

Generative AI and Academic Self-Confidence: Understanding How AI Tools Influence English Learning Motivation Among Multilingual and International Students

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Abstract

Though ample research has been done to examine bias in AI-generated outputs, a significant gap remains in user perceptions of confidence and identity while using generative AI tools. Our research examines the impact of generative AI tools on multilingual and international students' academic self-confidence and motivation to learn English. While these tools can improve grammar and quality of writing, they may also affect identity, dependency, and authenticity. In this paper, we present three findings from qualitative interviews with multilingual and international students. First, we introduce the concept of a confidence boost versus identity gap: while GAI enables students to produce polished, academic English and increases confidence in submitted work, it simultaneously reinforces feelings of inadequacy and dependence. Second, we find that GAI use produces a tension between dependency and resistance. Some students rely on GAI to reduce cognitive load and overcome barriers to starting tasks, while others actively resist it due to concerns about authenticity and adopting an "AI voice." Third, we identify split effects on language learning motivation. For some students, GAI serves as a model that inspires them to improve, while for others it reduces the motivation to develop their own English proficiency. These findings show that generative AI is not a neutral tool, but one that greatly influences students' sense of identity and confidence in academic work. We argue that while GAI can help multilingual students feel more confident in English-dominated academic spaces, it can also reinforce dominant linguistic norms and reduce skill development. We discuss recommendations for designing GAI systems that emphasize authenticity, learning, and skill development rather than simply optimizing for correctness and efficiency.

1 Introduction

Generative Artificial Intelligence (GAI) tools are rapidly transforming how academic work is produced. For example, a student would normally have to request feedback from their professor or teaching assistant and wait for their edits. However, a GAI system developed at Georgia Tech University was able to give edits on short-answer questions that matched the level of detail and structure of a human teaching assistant (George 2023). As these tools continue to evolve, they can support multilingual and international students in

producing natural-sounding, grammatically correct English (Xiao et al. 2025). Because writing is so central in higher education, GAI systems can also reduce linguistic barriers by helping with broader tasks such as brainstorming ideas, structure, or the argument of an essay, or giving smaller revisions to grammar, syntax, and diction (Wang 2024).

Despite these benefits, our findings highlight the broader implications of GAI use, including participants' experiences of diminished confidence in their ability, overreliance, and the loss of personal voice and expression. These concerns are especially critical for multilingual students, for whom language is not only a tool for communication but also a part of their identity and sense of belonging. While prior research has examined performance and productivity metrics associated with GAI, less is understood about how these tools may influence students' self-confidence and motivation to improve their English abilities.

In this work, we investigate how generative AI relates to academic self-confidence and English learning motivation among multilingual and international students. Through qualitative interviews and thematic analysis of 14 student participants of varying academic standing, we ask:

- **R1:** How does generative AI shape multilingual students' academic self-confidence in English-related tasks?
- **R2:** How do non-native English speakers navigate overreliance when using generative AI?
- **R3:** How does using generative AI influence motivation to improve English fluency?

Our findings suggest that GAI is not a neutral tool, but one that creates tension in how learners experience language and identity. We make three novel contributions:

- We show that while generative AI can increase confidence in produced outputs, it may also weaken confidence in one's own linguistic ability. A majority of students felt reassured by their polished academic writing, stating that using GAI to correct grammar or spelling is a necessity before submitting an assignment. However, many students also noted that using GAI reinforces perceived gaps between themselves and native English speakers, contributing to feelings of inadequacy and dependence. We label this tension as confidence boost versus identity gap, highlighting how performance confi-

dence can coexist with feelings of personal incompetence.

- We further find how students' use of generative AI is split between reliance and restraint. On one hand, students depended on GAI to reduce cognitive load by generating grammatically correct sentences, helping them start assignments, and refining their writing to sound more "native" or professional. A majority of students described using GAI to overcome the difficulty of beginning tasks or to quickly translate their ideas into polished English. On the other, some students actively resisted overuse due to concerns about authenticity and losing their personal voice. Some reported editing GAI outputs that felt "too professional" or worried that their writing may be perceived as AI-generated. We frame this as a tension between dependency and resistance, reflecting students' awareness that GAI outputs are not neutral and shape how their writing and identity are perceived by others.
- Our third contribution is that generative AI has divergent effects on students' motivation to improve their English proficiency. For some students, GAI outputs served as inspiration to improve their English by exposing them to more advanced vocabulary and sentence structure. As a result, seeing these edits motivated them to reach a similar level of fluency. These students describe learning from GAI by comparing their own writing to more polished responses and adopting the new language. For others, however, the efficiency and availability of GAI reduced the need to actively develop independent language skills. Instead of engaging with the learning process, they relied on GAI to produce high-quality outputs, often fully copying or lightly editing them. We characterize this as a split effect on language learning motivation, showing how the same tool can both support and undermine learning depending on how it is used.

Our findings suggest that GAI influences non-native English speakers' academic work by simultaneously enabling high-quality results while introducing potential risks of dependency, reduced motivation, and diminished personal voice.

We conclude by discussing implications for the design of generative AI tools that can better support language development while preserving authenticity and confidence. By centering the experiences of multilingual students, this work contributes to ongoing conversations in AI ethics and education about how to design more equitable, learner-centered generative AI systems.

2 Related Work

Prior work surrounding large language models has highlighted several benefits, such as instant language translation that benefits non-native speakers (e.g., Ghosh 2024; Håkansson and Phillips-Wren 2024), and allowing users to produce more polished and fluent work (e.g., Hwang et al. 2025; Li et al. 2024b; Zhao 2023). At the same time, risks of GAI use have also been studied. Some researchers have identified issues related to overreliance, reduced skill development, and dependence (Tao et al. 2026), while oth-

ers have studied risks such as decreased comprehension and critical thinking skills (Robles and Ek 2024). Much of this work evaluates the results of GAI through a lens of quality (Joosten et al. 2024), efficiency (Li et al. 2024a), or output bias (Afreen, Mohaghegh, and Doborjeh 2025).

However, less has been studied on how GAI affects users' internal confidence, motivation to learn languages, and identity. In this section, we break down related work in two sections: 1) how GAI influences language learning and sense of identity for multilingual students, and 2) how GAI shapes their agency, reliance, and decision-making behaviors.

2.1 GAI and Language Learning for Multilingual Students

When it comes to academic writing, multilingual students face challenges such as language barriers, feeling a lack of confidence when writing (Lillis and Curry 2010), and feeling pressure to sound "native" in terms of tone and writing style (Flores and Rosa 2015). To mitigate the challenges that come from GAI tools being increasingly integrated into writing, researchers have started exploring how these systems reshape ethics in communication and writing. For example, McKee and Porter (2020) argue that GAI writing tools are not neutral, and instead actively influence decision making and perceptions of credibility. Their work shows that GAI in writing may reinforce dominant narratives of what counts as "good" or "professional" writing. In addition, Grammarly and other editing tools that have been historically used by students to help revise grammar and sentence structure can also reinforce a single, standardized form of English. This raises concerns of a loss of personal voice and authentic writing style (Koltovskaia 2020).

Researchers have also found that multilingual students often perceive GAI models as approachable and much less intimidating than traditional educational settings. In particular, practicing English conversation and writing becomes much easier with GAI tools (Zhao 2022). This shows that GAI tools can significantly reduce barriers to participation by helping students communicate more fluently and confidently in academics. However, existing work largely frames GAI as a tool for improving writing rather than looking at how GAI reshapes students' relationships with their own language skills. Much of current research focuses on the fluency, correctness, and efficiency of GAI tools rather than identifying how these systems influence user's sense of belonging, identity, and agency over their personal voice and writing style.

This gap is especially important in academic environments where "professional" or "acceptable" English is often expected and rewarded. Researchers argue that generative AI systems reinforce dominant societal norms and further marginalize vulnerable populations rather than existing as a neutral tool (Bender et al. 2021; Birhane et al. 2022). In terms of language-learning, AI-editing systems such as Grammarly or ChatGPT can marginalize diverse forms of sentence structure and language expression by standardizing text to sound "native" (Blodgett et al. 2020; Flores and Rosa 2015). In the same vein, Agarwal, Naaman, and Vashistha (2025) and Dobbe, Gilbert, and Mintz (2020) reveal that

GAI systems are inherently biased towards dominant expectations about what style of communication should be valued.

In addition, language is not just a tool for communication, but also a significant part of one's identity and ability to participate in social contexts (Bucholtz and Hall 2005). This is important because language holds power over one's sense of identity and belonging in a space, which can be an especially vulnerable feeling for multilingual or non-native English speakers. For this population, the pressure to sound "native" may reinforce feelings of inadequacy or low self-worth. While prior work in this space has explored how GAI tools influence participation, representation, and perceptions of legitimacy in English writing, less is known about how generative AI tools influence students' sense of confidence and relationship to their own writing voice. We fill this gap by revealing how multilingual and international students perceive confidence, authenticity, and language learning motivation while interacting with GAI.

2.2 GAI, Agency, and Decision-Making Behaviors

Much of current research has explored how generative AI influences values, agency, decision-making, and user behavior (Dobbe, Gilbert, and Mintz 2020). Such interactions include reliance due to GAI efficiency (Li et al. 2024a), cognitive offloading (Hou et al. 2025), and blind trust in GAI tools (Parasuraman and Riley 1997). It's true that GAI systems can significantly reduce the activation energy required to start difficult tasks due to their widespread availability and efficiency. In particular, GAI is often used to help users brainstorm ideas, create outlines, or generate polished responses (Li et al. 2024b). However, this convenience can also diminish the need for active engagement, critical thinking, and even the necessary struggle during the writing process. By accurately reproducing the natural flow and language style of human communication, GAI models create "artificial intimacy" with the user (Yun, Su, and Yi Wang 2026). As a result of this deeply personalized and frictionless interaction, GAI models diminish the need for active intellectual engagement and reflection, decreasing users' sense of agency and control over their writing (Yun, Su, and Yi Wang 2026). In other words, the need for internal struggle during academic tasks that is imperative for one to develop their own thoughts simply evaporates. This type of passive reliance on GAI tools is destructive to the learning process; scholars warn against passive GAI use due to its ability to cause "cognitive inertia", a concept that highlights the loss of intellectual effort and deep comprehension skills as a result of GAI overuse (Lee et al. 2025).

Further research dives deep into the concerns over generative AI automation and dependence. Goodman (2021) states that GAI cannot make decisions or judgments, despite appearing authoritative or efficient. In addition, these systems are not very capable of accounting for disagreement, ambiguity, or human values, especially in socially nuanced contexts (Robinson 2023). In academic writing contexts, this raises concerns about the impacts of students accepting AI-generated language as "correct" without understanding or even pushing back on the reasoning behind those results.

Scholars also argue that seamless GAI automation may

negatively impact users' sense of identity by decreasing their psychological ownership over the generated text (Joshi and Vogel 2025). This loss occurs because having a sense of psychological ownership over academic work requires active effort and engagement with the task. This type of cognitive investment is actively suppressed by GAI systems, especially due to the fact that their edits are invisible. As these systems continue to evolve, they completely blur the boundary between original human thought and algorithmic generation. This lack of transparency limits the user's awareness of how their original draft is different from the GAI tool's edits. In turn, it becomes difficult to track how the user's decisions shape their output. To mitigate this, researchers Inman and Ribes (2019) describe a concept called "seamfulness", which argues that GAI systems should reveal their underlying infrastructure and technical limitations to better support user agency and trust. These concerns are especially relevant in academic contexts where excessive GAI use without seamless integration may significantly undermine opportunities for learning and skill development.

Researchers have also explored issues of authenticity when it comes to AI-generated outputs, finding that users often worry about losing authenticity in their work (Guo et al. 2025) or sounding AI-generated when using GAI tools (Gero, Long, and Chilton 2023). Other authors agree, arguing that GAI systems must be evaluated for misuse and over-reliance (Javadi et al. 2021). While conversations about how to address these concerns are still ongoing, less attention is being paid to how multilingual students specifically experience the tension between authentic writing and the pressure to sound fluent. Our work fills this gap by showing how multilingual students simultaneously rely on and resist GAI systems, and how this tension affects their sense of identity and motivation to develop their own English skills.

3 Methods

To understand how generative AI shapes academic self-confidence and language learning motivation among non-native English speaking students, we conducted a two-phase qualitative study consisting of a broad recruitment survey followed by semi-structured interviews. In this paper, we use "non-native English speakers" to refer to participants for whom English is not a first language, which was the defining criterion for our interview sample. We additionally report where participants are multilingual (speak more than one language) or international (studying on a student visa), as these are related but distinct attributes that not all participants share in the same way. This approach allowed us to first capture a wide range of experiences and sentiments with generative AI use, and then dive deeper into such sentiments through follow-up interviews.

We recruited participants from the University of Washington's Seattle campus through a combination of online and in-person strategies. Initially, the recruitment survey was distributed via various student Slack channels and through word-of-mouth to collect as many responses in our target population as possible. In addition, we posted flyers containing the QR code to the survey and our study inclusion criteria across campus to reach a broader and more diverse audi-

ence. The survey invited participants who self-identified as non-native English speakers and/or as multilingual or international students and who had experience using generative AI tools such as ChatGPT, Gemini, or Claude for academic or communication purposes.

For follow-up semi-structured interviews, we selected a subset of 14 survey participants who were non-native English speakers and spoke a multitude of languages and used generative AI tools often in their daily lives to capture a range of experiences, use patterns, and attitudes towards these systems. Participants' current student status included 7 undergraduate, 9 master's, and 2 PhD students. Participants reported fluency in a range of languages in addition to English, including Arabic, Chinese, Korean, Farsi, Hindi, Gujarati, and French. All participants were over the age of 18 and verbally consented to participate and be recorded during the interview. As compensation for their time, interview participants received a \$20 gift card as a result of the Human Centered Design and Engineering department's Diversity, Equity, and Inclusion (DEI) Committee mini grant funding opportunity.

3.1 Data Collection

The initial recruitment survey collected demographic information, prior experience with generative AI tools, and general attitudes towards using them. The survey also included open-ended questions about how participants use GAI for writing, communication, and learning, which informed the development of the interview questions.

We then conducted 14 semi-structured interviews with selected participants (hereafter referred to as P1-14) to explore their experiences in greater depth. Interviews focused on three main areas: 1) how participants use generative AI for English writing and communication, 2) how GAI use influences their confidence in academic work, and 3) how GAI influences their motivation to improve English proficiency. We also asked follow-up questions about participants' perceptions of authenticity, reliance, and ownership over their communication. Interviews were conducted over Zoom and lasted 45-60 minutes. All interviews were audio-recorded and transcribed for analysis.

3.2 Data Analysis

We analyzed the interview transcripts using thematic analysis (Braun and Clarke 2006) to identify recurring patterns and themes. First, we conducted qualitative coding on each transcript to generate 86 initial codes related to GAI use, confidence, motivation, and identity. After the initial codes were generated, we grouped them into higher-level categories or themes using Excel. This led to the identification of three key themes that are highlighted in this paper: confidence boost vs. identity gap (Section 4.1), tension between dependency and resistance (Section 4.2), and split effects on language learning motivation (Section 4.3). Throughout the analysis phase, we constantly iterated and compared codes across participants to ensure that findings captured both shared and conflicting experiences.

This study was reviewed and approved by the university's Institutional Review Board (IRB). All participants provided

verbal consent prior to interviews, and remained completely confidential in analysis. Pseudonyms are used in this paper for each participant to protect their identities.

4 Findings

In this section, we explain our findings from qualitative interviews with 14 student participants. Most of the participants were very comfortable using GAI tools for English-related tasks, with 8/14 (57.1%) using GAI tools daily and 6/14 (42.9%) using them once or a few times a week. Specific use of these tools varied, ranging from translating sentences and improving grammar to writing emails or drafting essays. Participants also exhibited an awareness of perceived harms of GAI overuse, stating concerns like *"I am worried I might start speaking or writing like AI"* (P8). Such sentiments reveal potential harms of GAI use on this population, such as a loss of linguistic agency and diversity.

4.1 Confidence Boost vs. Identity Gap

A primary theme that emerged from our interviews was a tension between increased confidence in English output and a sense of linguistic inadequacy as a result of generative AI use. While participants described feeling more confident in their ability to produce grammatically correct and academically appropriate English through the use of generative AI, this confidence was often tied to the output itself rather than to their own perceived English proficiency.

Participants consistently expressed that GAI enabled them to submit academic work confidently, particularly because they didn't need to worry about grammar or spelling errors. As P1 explained, using GAI was a *"relief,"* as they could *"confidently hand in that paper knowing [their] English is not going to deduct [their] grade."* Similarly, P4 was *"confident in the final results after having ChatGPT edit [their] assignment,"* highlighting how generative AI allows students to easily meet academic expectations. P12 echoed this sentiment, stating how nice it was that *"[they are] almost guaranteed a good grade on any writing assignment nowadays with AI... it's so awesome."* However, this confidence was short-lived after being asked if they could produce similar results independently. The same participant admitted, *"If I don't use AI... I don't know. Probably not."* P9 also stated, *"Without AI I could never do the same quality of work or get the same grades."* Across 6/14 (42.9%) interview participants, academic self-confidence stemmed from GAI-assisted submissions, not from personal ability.

At the same time, exposure to AI-generated content caused insecurities within participants' perceptions of their own English capabilities. Several participants described feeling embarrassed when comparing their own writing to AI-generated content. P1 depicted their reaction to seeing ChatGPT's edited version of their essay, stating, *"this is completely different... what on earth am I writing? My writing is so bad compared to this."* In addition, P7 stated that they would *"still feel very uncertain about [their] writing if there was no AI to correct [them]."* P11 expressed similar insecurities, stating *"ChatGPT writes so well, so professionally. It makes me feel like I am bad at writing, and not fluent"*

in English at all. Especially academically." Such comments reveal that rather than simply existing as a supportive tool, AI-generated outputs serve as a standard for what acceptable academic English should look like - a standard that participants felt they could not achieve on their own.

This desire to consistently produce high-quality academic work contributed to a reliance on generative AI as a necessary tool for communication. Participants reported a lack of confidence in submitting work without using GAI due to concerns about their grammar and tone. For example, P6 stated that even if *"I write my own sentences, I would not be confident with my grammar. [...] I would never submit my work on my own, without running it through an AI. I wouldn't get [a] good grade."* In the same vein, P12 expressed that they would feel *"very insecure"* about their writing without correcting it through ChatGPT first. Interestingly, even when participants felt confident in their ideas at a high-level, they still felt insecure about how they conveyed them without GAI use. P5 described this feeling, stating *"I know I can create good ideas, and I am confident in them. But when I go to present or write my ideas, I feel like they sound so weak or unprofessional. This is why I use AI."* Similarly, P3 also felt *"[...] confident that [he] can think at a high-level,"* but was *"insecure in how [he] communicated the thoughts."* This suggests that potential judgment from others plays a role in how multilingual students present their work.

In addition to confidence, this tension also impacted participants' sense of identity and belonging. P9 described how relying on GAI *"remind[s] me that I did not ... adapt to the community,"* emphasizing the gap between themselves and *"fluent native English speaker[s]."* P13 shared the same sentiment, stating *"I still feel there's a huge gap between me as an international student and local people, especially on the speaking and the communication."* In this way, GAI use not only allowed for high-level communication, but it also reinforced participants' perceptions that they have not yet assimilated into English-speaking communities at the level that they desire. In addition, P14 shared the same worries about not fitting in with their native English-speaking peers, stating *"I am confident in my writing and academic assignments when using AI, but when it comes to socializing with people here ... i feel so awkward"*. They also admitted that they *"wish [they] could speak with AI corrections..."* This evidence shows that there exists a gap between written communication ability and speaking ability, causing these multilingual students to feel different and disconnected from their native English-speaking peers.

These comments suggest that generative AI has certain negative impacts on this population. By considering AI-generated content as the standard for "correct" and "acceptable" academic English, these tools risk reinforcing dominant, native-speaker norms of English while undermining non-native students' sense of authenticity and agency over their writing. Rather than serving as a tool that simply reduces language barriers, generative AI may amplify feelings of insecurity and inadequacy among multilingual students, reshaping how they perceive their place within English-dominant environments.

4.2 Tension Between Dependency and Resistance in GAI Use

A second key theme that emerged from our interviews was a tension between dependency on generative AI for English-related tasks and an active resistance to overusing it. While some participants relied heavily on GAI to complete tasks more efficiently, others were much more cautious due to concerns about authenticity, skill-learning, and adopting an "AI voice". This tension illustrates how GAI use is not consistent and widespread among this population, but is instead adopted to varying degrees based on personal concerns.

A majority of participants described a strong dependency on GAI to correct grammar or fix tone to ensure their English sounded up-to-par and fluent. For instance, P13 remembered asking GAI whether their writing *"sounds like what a native speaker would say"*, while P14 used GAI to refine social messages to their friends to *"sound more like a native English speaker."* This reflects a broader pattern in which GAI is not only used to correct grammar, but used to translate one's personal expression into a socially "acceptable" standard. Another part of this dependency was driven by the desire to produce high-quality work without much cognitive effort. 8/14 (57.1%) participants mentioned using GAI as a tool that reduces cognitive load and the barrier to starting tasks. For example, P1 noted that they *"use it for everything"*, highlighting the extent to which GAI had become integrated into their life. Similarly, P2 described using GAI to bypass less interesting academic tasks altogether, relying on it to write full essays. P4 also used GAI tools to reduce cognitive load, stating *"Because in undergrad, I also had a lot of assignments that I knew didn't mean much to me, or were not very enriching, and I just wanted to get them done quickly. So [...] I would not do the reading, I just put it all on ChatGPT and be like, okay, just give me the important points."* Participants frequently described starting as the most challenging part of academic work, turning to GAI to overcome this barrier. As P11 explained, *"starting any task really is always the most difficult part. So I use Chat to help me get over that hump."* This shows that GAI functions as a tool to reduce cognitive load and the activation energy to start tasks, enabling students to complete work that they might otherwise avoid or delay.

Another key factor of this dependency was GAI's convenient and highly effective nature. P6 mentioned that common generative AI tools such as ChatGPT and Gemini are *"so easy to use because they are easily accessible on the internet and don't require much setting up."* Other participants (P6, P9, P11) echoed this idea that the availability of generative AI makes it that much more alluring and tempting to use. P11 in particular stated *"If I had to pay to use Chat or something, then yeah I would never use it. But it's free, and that makes it so hard to not turn to for assignments."* In addition, P6 described wanting *"[...] more barriers to generative AI"* so that they *"wouldn't be able to use it as much"*. Such comments reveal that the availability and accessibility of generative AI tools greatly impact feelings of reliance for students.

Interestingly, despite some participants' heavy reliance on

generative AI, some also expressed a strong resistance to GAI use due to concerns about authenticity and its impact on their learning and identity. One participant (P10) outright distrusted their GAI outputs, stating that *"they could be weird or unreliable and require additional verification."* P13 felt the same way, stating *"I still have to double-check the responses all the time because the outputs are weird sometimes. It makes me not want to use Chat."* In addition, participants were concerned about how their use of GAI might be perceived by others. P5 described being *"very cautious"* because they did not want their work to *"sound like [it] is AI generated."* They also expressed embarrassment at the possibility of their work being flagged as AI-generated or inauthentic.

Another concern that came up was GAI's impact on voice and long-term language development. Several participants described actively modifying AI-generated outputs to better reflect their personal voice or writing style. For example, P7 explained that when GAI responses sounded *"too native"* or *"too professional"*, they would *"tweak it again to sound more like [them]"*. Others expressed anxiety about internalizing AI-generated language. P8 was *"[...] worried [they] might start speaking or writing like AI"*, or that their own writing might begin to *"look obviously AI-generated."* These concerns highlight an awareness that GAI language is not neutral, but carries a distinct voice. As a result, these tools risk standardizing the diverse voices of non-native English speakers.

These findings reveal that GAI use is conflicting because participants establish their level of reliance or resistance based on personal values. While some students depend on GAI to meet a certain level of English proficiency and reduce the activation energy to start tasks, others resist its influence to preserve authenticity and take agency over their learning. This tension reveals important implications as well. As GAI systems become embedded in daily academic tasks, they not only shape how tasks are completed but also influence how users define credibility and what it means to preserve one's own voice. In doing so, generative AI introduces new pressures for multilingual students to balance efficiency with authenticity, potentially restricting how they express themselves and develop their English skills.

4.3 Split Effects on Language-Learning Motivation

A third key theme that emerged from our interviews was the split effect of generative AI on language learning motivation. While some participants described GAI as a strong motivating factor to improve their English proficiency, others mentioned that reliance on GAI reduced their incentive to improve their language skills. This finding suggests that students experienced generative AI as influencing motivation in different ways, depending on how they engaged with it.

Four out of 14 student participants described using generative AI as a tool to motivate them to improve their English. By exposing users to more polished, fluent, and expressive language, GAI provided a quick reference point for what *"better"* English could look like. For instance, P1

explained that seeing AI-generated revisions of their work motivated them to continue improving their writing skills. Their end goal was to reach a level where only minor edits would be needed. Similarly, P7 recounted how they would compare their own *"basic"* writing to GAI outputs and identify new vocabulary or phrasing to adopt the next time they wrote, noting that they were *"kind of learning English from ChatGPT."* In these cases, GAI created a feedback loop that helped learners recognize gaps in their communication and model what more advanced English could look like.

In addition, participants described other interactive uses of GAI that supported their learning beyond writing. P4 explained how conversational interactions with GAI helped them understand cultural nuances in the US, such as humor or social cues that were not present in their home country. In the same vein, P13 noted using GAI as a resource to *"explain jokes and slang terms that [they] were not familiar with."* This suggests that GAI can serve as an accessible, low-pressure learning tool that enables curiosity.

At times, even concerns about the influence of generative AI became motivating. P8 mentioned the possibility of *"sounding like AI"* encouraged them to seek out more authentic human interactions to improve their English. P6 echoed this, stating *"I feel like AI might have, uh... [...] somehow transferred a little bit to my, uh, speaking English as well. I am speaking to my native friends more to lessen this."* Such experiences show that using GAI not only failed to support these students directly, but also encouraged reflection on what it means to develop their own voice.

However, other participants had a contrasting view of the use of GAI in their daily lives. For these students, generative AI tools actively reduced their motivation to improve their English skills because they used them to simply produce correct outputs rather than as a resource for learning. As a result, the need to engage deeply with the English language diminished. P9 explained this trade-off, noting that while GAI greatly increased their ability to communicate in English, it *"decrease[d] the motivation to train [themselves] in English speaking without AI."* In addition, P2 stated *"[...] I improve my grades when I do use AI. [...] But with AI I'm not really learning the English."* This reflects a broader shift in which tasks that originally required learning can be outsourced, reducing the need for deep language engagement.

This dynamic was further reinforced by other uses of GAI, such as copying or lightly editing AI-generated responses. As discussed in previous findings, some participants acknowledged that they were *"not really learning from AI"*, even as they continued to rely on it for daily tasks (P6). In particular, participants 2, 3, 4, and 10 mentioned using GAI passively for tasks such as writing essays, generating presentation scripts, and drafting emails. For these students, GAI reduces the perceived need for skill development, as the immediate goal of producing proficient English and getting a good grade on academic tasks can be achieved without total language proficiency.

Interestingly, one participant was affected by both sides of this tension. P7 described wanting to improve their English skills while simultaneously relying on generative AI for editing English comprehension and expression. They mentioned

multiple times that *"I really want to become fluent in English, but I just have to use AI to edit my work. Otherwise I will not get good grade. But I do hope to become fluent where one day I will not need AI."* This suggests that motivation and dependency are not mutually exclusive; GAI does not simply increase or decrease language learning motivation, but instead reshapes the level at which learners choose to engage with it.

Together, these findings suggest that generative AI introduces a fundamental shift in the effort once required for language learning for non-native English speakers. By lowering the barriers to producing high-quality English, GAI can both inspire learners to improve and reduce the necessity of doing so. However, this has important implications as well. As AI-generated writing becomes more normalized in academic environments, there is a risk that language learning becomes optional rather than essential for students. In the United States, results and achievements are often prioritized over process, and this cultural norm, along with the accessibility of GAI tools, may contribute to long-term stagnation in language learning, despite short-term gains in performance. This raises critical questions about how to design GAI systems that support, not replace, language learning.

5 Discussion

Through 14 qualitative interviews with non-native English speakers, we observe three key findings. First, participants described increased confidence in their academic work while simultaneously expressing uncertainty about their own English abilities without AI assistance. Second, participants described a tension between reliance and resistance, balancing the efficiency of GAI with concerns about authenticity, personal voice, and learning. Finally, participants described divergent effects on their motivation to improve their English: some used GAI outputs as models for learning, while others felt less need to independently practice when GAI could produce polished English.

These findings suggest that participants experience GAI as more than a productivity tool. Their accounts indicate that GAI use can shape how they evaluate their own English abilities, how they think about acceptable academic English, and how they approach language-learning activities. While prior work emphasizes the productivity and accessibility benefits and/or harms of generative AI systems (Li et al. 2024b), our study examines motivation and identity-related impacts on multilingual students as a result of generative AI use.

A central contribution of this research is suggesting how generative AI is not just a tool for productivity, but may function as a system that actively shapes non-native English speakers' sense of identity by standardizing English language expression. Across our findings, participants' accounts suggest that GAI does not simply help students write or perform better on academic tasks; for our participants, it appeared to shape what counts as "good" or "acceptable" English, how they evaluate their own abilities, and how they see themselves relative to GAI outputs. Students described this dissonance between feeling confident in their submitted academic work and insecurity in communicating in daily life. Part of this divide stemmed from the fact that they felt

unable to live up to AI-generated English content (Lepp and Smith 2025). They mentioned not being able to reproduce GAI's outputs, a lack of confidence when submitting work without GAI edits, and feeling like their own writing is unprofessional or unacceptable. A clear contributor to this tension is the fact that generative AI tools reinforce dominant forms of native English by standardizing outputs (Agarwal, Naaman, and Vashistha 2025; Basoah et al. 2025). Historically, automated editing tools such as Grammarly strip personal voice, variable sentence structure, and vocabulary choice to consist of a single, dominant English form (Koltovskaia 2020). In addition, previous literature found that commonly used generative AI tools such as ChatGPT could decrease local dialects and cause the user to adopt the system's political, cultural, or linguistic biases (Bauer 2025). As a result, the authenticity and personal voice of the authors are stripped away (Hwang et al. 2025), leaving a result that is homogeneous and difficult for them to replicate.

Although some resistance to this standardization was shown in our findings by students editing AI-generated content to better reflect their writing style, a majority of participants in our study still struggle with feeling a lack of confidence in their English communication abilities when compared to AI-generated content. Several participants described this as contributing to a feeling of not belonging in their English-dominated communities, suggesting that the standardization of language expression may carry significant weight for this population.

Another contribution to this research is highlighting the tension between performance success and intentional learning with GAI use. Our research shows that there exists a critical divide between what generative AI currently produces (high-quality output) and what non-native English speakers actually need (support for learning and skill development). Participants in our study frequently described using GAI tools to produce polished writing without engaging in any active language learning (Kumar Navneet, Chandra, and Zhang 2026). As a result of this passive use, some participants became fully dependent on GAI for English communication, and patterns commonly adopted by GAI writing can creep into their own writing (Anderson, Galpin, and Juzek 2025). This concern extends previous research about the implications of outsourcing tasks to generative AI in educational spaces. If students can consistently produce high-quality, academically successful work through generative AI without putting in the internal work, traditional signs of language proficiency (well-written essays, correct grammar) may no longer reflect genuine language ability (Buyserie et al. 2024; Rahnuma 2026).

More importantly, the incentive to learn underlying language skills may diminish, especially due to the accessibility and efficiency of GAI tools (Brainnita Oktarina et al. 2024). This has important implications for learning and skill development for this population. If left unchecked, GAI may contribute to an environment in which non-native English speakers can produce work that appears equivalent to that of native speakers, while still experiencing a weakened sense of confidence, identity, and ability. This raises concerns about internalized inequities, where proficiency gaps are no longer

outwardly visible but may persist in students' lived experiences. Therefore, it is vital that GAI systems are designed for supporting learning and skill-development to mitigate these inequities.

Addressing these implications requires considering the broader context in which generative AI operates. In its current state, the global economy suffers from an "optimization" and "productivity" culture, where success or achievement is directly tied to a person's amount and quality of output. In this toxic productivity realm, a person's self-worth is often tied to their output, creating a negative cycle of identity and confidence loss (Afota et al. 2024). The widespread availability and efficiency of GAI tools further emphasize this tension, allowing students to optimize their workflow without necessarily building internal confidence. Instead of treating this as a failure of student behavior, we argue that this issue may reflect a design gap: current GAI systems are designed for correctness, efficiency, and fluency, but do not necessarily support meaningful practice or skill-building. As a result, these tools may undermine opportunities for learning rather than consistently support them. To bridge this gap, we propose design recommendations that emphasize the learning process and skill development.

6 Design Recommendations

We propose several design recommendations for generative AI tools that better support non-native English speakers while mitigating the risks of dependency, loss of authenticity, and reduced motivation for skill development. While most are targeted at developers of GAI systems, we also provide usage recommendations for students themselves (Section 6.3).

6.1 Encourage Active Engagement with GAI Over Passive Use

In our study, 10/14 (71.4%) students mentioned using generative AI tools very often in their daily lives. They use these tools primarily to generate ideas, write full responses, or improve sentence structure, vocabulary, or flow. In addition, 8/14 (57.1%) participants mentioned using generative AI tools passively for actions such as copy-pasting outputs or asking for fully written responses to an essay prompt, for example. Doing this allows them to complete high-effort tasks with minimal engagement and cognitive efforts.

For learning-oriented use cases specifically, designers should consider generative AI tools that do not provide fully written (or rewritten) responses right away. Instead, these systems could emphasize the learning process through a back-and-forth interaction system. This could include features such as highlighting and explaining specific grammar or vocabulary changes and encouraging users to attempt revisions themselves before revealing suggestions. For example, the GAI tool could prompt the user to try revising a sentence on their own based on high-level comments. If the user tries and is still not satisfied with the result, the tool can reveal its interpretation of the sentence, highlighting the changes it made in bright red text. The tool should also ask clarifying questions when the user requests edits to dive

deeper into the actual needs of the user. Adding these interactions can help shift generative AI from a tool that currently offloads cognitive load to one that actively supports learning and skill development.

After generating a response, the tool should explain why certain grammatical or stylistic changes were made to the original draft. Implementing these forms of friction is an example of "seamfulness," (Inman and Ribes 2019) by making technology interventions visible to the user in order to encourage awareness and more intentional engagement from them. Seamless interactions between the user and GAI systems can help users remain autonomous over their work and fully involved in the writing process. This will not only improve language development for non-native users, but it will also reduce passive overreliance on tasks that normally would require higher cognitive load.

However, it is important to note that this kind of friction is not appropriate for all contexts of use. Participants in our study also used generative AI for time-sensitive tasks such as emails and urgent communication, where delayed responses would likely be frustrating rather than beneficial. Friction-based designs may also disadvantage users who rely on GAI tools for accessibility support, such as those with disabilities that affect writing or language processing. We therefore frame this recommendation in terms of specific learning-oriented use-cases ("practice" or "study" settings) rather than for a general, daily writing assistant.

6.2 Preserve User Voice and Authenticity

Participants frequently expressed concerns that their writing might "sound like AI" or simply unlike themselves. In particular, 6/14 (42.9%) participants worried that they might adopt an "AI voice" and start writing or speaking like GAI naturally. Because current GAI tools produce outputs that are written in a very specific tone and style, it can be obvious to some when work is AI-generated.

Therefore, GAI tools should step away from generating a single standard of correct English and **preserve the user's original tone and style when making edits**. One feature may have toggles that allow users to customize their preferences for tone, formality, and level of change to their original draft. For example, the user can toggle between "light revision", "medium revision", or "heavy revision" editing styles, where a light revision would preserve original tone and formality, and heavy revision could revise tone in addition to grammar or vocabulary. Implementing this feature would bring back agency into human-AI interaction, allowing the user to have full control over what type of GAI output they desire (Ghosh et al. 2026).

It is also important that systems avoid correcting all aspects of a draft and **only focus on what the user asks for**. For example, if users ask for better sentence flow, then the corrected draft should only revise the flow and not edit original sentence structures, tone, or level of vocabulary. By expanding what counts as "acceptable", GAI systems can better value users' unique writing signatures, rather than homogenize them into a singular voice. This is also useful for GAI systems not adding their own 'signature' to student writing, thus making it sound less authentic (Baron 2024)

and putting students with lower English proficiency at higher risks of being accused of using GAI in academically dishonest means (Kadoma, Metaxa, and Naaman 2025).

Another way generative AI systems can preserve authentic writing is to **build a persona of the user's authentic writing style from their unedited draft**, and follow that persona's writing structure for suggested edits. This relates to inverse prompting mechanisms, which are defined as the process of creating prompts from a provided text or artifact (Hong et al. 2025). Implementing this technique could allow the system to understand the user's baseline identity, including their preferred vocabulary choices, sentence structure, and sentence cadence, before any edits are suggested. It is already known that current models of LLMs are highly capable of extracting and personifying a user's identity from conversational data (Yun, Su, and Yi Wang 2026). By capitalizing on this, the GAI model may be able to make edits that mirror the user's natural voice and writing style instead of erasing or standardizing the diverse linguistic identities of multilingual students.

We note that this recommendation carries trade-offs that would need to be considered before implementation. Building a personalized GAI model raises privacy concerns and can introduce risks of profiling users based on their linguistic identity. This kind of model also assumes a writing style is stable and consistent enough to match, when in practice a user's voice may shift across contexts or over the course of language development. Therefore, implementation of this feature would need to give users control over what data is retained and for how long. It would also need to be adaptable to the user instead of acting like a fixed baseline of their linguistic identity.

Collectively, these recommendations could support the movement of GAI systems away from a paradigm that simply performs a set of tasks a user requires support in, and move toward the *assistant* role that fosters interpersonal growth and boosts user confidence. Implementing these recommendations may greatly improve GAI assistants' ability to be effectively personalized as writing tools, and support growth in ways that writers themselves want to see (Hwang et al. 2025). While this paper specifically focuses on the needs of non-native English students in terms of English proficiency and academic writing, we suggest that the adoption of a truly assistive (and not completionist) paradigm to GAI development could benefit all users.

6.3 Incorporate Mindful GAI usage in Workflows

As the usage of GAI tools in industry positions is becoming increasingly unavoidable, with companies implementing practices such as "tokenmaxxing" to incentivize or require regular engagement with GAI as part of their performance reviews (Roose 2026), students might consider developing a mindful approach towards such engagement if presented with no other choice. While we are cognizant of the issues of regular GAI usage, both as highlighted in this paper and other research (e.g., Bedard et al. 2026; Ghosh et al. 2026; Kosmyna et al. 2025), it might be useful to develop a healthy GAI usage strategy when the options of GAI refusal or low usage are not viable for other reasons.

Students might consider developing a working relationship with GAI systems whereby they have standardized prompting structures that they have tested and found effective for their purposes. This might include explicitly encoding some of the instructions specified in Section 6.3, as well as other meta-prompting strategies such as providing broader context, restricting responses to a specified structure, and including references or examples that responses must have similarities with, to name a few (Zhang, Yuan, and Yao 2023). To build this practice, students might also discuss GAI usage with their instructors for coursework, and negotiate acceptable usages (such as ideation or reading summarization) that might support both their English language proficiency and overall career development (Ghosh 2024).

7 Limitations and Future Work

Due to our recruitment strategies and the fact that our research team originated from the same university, 13 out of our 14 interviewees were from our university, an R1 institution in the United States with competitive admission rates and tuition fees. This may decrease the diversity of our participant pool, because participants implicitly had a moderate-to-high English proficiency (which we did not measure) by virtue of meeting the English language requirements of the University.

In addition, we acknowledge that our sample size of 14 is not a holistic representation of all multilingual or non-native English speakers across the world. Because we did not specifically seek out students of certain races, ethnicities, or nationalities for this study to guarantee diversity, the demographics of our participants were limited to Indian, East Asian, and Italian students, which does not encapsulate the broad range of experiences that other nationalities may face in this regard. We believed that seeking out participants from certain nationalities to fill a diversity gap would introduce bias into the study and be an unfair research practice that recruits study participants because of some aspect of their (often-marginalized) identity, and we therefore only interviewed participants who filled out our survey. Future work may take a broader approach and sample students from many different countries or ethnicities to capture a broader range of sentiments from this population.

Finally, all interview prompts and questions were conducted in English, as that was the research team's primary language and the language of instruction of this university. However, some interview participants had limited English proficiency (still above a fairly high threshold of proficiency as required for admission into this university), which might have impacted their answers during the survey and interview. Future work might benefit from conducting interviews in the participants' native languages, or at least having that option as opposed to English-only interviews, to ensure full understanding and thorough, coherent answers.

These sampling constraints mean that our findings should be interpreted as participants' personal experiences using GAI tools rather than as evidence of broader, higher-level effects. In particular, the study cannot establish long-term causal relationships between GAI use and language profi-

ciency, motivation, dependency, or identity due to its sample size.

8 Conclusion

Our work bridges a critical divide in current research surrounding the impacts of generative AI. While prior research focuses on biases in AI output or how generative AI affects education, we hone in on how academic self-confidence, tensions between dependency and resistance, and the motivation to improve one's English are experienced in relation to to GAI use. We position GAI not as a neutral tool for learning, but one that may shape learners' sense of identity in an English-dominated environment. To address this, we propose design recommendations for GAI tools that prioritize learning and skill development instead of correctness and efficiency. Ultimately, we aim to understand how non-native English speakers navigate language learning, and advocate for generative AI technologies that better support authenticity for multilingual learners.

References

- Afota, M.; Provost Savard, Y.; Léon, E.; and Ollier-Malaterre, A. 2024. Changes in belongingness, meaningful work, and emotional exhaustion among new high-intensity telecommuters: Insights from pandemic remote workers. *Journal of Occupational and Organizational Psychology*, 97(3): 817–840.
- Afreen, J.; Mohaghegh, M.; and Doborjeh, M. 2025. Systematic literature review on bias mitigation in generative AI. *AI and Ethics*, 5(5): 4789–4841.
- Agarwal, D.; Naaman, M.; and Vashistha, A. 2025. AI suggestions homogenize writing toward Western styles and diminish cultural nuances. In *Proceedings of the 2025 CHI conference on human factors in computing systems*, 1–21.
- Anderson, B.; Galpin, R.; and Juzek, T. S. 2025. Model Misalignment and Language Change: Traces of AI-Associated Language in Unscripted Spoken English. In *Proceedings of the AAAI/ACM Conference on AI, Ethics, and Society*, volume 8, 179–191.
- Baron, R. 2024. AI editing: are we there yet? *Science Editor*, 47(3): 78–82.
- Basoah, J.; Cunningham, J. L.; Adams, E.; Bose, A.; Jain, A.; Yadav, K.; Yang, Z.; Reinecke, K.; and Rosner, D. 2025. Should AI mimic people? Understanding AI-supported writing technology among Black Users. *Proceedings of the ACM on Human-Computer Interaction*, 9(7): 1–51.
- Bauer, N. F. 2025. *Does ChatGPT Increase Language Homogenization?*, 11–31. Wiesbaden: Springer Fachmedien Wiesbaden. ISBN 978-3-658-46344-1.
- Bedard, J.; Kropp, M.; Hsu, M.; Karaman, O. T.; Hawes, J.; and Kellerman, G. R. 2026. When Using AI Leads to “Brain Fry”.
- Bender, E. M.; Gebru, T.; McMillan-Major, A.; and Shmitchell, S. 2021. On the Dangers of Stochastic Parrots: Can Language Models Be Too Big? In *Proceedings of the 2021 ACM Conference on Fairness, Accountability, and Transparency*, FAccT '21, 610–623. New York, NY, USA: Association for Computing Machinery. ISBN 9781450383097.
- Birhane, A.; Kalluri, P.; Card, D.; Agnew, W.; Dotan, R.; and Bao, M. 2022. The Values Encoded in Machine Learning Research. In *2022 ACM Conference on Fairness Accountability and Transparency*, FAccT '22, 173–184. ACM.
- Blodgett, S. L.; Barocas, S.; Daumé III, H.; and Wallach, H. 2020. Language (Technology) is Power: A Critical Survey of “Bias” in NLP. In Jurafsky, D.; Chai, J.; Schluter, N.; and Tetreault, J., eds., *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics*, 5454–5476. Online: Association for Computational Linguistics.
- Brainnita Oktarina, I.; Edistianda Eka Saputri, M.; Magdalena, B.; Hastomo, T.; and Maximilian, A. 2024. Leveraging ChatGPT to enhance students' writing skills, engagement, and feedback literacy. *Edelweiss Applied Science and Technology*, 8(4): 2306–2319.
- Braun, V.; and Clarke, V. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2): 77–101.
- Bucholtz, M.; and Hall, K. 2005. Identity and interaction: a sociocultural linguistic approach. *Discourse Studies*, 7(4-5): 585–614.
- Buyserie, B.; Thurston, T. N.; Rivera-Dundas, A.; Söken, A.; 'Ofakihevahanoa Fotu, B.; Litts, B. K.; Denial, C. J.; Mayer, C.; Ratliff, C.; Alward, C.; Frank, D.; Hutchinson, D.; Rosenberg, D.; Mecham, E.; Jensen, E.; Tsufim, F.; Nguyen, H.; Alladin, J. K.; Morris, J.; Taylor, J.; Green, J.; Grewe, J.; Johnson, J. K.; Tassoni, J. P.; Vogeler, J.; Gossard, J. M.; Sanders, K.; Nygreen, K.; Pomerleau, L.; Dumin, L.; and Campbell, L. 2024. *Teaching and Generative AI: Pedagogical Possibilities and Productive Tensions*. Utah State University.
- Dobbe, R. I.; Gilbert, T. K.; and Mintz, Y. 2020. Hard Choices in Artificial Intelligence: Addressing Normative Uncertainty through Sociotechnical Commitments. In *Proceedings of the AAAI/ACM Conference on AI, Ethics, and Society*, AIES '20, 242. New York, NY, USA: Association for Computing Machinery. ISBN 9781450371100.
- Flores, N.; and Rosa, J. 2015. Undoing Appropriateness: Raciolinguistic Ideologies and Language Diversity in Education. *Harvard Educational Review*, 85(2): 149–171.
- George, D. 2023. The Potential of Generative AI to Reform Graduate Education. *Partners Universal International Research Journal*, 2(4): 36–50.
- Gero, K. I.; Long, T.; and Chilton, L. B. 2023. Social Dynamics of AI Support in Creative Writing. In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems*, CHI '23. New York, NY, USA: Association for Computing Machinery. ISBN 9781450394215.
- Ghosh, S. 2024. Chatgpt as a tool for equitable education in engineering classes. In *2024 ASEE Annual Conference & Exposition*.
- Ghosh, S.; Venkit, P. N.; Gautam, S.; and Ghosh, A. 2026. What if AI systems weren't chatbots? In *The 2026 ACM Conference on Fairness, Accountability, and Transparency*, 792–815.

- Goodman, B. 2021. Hard Choices and Hard Limits in Artificial Intelligence. In *Proceedings of the 2021 AAAI/ACM Conference on AI, Ethics, and Society*, AIES '21, 112–121. New York, NY, USA: Association for Computing Machinery. ISBN 9781450384735.
- Guo, A.; Sathyanarayanan, S.; Wang, L.; Heer, J.; and Zhang, A. X. 2025. From pen to prompt: How creative writers integrate AI into their writing practice. In *Proceedings of the 2025 Conference on Creativity and Cognition*, 527–545.
- Hong, H.; Xiao, C.; Wang, Y.; Liu, Y.; Rong, W.; and Lin, C. 2025. Beyond One-Size-Fits-All: Inversion Learning for Highly Effective NLG Evaluation Prompts.
- Hou, C.; Zhu, G.; Sudarshan, V.; Lim, F. S.; and Ong, Y. S. 2025. Measuring undergraduate students' reliance on Generative AI during problem-solving: Scale development and validation. *Comput. Educ.*, 234(C).
- Hwang, A. H.-C.; Liao, Q. V.; Blodgett, S. L.; Olteanu, A.; and Trischler, A. 2025. 'It was 80% me, 20% AI': Seeking Authenticity in Co-Writing with Large Language Models. *Proceedings of the ACM on Human-Computer Interaction*, 9(2): 1–41.
- Håkansson, A.; and Phillips-Wren, G. 2024. Generative AI and Large Language Models - Benefits, Drawbacks, Future and Recommendations. *Procedia Computer Science*, 246: 5458–5468. 28th International Conference on Knowledge Based and Intelligent information and Engineering Systems (KES 2024).
- Inman, S.; and Ribes, D. 2019. "Beautiful Seams": Strategic Revelations and Concealments. In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems*, CHI '19, 1–14. New York, NY, USA: Association for Computing Machinery. ISBN 9781450359702.
- Javadi, S. A.; Norval, C.; Cloete, R.; and Singh, J. 2021. Monitoring AI Services for Misuse. In *Proceedings of the 2021 AAAI/ACM Conference on AI, Ethics, and Society*, AIES '21, 597–607. New York, NY, USA: Association for Computing Machinery. ISBN 9781450384735.
- Joosten, J.; Bilgram, V.; Hahn, A.; and Totzek, D. 2024. Comparing the Ideation Quality of Humans With Generative Artificial Intelligence. *IEEE Engineering Management Review*, 52(2): 153–164.
- Joshi, N.; and Vogel, D. 2025. Writing with AI Lowers Psychological Ownership, but Longer Prompts Can Help. In *Proceedings of the 7th ACM Conference on Conversational User Interfaces*, CUI '25. New York, NY, USA: Association for Computing Machinery. ISBN 9798400715273.
- Kadoma, K.; Metaxa, D.; and Naaman, M. 2025. Generative AI and Perceptual Harms: Who's Suspected of using LLMs? In *Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems*, 1–17.
- Koltovskaia, S. 2020. Student engagement with automated written corrective feedback (AWCF) provided by Grammarly: A multiple case study. *Assessing Writing*, 44: 100450.
- Kosmyrna, N.; Hauptmann, E.; Yuan, Y. T.; Situ, J.; Liao, X.-H.; Beresnitzky, A. V.; Braunstein, I.; and Maes, P. 2025. Your brain on ChatGPT: Accumulation of cognitive debt when using an AI assistant for essay writing task. *arXiv preprint arXiv:2506.08872*, 4.
- Kumar Navneet, S.; Chandra, J.; and Zhang, Y. 2026. When AI Writes, Whose Voice Remains? Quantifying Cultural Marker Erasure Across World English Varieties in Large Language Models. In *Proceedings of the Extended Abstracts of the 2026 CHI Conference on Human Factors in Computing Systems*, 1–7.
- Lee, H.-P. H.; Sarkar, A.; Tankelevitch, L.; Drosos, I.; Rintel, S.; Banks, R.; and Wilson, N. 2025. The Impact of Generative AI on Critical Thinking: Self-Reported Reductions in Cognitive Effort and Confidence Effects From a Survey of Knowledge Workers. In *Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems*, CHI '25. New York, NY, USA: Association for Computing Machinery. ISBN 9798400713941.
- Lepp, H.; and Smith, D. S. 2025. "You Cannot Sound Like GPT": Signs of language discrimination and resistance in computer science publishing. In *Proceedings of the 2025 ACM conference on fairness, accountability, and transparency*, 3162–3181.
- Li, M.; Dickhaut, E.; Bruhin, O.; Wache, H.; and Weritz, P. 2024a. More Than Just Efficiency: Impact of Generative AI on Developer Productivity. In *30th Americas Conference on Information Systems, AMCIS 2024*. United States: Association for Information Systems. Publisher Copyright: © 2024 30th Americas Conference on Information Systems, AMCIS 2024. All rights reserved.; 30th Americas Conference on Information Systems, AMCIS 2024, AMCIS 2024 ; Conference date: 15-08-2024 Through 17-08-2024.
- Li, Z.; Liang, C.; Peng, J.; and Yin, M. 2024b. The Value, Benefits, and Concerns of Generative AI-Powered Assistance in Writing. In *Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems*, CHI '24. New York, NY, USA: Association for Computing Machinery. ISBN 9798400703300.
- Lillis, T.; and Curry, M. J. 2010. *Academic writing in a global context*. London, England: Routledge.
- McKee, H. A.; and Porter, J. E. 2020. Ethics for AI Writing: The Importance of Rhetorical Context. In *Proceedings of the AAAI/ACM Conference on AI, Ethics, and Society*, AIES '20, 110–116. ACM.
- Parasuraman, R.; and Riley, V. 1997. Humans and Automation: Use, Misuse, Disuse, Abuse. *Human Factors: The Journal of the Human Factors and Ergonomics Society*, 39(2): 230–253.
- Rahnuma, N. 2026. Negotiating Writer Identity in Second Language Writing with Generative AI Support. *Digital Studies in Language and Literature*.
- Robinson, P. 2023. Moral disagreement and artificial intelligence. *AI Soc.*, 39(5): 2425–2438.
- Robles, L. E. R.; and Ek, J. I. 2024. Use of Generative Artificial Intelligence in Educational Environments: An Initial Student Perspective of the Risks and Advantages. In *2024 IEEE Global Engineering Education Conference (EDUCON)*, 1–5.

- Roose, K. 2026. Tokenmaxxing: How AI Agents Are Changing Optimization Behavior. *The New York Times*.
- Tao, S.; Lan, M.; Wang, M.; and Li, H. 2026. Potential risks of generative artificial intelligence integration into K-12 education: A scoping review. *Computers and Education: Artificial Intelligence*, 10: 100561.
- Wang, C. 2024. Exploring Students' Generative AI-Assisted Writing Processes: Perceptions and Experiences from Native and Nonnative English Speakers. *Technology, Knowledge and Learning*, 30(3): 1825–1846.
- Xiao, Y.; Hancock, C.; Agrawal, S.; Mehandru, N.; Salehi, N.; Carpuat, M.; and Gao, G. 2025. Sustaining Human Agency, Attending to Its Cost: An Investigation into Generative AI Design for Non-Native Speakers' Language Use. In *Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems*, CHI '25. New York, NY, USA: Association for Computing Machinery. ISBN 9798400713941.
- Yun, B.; Su, R.; and Yi Wang, A. 2026. AI and My Values: User Perceptions of LLMs' Ability to Extract, Embody, and Explain Human Values from Casual Conversations. In *Proceedings of the 2026 CHI Conference on Human Factors in Computing Systems*, CHI '26. New York, NY, USA: Association for Computing Machinery. ISBN 9798400722783.
- Zhai, X. 2022. ChatGPT User Experience: Implications for Education. *SSRN Electronic Journal*.
- Zhang, Y.; Yuan, Y.; and Yao, A. C.-C. 2023. Meta prompting for AI systems. *arXiv preprint arXiv:2311.11482*.
- Zhao, X. 2023. Leveraging artificial intelligence (AI) technology for English writing: Introducing wordtune as a digital writing assistant for EFL writers. *Relc Journal*, 54(3): 890–894.