academic writing: an investigation of international students' perceptions and writing experiences Michelle Vyncke MA in English Language Teaching and Applied Linguistics.

Contact email: afifah.2022@student.uny.ac.id