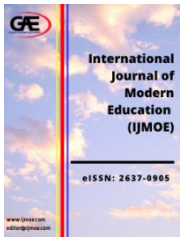
International Journal of Modern Education
EISSN: 2637-0905
Volume 7 Issue 26 (September 2025) PP. 322-335
DOI: 10.35631/IJMOE.726022



INTERNATIONAL JOURNAL OF MODERN EDUCATION (IJMOE)
www.ijmoe.com

RESEARCH TRENDS ON ACADEMIC WRITING FROM 2020 TO 2025

Faharol Zubir[1*], Norlizawati Ghazali[2], Ina Suryani[3]

[1] Department of Language and General Studies, Faculty of Business and Communication, Universiti Malaysia Perlis, Malaysia
Email: faharol@unimap.edu.my
[2] Academy of Language Studies, Universiti Teknologi MARA, Perlis Branch, Malaysia
Email: norlizawati@uitm.edu.my
[3] Department of Language and General Studies, Faculty of Business and Communication, Universiti Malaysia Perlis, Malaysia
Email: inasuryani@unimap.edu.my
[*] Corresponding Author

Article Info:

Article history:
Received date: 30.06.2025
Revised date: 21.07.2025
Accepted date: 24.08.2025
Published date: 01.09.2025

To cite this document:

Zubir, F., Ghazali, N., & Suryani, I. (2025). Research Trends On Academic Writing From 2020 To 2025. *International Journal of Modern Education, 7* (26), 322-335.

DOI: 10.35631/IJMOE.726022

Abstract:

Academic writing plays a vital role in scholarly communication. Yet, its development in response to digital transformation, multilingual learning contexts, and evolving pedagogies has not been comprehensively examined through bibliometric analysis. This study investigates global research trends in academic writing from 2020 to 2025 by analyzing 1051 English-language publications extracted from the Scopus database using a title-based search. The data was refined with OpenRefine, analyzed using Scopus Analyzer, and visualized through VOSviewer to explore patterns in co-authorship, keyword frequency, and citation strength. Findings reveal a notable increase in publication activity after 2020, with the United States (US), China, and the United Kingdom (UK) being recognized as major contributors in both volume and influence. Frequently occurring keywords such as ChatGPT, feedback, Artificial Intelligence (AI), and academic integrity reflect the growing interest in digital tools and ethical issues in academic writing instruction. Co-authorship trends show regional clustering, with limited engagement from underrepresented academic regions. Thematic mapping highlights two main research directions, namely the integration of advanced technologies in writing processes and the persistent emphasis on academic literacy for second language learners. This study offers a structured overview of the current landscape and highlights key areas for future inquiry, offering valuable insight for educators, researchers, and policymakers.

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 26 (September 2025) PP. 322-335
DOI: 10.35631/IJMOE.726022

Keywords:

Academic Writing, Bibliometric Analysis, Artificial Intelligence In Education, ChatGPT, Academic Integrity

Introduction

Academic writing is a dynamic field that has evolved significantly over the years, influenced by technological advancements, interdisciplinary approaches, and changing educational paradigms. This summary explores the key trends in academic writing research, focusing on digitization, collaborative writing, Artificial Intelligence (AI) integration, and methodological shifts. One of the prominent trends in academic writing is the increasing importance of formal bibliometrics and metadata. This includes the use of identifiers, citation standards, and keywords, which are crucial for creating databases that aid universities and research centers in making administrative and organizational decisions (Safonova & Safonov, 2021). The digitization of academic writing has also prompted the use of marketing strategies to expand the reach of academic papers, a phenomenon referred to as postproduction (Safonova & Safonov, 2021).

The advent of information technologies has facilitated a shift from individual authorship to collective authorship. This shift is characterized by thematic collaboration and functional distribution of authorship, where different authors contribute specific expertise to a single work (Sun & Lan, 2023). This trend is particularly evident in interdisciplinary research, where collaboration across various fields is essential (Omidian & Siyanova-Chanturia, 2021). The integration of AI-powered tools into academic writing has been transformative, supporting functions such as text generation, proofreading, editing, text annotation, paraphrasing, and translation (Raitskaya & Tikhonova, 2024). However, the use of AI in academic writing also raises challenges, such as concerns over authorship, integrity, and the risk of overreliance on AI-generated content. The discourse surrounding AI in academic writing continues to evolve, emphasizing the integration of these tools into hybrid writing processes and the need to address associated ethical implications (Raitskaya & Tikhonova, 2024).

Research on academic writing employs a variety of methodologies. Interpretive methods are predominant, reflecting a focus on understanding the social context and practices of writing (Juzwik et al., 2006). Bibliometric analyses have also gained prominence, aiding in the identification of research trends and influential publications within the field (Dong et al., 2024; Sun & Lan, 2023). These methodologies provide insights into the cognitive and metacognitive processes involved in writing, as well as the impact of technological advancements on writing practices. Research on academic writing often focuses on the textual and cognitive aspects of writing, including issue diagnosis and assessment (Mugambiwa, 2024). This trend is particularly strong in humanities and education faculties, where writing is a central component of the curriculum.

There is a growing emphasis on academic literacy, which involves writing across various disciplines using an interdisciplinary approach (Imran et al., 2024). This trend underscores the need to understand the distinct conventions and standards of various academic disciplines (Omidian & Siyanova-Chanturia, 2021, 2021). Critical thinking is a crucial component of

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 26 (September 2025) PP. 322-335
DOI: 10.35631/IJMOE.726022

academic writing, and there is increasing attention to how it can be effectively taught and integrated into writing practices. Pedagogic interventions emphasizing critical thinking have been shown to improve the writing skills of both academics and students.

The challenges related to authorship and integrity are significant, especially with the rise of AI-powered writing tools. Ensuring the originality and authenticity of academic work is a major concern (Burkhard, 2023). The need for interdisciplinary research is becoming more pronounced, as complex global issues require collaborative efforts across different fields (Korotkina, 2018). This trend necessitates a rethinking of traditional disciplinary boundaries and encourages a more holistic approach to academic writing (Korotkina, 2018). The integration of computational methods in writing assessment, along with the investigation of how various factors relate to writing quality, has emerged as a growing area of interest (Dong et al., 2024). These advancements have the potential to revolutionize how writing is taught and assessed in academic settings.

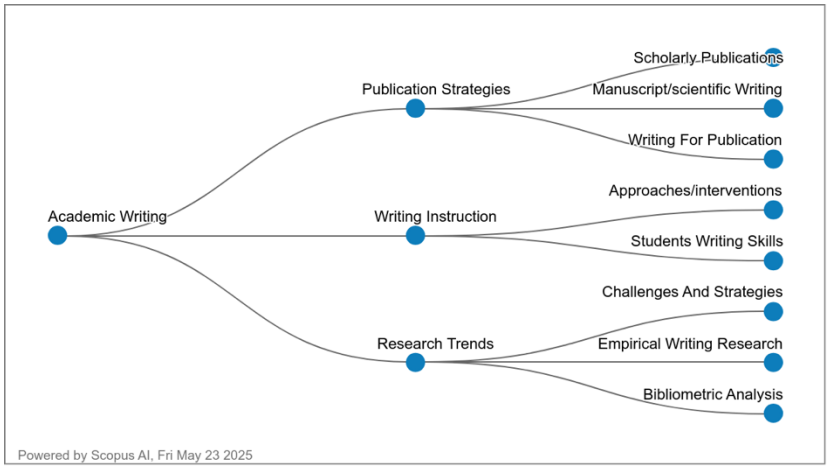


Figure 1: Trends Visualization Of Research On Academic Writing

Research Question

1. What are the research trends in academic writing studies according to the year of publication?
2. What are the most cited articles?
3. Who and how much has been published in the area with regard to the authors and countries?
4. What are the popular keywords related to the study?
5. What are co-occurrence, co-citation, and countries' collaboration?

Methodology

Bibliometrics entails the collection, organization, and analysis of bibliographic data from scientific publications (Alves et al., 2021; Assyakur & Rosa, 2022; Verbeek et al., 2002). In addition to basic statistics, such as identifying publishing journals, publication years, and prominent authors (Y. C. J. Wu & Wu, 2017), bibliometric methods also encompass advanced techniques like document co-citation analysis. A successful literature review requires a thorough and iterative process involving the selection of appropriate keywords, literature searching, and detailed analysis. This methodology supports the development of a

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 26 (September 2025) PP. 322-335
DOI: 10.35631/IJMOE.726022

comprehensive bibliography and enhances result reliability (Fahimnia et al., 2015). In this context, the study concentrated on high-impact publications, as they offer valuable insights into the theoretical frameworks guiding the field. To ensure the accuracy of the data, Scopus was used as the primary data source (Al-Khoury et al., 2022; di Stefano et al., 2010; Khiste & Paithankar, 2017). Furthermore, to maintain quality standards, only peer-reviewed journal articles were included, while books and lecture notes were intentionally excluded (Gu et al., 2019). Using Elsevier's Scopus, known for its broad coverage, publications were collected from 2020 through December 2023 for further analysis.

Data Search Strategy

The study employed a screening sequence to determine the search terms for article retrieval. Afterwards, the query string was revised so that the search term "academic writing". This process yielded 2,237 results, which were additionally scrutinized to include only English publications, making it 2087. The final search string refinement included publications only from the year range 2020-2025, and the final number of publications consulted is 1105.
[1]

Table 1: The Search String

Scopus	TITLE ("academic writing") AND PUBYEAR > 2019 AND PUBYEAR < 2026 AND (LIMIT-TO (LANGUAGE , "English")

Table 2: The Selection Criterion in Searching

Criterion	Inclusion	Exclusion
Language	English	Non-English
Timeline	2020-2025	<2020

Data Analysis

VOSviewer is a user-friendly bibliometric software developed by Nees Jan van Eck and Ludo Waltman at Leiden University, Netherlands (van Eck & Waltman, 2010a, 2017). It is widely used for the visualization and analysis of scientific literature, with a specialization in generating intuitive network visualizations, clustering related elements, and producing density maps. The software enables the analysis of co-authorship, co-citation, and keyword co-occurrence networks, offering researchers a comprehensive view of research landscapes. Its interactive interface and regular updates facilitate efficient and dynamic exploration of extensive datasets. With capabilities such as metric computation, customizable visualizations, and compatibility with various bibliometric data sources, VOSviewer stands out as a valuable tool for scholars exploring complex research domains.

A notable feature of VOSviewer is its ability to convert complex bibliometric datasets into visually accessible maps and charts. Emphasizing network visualization, the software is particularly effective in clustering related items, examining keyword co-occurrence patterns, and creating density maps. Its intuitive interface allows both novice and experienced

[1]

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 26 (September 2025) PP. 322-335
DOI: 10.35631/IJMOE.726022

researchers to navigate and analyze research landscapes with ease. Ongoing development keeps VOSviewer at the forefront of bibliometric analysis, offering insightful metrics and flexible visualization options. Its adaptability to different types of bibliometric data, such as co-authorship and citation networks, positions VOSviewer as a versatile and indispensable tool for scholars seeking deeper understanding and meaningful insights within their research domains.

Datasets encompassing bibliographic information—including publication year, article title, author details, journal source, citation counts, and associated keywords in PlainText format—were retrieved from the Scopus database, covering the period from 2004 to December 2024. Subsequent analyses were conducted utilizing VOSviewer software (version 1.6.19). By applying VOS clustering as well as mapping techniques, the software enabled the generation and examination of visual maps. To substitute the Multidimensional Scaling (MDS) approach, VOSviewer positions items within low-dimensional spaces, which ensures that the distance between items accurately represents their level of similarity as well as relatedness (van Eck & Waltman, 2010b). In this regard, VOSviewer aligns with the MDS approach (Appio et al., 2014). However, unlike MDS, which primarily relies on computing similarity metrics, for example, Jaccard indices as well as cosine, VOS adopts a more suitable method for normalizing co-occurrence frequencies, particularly Association Strength (AS_{ij}), measured by Van Eck & Waltman (2007):

$$AS_{ij} = \frac{C_{ij}}{w_i w_j},$$

where "proportional to the ratio between on the one hand the observed number of cooccurrences of i and j and on the other hand the expected number of co-occurrences of i and j under the assumption that co-occurrences of i and j are statistically independent" (Van Eck & Waltman, 2007).

Findings

The bibliometric data spanning 2020 to 2025 reveals a notable upward trajectory in research on academic writing, culminating in a significant peak in 2024. The number of publications rose from 148 in 2020 (13.21%) to 279 in 2024 (24.89%), underscoring a growing scholarly focus on writing instruction, assessment, and authorship practices amid evolving educational and technological landscapes. This surge aligns with the global shift to digital and hybrid learning environments following the COVID-19 pandemic, which foregrounded the need to reexamine foundational academic literacies. Additionally, the increased integration of AI-powered tools, for instance, Grammarly and ChatGPT, likely spurred academic discourse surrounding originality, ethics, and the pedagogical implications of automated writing support systems.

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 26 (September 2025) PP. 322-335
DOI: 10.35631/IJMOE.726022

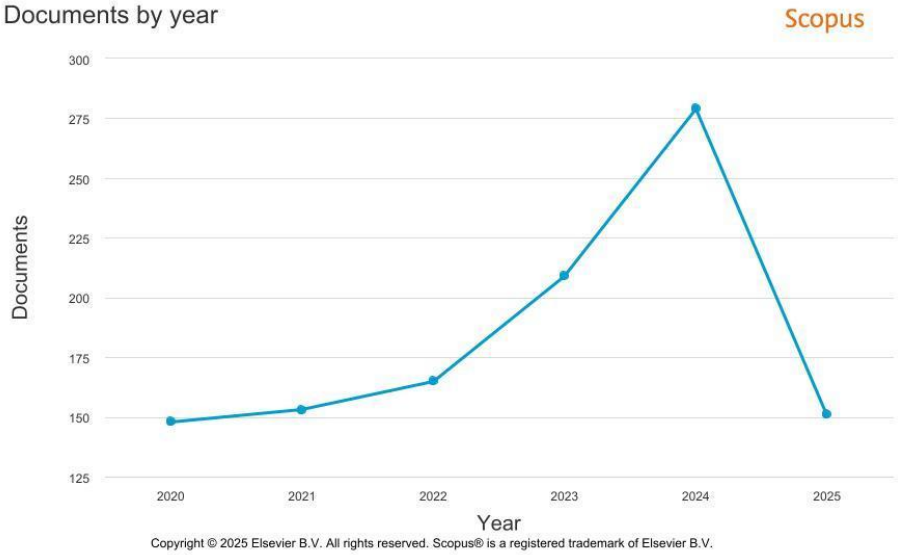


Figure 2: Trend of Research in Academic Writing by Year

Table 3: Number of Publications by Year

Year	Number of Publications	Percentage (%)
2025	151	13.47%
2024	279	24.89%
2023	209	18.64%
2022	165	14.73%
2021	153	13.65%
2020	148	13.21%
Total	1105	100%

Although a slight decline is observed in 2025 (151 publications; 13.47%), this may reflect either incomplete indexing or a reorientation of research themes toward broader interdisciplinary domains such as digital literacy, AI ethics, and automated language learning. Overall, the data illustrate that academic writing remains a vital and adaptive field of inquiry, responsive to technological advancements and institutional transformations. Future research should explore co-authorship networks, keyword evolution, and cross-disciplinary collaborations to better understand how the field continues to evolve in response to both global academic pressures and localized educational reforms.

Table 4: Most Cited Author

Authors	Title	Year	Cited by
(Dergaa et al., 2023)	From human writing to artificial intelligence generated text: examining the prospects and potential threats of ChatGPT in academic writing	2023	350
(Song & Song, 2023)	Enhancing academic writing skills and motivation: assessing the efficacy of ChatGPT in AI-assisted language learning for EFL students	2023	156
	Using ChatGPT in academic writing is (not) a form of plagiarism: What does the literature say?	2023	115

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 26 (September 2025) PP. 322-335
DOI: 10.35631/IJMOE.726022

(Jarrah et al., 2023)			
(Yu & Liu, 2021)	Improving student feedback literacy in academic writing: An evidence-based framework	2021	108
(Knight et al., 2020)	AcaWriter A learning analytics tool for formative feedback on academic writing	2020	105
(Khalifa & Albadawy, 2024)	Using artificial intelligence in academic writing and research: An essential productivity tool	2024	83
(X. Wu et al., 2020)	Syntactic complexity in English as a lingua franca academic writing	2020	73
(Guggemos et al., 2020)	Humanoid robots in higher education: Evaluating the acceptance of Pepper in the context of an academic writing course using the UTAUT	2020	71
(Marchandot et al., 2023)	ChatGPT: The next frontier in academic writing for cardiologists or a pandora's box of ethical dilemmas	2023	64
(Mahapatra, 2024)	Impact of ChatGPT on ESL students' academic writing skills: a mixed methods intervention study	2024	64

An analysis of the most cited articles on academic writing from 2020 to 2024 highlights the swift and prominent emergence of AI, especially ChatGPT, as a dominant theme in the literature. The most cited article by Dergaa and colleagues, published in 2023, has received 350 citations and explores both the opportunities and concerns related to AI-generated text use in academic contexts. This is followed by the study by Song and Song, also from 2023, which has received 156 citations and examines the influence of ChatGPT on student motivation and writing skills in an English as a Foreign Language setting. The significant citation volume of these recent publications suggests that the academic community is increasingly focused on understanding the pedagogical and ethical implications of AI in the development of academic writing practices.

At the same time, articles that focus on more traditional approaches to academic writing continue to demonstrate strong scholarly relevance. For example, the work of Yu and Liu on feedback literacy in writing and the study by Knight and colleagues on the AcaWriter feedback tool have been cited over one hundred times each. These findings indicate that while the discourse is evolving with the integration of advanced technologies, there remains a consistent interest in improving student learning through human-centered approaches. The coexistence of these two directions within the top-cited works suggests that future research in academic writing must simultaneously pursue innovation in digital tools and preserve pedagogical frameworks that prioritize critical thinking, formative feedback, and ethical academic engagement.

International Journal of Modern Education
IJMOE
EISSN: 2637-0905
Volume 7 Issue 26 (September 2025) PP. 322-335
DOI: 10.35631/IJMOE.726022

Table 5: Number of Publications by Country

Country	Number of Publications
China	159
United States	143
United Kingdom	100
Indonesia	78
Saudi Arabia	49
Australia	47
Hong Kong	43
Russian Federation	42
Malaysia	39
Canada	38

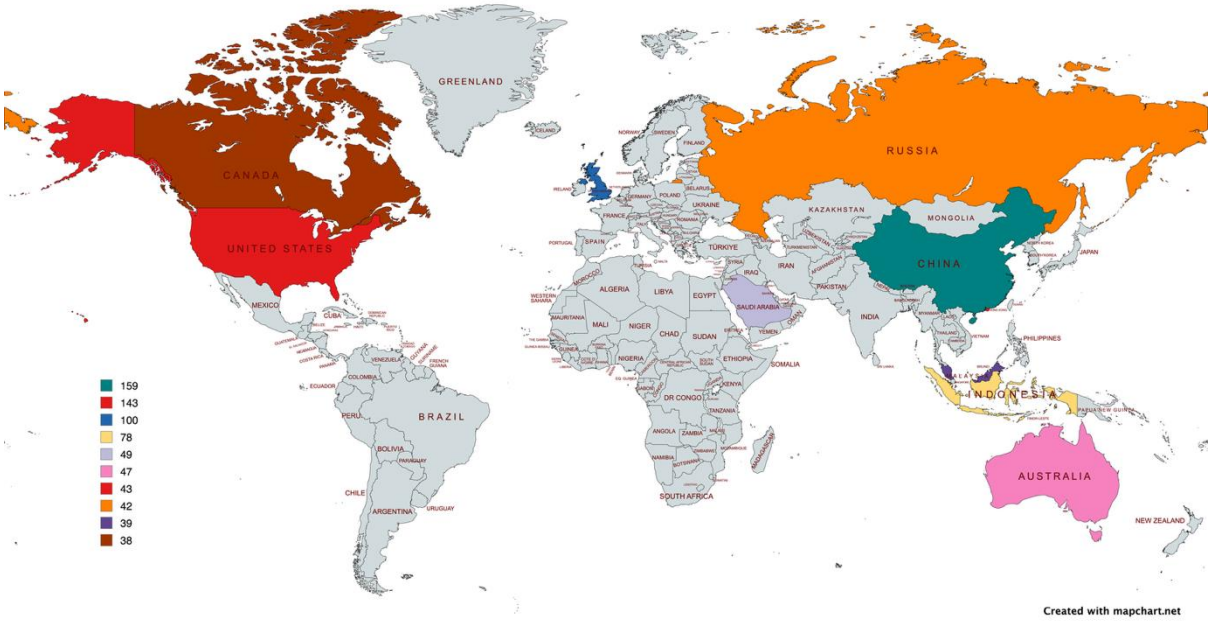


Figure 3: Visual Representation of Number of Publications by Country

The geographical distribution of publications reveals that research on academic writing is largely concentrated in a few leading academic economies, with China contributing the highest number of publications (159), followed by the United States (US) (143) and the United Kingdom (UK) (100). This pattern reflects the growing emphasis in these regions on academic literacy, international publication standards, and the strategic positioning of research output in global databases such as Scopus. China's leading position may be attributed to its national academic reform agendas, institutional incentives for international publication, and expanding doctoral training programs, which place strong emphasis on writing proficiency. Similarly, the high output from the US and the UK is consistent with their long-standing traditions in academic writing scholarship, well-established writing centers, and extensive investments in writing pedagogy and research infrastructure.

International Journal of Modern Education
EISSN: 2637-0905
Volume 7 Issue 26 (September 2025) PP. 322-335
DOI: 10.35631/IJMOE.726022

Outside the dominant triad, several emerging contributors demonstrate increasing engagement with the field. Notably, Indonesia (78 publications) and Saudi Arabia (49) represent rising regional hubs where academic writing is gaining strategic importance, especially in the higher education internationalization and English medium instruction context. Malaysia (39 publications) and Hong Kong (43) also underscore the role of multilingual and multicultural contexts in shaping research priorities on academic literacy. The presence of the Russian Federation (42) and Canada (38) further indicates a distributed, albeit uneven, global interest in academic writing. These patterns suggest that while academic writing remains rooted in traditional Anglo-American scholarly traditions, its global relevance is expanding. Future studies should explore how local academic cultures, linguistic diversity, and policy shifts shape the discourse and pedagogy of academic writing across different national contexts.

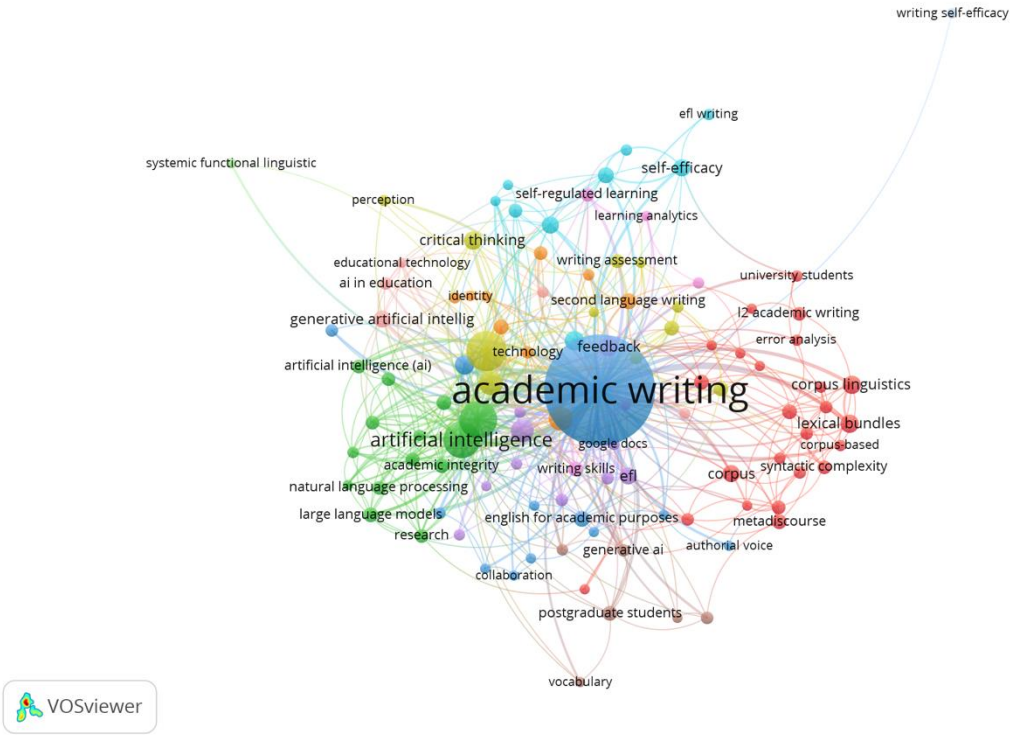


Figure 4: Network Visualization Map of Keywords' Co-occurrence

The keyword co-occurrence data shows a research domain that is undergoing significant transformation, driven by both pedagogical refinement and technological integration. The dominance of "academic writing" with 498 occurrences and the highest total link strength of 550 confirms its centrality as the primary conceptual anchor in the literature. Closely following are terms such as "artificial intelligence," "ChatGPT," and "higher education," which collectively indicate an epistemic shift in academic writing research towards the exploration of intelligent systems and their pedagogical implications. The visibility of keywords like "generative artificial intelligence," "large language models," and "plagiarism" reflects both the adoption of and the critical anxieties surrounding AI-supported writing environments. These trends suggest that scholars are no longer investigating writing as a static skill set but rather as a dynamic process increasingly shaped by automation, ethical concerns, and institutional readiness. However, the relatively modest strength of linkages for foundational pedagogical

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 26 (September 2025) PP. 322-335
DOI: 10.35631/IJMOE.726022

terms such as "writing instruction," "revision," and "formative assessment" signals a potential marginalization of core teaching practices in favour of technologically oriented discourses.

A deeper inspection of thematic clusters further highlights the coexistence of complementary and competing priorities in the field. Terms associated with learner development, such as "self-efficacy," "feedback," "peer review," and "critical thinking", show sustained relevance, though their link strengths remain secondary to those associated with technological terms. The strong presence of keywords like "English for academic purposes," "corpus linguistics," and "lexical bundles" points to ongoing interest in the linguistic features of academic writing, especially within second language and multilingual contexts. Yet, the scattered distribution and limited co-linkage of terms such as "identity," "authorial voice," and "stance" suggest that more nuanced sociocultural dimensions of academic writing are underexplored in comparison to more quantifiable aspects. This thematic imbalance calls for a more integrative research agenda that foregrounds the operational potential of intelligent writing tools and the epistemological, ethical, and disciplinary commitments that define academic literacy. Without such balance, the field risks narrowing its vision to a techno-centric trajectory that may overlook the humanistic and critical dimensions of scholarly writing development.

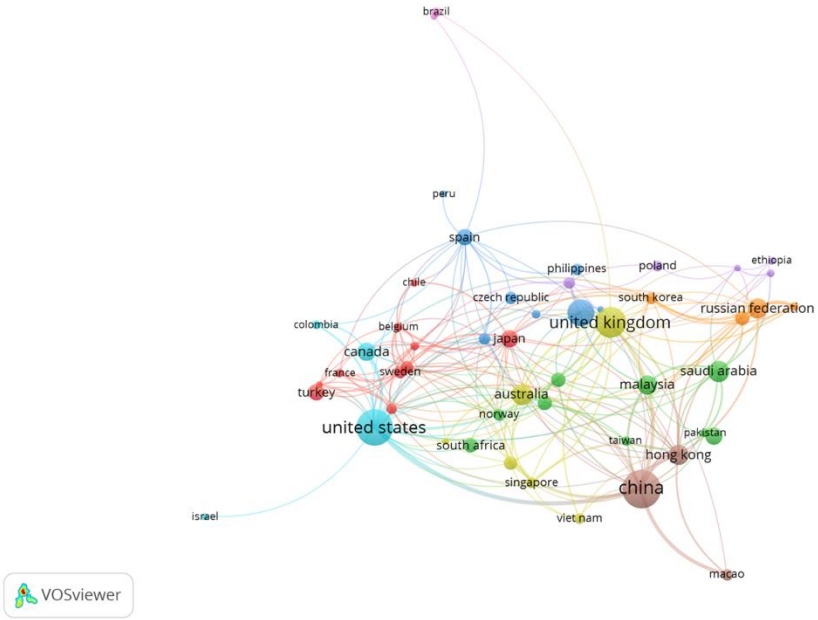


Figure 5: Visual Representation of Co-citation Analysis Among Countries

Table 5: Co-citation Analysis Among Countries

Id	Country	Documents	Citations	Total link strength
5	Australia	47	442	29
6	Austria	6	58	8
10	Belgium	8	87	19
12	Brazil	10	25	3
17	Canada	38	255	18
19	Chile	7	27	5
20	China	158	1358	88

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 26 (September 2025) PP. 322-335
DOI: 10.35631/IJMOE.726022

21	Colombia	9	11	6
23	Czech Republic	17	35	5
24	Denmark	5	15	8

The co-citation analysis uncovers the hierarchical structure of intellectual influence within academic writing research, positioning China, the US, and the UK as the leading epistemic authorities. China leads the field with 158 cited publications and the highest total link strength of 1358, reflecting both a high volume of scholarly output and strong global connectivity within citation networks. The US and the UK follow with 143 and 100 publications, respectively, and notable link strengths of 762 and 694. This triangulation reinforces the centrality of these three nations in shaping discourses around academic writing, particularly in areas intersecting with AI, educational technology, and academic integrity. The co-citation volume reflects the ability of these countries to anchor the field conceptually, while their high link strengths suggest that their work functions as a common reference point across diverse research traditions.

Beyond this dominant triad, countries such as Australia, Hong Kong, Saudi Arabia, and Sweden exhibit noteworthy influence with moderate publication counts but disproportionately strong citation linkages. For instance, Hong Kong records 43 publications with a link strength of 365, indicating its strategic role in bridging Eastern and Western academic traditions, particularly in English as a second language writing contexts. Similarly, countries like Malaysia, Indonesia, and Japan demonstrate growing engagement, though their lower link strengths suggest a more regionally focused impact. Notably absent from the top citation nodes are many countries from the Global South, whose presence remains fragmented or marginal in the citation landscape. This imbalance highlights the persistence of structural inequalities in global knowledge production, raising concerns about the inclusivity of academic writing discourse. Future research collaborations should prioritize transnational equity and support underrepresented regions in building their citation visibility, thereby contributing to a more democratically structured knowledge economy.

Conclusion

This bibliometric study aimed to explore global research trends and emerging themes in academic writing, focusing on publications indexed in the Scopus database between 2020 and 2025. The analysis aimed to identify the leading contributors, most cited works, key thematic clusters, and patterns of collaboration across countries. A total of 1051 publications were analyzed using Scopus Analyzer, OpenRefine, and VOSviewer, offering a comprehensive mapping of the intellectual and geographic distribution of academic writing research.

The findings indicate a consistent rise in publication activity, reaching its peak in 2024, suggesting increased scholarly engagement likely influenced by the integration of AI tools in writing instruction. China, the US, and the UK emerged as the leading contributors, both in output and citation strength, while emerging economies such as Indonesia, Malaysia, and Saudi Arabia show growing participation. Keyword co-occurrence analysis highlighted critical focus areas such as generative AI, ChatGPT, academic integrity, and feedback, indicating an epistemic shift toward technology-mediated writing practices. Despite this, foundational themes such as peer review, self-efficacy, and writing instruction maintain relevance, albeit with reduced visibility in recent publications.

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 26 (September 2025) PP. 322-335
DOI: 10.35631/IJMOE.726022

This study contributes to the academic writing literature by mapping its evolution and identifying a transition from traditional pedagogical approaches to technology-driven frameworks. The results offer useful insights for institutions and educators aiming to adapt writing instruction to contemporary challenges. However, limitations include the exclusion of non-English publications and reliance on a single database, which may overlook regional contributions and alternative publication venues. Future research could extend this analysis by incorporating additional databases, exploring longitudinal citation trends, and integrating qualitative methods to understand the pedagogical impact of emerging technologies. The value of this study lies in its capacity to deliver a structured overview of an evolving field, supporting informed academic discourse and guiding future scholarly exploration in academic writing.

Acknowledgement

The authors would like to express their sincere gratitude to Universiti Malaysia Perlis (UniMAP) for the support provided in the completion of this study. This support has been invaluable in ensuring the successful execution of the research

References

Al-Khoury, A., Hussein, S. A., Abdulwhab, M., Aljuboori, Z. M., Haddad, H., Ali, M. A., Abed, I. A., & Flayyih, H. H. (2022). Intellectual Capital History and Trends: A Bibliometric Analysis Using Scopus Database. *Sustainability (Switzerland)*, *14*(18). https://doi.org/10.3390/su141811615

Alves, J. L., Borges, I. B., & De Nadae, J. (2021). Sustainability in complex projects of civil construction: Bibliometric and bibliographic review. *Gestao e Producao*, *28*(4). https://doi.org/10.1590/1806-9649-2020v28e5389

Appio, F. P., Cesaroni, F., & Di Minin, A. (2014). Visualizing the structure and bridges of the intellectual property management and strategy literature: a document co-citation analysis. *Scientometrics*, *101*(1), 623–661. https://doi.org/10.1007/s11192-014-1329-0

Assyakur, D. S., & Rosa, E. M. (2022). Spiritual Leadership in Healthcare: A Bibliometric Analysis. *Jurnal Aisyah : Jurnal Ilmu Kesehatan*, *7*(2). https://doi.org/10.30604/jika.v7i2.914

Burkhard, M. (2023). HOW TO DEAL WITH AI-POWERED WRITING TOOLS IN ACADEMIC WRITING: A STAKEHOLDER ANALYSIS. *20th International Conference on Cognition and Exploratory Learning in Digital Age, CELDA 2023*, 187–198. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85181774666&partnerID=40&md5=2a222d797cc42ba4ac7d8a9c0d8a724b

Dergaa, I., Chamari, K., Zmijewski, P., & Saad, H. Ben. (2023). From human writing to artificial intelligence generated text: examining the prospects and potential threats of ChatGPT in academic writing. *Biology of Sport*, *40*(2), 615–622. https://doi.org/10.5114/BIOLSPORT.2023.125623

di Stefano, G., Peteraf, M., & Veronay, G. (2010). Dynamic capabilities deconstructed: A bibliographic investigation into the origins, development, and future directions of the research domain. *Industrial and Corporate Change*, *19*(4), 1187–1204. https://doi.org/10.1093/icc/dtq027

Dong, J., Zhao, Y., & Buckingham, L. (2024). Thirty years of writing assessment: A bibliometric analysis of research trends and future directions. *Assessing Writing*, *61*. https://doi.org/10.1016/j.asw.2024.100862

International Journal of Modern Education
IJMOE
EISSN: 2637-0905
Volume 7 Issue 26 (September 2025) PP. 322-335
DOI: 10.35631/IJMOE.726022
Fahimnia, B., Sarkis, J., & Davarzani, H. (2015). Green supply chain management: A review and bibliometric analysis. In *International Journal of Production Economics* (Vol. 162, pp. 101–114). https://doi.org/10.1016/j.ijpe.2015.01.003

Gu, D., Li, T., Wang, X., Yang, X., & Yu, Z. (2019). Visualizing the intellectual structure and evolution of electronic health and telemedicine research. *International Journal of Medical Informatics*, *130*. https://doi.org/10.1016/j.ijmedinf.2019.08.007

Imran, M., Almusharraf, N., & Dalbani, H. (2024). Future of writing in higher education a review of prospective use of artificial intelligence and chatGPT in academia. In *Innovative Pedagogical Practices for Higher Education 4.0: Solutions and Demands of the Modern Classroom* (pp. 108–125). CRC Press. https://doi.org/10.1201/9781003400691-7

Jarrah, A. M., Wardat, Y., & Fidalgo, P. (2023). Using ChatGPT in academic writing is (not) a form of plagiarism: What does the literature say? *Online Journal of Communication and Media Technologies*, *13*(4). https://doi.org/10.30935/ojcmt/13572

Juzwik, M. M., Curcic, S., Wolbers, K. D., Moxley, K. D., Dimling, L. M., & Shankland, R. K. (2006). Writing into the 21st Century: An Overview of Research on Writing, 1999 to 2004. *Written Communication*, *23*(4), 451–476. https://doi.org/10.1177/0741088306291619

Khalifa, M., & Albadawy, M. (2024). Using artificial intelligence in academic writing and research: An essential productivity tool. In *Computer Methods and Programs in Biomedicine Update* (Vol. 5). Elsevier B.V. https://doi.org/10.1016/j.cmpbup.2024.100145

Khiste, G. P., & Paithankar, R. R. (2017). Analysis of Bibliometric term in Scopus. *International Research Journal*, *01*(32), 78–83.

Knight, S., Shibani, A., Abel, S., Gibson, A., Ryan, P., Sutton, N., Wight, R., Lucas, C., Sándor, A., Kitto, K., Liu, M., Mogarkar, R. V, & Shum, S. B. (2020). AcaWriter A learning analytics tool for formative feedback on academic writing. *Journal of Writing Research*, *12*(1), 141–186. https://doi.org/10.17239/JOWR-2020.12.01.06

Korotkina, I. B. (2018). Academic writing in Russia: The urge for interdisciplinary studies. *Vysshee Obrazovanie v Rossii*, *27*(10), 64–74. https://doi.org/10.31992/0869-3617-2018-27-10-64-74

Mugambiwa, S. (2024). Reaping the rewards with minimal toil: Evaluating the polemics of artificial intelligence in academia and the future of academic writing. *Edelweiss Applied Science and Technology*, *8*(6), 3535–3541. https://doi.org/10.55214/25768484.v8i6.2752

Omidian, T., & Siyanova-Chanturia, A. (2021). Parameters of variation in the use of words in empirical research writing. *English for Specific Purposes*, *62*, 15–29. https://doi.org/10.1016/j.esp.2020.11.001

Raitskaya, L., & Tikhonova, E. (2024). Appliances of Generative AI-Powered Language Tools in Academic Writing: A Scoping Review. *Journal of Language and Education*, *10*(4), 5–30. https://doi.org/10.17323/jle.2024.24181

Safonova, M. A., & Safonov, A. A. (2021). Transformation of academic writing in the digital age. *Vysshee Obrazovanie v Rossii*, *30*(2), 144–153. https://doi.org/10.31992/0869-3617-2021-30-2-144-153

Song, C., & Song, Y. (2023). Enhancing academic writing skills and motivation: assessing the efficacy of ChatGPT in AI-assisted language learning for EFL students. *Frontiers in Psychology*, *14*. https://doi.org/10.3389/fpsyg.2023.1260843

International Journal of Modern Education
IJMOE
EISSN: 2637-0905
Volume 7 Issue 26 (September 2025) PP. 322-335
DOI: 10.35631/IJMOE.726022
Sun, Y., & Lan, G. (2023). A bibliometric analysis on L2 writing in the first 20 years of the 21st century: Research impacts and research trends. *Journal of Second Language Writing*, *59*. https://doi.org/10.1016/j.jslw.2023.100963

Van Eck, N. J., & Waltman, L. (2007). Bibliometric mapping of the computational intelligence field. *International Journal of Uncertainty, Fuzziness and Knowldege-Based Systems*, *15*(5), 625–645. https://doi.org/10.1142/S0218488507004911

van Eck, N. J., & Waltman, L. (2010a). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, *84*(2), 523–538. https://doi.org/10.1007/s11192-009-0146-3

van Eck, N. J., & Waltman, L. (2010b). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, *84*(2), 523–538. https://doi.org/10.1007/s11192-009-0146-3

van Eck, N. J., & Waltman, L. (2017). Citation-based clustering of publications using CitNetExplorer and VOSviewer. *Scientometrics*, *111*(2), 1053–1070. https://doi.org/10.1007/s11192-017-2300-7

Verbeek, A., Debackere, K., Luwel, M., & Zimmermann, E. (2002). Measuring progress and evolution in science and technology - I: The multiple uses of bibliometric indicators. *International Journal of Management Reviews*, *4*(2), 179–211. https://doi.org/10.1111/1468-2370.00083

Wu, X., Mauranen, A., & Lei, L. (2020). Syntactic complexity in English as a lingua franca academic writing. *Journal of English for Academic Purposes*, *43*. https://doi.org/10.1016/j.jeap.2019.100798

Wu, Y. C. J., & Wu, T. (2017). A decade of entrepreneurship education in the Asia Pacific for future directions in theory and practice. In *Management Decision* (Vol. 55, Issue 7, pp. 1333–1350). https://doi.org/10.1108/MD-05-2017-0518

Yu, S., & Liu, C. (2021). Improving student feedback literacy in academic writing: An evidence-based framework. *Assessing Writing*, *48*. https://doi.org/10.1016/j.asw.2021.100525