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The Role of Generative Artificial Intelligence Tools in Enhancing Academic Writing

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Abstract

This study examines the ability of Generative Artificial Intelligence (GenAI) tools to improve the quality of academic writing with a special interest in second language learners. These tools have proven to be very useful when it comes to improving language accuracy, coherence, and most importantly, decreasing the learners' efforts in tackling the field of academic writing. But these technologically driven tools have their downside and one important downside that these tools have is the over reliance on them, which in turn can negatively affect originality, essential writing skills, and critical thinking. This study offers insight as to the potential keenness with which others may need to address the over dependence and ethical issues related to the AI usage in academia, such as the issues and challenges of academic honesty, plagiarism, and other form of academic misconducts and crimes. The paper also analyzes the impact of GenAI tools on the education sector as a whole. It points out that these tools should be viewed as add-ons to the educational process and not replacements for learning activities and hands-on work. The study proposes an integration model aimed at ensuring that crucial writing skills are not lost in the quest of reaping the benefits of AI technologies, and it also seeks to limit the scope of use through practical solutions to ensure responsible use. This analysis participates in the debates about AI technology's place in education and shows ways of applying GenAI tools in academic writing while maintaining the integrity and the originality which is the hallmark of academic writing.

Keywords: Second Language, Writing, Generative Artificial Intelligence,

Akademik Yazmanın Geliştirilmesinde Üretken Yapay Zeka Araçlarının Rolü

Öz

Bu çalışma, Üretken Yapay Zeka (GenAI) araçlarının akademik yazıma katkılarını ve özellikle İngilizce'yi ikinci dil olarak kullanan bireyler üzerindeki etkilerini araştırmaktadır. Bu araçlar, dil doğruluğunu artırma, metin tutarlılığını sağlama ve bilişsel yükü azaltma gibi önemli avantajlar sunarak akademik yazımın

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karmaşıklıklarını aşmada faydalı olmuştur. Ancak, bu teknolojilere artan bağımlılık, özgünlük, eleştirel düşünme ve temel yazma becerilerinin gelişimi üzerindeki olumsuz etkiler gibi endişeleri de beraberinde getirmektedir. Çalışma, bu zorlukları ele alarak, aşırı bağımlılığın risklerini ve yapay zeka kullanımının etik boyutlarını, özellikle akademik dürüstlük ve intihal konularında, değerlendirmektedir. Ayrıca, makale, GenAI araçlarının eğitim uygulamalarına entegrasyonunun daha geniş etkilerini de tartışmaktadır. Bu araçların destekleyici birer yardımcı olarak kullanılması ve temel beceri kazanımını engellemeden eleştirel düşünceyi teşvik etmesi gerektiğini vurgulamaktadır. Sorumlu kullanım için pratik öneriler sunan çalışma, bu araçların avantajlarından yararlanırken yazma yetkinliklerini korumayı hedefleyen dengeli bir strateji önermektedir. Bu çalışma, eğitimde yapay zekanın rolüne dair devam eden tartışmalara katkı sağlamakta ve GenAI araçlarının akademik yazımı nasıl destekleyebileceği konusunda, akademik bütünlük ve yaratıcılığın korunmasını ön planda tutarak önemli çıkarımlar sunmaktadır.

Anahtar Kelimeler: İkinci Dil, Yazma, Üretken Yapay Zeka

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Introduction

Academic writing is one of the core activities in education and research as it is the main way of sharing information, reporting research activities, and scholarly exchanges. Generally, in all fields of sciences, the students and other professionals who manage to compose complex, cohesive, and innovative academic papers, understand quite well how to add value to the scientific community and further their careers (Richards & Miller, 2006). In both students and researchers' cases, the act of academic writing consists not only of the effective transmission of ideas but also of the following of traditions such as citations and writing in a particular manner consistent with the discipline in question (Galbraith, 2009). Yet, it is hard to deny that in both developed and developing nations academic writing is still considered to be a significant challenge, rather requiring language and critical skills at the same time (Snow & Uccelli, 2009).

The very problem is exacerbated by the fact that has become a global phenomenon throughout the world. For people who are not used to speaking English on a daily basis, academic writing is a hard nut to crack due to the statement formulations, grammar mistakes and cohesion (Paltridge, 2004). Native speakers as well do not have it easy as producing original content, maintaining strict adherence formatting and trimmed content make the two processes quite complicated (Hyland, 2016). As a result, it comes as no surprise that researchers and educators have devised novel strategies to assist authors at different stages of academic writing (Akdemir & Eyerci, 2016; Verma, 2023).

Academic writing is said to have been significantly democratized due to the rise of Generative Artificial Intelligence (GenAI) tools (Nguyen, 2024). Natural Language Processing with machine learning in conjunction allows these tools to aid users in generating content, rewrites, grammar and style corrections and more (DuBose & Marshall, 2023). Nonetheless, with such tools on the increase we are left with the ability to consider how their usage impacts writing. Despite their aim to lessen the workload while improving output (Assidiq, 2024), they are dangerous tools that encourage automation dependence, originality and ethics risks and critical thinking declines (Nwozor, 2025). Even with their popularity, a concerning majority holds limited evidence to show how they are beneficial to academic writing. A thorough deep dive into

their modern day usage is essential if we want to correctly determine whether or not they hold any value.

In this sense, this study aims to bridge this gap by investigating the function of GenAI tools in academic writing. In particular, it looks at how such tools are utilized at different stages in the writing process and its application in brainstorming, drafting, editing and proofreading. The review goes further by looking at the advantages tools bring such as the enhancement of language accuracy and the reduction of tasks in a workflow model while stating the disadvantages and social consequences that arise from these tools. In order to achieve that, the paper sets the following research questions:

- 1. What are the Generative Artificial Intelligence tools and how are they incorporated in an academic writing?
- 2. Which ones excel and which ones fail in contributing positively to the writing process?
- 3. What changes do they hope to bring in the near future when it comes to academic writing?

The three questions focused on help put in perspective the implications GenAI tools have on academic writing in context to both the advantages and the disadvantages. It does provide guidance on how these tools can be incorporated into an academic writing environment in the right fashion ensuring critical and creative components are maintained and not substituted.

1. Writing in a Second Language

Academic writing in a second language is a complex process requiring learners to navigate linguistic, rhetorical, and cultural challenges. Unlike conversational fluency, academic writing involves adhering to specific conventions of grammar, style, and discourse, all while articulating complex ideas with clarity and precision. For learners whose first language is not English, academic writing becomes even more challenging, given that English dominates as the lingua franca in academia (Flowerdew, 2008a; Curry & Lillis, 2004).

The challenges second-language learners face are multifaceted. At the linguistic level, they often struggle with grammatical accuracy, syntactic complexity, and limited academic vocabulary. Studies have shown that non-native English speakers frequently encounter issues with cohesion, coherence, and the appropriate use of articles, prepositions, and other functional words (Akdemir, 2021; Flowerdew, 1999; Hyland & Salager-Meyer, 2008; López & Manalastas, 2017).

Beyond linguistic challenges, cultural differences in rhetorical conventions pose additional obstacles. English academic writing often demands a direct and linear argumentation style, with a clear thesis statement and logical organization of ideas (Swales, 1990). In contrast, other cultural traditions may prioritize implicit reasoning, storytelling, or non-linear structures. These differences can lead to difficulties in producing texts that align with the expectations of English academic discourse communities, as noted by Swales (1990) and Flowerdew (1999b). Multilingual learners often face challenges in constructing

introductions, engaging in argumentative writing, and using metadiscourse markers effectively (Li & Flowerdew, 2007).

Writing in a second language also imposes significant cognitive demands. Learners must simultaneously generate ideas, structure arguments, and ensure linguistic accuracy, leading to cognitive overload (Akdemir, 2019; Gosden, 1996; Curry & Lillis, 2004). This is particularly evident in academic writing, where dense sentence structures and discipline-specific terminology increase the complexity of the task (Flowerdew, 1999a).

The emotional burden of academic writing in a second language can further hinder progress. Fear of making mistakes, repeated revisions, and concerns about meeting academic standards often reduce learners' confidence and motivation (Casanave, 1998; Flowerdew, 1999b). Additionally, multilingual learners may struggle to interpret feedback effectively, particularly when it involves deeper rhetorical or cultural issues, which can prolong the revision process (Duszak & Lewkowicz, 2008).

To overcome these challenges, targeted strategies and structured support are essential. Key approaches include:

Focused Language Instruction: Teaching the specific grammar, vocabulary, and cohesive devices necessary for academic writing (Richards & Renandya, 2002).

Modeling Academic Genres: Providing learners with examples of essays, research papers, and reports that illustrate the structural and rhetorical norms of academic writing (Swales, 1990; Tardy, 2005).

Iterative Feedback Cycles: Encouraging learners to engage in a process of drafting, receiving feedback, and revising, which is crucial for skill development (Flowerdew, 1999a; Li, 2007).

Peer Collaboration: Offering opportunities for peer review and collaborative writing to foster shared learning experiences (Cho, 2009; Curry & Lillis, 2010).

Technological tools have become invaluable in supporting secondlanguage academic writing. Applications like Grammarly, ProWritingAid, and QuillBot assist learners in identifying and correcting grammatical and stylistic errors, while tools like ChatGPT help with brainstorming ideas and drafting initial text. These tools not only reduce the cognitive burden but also enable learners to focus on higher-order writing tasks such as argument development and idea organization (Hyland, 2016; Flowerdew, 2014).

Despite these challenges, second-language academic writers bring valuable perspectives to the academic community. Their work often reflects diverse cultural insights and localized knowledge, enriching the global academic discourse (Canagarajah, 2003). Recognizing and addressing the unique challenges faced by multilingual learners is crucial not only for their individual success but also for fostering a more inclusive and diverse academic environment.

By implementing tailored strategies, fostering supportive learning environments, and leveraging innovative technologies, educators can empower second-language learners to develop their academic writing skills. This, in turn, contributes to a more equitable and representative

academic community. While academic writing in a second language poses significant linguistic, rhetorical, and cognitive challenges, advancements in technology have opened new avenues for addressing these difficulties. Among these innovations, GenAI tools have emerged as transformative resources in education. These tools are designed to assist learners in developing their writing skills by offering real-time feedback, generating content, and simplifying complex linguistic tasks (Zhao, 2024). For second-language learners, the potential of GenAI to provide tailored support, enhance linguistic accuracy, and facilitate rhetorical development represents a significant leap forward in overcoming traditional barriers to academic writing.

2. Generative Artificial Intelligence and Its Use in Second Language Writing

Generative Artificial Intelligence (GenAI) tools have emerged as transformative resources for second-language learners, offering tailored support to address challenges in academic writing (Tang et al., 2024). By leveraging advanced natural language processing and machine learning algorithms, these tools assist learners across various stages of the writing process.

In the pre-writing phase, tools like ChatGPT and Jasper AI help secondlanguage learners overcome writer's block by brainstorming ideas and structuring topics. They can also summarize complex literature into manageable insights, enabling learners to better understand and explore relevant research areas. During the writing phase, tools such as Grammarly and ProWritingAid provide real-time feedback on grammar, syntax, and style, helping learners enhance linguistic accuracy and coherence. Paraphrasing tools like QuillBot and Wordtune assist in rephrasing ideas while retaining meaning, enabling writers to develop clearer and more original text. Additionally, content generation tools like Writesonic support the drafting of sections such as introductions and abstracts, streamlining the overall process. In the post-writing phase, GenAI tools assist with proofreading, ensuring grammatical and stylistic accuracy while maintaining academic standards. Many tools also include plagiarism detection features, helping second-language learners uphold integrity in their work, and citation management capabilities to format references accurately.

These tools offer significant advantages for second-language learners by reducing cognitive load (Feng, 2025), enhancing linguistic proficiency (Zhao & Lai, 2023), and automating repetitive tasks (Alharbi, 2023). For instance, Grammarly's detailed corrections and Wordtune's tone adjustment features are particularly helpful in refining arguments and ensuring clarity. However, learners must use these tools judiciously to avoid over-reliance, which can hinder the development of independent writing and critical thinking skills (da Silva, 2024).

Looking forward, advancements in GenAI are expected to further enhance their contextual understanding and interactivity, making them even more effective for second-language academic writing. To maximize their potential, educators should integrate these tools into pedagogical practices while emphasizing foundational writing skills,

ensuring that they complement rather than replace critical aspects of learning.

3. Methodology

This study focuses on analyzing Generative AI tools and their applications in supporting second-language writing. The primary goal is to evaluate the features, functionalities, and potential uses of these tools for learners developing academic writing skills in a second language. To investigate these tools, several criteria were applied. First, their functionality and features were assessed, including grammar checking, paraphrasing, summarizing, and content generation. Features beneficial for second-language writers, such as vocabulary enhancement and context-based suggestions, were also evaluated. Ease of use was another focus, with particular attention to user interfaces, accessibility, and integration with other writing platforms.

The study also examined the effectiveness of these tools in addressing common challenges in second-language writing, such as grammatical accuracy, coherence, and lexical variety. Feedback mechanisms, such as real-time suggestions, detailed reports, and stylistic recommendations, were evaluated for their relevance to second-language learners. Additionally, affordability and accessibility were considered, including pricing structures, availability of free versions, and support for multiple languages or regional variations of English.

Ethical considerations, such as the impact on academic integrity and originality, as well as privacy and data security, were also reviewed. Data for this analysis was collected directly from official tool websites, user manuals, trial versions, user reviews, and online community discussions. The tools were categorized based on their primary functionalities and evaluated for their relevance and effectiveness in second-language writing contexts. A comparative analysis was conducted to highlight the strengths, limitations, and unique features of each tool.

In the study, GENAI tools primarily designed for SEO and marketing were also included as they can be used by second language writers for content production, tone alteration and task organization and in a more roundabout way assist second-language students in the optimization of ideas and order in which they shall be penned down in writing. The tools analyzed and key features of the tools are presented in Table 1.

Table 1

Tool	Primary Focus	Effectiveness	Feedback Mechanism	Affordability	Ethical Issues
Jasper AI	Content generation	Good for content structure	No detailed feedback	Subscriptio n-based	Over- reliance risks
Writesonic	Content creation	Good for brainstormi ng	No detailed feedback	Subscriptio n-based	Originality concerns
Grammarly	Grammar and style checking	Excellent for grammar	Real-time corrections	Free and Premium	Over- reliance risks
Wordtune	Rewriting and tone adjustment	Great for clarity	Suggestion s only	Free and Premium	Plagiarism risk
ContentShak e AI	Marketing content generation	Limited	None	Subscriptio n-based	Originality concerns
Ink	Content optimization	Moderate	Basic suggestions	Free and Premium	Skill developme nt risks

GENAI Tools Analyzed in the Study

Writer	Brand consistency and collaborative editing	Moderate	Basic suggestions	Subscriptio n-based	Originality concerns
Copy.ai	Marketing copy generation	Limited	None	Free and Premium	Originality concerns
Anyword	Marketing and predictive analytics	Limited	None	Subscriptio n-based	Ethical risks in predictive analytics
QuillBot	Paraphrasing and summarizing	Excellent for paraphrase	Rephrasing suggestions	Free and Premium	Plagiarism and over- reliance risks
LongShot AI	Long-form content creation	Moderate	None	Subscriptio n-based	Fact- checking needed
Copysmith	Marketing and e- commerce content	Limited	None	Subscriptio n-based	Over- reliance risks
ProWritingA id	Grammar and style analysis	For style improveme nt	Detailed feedback	Free and Premium	Over- reliance risks
AI Writer	Long-form content generation	Good for reference	None	Subscriptio n-based	Originality concerns
Rytr	Content generation	Moderate	None	Free and Premium	Originality concerns
ChatGPT	Conversation al AI	Excellent for brainstormi ng	Suggestion s and clarificatio ns	Free and Premium	Proper attribution needed
Sudowrite	Creative writing	Good for creative tasks	Creative suggestions	Subscriptio n-based	Creative originality risks
Scalenut	SEO-driven content	Limited	None	Subscriptio n-based	Originality concerns
HubSpot	Marketing platform	Limited	None	Free and Premium	Marketing ethics adaptation
Content at	Automated	Moderate	None	Subscriptio	Originality

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Scale	long-form content creation			n-based	concerns
Claude	Conversation al AI	Excellent for brainstormi ng	Clarificatio ns and suggestions	Free and Premium	Proper attribution needed

4. Findings

4.1. Jasper AI

Jasper AI is a multi-purpose AI tool that assists users in generating remarkable content in the form of blog posts, social media posts, and even marketing content. The application also allows users to customize the tone of their content by providing them with different templates and integrating SEO tools to increase the optimization of the content. Jasper also provides easy to use guided workflows while having a user-friendly interface ensuring that the application can be used by writers of all levels, regardless of experience. This integration of Surfer SEO constitutes to a more seamless content creation experience. In this regard, Jasper helps second language learners in writing by assisting in putting ideas into relevant words, thus tackling the main barrier in fluency-appropriateness. This too allows for a greater reach as this application broadens the range in which people can create content. However, while a wide variety of content can be generated easily through Jasper, the application does not provide correcting feedback to inputted data and this might limit the usefulness of the tool for learners who either want to improve their skills through correct feedback or get feedback in real-time. The different packages cater to the variety of

needs and to the matter of affordability allowing students to utilize their budgets wisely. It provides a free trial so that individuals can first test the tools before making any major commitments. Users should ensure that they abide by the standards of academic integrity and originality, as being too dependent on AI content may impede the ideals they set to follow. An indispensable part of content creation is the personal touch, which means Jasper should be used only as an adjunct.

4.2. Writesonic

The AI-powered writing tool, Writesonic, assists users in the development of several kinds of content such as articles, ads, and product descriptions. It has a total of over 80 templates available alongside other writing multi-language capabilities. Loads of versatility can be gained from the application while the interface is extremely easy to use and caters to varying levels of expertise. It is possible to create music videos, advertisements, and copywriters by entering the prompt, tone, or style. Content generation helps second language learners with structured generation to get rid of writer's block and produce coherent text that they can refer to for their language acquisition needs. However, because it doesn't offer content feedback, it is not effective in an educational context that requires learning from mistakes, such as second language students. This is also applicable to Writesonic, which also enables varying users to try it out without having to worry about its costs since it has a free trial period with limited features. Users are able to use the tool across different devices, making the tool highly convenient. Writesonic stresses the importance of originality as the content that might not entirely be original or having copy rights violations might present potential ethical issues, and so it's vital to understand that this tool isn't designed to replace hard work.

4.3. Grammarly

Grammarly aids in boosting clarity, brevity and overall quality of writing by providing comprehensive grammar and punctuations checks, offering suggestions for style and tone and even checking for plagiarism. It features a very intuitive interface which enables its integration into different platforms such as web browsers and word processors. This enhances ease of access for individuals with varying degrees of technical skill. Non-native English speakers are bound to especially benefit from using Grammarly since it aids users in spotting and rectifying errors in their grammar, punctuation, spelling, and word usage due to which the accuracy of their writing improves significantly. Grammarly also provides contextual feedback along with detailed descriptions of the offered corrections which makes it easier for an individual to comprehend their errors and learn from them. Grammarly is available in both free and premium variants with the latter offering many advanced features. Different dialects of English such as American English, British English, Canadian English and Australia. While Grammarly greatly assists in enhancing one's writing, becoming too dependent on it can never be recommended as it is detrimental to the development of one's writing skills. Privacy concerns should be kept in mind as this tool does require text input which is then processed to give suggestions.

4.4. Wordtune

Wordtune is a paraphrasing tool that specializes in rewriting and adjusting the tone of the text. It can aid in enhancing text formality by offering suggestions. It also suggests shifting the length or translating non-English ideas to English. The interface is neat and clean and is an add-on to web browsers, thus giving users who require quick fixes in their writing the ability to use it easily. Wordtune also assists second language learners by suggesting shifting the tone or providing alternative phrasings. In this way, it assists in articulating ideas in a suitable manner in an academic environment. The tool, on the other hand, provides the users with various rewriting options so they can select the most suitable meaning and tone of their preference. For basic features, it is provided to all users free of charge while there is a licensed subscription available to obtain advanced functionality. Other supported languages enable translation, which is beneficial for users who do not have English as their first language.

4.5. ContentShake

The primary purpose of the ContentShake is to streamline the creation and editing of content which is aimed at satisfying marketing needs. Also, automated suggestions of the topics of the materials to be created, templates for the content, as well as real-time collaboration between several users are available as well. In addition to that, the tool boasts a quite a simple interface with step-by-step guides such as for content creation that enable both novices and experts to make use of this program. Students, on the other hand, might find it useful in the marketing field because it first gives step by step formatting instructions then helps with the construction of the relevant concepts. But such advanced features as advanced grammar check or any linguistics tools for academic writing are not included. Mainly such a tool is used to write the content and does not provide criticism to the writing with comprehensive suggestions to ameliorate it. Accessible marketing materials can be generated by means of ContentShake AI and is available on a subscription basis with several price brackets depending on what services are accessed. Furthermore, the program is compatible with numerous other programs aimed at improving cooperation. It is a requirement, however, that the content generated is academically suitable and not plagiarism or originality content checks.

4.6. InkAI

Ink combines AI with its tools to help users check grammar, change tone, and optimize their content for SEO. Writing texts that are to the point and meaningful become effortless with its writing assistants. Its user-friendly nature strikes once more as Ink's interface is easy to use while providing real-time suggestions on how to improve your piece. The marketing and SEO tools easily customizable within widely used content management systems make the process of crafting content much simpler. Its features for grammar and tone correction can be helpful for someone whose Primary language differs from English. Conversely, tools for SEO and marketing are less relevant for a scholarly audience. Despite this, Ink does not dwell on how to properly use such rules and instead gives suggestions about how to rewrite a statement to increase its effectiveness or tone. Usual's user policy is maintained as two parallel

options are offered, basic features work with free signed users while advanced content uses tiered plans. Where user's interests lay is determined by the user themselves, as a free version of the plan is also available. All in all, one should not overly rely on Ink, as not developing teamwork skills places barriers for one's independent development. To use instead of adapting content is particularly dangerous in an academic environment.

4.7. Writer

Writer is designed for teams and businesses, offering features like brand voice consistency, style guides, and collaborative editing. In academia and in other scholarly contexts, users should exercise caution while using Writer's services. In addition to specific ethics of use of services, they should also ensure that the generated content meets the principles of academic integrity. Writer Work in teams and businesses with features allowing for consistency in brand voice, style guides, and collaborative editing. It also supposes grammar and spelling checks and appropriate writing tips. I find the interface intuitive and the service suitable for team projects. While its primary goal is to ensure brand compliance, Writer's grammar and coherence tools may assist second-language writers looking to enhance their sentence structure and overall coherence. Writer addresses issues of tone and structure, however, it does not do the tactics that would be aimed at explanation of the target language for learners such as non-native speakers. Pricing varies for individuals and teams, as well as businesses on custom packages. A demo version is also available.

4.8. Copy.ai

Copy.ai focuses on generating marketing content for advertisements, social media posts, and emails. Brainstorming, content creation, and tone adjustment are some of the tools that it contains. The platform offers a user-friendly design which allows the user to quickly come up with content. Users can select templates that best fit their requirements. However, it is not that efficient for academic writing as it promotes the creation of marketing materials. However, it can help second-language students phrase and structure their ideas. Copy.ai formulates text but does not provide comments that would help understand the work better, and such an example cannot be classified as useful. There are free offers on the site with limited functionality as well as many paid for extensive use of the platform. It is important to note that this tool cannot replace academic writing and should be applied responsibly, this means that the text produced is both original and academically valid.

4.9. Anyword

As a predictive performance analytics, Anyword is a go-to for all professional copywriters. If you would like to create better marketing text for your business, Anyword has plenty of features to help you do exactly that, some of them being tone changes and keyword optimization tools. The AI interface is easy to use with ready-to-go templates and real-time analytics available as well. Due to Anyword's focus on writing marketing content, this AI is not appropriate for academic writing purposes. However, these features could help ESL writers to refine their text with better tone and readability. Although it does provide

performance analytics, Anyword would not provide more critical tasks like grammar correction or sentence structure changes. You could find different subscription plans like basic one with a trial subscription to use for free. Outputs generated by Anyword need academic context for usage and strict editing is crucial in order to maintain good ethics.

4.10. QuillBot

QuillBot offers services such as paraphrasing, summary generation and grammar check. Furthermore, this platform provides users with three modes which are Standard, Fluency, and Creative allowing them to tailor the output according to their requirements, as it also has a citation generator. QuillBot is easy to use owing to its simple layout, and this makes it easier for users to shift between its modes seamlessly. QuillBot's text rephrasing and summarizing tools assist those who are learning another language, as it aids in their understanding of the concept of ideas and broad texts. The grammar checking tool further compliments QuillBot and its aim to maintain accuracy. Additionally, while QuillBot does offer reworded recommendations, it does so without the context of why a particular modification is made, and that reduces its educational outreach and intent. At the core level QuillBot is free in nature but those who wish to use advanced functionality, larger word limits and higher processing speeds would need to subscribe to its premium plans, it must also be noted however that QuillBot has a restriction on their basic features. Finally, users should be aware that avoiding academic misconduct by ensuring that the integrity level of their content is okay. Avoiding these aids in working on editing alongside independent writing skills.

4.11. LongShot AI

LongShot AI has created a brilliant SaaS application that can write long articles, blogs as well as marketing content. It helps with verifying facts, optimising for SEO as well as exploring topics. LongShot's intuitive interface and step by step processes enable users to easily create content that is easy to read. Marketing and SEO content is the primary focus of this application, but its features for custom text generation may assist non-native students with topics research and writing assistance. Still, this application is not very suitable for advanced academic use and lacks detail. Language improvement or structure changes are not accompanied by any detailed explanation, and the application only creates content that meets the basic requirements. LongShot AI has both a freemium model as well as paid options. Premium features like accuracy checks are available in paid options. Output generated by application should be verified by the users and altered as needed so that content generated is accurate and meets the required standards. Applications developed mostly for writing marketing content will need to be adjusted for use in within a scholastic environment.

4.12. Copysmith

Copysmith serves in the field of content marketing and e-commerce, providing services such as product descriptions, ad writing, and writing templates for emails. It also includes tools for content ideation and collaboration. With the use of preset templates and AI recommendations,

it is easy to produce content and to save time. Its marketing-centric focus does limit how interventive it can be during academic writing tasks. However, the content generation tools may be useful to second-language learners for idea generation and organization. The tool is prompt-based and serves information but never prompts the user to check for accurate grammar or coherency. The subscription plans are tiered with teambased features for collaboration. The general rule when using any other content generation system also applies in this case, the text outputs should be considers in terms and contextualized to academic standards of integrity and originality.

4.13. ProWritingAid

ProWritingAid grants access to excessive software tools that help analyze the style and wording used in a document, produces content reports as well as grammatically checking the document. ProWritingAid also features integration with Microsoft Word and Google Docs, making it even more user-friendly. The reports prove useful to second language learners as they cover grammar, syntax, and style and the learner wishes to develop academically. ProWritingAid cites the mistakes made by the user and explains the notion, assisting them in correcting their errors furthermore encouraging the process of learning. There's also a freemium version, however its functions are limited; on the other hand, there are paid subscriptions that allow full access ProWritingAid's advanced features including custom comments for a specific writing style. It has effect on improvement on writing skills of a person and then again excessive use of it will slow down the process of building reliant skills. Competence of the type needs to be keyed in with learning.

4.14. AI Writer

AI Writer is an automated essay writer application that specializes in high-ranking articles and other long-form contenz. It carries out its work with precision and style by ensuring the clarity and brevity of speech. The tool is equipped with easy-to-use technology that allows users to enter queries and receives structured outputs in a few clicks. In addition, AI Writer serves to assist second language learners by creating language models with marked connectedness which can be treated as foreign language resources. However, it does not offer tools for grammar checking or style suggestions, which are vital for scholarly writing. The tool aims for content creation and does not aim to assess the input from the user and suggest appropriate solutions or changes to it. AI Writer is embraced on a subscription basis, with a range of plans applicable on a personal and team level. Generated content needs to be modified to suit academic use and be original.

4.15. Rytr

Rytr is an AI writer that specializes in crafting content for blogs, emails, social or any other platform. With several use cases available including customized tone and writing style, Rytr can assist with content creation. For a first time user, Rytr is friendly as it has pre-installed templates for different types of content. However, second language learners with Rytr are unable to expand their vocabulary and complex their structure, as there is little support for grammar correction or academic writing forms.

Rather than error correction, Rytr focuses on text generation, which renders it less efficient as a learning tool. The premium plan has unlimited access while the free version is limited to a few features. Everyone has access to Rytr because the price is reasonable. Revising and adapting AI generated content is crucial, especially for academic purposes, as they may be viewed differently or in a negative light.

4.16. ChatGPT

One of the tools for the generation of human-like texts is ChatGPT. The tool is capable of conversing with the users, answering questions, generating ideas, and completing tasks such as writing or editing long texts with the aid of its intuitive interface. This feature makes it easier for people with no technical knowledge to use its services, but it also makes it easier for experts to interact with the system. ChatGPT can brainstorm and draft almost any piece of writing and explain very complicated concepts as well. It can assist language learners in adjusting their grammar and style as well. The other aspect of that function does not critique user input but suggests other options instead upon a specific request enhancing iterative improvement. ChatGPT can be accessed in a free and paid format with the latter distributing content at a higher rate and allowing more features to be utilized. When engaging with content that has been produced with AI assistance, users must provide proper citation and not become overly reliant on the technology while completing academic work.

4.17. Sudowrite

Sudowrite it provides a variety of prompts, helps to come up with ideas and even assists with the use of descriptive language. Such software is most beneficial for the purposes of narration. Its interface is straightforward and does not require training, providing options for authors. Even if the software is not meant for academic writing approaches, its descriptive functions as well as idea generating might assist British learners of a foreign language to broaden their creativity. The app will assist in phasing and developing creative captions but will not assist in proofreading grammar and academic writing format. The app works on a subscription basis, there are various plans for selfpublishing authors and for teams. Adaptation of new material is necessary as well as originality and integrity of text is highly recommended.

4.18. Scalenut

Scalenut is an amalgamation of an automatically generated text and content marketing tool. The platform is equipped with multiple functions like content grading, keyword suggestion, and topic research, to name a few. The interface is quite easy to navigate through as there are step by step processes to follow when generating optimized content. Due to its primary emphasis its more SEO, it is ideal for marketing purposes, not for composing academic content. At the same time, it could help people whose first language isn't English see how to arrange ideas and be clear through its content structuring. The application is limited in a sense as it does not give any feedback for grammar or stylistic choices, hence the practice is not effective for those who want to develop their writing

abilities. Scalenut has a multi tier pricing policy which includes free access for new users. When applying generated content in an academic context, modification is required and users are fully responsible for the authenticity requirements.

4.19. HubSpot

HubSpot is a content marketing and generation tool aimed at increasing page views and serves ads created by the blogs, emails, and webpages. It provides users with a rich variety of tools including SEO, analytics and editing. Having dozens of templates and workflows, it gives an impression of a great user interface and is excellent for marketers. Being an experienced marketer myself, I find it hard to use this tool for research writing because of the way it is designed primarily for marketing. Nonetheless, it could be beneficial to second language users in enhancing their clarity through text organization and tone adjustment tools installed in HubSpot. It is indeed a content generation tool, however this tool does not give users feedback or suggestions. Plans are offered in both free and paid, with paying more unlocking premium features. Kindly note to which papers this app should be cited, since it can also be considered a content writing app one should avoid where originality is required

4.20. Scale

Content at Scale is a content generation platform that combines the help of AI with human employees. It includes features such as keyword integration and SEO optimization. The platform favors economics, with templates that enhance the productivity of content creation. Such a keen attention to SEO-targeted content can affect its usability in academic writing, but is very relevant when it comes to structuring complex texts and organizing lapses or ideas. The tool produces ample content without many errors, but it does not offer personal feedback nor even offer the possibility of correcting user identified mistakes. Content at Scale is available in a subscription model where content volume corresponds with set cost per plan. All generated outputs must reflect academic writing standards under the ethical boundaries of content creation in order to meet the standards for academic writing.

4.21. Claude

Claude, developed by Anthropic, is a conversational AI designed to assist with text-based tasks such as summarization, drafting, editing, and providing clarifications. It excels at generating context-aware and coherent responses. Its intuitive interface is designed for efficient interactions and adapts well to various user inputs, making it accessible for second-language writers. Claude is particularly effective in helping writers structure ideas, clarify arguments, and improve coherence. Its conversational ability supports brainstorming and discussing complex concepts. While it provides refined outputs, it does not actively critique user writing, which may limit its potential for fostering learning. Claude is available through free and paid API access, offering flexibility for both personal and academic use. Users must exercise caution regarding over-reliance on the tool and ensure proper attribution of AI-generated content in academic contexts.

5. Discussion

The discussion on AI tools has noted their various functions, the extent of their application, as well as the influence that they exert on second language academic writing. These tools span across a wide range of functions within the writing process, including, but not limited to, grammatical correction, wording enhancement, content creation, and conceptual structuring (Marzuki et al., 2023). The trends indicating growing use of such tools by students, professionals, and educators imply that such tools have a potential of solving some of the more common issues that arise in the writing process, particularly for English as a Foreign Language writers (Adams & Chuah, 2024). However, it must be clear how such tools meet the specific requirements of the writing tasks in particular contexts. There are tools that focus on improving linguistic performance in terms of accuracy and coherence, while others are focused on the production of creative content or enhancement of marketing purposes. For the second language writers, such tools can boost writing skills and confidence (Song & Song, 2023). Still, it is important to bear in mind how these tools can be used as well, as there are advantages and disadvantages that accompany their use (Warschauer, 2023).

Generative AI tools are an excellent resource, however, an excessive dependence on these technologies has the potential of creating detrimental educational and cognitive implications and even more so for second language learners and emerging writers (Zhai et al., 2024). One major threat is the foundational skills such as writing and critical analysis, failing to develop retaining such skills creates an opportunity cost to the individual (Gandhi & Gandhi, 2023). The overreliance such learners have on AI content and suggestions drastically impairs the ability to themselves formulate original ideas and even construct sophisticated arguments (Ningrum, 2023). For instance, second language students may greatly rely on paraphrasing tools like QuillBot and this would frustrate their attempts to interpret ideas on their own.

Limited exercise in grammar integration and other problem solving activities is also another area of linguistic concern (Schmidt & Strasser, 2022). Grammarly and ProWritingAid offer superb results in pinpointing mistakes and rectifying them, but if learners rely on them too much they may miss quite a substantial academic exercise of digesting grammatical errors and reasoning for the change. A tendency towards this could lead to surface changes that lack development in skills. Moreover, the absence of critical interaction with the material may impair higher order skills involving mobilization of ideas such as analyzing, synthesizing and evaluation (Kim et al., 2024). It has already been shown that writing facilitates students to think reflectively. When AI tools make this process easier or automate it, it is likely that learners could lose the chances to cultivate more critical and creative thinking abilities (da Silva, 2024). For example, learners using content generation tools such as Jasper AI or Writesonic, instead of purchasing essays, may produce essays that have high accuracy but when attempting to fabricate the message would most likely get an average grade.

Real-life examples accentuate these difficulties. In classroom situations, some teachers may note that students who made use of AI tools cannot

address comprehensive feedback because they do not have a realistic understanding of the rationale for the mistakes they made in their writing, such as the case with students who have mastered these AI tools (Parker et al., 2024). Furthermore, research papers that have been largely drafted with the assistance of AI may seem mechanically constructed, failing to embody the level of originality or subtlety of argumentation that is necessary in academic papers (AlSagri et al., 2024).

The functionality of the tools vary quite a lot in the tools analyzed. For instance, Grammarly, ProWritingAid, and QuillBot, which specialize in polishing students' extra requirements such as grammar, style, and clarity, are very useful in academic writing of second language learners. Conversely, Jasper AI, Writesonic, and Rytr are very good content generators but may not be suitable for academic use. QuillBot and Wordtune are incredibly effective for paraphrasing and summarising sentences, which can help second language students in expressing ideas they do not understand with ease. Meanwhile, ContentShake AI, Anyword, and HubSpot are built for SEO and marketing purposes only, and are not useful for academic field.

Another significant aspect is the advancement of the user interface. There are various tools such as Grammarly, ChatGPT, Wordtune and Rytr that have been built with a sophisticated UI which makes them beneficial to a broader audience. Though worth mentioning are the LongShot AI or the ContentShake AI which have advanced customization tools and are made for specific professional tasks which make them a bit complex to understand. When it comes to effectiveness for writing in a different languages, it differs as well. There are tools like Grammarly, ProWriting Aid, QuillBot which help to overcome issues with grammar, logic, style and many more. There are tools like Jasper AI, Writesonic, Wordtune which have a fair amount of support for idea generation and structure, however they lack deep linguistic analysis. As for Copy.ai, Anyword, or Scalenut during academic use were not very effective which is due to the fact their primary aim is marketing copy so they had to be heavily modified to suit academic application.

The tools differ in terms of feedback systems as well. Grammarly and ProWriting Aid provide very comprehensive feedback within the process allowing users to learn and use them in the future. Wordtune, QuillUb, or Chat GPT suggest changes and explain parts but vocally explain errors and mistakes. Writesonic, Rytr, or ContentShake AI do not correct errors, simply generate the content to avoid any negative feedback.

Ethical considerations must be addressed as well. For example, depending on Quillbot, Grammarly and Pro Writing Aid may disrupt the learning process of writing independently. Jasper AI, Writesonic, and Copy.ai as content generation tools all have to be handled with care to avoid violation of academic integrity. Other tools like Wordtune and Quillbot should be used with supplemental caution to eliminate accidental plagiarism and a cloud-based BI system on its own raises a privacy issue

Conclusion

In this review, the range of features and ways in which AI tools can be tailored for academic writing is expanded alongside their emerging role as a solution for writing problems for second language learners. In matters of improving grammar, style and coherence, working tools such as Grammarly, Quillbot and ProWriterAid, advanced content generation tools such as Jasper AI and Writesonic aid in finishing up on structure by developing ideas. They, however, don't share the same abilities, and as a result, their reliance, ethical aspects and placement in academic realms, among other restrictions, call for the need to be used with caution.

It is essential to avoid considering AI Generative tools as a substitute for idea generation and critical evaluation. These technologies can be integrated across the academic workflow to stimulate productive work, promote group interactions and give assistance to various users. All these measures would ensure that limitations of AI's application in academia including its ethical use and democratic disparity would be maintained.

In the future, emerging trends in AI-driven academic writing tools point to exciting possibilities. Advances in contextual understanding and interdisciplinary applications may further refine their functionality, making them more adaptive to academic needs. Additionally, the potential for AI tools to support collaborative academic writing opens new avenues for group projects and research initiatives. These developments call for a reimagining of teaching academic writing in the AI era, incorporating these tools as integral components of writing pedagogy while ensuring that fundamental skills are preserved and strengthened.

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