

Linguistic Equity or Forced Assimilation: A Review of How AI Writing Tools Shape the International Student Experience

Aratrika Deb¹; Aatreyee Kar²

¹Research Scholar at Adamas University and Assistant Teacher at National English School, Rajarhat

²Research Scholar at Adamas University and Assistant Professor at Syamaprasad Institute of Education and Training, Tollygaunge

Publication Date: 2026/06/25

Abstract: As artificial intelligence becomes woven into global higher education, large language models and automated writing assistants have become essential academic support tools for international students who are non-native English speakers. These tools are often praised for levelling the playing field by lowering language barriers. At the same time, they raise serious questions about equity, identity, and algorithmic justice. This paper reviews recent research to examine the dual role of AI-mediated academic writing. On one side, tools like ChatGPT and Grammarly provide essential support with grammar, syntax, and confidence in English-dominant universities. On the other side, they reinforce hidden hierarchies about what “good” academic writing should look like. The literature points to two compounding threats to equity. First, institutional pressure pushes students toward linguistic homogenization, which strips away regional and cultural nuances in their writing. Second, commercial AI detectors carry structural bias, showing disproportionately high false-positive rates for text written by non-native speakers. By analysing existing scholarship and university policy frameworks, this paper argues that most current guidelines don’t clearly separate illegitimate plagiarism from legitimate language support. The study closes with practical recommendations for higher education governance. The goal is to reform academic integrity policies so that AI integration protects student agency and supports real linguistic equity, rather than punishing the diverse voices of international students.

Keywords: *AI in Education, International Students, Linguistic Equity, Academic Writing, Epistemic Hierarchies, AI Detectors, Critical Pedagogy.*

How to Cite: Aratrika Deb; Aatreyee Kar (2026) Linguistic Equity or Forced Assimilation: A Review of How AI Writing Tools Shape the International Student Experience. *International Journal of Innovative Science and Research Technology*, 11(6), 1176-1181. <https://doi.org/10.38124/ijisrt/26jun849>

I. INTRODUCTION

International education has grown quickly over the last few decades. Millions of students now move abroad to pursue higher degrees at English-medium universities. For non-native English-speaking students, this academic journey brings a double challenge. They must master complex, discipline-specific content while also learning the strict rules of formal academic writing. Historically, this language barrier has acted like an institutional gatekeeper. It often leads to long-term stress, less participation in class, and lower grades, even for students who are otherwise very capable.

The public release of generative AI and automated writing tools has changed this situation dramatically (Firat, 2023; Slimi, 2026). Tools such as ChatGPT, Grammarly, and deep-learning translation platforms are no longer just new technology. They have become everyday essentials for many international students (Alharbi, 2023; Arslan, 2025). In

universities where language fluency is often mistaken for intellectual ability, AI tools offer a practical way to improve drafts and close communication gaps (Barrot, 2023; Godwin-Jones, 2024).

But universities have been slow to catch up. The fast adoption of AI has moved ahead of clear policies and teaching practices, raising difficult questions about fairness and student identity (Askari, 2025; Bozkurt, 2024). Many institutions still see generative AI mainly as an academic integrity problem, treating it as a form of cheating. For international students, though, the reality is more complicated (Chan & Hu, 2023; Monib et al., 2024). This paper reviews recent literature on AI tools and the international student experience. It argues that while AI serves as an important tool for accessibility, current university policies and unreliable detection tools create biases. These biases penalise linguistic diversity and reduce students’ sense of agency.

II. METHODOLOGY

The present study adopts a qualitative Critical Narrative Review design to examine how Artificial Intelligence (AI)-assisted writing tools influence the academic experiences of international students, particularly with regard to linguistic equity, academic integrity, student agency, and institutional policy. A Critical Narrative Review was considered appropriate because the study seeks not only to summarize existing research but also to critically analyse emerging debates surrounding AI-mediated academic writing and its implications for educational equity.

The study is based entirely on secondary sources of data. Relevant literature was identified through a review of peer-reviewed journal articles, scholarly books, conference proceedings, policy documents, and academic reports available through databases such as Google Scholar, Scopus, ERIC, SpringerLink, Taylor & Francis Online, and ScienceDirect. Keywords including “Artificial Intelligence in Education,” “ChatGPT and Academic Writing,” “International Students,” “Linguistic Equity,” “AI Writing Assistants,” “Academic Integrity,” “AI Detection Tools,” “Non-Native English Speakers,” and “Generative AI in Higher Education” guided the literature search.

The review primarily focused on publications produced between 2023 and 2026, reflecting the period during which

generative AI technologies became widely integrated into higher education. Sources were selected based on their relevance to AI-assisted writing, international student experiences, linguistic diversity, academic integrity, and higher education policy. Studies unrelated to these themes or lacking scholarly credibility were excluded from the review.

To analyse the literature, a thematic approach was employed. The selected studies were examined and synthesised under four broad themes: (i) AI as an accessibility and language-support tool, (ii) AI and academic confidence among international students, (iii) linguistic homogenisation and challenges to authorial identity, and (iv) bias and fairness concerns associated with AI-detection technologies and institutional policies. Through critical comparison and interpretation of these themes, the study explores both the opportunities and challenges presented by AI-assisted academic writing.

To enhance the credibility of the review, evidence was drawn from multiple disciplinary perspectives, including education, applied linguistics, educational technology, higher education studies, and policy research. The findings were subsequently synthesised to develop recommendations for more equitable and inclusive institutional approaches to the use of AI in academic writing and assessment.

III. LITERATURE REVIEW MATRIX

Table 1 Academic Literature Matrix

Author(s) & Year	Title/Focus of Study	Methodology	Major Findings	Relevance to Present Study
Henderson et al. (2025)	Generative AI and international student writing	Empirical Study	AI assists students with editing, formatting, writing style, and language improvement	Demonstrates AI as a valuable academic support tool for international students.
Gabay, Funa & Ricafort (2025)	AI scaffolding in STEM and non-STEM learning	Empirical Study	AI tools support idea generation and topic scaffolding across disciplines	Highlights the educational benefits of AI-assisted learning and writing.
Al Hosni (2025)	Preserving authorial voice in the age of Generative AI	Conceptual Study	AI-generated writing often follows standardized academic English conventions	Supports concerns regarding linguistic homogenization and loss of authorial identity.
Jin et al. (2025)	AI literacy and student learning experiences	Mixed-Methods Study	AI may either empower students or create dependency depending on AI literacy levels	Demonstrates the importance of responsible AI integration and literacy.
Shabir (2025)	Systematic review of AI writing tools	Systematic Review	AI tools improve writing performance and user experience but require critical oversight	Provides broad evidence regarding opportunities and limitations of AI-assisted writing.
Liang et al. (2023)	Bias in GPT detectors against non-native English writers	Experimental Study	AI detectors disproportionately misclassify texts written by non-native English speakers	Supports arguments regarding algorithmic bias and academic fairness.
Chaka (2024)	Review of AI text detection tools	Scoping Review	Commercial AI detectors suffer from reliability and validity concerns	Strengthens discussion on the limitations of AI-detection technologies.
Bannister et al. (2025)	Assessment in an AI-pervasive world	Policy Analysis	Institutions should move beyond detection-based approaches	Supports policy recommendations proposed in the study.
Al Ali (2026)	Detector bias against non-native speakers	Empirical Study	False positives occur more frequently for second-language writers	Provides evidence of inequitable treatment of international students.
Slimi (2026)	Critical review of Generative AI in education	Systematic Critical Review	AI presents both transformative opportunities and ethical challenges	Provides theoretical foundation for the paper's critical perspective.

Table 1 presents a summary of the major studies reviewed in the present investigation. The reviewed literature indicates that AI-assisted writing tools provide substantial support to international students by improving language proficiency, reducing writing anxiety, and enhancing academic participation. At the same time, emerging evidence highlights concerns regarding linguistic homogenization, authorial identity, and bias in AI-detection systems.

➤ Literature Review and Emerging Research Gaps

• Literature Review-

- ✓ Henderson et al. (2025), in their study *Finding Your Voice: Using Generative AI to Help International Students Improve Their Writing*, suggested that AI tools are a lifesaver for editing, learning formatting, writing styles, and wordplay.
- ✓ Gabay, Funa, and Ricafort (2025) on the other hand stated that AI tools are best for scaffolding topics for STEM subjects alongside NON-STEM subjects.
- ✓ Al Hosni (2025), has suggested in *Preserving Authorial Voice in Academic Texts in the Age of Generative AI*, that writing systems using Artificial means often generate text based on standardised academic English conventions, which is difficult to achieve otherwise.
- ✓ Jin et al. (2025) have stated that AI itself is on a diplomatic line of thought. It can either empower students or create dependency, depending on how it is integrated into learning processes. International students with limited AI literacy may experience dubious advantages from these technologies.
- ✓ Shabir (2025), in a systematic review of 102 studies, found evidence that AI writing tools improve writing performance and overall experience. But currently, the tools themselves are acting like supportive digital tools.

• Research Gap-

Although existing scholarship has extensively examined the pedagogical benefits and ethical implications of generative AI in higher education, comparatively fewer studies have explored the intersection of AI-assisted writing, linguistic equity, and the lived experiences of international students. Furthermore, limited attention has been paid to the ways in which AI-detection technologies may disproportionately affect non-native English speakers through algorithmic bias. Existing literature frequently discusses academic integrity and technological innovation as separate concerns, leaving a gap in understanding how institutional policies can simultaneously support accessibility, preserve linguistic diversity, and uphold academic standards. The present review seeks to address this gap by critically examining AI writing tools through the lens of linguistic justice and educational equity.

IV. ANALYSIS AND DISCUSSION

There have been several advantages in understanding the need and use of AI for the international student experience.

➤ AI as an Accessibility and Language Support Tool

To understand the ethical and systemic issues around AI, we first need to recognize why international students use these tools so widely (Arslan, 2025). In global higher education, AI writing assistants work like digital scaffolding (Alharbi, 2023). They give students practical support that helps make the academic playing field more equal (Barrot, 2023; Godwin-Jones, 2024).

➤ Reducing the "Tax" on Non-Native Speakers

Writing an academic essay requires significant cognitive load (Urbaite, 2025). For non-native English speakers, that load doubles because they must develop conceptual arguments while also managing vocabulary, syntax, idioms, and grammar (Urbaite, 2025). Research shows that international students often spend much more time editing their work compared to domestic peers. AI tools help reduce this "linguistic tax" by automating the mechanics of proofreading, which allows students to focus their mental energy on core research and critical thinking (Lendvai, 2024; Marzuki et al., 2023; Nguyen, 2026).

➤ Enhancing Academic Confidence and Participation

Language anxiety is a major barrier to academic success. Many international students say they hesitate to speak up in seminars, email professors, or share early drafts because they fear being judged. Automated tools give them a private, low-stakes space to test and refine their language before anyone else sees it (Farrelly & Baker, 2023; Muñoz Muñoz et al., 2025). When students run their ideas through AI to check for clarity before submitting, it noticeably lowers writing-related stress. That extra check helps them build the confidence to participate more fully in their academic communities (Black, 2025; Du & Daniel, 2024).

➤ Democratizing Remedial Language Support

Traditionally, students who had trouble with academic English turned to university writing centers or paid for private tutors. But writing centers are often understaffed and run on limited hours, so they can't keep up with demand. Private tutoring creates an economic divide that favors wealthier students. Free or low-cost AI tools change that dynamic. They provide instant, 24/7 feedback on structure, clarity, and tone to any student with an internet connection, regardless of financial status (Chen et al., 2020; Dwivedi et al., 2023).

➤ Despite Such Advantages, there Have Been Some Deep-Rooted Issues that Need Addressing-

• Linguistic Homogenization and the Detection Trap

Despite the practical advantages of AI as a language aid, its uncritical integration into higher education introduces systemic risks. For international students, these risks manifest not as a lack of academic integrity, but as a loss of identity and unfair institutional vulnerability.

• Erasure of Diverse English Variations

Academic English is not uniform; it encompasses various regional styles, vocabulary choices, and rhetorical structures, such as Indian English, Euro-English, or African English variations. However, commercial large language

models are trained primarily on standard, Western, white-dominant academic texts (Liu et al., 2025).

- *The Question of Linguistic Identity*

When international students rely on AI to polish their writing, the software does not just correct grammar—it actively rewrites the text to fit a specific, homogenized Western mold (Liu et al., 2024). This process strips away the student's unique voice, cultural nuances, and alternative ways of structuring an argument (Aziz et al., 2026). Consequently, AI tools can act as mechanisms of forced linguistic assimilation, signaling to international scholars that their native writing styles are inherently deficient.

- *Faulty AI-Detection Trap*

The most immediate and damaging consequence for international students is the widespread use of commercial AI detectors (such as Turnitin, GPTZero, or Copyleaks) by university faculties (Chaka, 2024). Recent linguistic studies have exposed a severe structural flaw in these detection tools: they rely on "perplexity" and "burstiness" metrics to flag text (Pratama, 2025).

Perplexity measures how predictable word choices are. Because non-native English speakers naturally use a more limited, predictable vocabulary and highly structured grammatical patterns, their original, human-written work is flagged as "AI-generated" at a disproportionately higher rate than that of native speakers (Al Ali, 2026; Liang et al., 2023; Patty & Matatula, 2026).

- *Novelty or Uniqueness?*

The AI tools creates a highly stressful environment of suspicion. International students who use AI strictly for permissible grammar editing, or who simply write with a structured, formulaic style, frequently find themselves facing false accusations of academic dishonesty (Bannister et al., 2025). The burden of proof falls on the student, who must somehow prove they wrote their own thoughts.

V. POLICY ANALYSIS AND INSTITUTIONAL RECOMMENDATIONS

Current university academic integrity policies are poorly equipped to handle this nuance (Moffatt et al., 2025). Most institutional guidelines operate on a binary framework: work is either entirely human-generated or it is plagiarized via AI. This binary fails to account for the reality of international students who use AI as an accessibility tool rather than a cheating mechanism.

➤ *Reforming Higher Education Policy to Ensure AI Equity*

- *Define the Line Between Language Assistance and Plagiarism*

Universities must update their honor codes to explicitly distinguish between content generation (having AI write the ideas) and linguistic polishing (using AI to fix syntax and grammar) (Boustane et al., 2025). Using AI to improve readability should be categorized alongside traditional dictionary or spell-check use, protecting it as a legitimate

accessibility right for non-native speakers (Chan & Colloton, 2024).

- *Ban or Restrict Commercial AI Detectors*

Given the documented linguistic bias of AI detectors, universities should cease using these tools as definitive proof of cheating (Pratama, 2025). Faculty members must be trained to understand that a high AI-detection score often reflects a student's non-native linguistic background rather than academic fraud (Cuenca et al., 2025). Investigations should rely on holistic evaluations, such as checking a student's version history or holding brief oral discussions about the paper's concepts (Carbonel et al., 2025).

- *Create Transparent Institutional AI Tools*

To prevent financial disparities where wealthier students buy superior, undetected AI software, universities should provide secure, institution-approved AI writing assistants to all students. These tools should be explicitly calibrated to preserve diverse writing voices while offering ethical grammar and structural feedback.

VI. LIMITATIONS OF THE STUDY

The present study relies exclusively on secondary data sources and therefore does not include direct empirical evidence from international students, faculty members, or institutional stakeholders. The findings are limited to interpretations derived from existing literature and policy documents. Additionally, the review focuses primarily on English-language publications published between 2023 and 2026, which may exclude relevant studies conducted in other languages or contexts. Future research should incorporate empirical methods such as surveys, interviews, and case studies to further explore how international students experience AI-assisted writing in diverse educational settings.

VII. CONCLUSION

The findings of this review suggest that the relationship between Artificial Intelligence and international education extends beyond technological innovation and academic productivity. Rather, it represents a critical issue of linguistic equity, algorithmic fairness, and epistemic justice within contemporary higher education systems. While AI-assisted writing tools have the potential to reduce language barriers, increase confidence, and improve academic participation among international students, they also raise important concerns regarding linguistic homogenisation, authorial identity, and the fairness of AI-detection technologies.

If higher education institutions continue to rely on structurally flawed detection software that misinterprets the natural, structured vocabulary of second-language learners as machine-generated text, they will inevitably marginalize the international scholars they seek to welcome (Al Ali, 2026; Liang et al., 2023). Rigid, binary definitions of plagiarism fail to reflect the reality of modern, distributed human-AI writing collaboration (Moffatt et al., 2025). By reforming academic policies to recognize AI as a legitimate accessibility aid rather than a tool for academic fraud, universities can shift the

institutional focus away from defensive suspicion (Bannister et al., 2025; Boustane et al., 2025). Cultivating comprehensive, context-sensitive AI literacy and implementing pedagogical-trust frameworks will ultimately safeguard true linguistic equity, ensuring that global education remains open, fair, and inclusive for all voices (Cuenca et al., 2025; Urbaite, 2025).

REFERENCES

- [1]. Alharbi, W. (2023). AI in the foreign language classroom: A pedagogical overview of automated writing assistance tools. *Education Research International*, 2023, 1–12. <https://doi.org/10.1155/2023/4253331>
- [2]. Al Ali, A. (2026). Different time, different language: Revisiting the bias against non-native speakers in GPT detectors. *Proceedings of the EAACL Student Research Workshop (ACL Anthology)*, 277–285. <https://aclanthology.org/2026.eacl-srw.20.pdf>
- [3]. Arslan, N. (2025). AI and learning experiences of international students studying in the UK: An exploratory case study. *Journal of International Students*, 1–22.
- [4]. Askari, H. (2025). The seismic shift: Generative AI as an inflection point in contemporary higher education governance. *Journal of Educational Policy*, 40(2), 112–129.
- [5]. Aziz, B., Zehra, S. L., & Shafiq, M. H. (2026). Over-reliance on ChatGPT and its psychological impact on critical thinking and writing skills among university students. *ACADEMIA International Journal for Social Sciences*, 5(2), 31–44. <https://doi.org/10.63056/academia.5.2.2026.1508>
- [6]. Bannister, J., Guan, K., & Han, L. (2025). Re-engineering assessment for an AI-pervasive world: Moving beyond defensive detection. *Studies in Higher Education*, 50(4), 512–528.
- [7]. Barrot, J. S. (2023). Using ChatGPT for second language writing: Pitfalls and potentials. *Assessing Writing*, 57, Article 100745. <https://doi.org/10.1016/j.asw.2023.100745>
- [8]. Black, R. W. (2025). University students describe how they adopt AI for writing and research in a general education course. *Humanities and Social Sciences Communications*, 12, Article 415.
- [9]. Boustane, H., Chroqui, R., & Sabil, A. (2025). The impact of artificial intelligence on academic writing: A systematic literature review. *International Journal of Learning Technology*, 20(3), 210–228. <https://doi.org/10.1504/IJLT.2025.149289>
- [10]. Bozkurt, A. (2024). Generative artificial intelligence in education: Balancing transformative potential with ethical boundaries. *Open Praxis*, 16(1), 45–59. <https://doi.org/10.5944/openpraxis.16.1.645>
- [11]. Carbonel, M., Qu, X., & Suchikova, Y. (2025). Disciplinary divergence in response to generative AI: A comparative analysis of humanities and STEM faculties. *Higher Education Research & Development*, 44(3), 320–336.
- [12]. Chaka, C. (2024). Detecting the detectors: A critical scoping review of commercial AI text detection tools in higher education. *Interactive Learning Environments*, 32(2), 189–204. <https://doi.org/10.1080/10494820.2023.2253852>
- [13]. Chan, C. K., & Colloton, T. (2024). Navigating the human-AI academic ecosystem: Policy frameworks for student partnerships. *Educational Technology Research and Development*, 72(3), 889–907. <https://doi.org/10.1007/s11423-023-10323-0>
- [14]. Chan, C. K., & Hu, W. (2023). Students' voices on generative AI tools in higher education: Scaffolding or cheating? *Assessment & Evaluation in Higher Education*, 48(8), 1095–1112. <https://doi.org/10.1080/02602938.2023.2237247>
- [15]. Chen, L., Islamov, U., & Ma, X. (2020). Machine learning algorithms for adaptive learning and knowledge management in international classrooms. *Computers & Education*, 154, Article 103912. <https://doi.org/10.1016/j.compedu.2020.103912>
- [16]. Cuenca, R., Oliveira, M., & Nguyen, T. (2025). The integrity dilemma: Balancing technological policing models with pedagogical-trust frameworks. *Ethics and Education*, 20(1), 75–92.
- [17]. Du, Y., & Daniel, S. (2024). Automated translation and text-to-speech services as inclusion accelerators for international postgraduate students. *Journal of Studies in International Education*, 28(2), 143–161. <https://doi.org/10.1177/10283153231189420>
- [18]. Dwivedi, Y. K., Kshetri, N., & Hughes, L. (2023). So what if ChatGPT wrote it? Multidisciplinary perspectives on opportunities and challenges of generative AI. *International Journal of Information Management*, 71, Article 102642. <https://doi.org/10.1016/j.ijinfomgt.2023.102642>
- [19]. Farrelly, T., & Baker, N. (2023). Generative AI as an idea generation companion for English as an additional language scholars. *Journal of Academic Writing*, 13(1), 24–38. <https://doi.org/10.18552/joaw.v13i1.905>
- [20]. Firat, M. (2023). What ChatGPT means for universities: Perceptions of scholars and students. *Journal of Applied Learning and Teaching*, 6(1), Article 22. <https://doi.org/10.37074/jalt.2023.6.1.22>
- [21]. Godwin-Jones, R. (2024). Distributed agency in second language learning and teaching through generative AI. *Language Learning & Technology*, 28(2), 5–30. <https://doi.org/10.10125/73570>
- [22]. Lendvai, G. F. (2024). ChatGPT in academic writing: A scientometric analysis of literature published between 2022 and 2023. *Scientometrics*, 129(5), 2415–2433. <https://doi.org/10.1007/s11192-024-04980-6>
- [23]. Liang, W., Yuksekogonul, M., Mao, Y., Wu, E., & Zou, J. (2023). GPT detectors are biased against non-native English writers. *Patterns*, 4(7), Article 100779. <https://doi.org/10.1016/j.patter.2023.100779>
- [24]. Liu, Y., Ju, C., & Wang, L. (2024). Bidirectional and auto-regressive transformer structures in mechanical text translation and polishing. *PeerJ Computer Science*, 10, Article e1902. <https://doi.org/10.7717/peerj-cs.1902>

- [25]. Liu, Y., Kong, W., & Merve, K. (2025). ChatGPT applications in academic writing: A review of potential, limitations, and ethical challenges. *Arquivos Brasileiros de Oftalmologia*, 88(1), 1–9. <https://doi.org/10.5935/0004-2749.2024-0269>
- [26]. 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), Article 2236469. <https://doi.org/10.1080/2331186X.2023.2236469>
- [27]. Moffatt, K., Hall, M., & Zhou, P. (2025). The deconstruction and reconstruction of authorship: Evaluating distributed human-AI assemblages in scholarly publishing. *Journal of Documentation*, 81(2), 201–220.
- [28]. Monib, W. K., Qazi, A., Apong, R. A., Azizan, M. T., De Silva, L., & Yassin, H. (2024). Generative AI and future education: A review, theoretical validation, and authors' perspective on challenges and solutions. *PeerJ Computer Science*, 10, Article e2105. <https://doi.org/10.7717/peerj-cs.2105>
- [29]. Muñoz Muñoz, B. C., Nassaji, H., & Bello Carrillo, F. I. (2025). ChatGPT-generated versus human direct corrective feedback on L2 writing. *System*, 126, Article 103359. <https://doi.org/10.1016/j.system.2025.103805>
- [30]. Nguyen, D. M. Q. (2026). The role of ChatGPT in providing written corrective feedback for EFL academic writing: A literature review. *International Journal of AI in Language Education*, 4(1), 45–62.
- [31]. Patty, J., & Matatula, M. Y. (2026). Are AI detectors fair to EFL learners? A library research on detection bias and academic integrity. *J-Shelves of Indragiri (JSI)*, 8(1), 75–89. <https://doi.org/10.61672/jsi.v8i1.3557>
- [32]. Pratama, A. R. (2025). The accuracy-bias trade-offs in AI text detection tools and their impact on fairness in scholarly publication. *Research Assessment*, 3(1), Article PMC12453642.
- [33]. Slimi, Z. (2026). A systematic critical review of generative AI's impact on authorship, pedagogy, and integrity (2023–2025). *Frontiers in Education*, 11, Article 1769680. <https://doi.org/10.3389/feduc.2026.1769680>
- [34]. Urbaite, G. (2025). Artificial intelligence integration in the acquisition of English academic writing. *Porta Universorum*, 1(4), 88–103.