

# An autoethnographic study of ESL academic writing with ChatGPT: from psychological insights to the SUPER framework

Hsiao-Ping Hsu

To cite this article: Hsiao-Ping Hsu (2025) An autoethnographic study of ESL academic writing with ChatGPT: from psychological insights to the SUPER framework, Cogent Education, 12:1, 2543113, DOI: [10.1080/2331186X.2025.2543113](https://doi.org/10.1080/2331186X.2025.2543113)

To link to this article: <https://doi.org/10.1080/2331186X.2025.2543113>



© 2025 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 25 Aug 2025.



Submit your article to this journal [↗](#)



Article views: 72



View related articles [↗](#)



View Crossmark data [↗](#)

# An autoethnographic study of ESL academic writing with ChatGPT: from psychological insights to the SUPER framework

Hsiao-Ping Hsu 

School of STEM Education, Innovation and Global Studies, Institute of Education, Dublin City University, Dublin, Ireland

## ABSTRACT

While the practical benefits of English as a Second Language (ESL) higher education (HE) students' use of ChatGPT for academic writing have been explored, psychological factors remain under-investigated. This autoethnographic study examines how ESL HE students use ChatGPT to address psychological challenges in academic writing. Guided by Maslow's hierarchy of needs and the concept of Escapism, this study provides a critical reflection on the author's lived experience of academic writing challenges, first encountered during doctoral studies in the United States and continuing into an assistant professorship in Ireland. Data sources include a personal diary, work logs, notes from academic writing classes, and track-changed drafts annotated by writing tutors and editors. These materials were analysed using reflective thematic analysis to interpret the author's experiences. Findings indicate that ChatGPT helps fulfil physiological and safety needs, fosters belonging, enhances self-esteem, and supports self-actualisation. Despite providing temporary psychological relief from writing challenges, concerns persist about overreliance and potential breaches of academic integrity. The study proposes a user-friendly SUPER framework comprising five interconnected principles to guide ESL HE students and general writers in ethically and effectively using ChatGPT. Researchers and practitioners are recommended to share, validate, and refine this framework.

## ARTICLE HISTORY

Received 18 June 2025  
Revised 28 July 2025  
Accepted 30 July 2025

## KEYWORDS



Autoethnography; ChatGPT; English as a second language; escapism; generative artificial intelligence; hierarchy of needs theory

## SUBJECTS

Digital Learning; Educational Technology; Language Education; Applied Linguistics; Teaching & Learning - Education; Theories of Learning; Education - Social Sciences

## Introduction

As international student enrolment in English-medium higher education (HE) continues to rise (British Council, 2024), the ability of English as a Second Language (ESL) students to write effectively in English is increasingly essential for academic success and participation. However, ESL HE students often face psychological challenges in academic writing (Cheng, 2004; Gupta et al., 2022; Li, 2024; Wette & Furneaux, 2018) due to their unfamiliarity with the norms and expectations of English academic writing (Maringe & Jenkins, 2015), as well as a lack of knowledge about rhetorical conventions and discourse structures (Cheng, 2004; Li, 2024; Wette & Furneaux, 2018). Poor academic writing skills are a major factor contributing to low academic performance among ESL students (Moses & Mohamad, 2019). The pressure to convey complex ideas in a non-native language can lead to frustration (Woodrow, 2011) and reduced sense of belonging and self-esteem (Jebreil et al., 2015; Zhang, 2022). These psychological challenges may inhibit their academic participation and engagement because they may feel they do not belong or are not fully recognised by native speakers (Parra et al., 2014). Such feelings can further hinder their motivation to engage in academic writing tasks (Zotzmann & Sheldrake, 2021), impeding personal growth and self-fulfilment in their academic journey (Zeligman, 2022). In response, ESL HE students might seek comfort in familiar cultural practices or communities, which may divert their focus from engagement with scholarly discussion and community (Hyland, 2002; Rahnuma, 2023).

**CONTACT** Hsiao-Ping Hsu  [hsiao-ping.hsu@dcu.ie](mailto:hsiao-ping.hsu@dcu.ie)  School of STEM Education, Innovation and Global Studies, Institute of Education, Dublin City University, C107, St Patrick's Campus, Dublin, D09AW21, Ireland

© 2025 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

In light of these persistent psychological and academic challenges, ESL HE students are increasingly turning to large language model-based generative artificial intelligence (LLM-based GenAI) tools, such as ChatGPT, as potential supports for academic writing (Al-Khresheh, 2024; Barrot, 2023; Kostka et al., 2023). As the most widely adopted GenAI tool among HE students globally (Digital Education Council, 2024), ChatGPT has been the focus of a number of studies exploring its opportunities and challenges in supporting academic writing among ESL students (Mahapatra, 2024; Ozfidan et al., 2024; Tseng & Lin, 2024; Yuan et al., 2024). Access to ChatGPT can help the students build writing confidence (Yuan et al., 2024), increase writing efficiency (Tseng & Lin, 2024), improve grammar and spelling (Ozfidan et al., 2024) and provide formative feedback (Mahapatra, 2024). This personalised support makes writing more manageable and productive for ESL learners (Dillon et al., 2024). However, challenges such as overreliance on the tool (Candilas et al., 2024), diminished critical thinking (Yuan et al., 2024), and concerns regarding contextual reliability, accuracy, and ethics (Ozfidan et al., 2024) have also been widely documented. While the practical benefits of ESL students' use of ChatGPT for academic writing were preliminarily investigated, the psychological factors influencing their use of ChatGPT remain less explored. For example, how does frustration with English academic writing motivate ESL HE students to use ChatGPT? How do ESL HE students use ChatGPT to cope with the pressure of achieving a similar level of academic writing quality as their native-speaking peers?

Building on recent empirical findings on the impact of ChatGPT adoption on teachers' psychological needs (Zhou et al., 2024), this study addresses that gap by exploring how ESL HE students use ChatGPT not only to improve writing but to manage psychological discomfort tied to academic writing in a second language. Specifically, it investigates how the tool may help fulfil psychological needs or provide relief from writing-related anxiety, and what risks arise from this use. To explore these questions, I use an autoethnographic approach, drawing on my lived experience as an ESL doctoral student in the United States. I reflect on the psychological challenges I faced and how the adoption of ChatGPT in 2022 reshaped my relationship with English academic writing. My reflections are analysed using reflective thematic analysis, guided by Maslow's Hierarchy of Needs (1943, 1954) and the concept of Escapism (Evans, 2001; Tuan, 1998). By addressing how psychological experiences influence ESL HE students' engagement with GenAI tools like ChatGPT, this study complements existing research on responsible and ethical use by drawing attention to often-overlooked emotional and motivational dimensions of academic writing.

The motivation for writing this paper originated from my frustrations and self-doubt with English academic writing. Throughout my doctoral study in the United States, I struggled significantly and had to work hard to meet the required standards. Even after becoming an assistant professor at an English-speaking university in Ireland, I continued to face intertwined language barriers, frustrations, and motivational challenges in both daily and academic writing. In 2022, my adoption of ChatGPT transformed my approach to writing in English, especially for academic purposes, introducing new opportunities alongside challenges I had not previously encountered. This ongoing engagement with ChatGPT motivated me to reflect on my earlier struggles, leading me to recall the psychological discomfort associated with academic writing and to examine both the benefits and drawbacks of using ChatGPT as a writing aid. This reflection, in turn, allowed me to explore and interpret the psychological factors influencing how ESL HE students use ChatGPT in their academic writing. In summary, this reflective study poses two research questions:

1. If ChatGPT had been available during my doctoral studies, would it have alleviated my frustrations with English academic writing while also fulfilling my needs for physiological safety, security, belonging, self-esteem, and self-actualisation?
2. Could ChatGPT have provided an escape from my psychological challenges, and how might this, in turn, have influenced the development of my English academic writing skills?

## Theoretical framework

This study integrates Maslow's Hierarchy of Needs Theory (1943, 1954) and Escapism (Evans, 2001; Tuan, 1998) to facilitate a theoretical framework. Maslow's Hierarchy of Needs Theory (1943, 1954) suggests

five categories of needs: physiological, safety, love and belonging, esteem, and self-actualisation. The order of these need categories might not be fixed and can depend on personal circumstances (Maslow, 1987). This theory has been widely applied to analyse psychological factors behind technology adoption behaviours (Backonja et al., 2014; Cheng & Yeh, 2009; Huang et al., 2025). For example, Zhou et al. (2024) applied this theory to investigate the psychological needs driving the teachers' use of ChatGPT, examining its impact and how it fulfils essential psychological requirements. Therefore, applying this theory to explore and interpret the psychological factors behind my and ESL HE students' use of ChatGPT for academic writing is an ideal option.

Escapism refers to the tendency to distract oneself from real-life problems, for example, by using online games to avoid confronting them (Calleja, 2010; Evans, 2001; Tuan, 1998; Yee, 2006). Escapism was constantly linked to negative results, such as Internet addiction (Ohno, 2016) and excessive Internet use (Jouhki et al., 2022). However, Tuan (1998) offered positive insights into individuals seeking to escape undesirable experiences and transform their circumstances. According to Tuan, escapism is not merely a passive avoidance of discomfort but a proactive coping strategy for real-life challenges. Tuan further suggested that all cultural practices—whether art, literature or even urban design—serve as ways to reimagine and reshape our world. In this regard, escapism can be regarded as not only a coping mechanism but also a source of innovation. This study extends Tuan's perspective by interpreting ESL HE students' use of ChatGPT as a cultural practice of the GenAI age. Moreover, it serves as a form of escapism that transforms psychological challenges into innovative academic expression while enhancing opportunities for self-regulated learning (Hsu, 2023; Wang, 2024b). For example, an ESL HE student might use ChatGPT to refine an unpolished essay with grammatical and rhetorical errors into a clear and creative narrative, thereby learning from comparing their original draft with the GenAI-generated revision. In summary, this study combines Escapism's negative and positive perspectives to interpret how using ChatGPT might have allowed me to deal with the psychological challenges of academic writing in a second language while causing challenges and providing opportunities for growth and development.

This study integrates Maslow's Hierarchy of Needs Theory (1943, 1954) with the concept of Escapism (Calleja, 2010; Evans, 2001; Tuan, 1998; Yee, 2006) to provide a dual lens for interpreting both my earlier struggles with English academic writing before adopting ChatGPT and, more broadly, the motivation and psychological challenges influencing ESL HE students' use of ChatGPT for academic writing. Maslow's theory highlights that five categories of psychological needs drive these students' use of ChatGPT for academic writing. However, when the fulfilment of these needs is threatened, escapism offers an alternative explanation for their engagement with ChatGPT—helping them avoid the psychological challenges associated with academic writing difficulties. While escapism can suggest a withdrawal from real-life struggles, it also serves as a proactive strategy, enabling students to transform psychological barriers into opportunities for creative and self-regulated learning.

## Methods

### *Autoethnography: reflective personal narrative that interprets broader cultural practices*

Autoethnography is a qualitative research method that involves the researcher exploring their own experiences through reflective and emotionally salient narrative accounts in order to expose and understand the broader cultural practices and social phenomena in which they are embedded (Edwards, 2021; Ellis et al., 2011; Starr, 2010). Autoethnography is increasingly employed in educational technology research (Mao et al., 2024) as a means for researchers and practitioners to share their first-hand experiences and practices with broader audiences (Ren, 2022; Seo, 2019; Walster, 2017). For example, Seo (2019) explored his experiences as a blind maker to analyse the shared cultural experiences of other blind makers in online communities. His reflective process highlights marginalised groups' broader challenges in the maker movement. This paper adopts an autoethnographic lens by critically reflecting on my psychological challenges in English academic writing during my PhD studies and early career as an assistant professor ("auto") to describe and interpret ("graphy") the factors influencing ESL HE students' motivation to use ChatGPT in academic writing ("ethno") (Adams et al., 2017). This approach aligns with the fundamental need for researchers to engage in autoethnographic research, enabling deep reflection on

their educational experiences. Through this process, they can understand how these experiences have shaped them while also analysing broader cultural phenomena (Hughes & Pennington, 2016).

In 2015, as an ESL student pursuing a doctoral degree in the United States with the goal of becoming an academic staff member for personal fulfilment and career advancement, I often found academic writing to be a significant challenge. Before starting my doctoral studies, I invested a considerable amount of time and effort in preparing for the Test of English as a Foreign Language (TOEFL) and the Graduate Record Examinations (GRE) to gain admission to US universities offering a PhD programme in learning technologies. After being admitted to a PhD programme in learning technologies, I was surprised by the rigorous academic writing requirements and constantly doubted whether I could fulfil them. As a result, I spent considerable time and energy at the writing centre, refining my assignments and polishing my English writing skills. My daily routine involved a constant back and forth between the classrooms, the writing centre, and the library. Did I find this time enjoyable? Not particularly. When I received constructive feedback from a native English-speaking tutor, my initial reaction was often frustration and shame, even though I appreciated the feedback. I had to take a deep breath to accept the feedback, lower my head, and revise my work, only to face another challenge and repeat the process—frustration and shame, deep breath, acceptance, and revision, over and over. This constant posture of having my head down made me feel like a powerless child being scolded by their parents (Kuo, 2011). A 45-minute session could lead to a strong sense of shame and self-doubt, making me constantly question whether I should quit the PhD programme and return to my home country. Each time I left the writing centre, although I appreciated the opportunity to improve my academic writing skills, the intense frustration and sense of shame often prevented me from wanting to go back to the writing centre. My psychological challenges were very similar to those described by previous studies, such as anxiety (Woodrow, 2011), reduced self-esteem, and fear of negative evaluation (Jebreil et al., 2015; Zhang, 2022). However, I recognised that without improving my writing skills, I risked losing merit-based financial support from sponsors, facing expulsion from the university, feeling ashamed in front of my parents and close friends back in my home country, and, more importantly, losing the chance to prove to myself that I can succeed and thrive in a foreign environment. These fears constantly pulled me back to the writing centre, forcing me to confront the frustrating revision cycle. Fortunately, I improved my English academic writing to a level sufficient for completing my doctoral study and advancing my career to become an assistant professor in Ireland. Despite being an academic staff member, I constantly struggled with intertwined language barriers, frustrations, self-doubt and motivational challenges in daily written communication and academic writing. I even wished to move to an institution where my native language was the primary communication medium—until I discovered ChatGPT.

Shortly after ChatGPT was released in late 2022, I began exploring its potential to enhance my academic writing, particularly for proofreading and editing (van Niekerk et al., 2025; Yuan et al., 2024). I examined how ChatGPT could function as an assistive resource to refine my writing while ensuring that it complemented rather than replaced my own scholarly efforts (Imran & Almusharraf, 2023; Mahapatra, 2024; Ozfidan et al., 2024). In late 2023, while responding to a special issue call from a digital learning academic journal, I experimented with ChatGPT's capacity to generate an academic manuscript from scratch (Hsu 2023). Throughout this process, I encountered the field of prompt engineering and recognised its importance in generating well-structured research papers with focused research questions, a comprehensive literature review, a sound methodology, and clear findings and implications. Prompt engineering involves designing and refining prompts based on AI responses (Ekin, 2023) and is crucial in enhancing the relevance and accuracy of AI-generated content (Cain, 2024; Lo, 2023). More importantly, I discovered how prompt engineering could be applied to collaborate effectively with ChatGPT to enhance clarity, coherence, and logical progression in English academic writing (Bozkurt et al., 2024). For example, I experimented with prompting ChatGPT to proofread and suggest improvements in structure, logical flow, grammar, and syntax, using its feedback to refine my drafts (Jacob et al., 2025). This approach also allowed me to recognise ChatGPT as a valuable self-regulated learning tool for the development of English writing skills (Wang, 2024b), particularly for ESL scholars and students (Wang, 2024b). However, I remained mindful of the risks associated with AI, such as hallucinations and potential bias (van Niekerk et al., 2025; Zhao et al., 2024). To mitigate these risks, I critically evaluated AI-generated responses using my content knowledge and cross-referenced multiple reliable sources to verify their



accuracy (van Niekerk et al., 2025; Yuan et al., 2024). Additionally, I became increasingly aware of the potential for overreliance on ChatGPT (Candilas et al., 2024), and this awareness led me to continuously reflect on maintaining my unique perspective and insights (Ozfidan et al., 2024). To maintain ethical standards and academic integrity, I treated ChatGPT as a supportive tool rather than a substitute and avoided involving sensitive information, and I regularly checked my independence as a writer (Harunasari, 2023).

### **Data sources and analysis**

The data sources outlined in Table 1 informed this autoethnographic exploration of my psychological challenges associated with English academic writing. These sources included my diary during my PhD studies, a work log documenting tasks and the time allocated to each, notes taken during academic writing classes, and track-changed documents with comments from writing centre tutors, proofreaders, and editors. Collectively, these materials provided rich insights into my experiences, particularly the emotional and motivational dimensions linked to Maslow's hierarchy of needs (e.g. belonging and esteem) and the tendency toward escapism when facing writing-related frustrations. By integrating these personal records, I sought to deepen my understanding of the psychological factors that shaped my writing journey and influenced my adoption of ChatGPT. This, in turn, provided a foundation for interpreting the broader psychological factors driving ESL HE students to use ChatGPT as a support tool for academic writing.

This study employed reflective thematic analysis as outlined by Braun and Clarke (2022), which views theme development as an active and interpretive process shaped by the researcher's reflexivity and engagement with the data. The analysis followed an inductive approach in the initial phase, allowing patterns of meaning to emerge from the author's autoethnographic data, including diaries, writing logs, and annotated documents. Rather than applying a predetermined coding framework, themes were constructed through immersive and iterative reflection on the author's lived experiences. These inductively developed themes were subsequently interpreted and organised through a deductive lens, drawing on two theoretical frameworks: Maslow's Hierarchy of Needs (1943, 1954) and the concept of Escapism

**Table 1.** Overview of the data sources.

Category	Description
Diary	During my PhD programme, I kept a diary to document my daily life, particularly my experiences at school, including moments of happiness, surprise, sadness, frustration, and stress. Composing these diary entries provided a channel for self-reflection and emotional release. For this study, this source captures my psychological challenges in academic writing, moments when my needs (e.g. belonging, esteem) were unmet, and instances of escapist behaviour—such as postponing writing tasks—mainly due to academic pressure and the challenges of writing in English.
Work log	Inspired by senior academics, I have maintained a daily work log since 2012 to record tasks and track the time spent on academic and professional activities, including attending courses, writing assignments, reading academic journal articles, and drafting journal papers. In the context of this study, reviewing these entries highlights the extent of my struggles and hard work with academic writing, especially when a significant portion of my time was dedicated to writing-related tasks. The log also reveals instances of avoidance or procrastination (escapism), evident in periods when no writing-related tasks during an academic semester were recorded for an extended timeframe.
Notes from English writing classes	I attended multiple academic writing workshops, both in group settings and one-on-one sessions, at various stages of my PhD studies. In these sessions, I took notes on key writing techniques, tutor and peer feedback, and peer insights. These notes documented the development of my writing skills and served as a record of my reflections. At times, I included emojis to capture my emotions during the classes. For instance, if a peer or tutor unintentionally criticised my writing in a way that made me struggle, I would draw a sad face to mark the emotional impact of the moment. Later, I would elaborate on this experience in my diary, providing further details on how it affected my confidence and motivation. Sometimes, a smiley was drawn to indicate a sense of achievement after receiving positive feedback from a tutor or peer. In the context of this study, these notes highlight my need for belonging and esteem within a learning community. They also reveal moments when I felt unrecognised by my peers, which, in turn, could trigger escapist tendencies and behaviours (e.g. wanting to skip the next class).
Track-changed documents with comments	This collection includes assignment essays and drafts of conference papers and journal articles that were proofread and edited by native English-speaking editors and writing centre tutors. I retained both the original and revised versions to learn from my mistakes and improve my writing. Reflecting on these documents reveals recurring challenges—such as grammar, syntax, and structure—and their emotional impact. They also demonstrate my efforts to achieve high academic performance to maintain my scholarships and fulfil my needs for belonging, self-esteem, and self-actualisation. At the same time, they highlight moments when frustration led me to disengage or avoid writing altogether.

(Evans, 2001; Tuan, 1998). This theoretically informed inductive RTA enabled the integration of personal insight with conceptual understanding, aligning with Braun and Clarke's emphasis on researcher subjectivity, theoretical flexibility, and meaning-oriented analysis.

## Results

### *ChatGPT as a catalyst for psychological well-being: a Maslowian perspective*

The first research question asks whether, had I had access to ChatGPT during my doctoral studies, it would have alleviated my frustrations with English academic writing and, in turn, fulfilled my needs for physiological security, safety, love and belonging, esteem, and self-actualisation. The answer is yes. Specifically, poor academic writing skills are a major factor contributing to low academic performance among ESL students (Moses & Mohamad, 2019). This, in turn, can result in the loss of merit-based scholarships, affecting their ability to meet basic physiological and safety needs (e.g. affording grocery shopping, accommodation and utility bills). For example, during my PhD studies, I had to maintain a specific grade point average (GPA) each semester to meet my scholarship sponsor's requirements. ChatGPT could have provided a sense of security and safety by offering immediate and personalised feedback in refining my academic writing, helping me maintain my GPA and retain my scholarship.

Poor academic performance is often accompanied by the fear of disappointing family members and losing peer recognition. This is especially true for international students who leave home carrying the expectations of family and friends, as was the case for me. Therefore, using ChatGPT to support English academic writing to gain a strong GPA could preserve positive family relationships and gain peer recognition, fulfilling my need for a sense of belonging. Furthermore, academic struggle is frequently associated with low self-esteem among ESL students. For example, I often felt unintelligent because I struggled to express myself academically and write effectively, especially compared to my native English-speaking peers. I felt particularly inadequate when writing in English, a challenge I had never encountered when writing in my mother tongue. This sense of self-deficiency became even more apparent when writing for academic purposes (Nichols-Besel et al., 2022), especially during my PhD studies, as I struggled to express my understanding of literature and distinguish between academic and everyday language. With ChatGPT, I could have prompted it to support my academic expression of understanding of literature, convert my colloquial writing into academic language, and learn from its responses after verifying them with reliable sources. Thus, using ChatGPT to assist academic writing could offer confidence and preserve self-esteem. In other words, I could have felt empowered and no longer viewed myself as inferior to my native-speaking peers in academic writing due to linguistic insecurity.

Pursuing a HE degree abroad is often considered a significant step towards self-actualisation for ESL HE students. I resigned from a permanent teaching position at a highly regarded post-primary school to pursue a PhD, aiming to achieve my goal of becoming a professor for career progression and self-actualisation. In this sense, producing high-quality academic writing is crucial to achieving these goals. ChatGPT could serve as an assistive tool in this regard, thereby enabling self-fulfilment. Overall, access to ChatGPT during my doctoral studies could have helped meet each category of Maslow's needs—ensuring basic physiological and safety requirements through scholarship retention, fostering a sense of belonging and self-esteem via enhanced academic performance and family and peer recognition, and ultimately paving the way for self-actualisation.

### *Escape from psychological discomfort: thrived or trapped*

The second research question is whether ChatGPT could have helped me escape from the psychological challenges and how this might, in turn, have influenced my development of academic writing skills. As articulated in the previous section, I often felt overwhelmed by academic writing in English, especially in grammar, vocabulary, syntax and adhering to APA style. Moreover, the interference of my mother tongue further complicates the process, as differences in writing conventions between my mother tongue and English added an extra layer of challenges. At times, I even felt frustrated with my mother tongue, wondering why it was not English and questioning its value. This self-doubt about my cultural origins not only

lowered my confidence and self-esteem but also led to a strong desire to escape psychological discomfort. In this context, ChatGPT could have served not only as a linguistic assistant but also as a means of escape from language constraints and self-doubt. It would have helped me avoid writing-related anxiety while enhancing my overall motivation. Furthermore, it would have allowed me to express my authentic thoughts more freely without fear of judgment or comparison to native-speaking peers.

I would likely have relied heavily on ChatGPT to escape the stress of academic writing, potentially substituting it for the rigours of essential academic training. The data highlighted concerns that such overreliance could have weakened foundational writing skills, compromised the development of academic writing competence, and diminished my sense of authorial agency. In addition, frequent use of ChatGPT-generated content might have limited opportunities for meaningful engagement with academic materials. For example, when asked to comment on a research article, I might have used ChatGPT to summarise the article and draft a response on my behalf. Furthermore, I could have been tempted to write in my mother tongue and then use ChatGPT to translate it into English. This process may have introduced subtle errors and inconsistencies, thereby hindering the development of effective cognitive strategies. Such strategies include reflecting on my own drafts, identifying and correcting errors, and developing the skills necessary to master academic writing conventions in English.

In summary, while ChatGPT can help ESL HE students overcome the psychological challenges associated with academic writing, it is essential to use it effectively, critically, responsibly, and ethically. Overreliance on the tool may lead students to bypass writing tasks, missing valuable self-regulated learning opportunities to develop independent thinking, critical thinking, and academic writing skills.

## Discussion

This discussion interprets the findings through the dual lenses of Maslow's hierarchy of needs and Tuan's concept of escapism. It first examines how ChatGPT may satisfy ESL students' physiological and safety needs, then moves to belonging, esteem, and self-actualisation. The analysis subsequently weighs the short-term psychological relief afforded by ChatGPT against the long-term costs of over-reliance, and concludes by outlining a balanced, ethical framework for using ChatGPT and other similar GenAI tools in academic writing.

### *From stability to self-actualisation: ChatGPT and the psychological needs of ESL HE students*

The findings highlight ChatGPT's potential to support ESL HE students' psychological well-being by helping meet basic physiological and safety needs. For many international students, maintaining academic performance is not only a matter of academic success but also a condition for retaining scholarships that enable them to cover essential living costs, such as accommodation, food, and utilities (Mullins et al., 1995). In this light, a timely, personalised writing assistance may offer a sense of academic and financial stability, particularly for those navigating the dual pressures of linguistic adaptation and economic survival. My own experiences further illustrate and extend this perspective, demonstrating how immediate, personalised feedback from ChatGPT could substantially reduce scholarship-related anxieties, contributing to a more stable and secure academic experience. This interpretation advances existing research on ChatGPT's role in academic success (Mahapatra, 2024; Ozfidan et al., 2024; Tseng & Lin, 2024; Yuan et al., 2024) by revealing its potential contribution to material and financial stability.

Furthermore, the reflections highlight that family expectations and the desire for peer recognition are key sources of psychological stress for international students (Kuo, 2011; Moensted, 2022; Nsiah, 2017). The present findings echo these studies by suggesting that improved academic performance, supported by tools like ChatGPT, may help reduce these pressures by enhancing students' feelings of belonging and acceptance. Previous studies have argued that effective language support not only contributes to academic success but also strengthens family and peer relationships among ESL HE students (Kristiana et al., 2022; Oyeniyi et al., 2016). Building on previous scholarly work, this study suggests that ChatGPT may play a role in reinforcing family ties and fostering peer relationships between ESL HE students and their native-speaking peers.



In relation to self-esteem, the findings reinforce previous studies concerning the relationship between linguistic insecurity and feelings of inadequacy among ESL students (Gupta et al., 2022; Kuo, 2011; Telbis et al., 2014). The analysis enriches the existing literature by demonstrating specifically how ChatGPT might mitigate these feelings through tailored academic language support (Jacob et al., 2025). By providing direct assistance in articulating complex academic ideas, ChatGPT could empower ESL students and reduce perceived intellectual disparities compared to native-speaking peers. This study further supports Candilas et al. (2024), who found that ChatGPT increased students' confidence and reduced anxiety in academic tasks. Their findings imply that ChatGPT may play a role in supporting the esteem needs of ESL students by helping them feel more capable and academically competent. Finally, my reflections on self-actualisation align closely with prior research, which has suggested that achieving academic excellence is a vital component of self-fulfilment for ESL HE students (Chirkov et al., 2007; Du & Jackson, 2021). This study uniquely contributes to this discourse by detailing the potential supportive role of ChatGPT in fulfilling self-actualisation needs through facilitating high-quality academic writing.

Taken together, these findings suggest that ChatGPT plays a meaningful role beyond academic writing support. For ESL HE students, it offers timely assistance that helps stabilise academic performance, often essential for maintaining financial security through scholarships. It also alleviates emotional strain stemming from family expectations and peer comparisons by enhancing students' confidence and sense of belonging. Furthermore, by reducing linguistic insecurity and supporting the articulation of complex academic ideas, ChatGPT contributes to the development of self-esteem. Ultimately, this form of support may help ESL HE students progress toward both academic and personal fulfilment, offering a pathway to self-actualisation.

### ***Escapism through ChatGPT: balancing short-term relief and long-term costs***

The findings illustrate my tendency to rely on ChatGPT as a strategy to cope with psychological discomfort and stress associated with English academic writing. Such findings resonate with Tuan's (1998) conceptualisation of escapism, in which individuals engage in activities to avoid social pressures and cultural expectations, seeking temporary refuge and stress relief (Calleja, 2010). Writing itself is a cultural practice, reflecting how individuals interact within communities and express their identities and experiences (Hsu et al., 2012; Landis, 2003). ESL students, constrained by limited proficiency, frequently struggle to articulate their ideas clearly and confidently (Wirantaka, 2016). Often labelled culturally deficient (Nichols-Besel et al., 2022; Ryan, 2011), they are vulnerable to deficit thinking (Lee et al., 2019; Smit, 2012), which may lead to social isolation and tensions with teachers, peers, and the wider academic community (Heng, 2017; Leask, 2015). ESL students also frequently perceive themselves as being judged unfairly compared to native-speaking peers (Nichols-Besel et al., 2022). In this context, my reflections suggest that using ChatGPT as a supportive tool could temporarily ease social and cultural pressures by providing timely feedback and explicit guidance (Al-Khresheh, 2024; Barrot, 2023; Kostka & Toncelli, 2023). It can also help them maintain their unique authorial voice and agency (Jacob et al., 2025) while freeing them from the fear of judgment or unfavourable comparisons with native-speaking peers (Ryan, 2011; Smit, 2012; Yuan et al., 2024).

Tuan (1998) noted that while escapism is a natural and often positive response, it becomes problematic when it replaces meaningful engagement with real-life tasks (Calleja, 2010; Yee, 2006). In academic writing, overreliance on ChatGPT may hinder the development of foundational writing skills, independent thinking and authorial agency (Wang, 2024b), as students might depend on it to produce their work instead of engaging authentically with learning materials (Harunasari, 2023). Rather than formulating and refining their original ideas, some students may use ChatGPT to generate entire essays, passing off the AI-produced content as their own (van Niekerk et al., 2025). This issue is compounded by a tendency to accept AI-generated content uncritically, which can weaken independent writing skills, reduce opportunities of self-regulated learning, diminish critical thinking, and limit creativity (Long & Kim, 2024; Yuan et al., 2024), as well as raise concerns about academic integrity and self-regulated learning (Al-Khresheh, 2024; Long and Kim 2024; Mahapatra, 2024). In addition, some ESL students may choose to draft their work in their native language and then translate it into English (Cennetkuşu, 2017; Li, 2024). However, ChatGPT's translation accuracy and quality can be inconsistent, particularly for non-English-centric tasks,

potentially introducing errors that students with limited English proficiency might overlook (Baek et al., 2024; Peng et al., 2023). This approach may also impede the development of effective thinking strategies essential to mastering English academic writing conventions (Dillon et al., 2024).

In summary, this study builds on prior research highlighting ChatGPT's practical value in writing support, such as improving writing confidence (Yuan et al., 2024), writing efficiency (Tseng & Lin, 2024), grammar, spelling (Ozfidan et al., 2024) and providing feedback (Mahapatra, 2024). It further contributes by introducing a less-explored perspective, using Maslow's hierarchy of needs and the concept of Escapism to show how ChatGPT may help ESL HE students manage psychological stress, meet motivational needs, and cope with emotional challenges in academic writing. However, from the perspective of Escapism, overreliance on GenAI tools may lead students to bypass writing tasks and miss valuable self-regulated learning opportunities to develop independent thinking, critical thinking, and academic writing skills. To support a balanced approach, the following section presents a framework to help ESL HE students, as well as other users seeking writing support, use ChatGPT effectively and responsibly. The proposed strategies aim to enhance psychological well-being, strengthen English academic writing skills, and uphold academic integrity.

### ***The SUPER framework: a path for effective and ethical use of ChatGPT for academic writing***

The *SUPER* framework (Table 2) is designed to promote ChatGPT's effective and ethical use in academic writing. It comprises five interrelated principles: Support not a Substitute, Unique Perspective, Prompt Engineering, Ethical Use, and Reflection. An infographic is created to illustrate the principles visually for better promotion of the proposed framework (Figure 1). These principles work together to provide a structured approach that helps ESL and general writers retain their original thoughts and insights while preventing overreliance on ChatGPT, particularly when seeking to overcome psychological challenges associated with writing. Additionally, the framework fosters the development of critical thinking and independent writing skills while ensuring compliance with institutional guidelines and adherence to academic ethics and integrity.

#### ***Support not a substitute***

*Support not a Substitute*, as the first principle, emphasises ChatGPT's role as a supportive tool in academic writing rather than a replacement for the writer's authentic efforts (Chan & Hu, 2023; Wang, 2024b). This principle underpins effective and ethical AI-assisted writing by ensuring that writers retain their agency and identity through their intellectual contributions (Baek et al., 2024; Harunasari, 2023). Internalising this principle helps prevent overreliance on ChatGPT and other LLM-based GenAI tools (Chan & Hu, 2023), which could otherwise diminish writers' unique perspectives and insights (Baek et al., 2024). This concern is particularly relevant for non-native English writers, who have been found to use ChatGPT more frequently (Baek et al., 2024). While ChatGPT can be a valuable aid for brainstorming (Naznin et al., 2025), developing essay outlines (Zhao et al., 2024), and assisting with proofreading and editing (Barrot, 2023), its outputs should be regarded as preliminary drafts rather than finalised content. For instance, a student might use ChatGPT to generate a rough outline; however, they must critically

**Table 2.** Overview of the *SUPER* framework.

Principle	Description
Support not a substitute	Treats ChatGPT as a supportive resource that enhances academic writing by generating initial ideas, facilitating brainstorming, and assisting with proofreading and editing, while ensuring that the writer's intellectual effort and authentic voice are not substituted
Unique perspective	Ensures that every written piece reflects the writer's experiences, insights, and engagement with academic materials. This principle prevents overreliance on ChatGPT and other LLM-based GenAI tools while retaining originality and creativity of the work
Prompt engineering	Involves crafting clear, concise, and specific prompts for ChatGPT and other LLM-based GenAI tools, followed by iterative refinement to optimise the quality of AI-generated outputs
Ethical use	Requires strict adherence to institutional policies to maintain academic ethics and integrity, with proper citation and transparent disclosure of AI contributions being essential
Reflection	Involves a continuous process of self-assessment throughout the AI-supported writing process. This principle ensures that AI assistance complements rather than replaces the writer's unique perspective, maintaining academic ethics through the iterative evaluation of AI outputs and the refinement of prompts

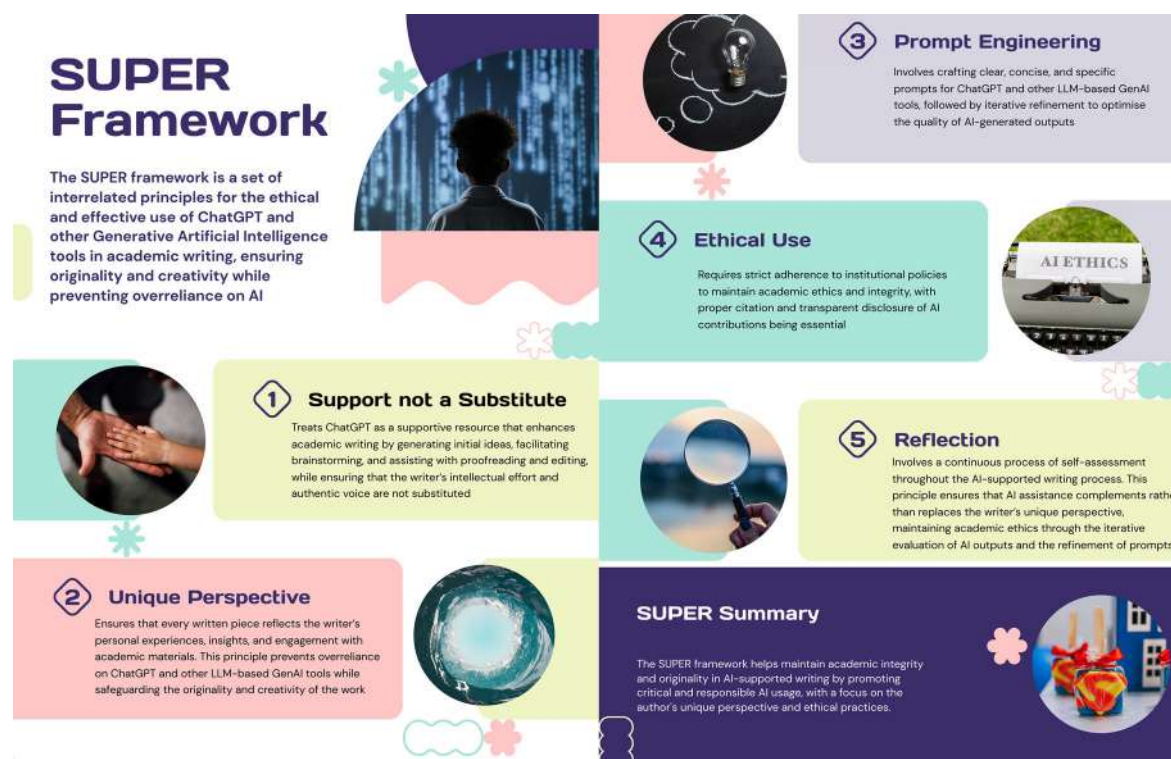


Figure 1. The infographic of the *SUPER* framework.

evaluate the content against reliable sources and refine it through research and reflection to ensure the final text maintains a credible and distinctive scholarly voice (Yilmaz & Karaoglan Yilmaz, 2023; Zou & Huang, 2023).

### Unique perspective

The second principle of Unique Perspective emphasises that a written piece, such as an assignment essay, reflection paper, lesson plan or journal article—must authentically reflect the writer's personal voice, insights, engagement with academic materials, and creative thought (Tseng & Lin, 2024; Wang, 2024a). When using ChatGPT, it is less suggested to rely on it to produce the entire written piece (Harunasari, 2023) as an escapist strategy to deal with psychological discomfort. Instead, writers should first establish their perspectives and then use ChatGPT as a supportive tool to refine their arguments or provide feedback on their ideas (Ozfidan et al., 2024; Tseng & Lin, 2024). Additionally, writers must have a clear and well-defined standpoint to avoid being distracted by AI-generated content that might not align with their intended message (Jacob et al., 2025). For instance, when a pre-service teacher is tasked with creating a lesson plan, they should first outline their objectives and teaching and learning activities for the introduction, development, and conclusion sections. After establishing a clear standpoint, they can prompt ChatGPT to provide feedback or suggest ideas for technology integration. By ensuring that the teacher's original ideas remain at the core of the process, they maintain their unique insights, agency, and creativity while effectively using AI-generated insights to enhance the lesson plan (Hsu, 2025; Hsu et al., 2024; Kehoe, 2023). This principle is closely linked to the first principle discussed above, as using ChatGPT and other LLM-based GenAI tools solely as *supportive* aids helps preserve the writer's unique perspective (Tseng & Lin, 2024) rather than *substituting* their original insights.

### Prompt engineering

The third principle of *Prompt Engineering* involves crafting clear, concise and targeted queries for LLM-based GenAI, such as ChatGPT, and iteratively refining these inputs to optimise response accuracy and relevance (Ekin, 2023). Studies have suggested the importance of structuring prompts clearly, logically, and explicitly with iterative refinement for desirable AI responses (Cain, 2024; Lo, 2023; Oppenlaender

et al., 2024). Two widely cited frameworks exemplify this approach: Cain's model, which focuses on *content knowledge*, *critical thinking*, and *iterative design*, and Lo's CLEAR model, which prioritises prompts that are *concise*, *logical*, *explicit*, *adaptive*, and *reflective*. For example, consider a student seeking feedback on their end-of-semester reflection essay about enabling children to become digitally literate learners. Drawing on Cain's framework, the student first uses *content knowledge* by researching key components of digital literacy and effective teaching strategies to formulate a detailed initial prompt. Rather than issuing a vague request such as "Please provide feedback on my essay," the student instead asks, "Please review my essay on strategies to enable children to become digitally literate learners, focusing on clarity, grammar, syntax, and coherence. Then, please provide step-by-step instructions to help me improve the essay. Finally, please suggest any references from Scopus-indexed academic journals that may inform my points on teaching strategies" This example prompt also exemplifies Lo's CLEAR model: the student's prompt is *concise* and *logical*, *explicitly* specifies the desired AI output, remains *adaptive* and *reflective* through asking for feedback and keeping flexibility for subsequent adjustment. Employing *critical thinking*, the student evaluates the generated feedback for AI hallucinations and accuracy, then *iteratively redesigns* the prompt to address any mistakes and gaps. In summary, the *Prompt Engineering* principle plays a crucial role in determining the quality of AI-generated responses. Moreover, it is conceptually interconnected with the first and second principles. By applying the *Prompt Engineering* principle, writers can obtain more precise AI-generated *support* while ensuring that AI complements rather than *substitutes* their intellectual efforts and engagement with academic materials. This approach also enhances writers' capacity to articulate their unique perspectives effectively.

### Ethical use

The fourth principle refers to the *Ethical Use* of ChatGPT in writing support, requiring strict adherence to AI usage policies and guidelines to maintain academic ethics and integrity (Baek et al., 2024; Jacob et al., 2025;). Academic institutions and journals worldwide have been establishing clear policies and guidelines on the ethical use of AI technologies for writing assistance (European Commission: European Education & Culture Executive Agency, 2023; Jobin et al., 2019; Maslej et al., 2024). There is a strong emphasis on positioning AI as a *supportive* tool rather than a *substitute* for personal intellectual effort (van Niekerk et al., 2025). When AI-generated content is incorporated into a writing task, proper citation and clear disclosure (Steele, 2023) are essential to maintaining transparency in scholarly communication and ensuring accountability (Naznin et al., 2025; Steele, 2023). This principle also reinforces the *Unique Perspective* principle by preventing excessive reliance on AI outputs (Jacob et al., 2025), thereby preserving writers' original intentions and insights (Wang, 2024b). Furthermore, in conjunction with the *Prompt Engineering* principle, it helps ensure that the final written piece remains original and free from misleading information or bias (Baek et al., 2024; Imran & Almusharraf, 2023).

### Reflection

The fifth principle, *Reflection*, refers to the continuous process of reflective practices at the beginning, middle, and end of engagement with ChatGPT for writing assistance (Dillon et al., 2024; Wang, 2024b). Specifically, at the start, writers must reflect on whether their use of AI aligns with relevant policies and guidelines set by those who will review their work (Candilas et al., 2024; Wang, 2024a), in line with the *Ethical Use* principle. For example, an ESL HE student should check the syllabus or consult their professors if unsure whether ChatGPT and other LLM-based GenAI tools are permitted for an assignment. If permitted, they should also clarify any specific requirements or restrictions regarding its use. During the AI-supported writing process, writers should continually assess whether ChatGPT is being used as a *supportive* tool rather than a *substitute* for their intellectual efforts (Wang, 2024a), as emphasised in the *Support not a Substitute* principle. Additionally, they must keep the *Unique Perspective* principle in mind by ensuring that AI-generated content does not replace their creative insights and that their written piece authentically reflects their engagement with relevant academic materials (Jacob et al., 2025), such as required readings and academic literature. Writers should also reflect on their application of the *Prompt Engineering* principle by critically evaluating AI outputs and iteratively refining their prompts to enhance the relevance and accuracy of responses (Harunasari, 2023; Tseng & Lin, 2024). At the final stage, writers should carefully review the completed piece to confirm that their unique perspective has



been effectively conveyed and that all AI usage has adequately been disclosed (Steele, 2023). In summary, the Reflection principle underpins the other four principles by promoting ethical AI use and reinforcing the writer's active, independent role. It ensures that unique thoughts and original insights are expressed through well-structured prompts and critical engagement with AI-generated content.

### **Example: integrating the SUPER framework in academic writing**

To illustrate the integrated application of the five principles, consider a primary student teacher tasked with writing an end-of-semester reflection essay on teaching strategies to help children develop computational thinking. At the start, in line with the *Reflection* and *Ethical Use* principles, the student carefully reviews the syllabus and, if unclear, consults their professor to clarify the extent to which AI assistance is permitted (van Niekerk et al., 2025). Following the *Support not a Substitute* principle, the student identifies key teaching strategies they wish to discuss during the essay and then uses ChatGPT to generate a rough essay outline and brainstorm potential approaches (Candilas et al., 2024), such as game-based learning (Zhao & Shute, 2019), engagement with virtual reality (Hsu, 2024; Sukirman et al., 2021), and constructionist prompting (Hsu, 2025). Throughout this process, the student recognises AI-generated outputs as preliminary drafts that require further evaluation and refinement rather than as final content. As an example of using the *Prompt Engineering* principle, they critically assess the AI-generated outline by verifying its quality against multiple reliable sources and adapting it to form the backbone of their draft (Jacob et al., 2025). Using the *Unique Perspective* principle, the student integrates personal experiences, including interactions with younger siblings, student-teaching experiences, and relevant assigned readings, to develop a complete draft. By applying the *Prompt Engineering* principle again, the student refines their feedback-seeking prompt from a vague request to a more specific prompt. Instead of a general prompt, such as "Please provide feedback to my draft essay," they ask: "Please review my reflection essay on strategies to enable children to become computational thinkers, focusing on clarity, grammar, syntax, and coherence, and provide step-by-step instructions for improvement along with relevant academic references." Furthermore, by the *Ethical Use* principle, the student acknowledges their engagement with AI explicitly and cites any AI-generated content transparently. Finally, through continuous *Reflection*, the student consistently evaluates whether they are using AI as a supportive tool rather than allowing it to replace or overshadow their unique perspective and insights.

## **Conclusion**

This autoethnographic study examined the psychological factors influencing ESL HE students' engagement with ChatGPT for academic writing, drawing on my lived experiences through analytical and narrative accounts. Using Maslow's Hierarchy of Needs and the concept of Escapism as a combined framework, the findings show that ChatGPT can support students' psychological security and safety, foster belonging and self-esteem, and contribute to self-actualisation. While the tool offers relief from writing-related stress and enhances expression, the study also cautions against overreliance, which may undermine critical thinking, hinder independent writing development, and compromise academic integrity.

This study contributes to the growing body of research on GenAI in education by foregrounding the psychological experiences of ESL HE students, an area that remains underexplored in the current literature. It highlights how ESL writers may use ChatGPT to manage anxiety, self-doubt, and linguistic insecurity. Using an autoethnographic lens, the study reflects critically on these challenges and introduces the *SUPER* framework as a set of practical principles for the ethical and effective integration of GenAI into academic writing. Researchers and practitioners are encouraged to implement and validate the *SUPER* framework to support ESL and general writers in using ChatGPT and other LLM-based GenAI tools responsibly. They are also urged to share and discuss the framework with colleagues and students to gather feedback for its ongoing refinement and long-term impact on academic writing support.

## **Disclosure statement**

No potential conflict of interest was reported by the author(s).



## About the author

**Hsiao-Ping Hsu** is an Assistant Professor at the Institute of Education, Dublin City University. His research focuses on digital learning, generative AI in education, computational thinking, teacher technology integration, and digital literacy. He has published extensively and serves on the editorial boards of international journals.

## ORCID

Hsiao-Ping Hsu  <http://orcid.org/0000-0002-3943-2690>

## References

- Al-Khresheh, M. H. (2024). Bridging technology and pedagogy from a global lens: Teachers' perspectives on integrating ChatGPT in English language teaching. *Computers and Education: Artificial Intelligence*, 6, 100218. <https://doi.org/10.1016/j.caeai.2024.100218>
- Adams, T. E., Ellis, C., & Jones, S. H. (2017). Autoethnography. In Christine Davis Jörg Matthes & Robert Potter (Eds.), *The international encyclopedia of communication research methods* (pp. 1–11). Wiley.
- Backonja, U., Hall, A. K., & Thielke, S. (2014). "Older adults' current and potential uses of information technologies in a changing world: A theoretical perspective. *International Journal of Aging & Human Development*, 80(1), 41–63. <https://doi.org/10.1177/0091415015591109>
- Baek, C., Tate, T., & Warschauer, M. (2024). "ChatGPT seems too good to be true": College students' use and perceptions of generative AI. *Computers and Education: Artificial Intelligence*, 7, 100294. <https://doi.org/10.1016/j.caeai.2024.100294>
- Barrot, J. S. (2023). Using ChatGPT for second language writing: Pitfalls and potentials. *Assessing Writing*, 57, 100745. <https://doi.org/10.1016/j.asw.2023.100745>
- Bozkurt, A., Xiao, J., Farrow, R., Bai, J. Y. H., Nerantzi, C., Moore, S., Dron, J., Stracke, C. M., Singh, L., Crompton, H., Koutropoulos, A., Terentev, E., Pazurek, A., Nichols, M., Sidorkin, A. M., Costello, E., Watson, S., Mulligan, D., Honeychurch, S., ... Asino, T. I. (2024). The manifesto for teaching and learning in a time of generative AI: a critical collective stance to better navigate the future. *Open Praxis*, 16(4), 487–513. <https://doi.org/10.55982/open-praxis.16.4.777>
- Braun, V., & Clarke, V. (2022). *Thematic analysis: A practical guide*. SAGE Publications.
- British Council. (2024). *The outlook for international student mobility: Amidst a changing global macroeconomic landscape*. British Council.
- Cain, W. (2024). Prompting change: Exploring prompt engineering in large language model AI and its potential to transform education. *TechTrends*, 68(1), 47–57. <https://doi.org/10.1007/s11528-023-00896-0>
- Calleja, G. (2010). Digital games and escapism. *Games and Culture*, 5(4), 335–353. <https://doi.org/10.1177/1555412009360412>
- Candilas, K., Japson, M. C. N., Bartolata, V. D., Amores, D. J. R., Abas, S. R., & Getuaban, P. A. M. (2024). AI-powered writing tools: A phenomenological inquiry of tertiary students' usage. *AsiaCALL Online Journal*, 15(2), 29–41. <https://doi.org/10.54855/acoj.241523>
- Cennetkuşu, N. G. (2017). International students' challenges in academic writing: A case study from a prominent US university. *Journal of Language Linguistic Studies*, 13(2), 309–323.
- Chan, C. K. Y., & Hu, W. (2023). Students' voices on generative AI: Perceptions, benefits, and challenges in higher education. *International Journal of Educational Technology in Higher Education*, 20(1), 43. <https://doi.org/10.1186/s41239-023-00411-8>
- Cheng, Y. S. (2004). A measure of second language writing anxiety: Scale development and preliminary validation. *Journal of Second Language Writing*, 13(4), 313–335. <https://doi.org/10.1016/j.jslw.2004.07.001>
- Cheng, Y.-C., & Yeh, H.-T. (2009). From concepts of motivation to its application in instructional design: Reconsidering motivation from an instructional design perspective. *British Journal of Educational Technology*, 40(4), 597–605. <https://doi.org/10.1111/j.1467-8535.2008.00857.x>
- Chirkov, V., Vansteenkiste, M., Tao, R., & Lynch, M. (2007). The role of self-determined motivation and goals for study abroad in the adaptation of international students. *International Journal of Intercultural Relations*, 31(2), 199–222. <https://doi.org/10.1016/j.ijintrel.2006.03.002>
- Digital Education Council. (2024, August 2). *Global AI Student Survey 2024*. <https://www.digitaleducationcouncil.com/post/digital-education-council-global-ai-student-survey-2024>
- Dillon, A., Geraldine, C., Nusaibah Al, A., Nahla, A., Yusra, S., Moss, T., & Kay, G. (2024). The use of large language model tools such as ChatGPT in academic writing in English medium education postgraduate programs: A grounded theory approach. *Journal of Educators Online*, 21(2), n2. <https://doi.org/10.9743/JEO.2024.21.2.5>
- Du, X., & Jackson, J. (2021). L2 self-discrepancy, motivation, and study abroad (SA) contexts: A case study of semester-long international exchange students. *Journal of Multilingual and Multicultural Development*, 42(3), 207–220. <https://doi.org/10.1080/01434632.2020.1797055>

- Edwards, J. (2021). Ethical autoethnography: Is it possible? *International Journal of Qualitative Methods*, 20, 1609406921995306. <https://doi.org/10.1177/1609406921995306>
- Ekin, S. (2023). Prompt engineering for ChatGPT: A quick guide to techniques, tips, and best practices. *TechRxiv*. <https://doi.org/10.36227/techrxiv.22683919.v2>
- European Commission: European Education and Culture Executive Agency. (2023). *AI report – By the European Digital Education Hub's Squad on artificial intelligence in education*. Publications Office of the European Union.
- Ellis, C., Adams, T. E., & Bochner, A. P. (2011). Autoethnography: An overview. *Historical Social Research/Historische Sozialforschung*, 36(4), 273–290.
- Evans, A. (2001). *This virtual life: Escapism and simulation in our media world*. Fusion Press.
- Gupta, S., Jaiswal, A., Paramasivam, A., & Kotecha, J. (2022). Academic writing challenges and supports: Perspectives of international doctoral students and their supervisors. *Frontiers in Education*, 7, 891534. <https://doi.org/10.3389/feduc.2022.891534>
- Harunasari, S. Y. (2023). Examining the effectiveness of AI-integrated approach in EFL writing: A case of ChatGPT. *International Journal of Progressive Sciences and Technologies*, 39(2), 357–368. <https://doi.org/10.52155/ijpsat.v39.2.5516>
- Heng, T. T. (2017). Voices of Chinese international students in USA colleges: 'I want to tell them that ...'. *Studies in Higher Education*, 42(5), 833–850. <https://doi.org/10.1080/03075079.2017.1293873>
- Hsu, H.-P. (2023). Can Generative Artificial Intelligence Write an Academic Journal Article? Opportunities, Challenges, and Implications. *Irish Journal of Technology Enhanced Learning*, 7(2), 158–171. <https://doi.org/10.22554/ijtel.v7i2.152>
- Hsu, H.-P. (2024). Promote Environmental Awareness and Care by Creating a Virtual Reality Tour for the Local Community. *The Geography Teacher*, 21(3), 119–125. <https://doi.org/10.1080/19338341.2024.2373709>
- Hsu, H.-P. (2025). From Programming to Prompting: Developing Computational Thinking through Large Language Model-Based Generative Artificial Intelligence. *TechTrends*, 69(3), 485–506. <https://doi.org/10.1007/s11528-025-01052-6>
- Hsu, H.-P., Mak, J., Werner, J., White-Taylor, J., Geiselhofer, M., Gorman, A., & Torrejon Capurro, C. (2024). Preliminary study on pre-service teachers' applications and perceptions of generative artificial intelligence for lesson planning. *Journal of Technology and Teacher Education*, 32(3), 409–437. <https://doi.org/10.70725/869859beoezu>
- Hsu, H.-P., Pang, C. L., & Haagdorens, WIM. (2012). Writing as Cultural Practice: Case Study of a Chinese Heritage School in Belgium. *Procedia- Social and Behavioral Sciences*, 47, 1592–1596. <https://doi.org/10.1016/j.sbspro.2012.06.868>
- Huang, Y.-M., Wang, D.-C., Lin, G.-H., & Huang, Y.-M. (2025). Unpacking the determinants of social media-based life-long learning from the need hierarchy theory. *Behaviour & Information Technology*, 44(3), 477–490. <https://doi.org/10.1080/0144929X.2024.2324056>
- Hughes, S. A., & Pennington, J. L. (2016). *Autoethnography: Process, product, and possibility for critical social research*. SAGE Publications, Inc.
- Hyland, K. (2002). Authority and invisibility: Authorial identity in academic writing. *Journal of Pragmatics*, 34(8), 1091–1112. [https://doi.org/10.1016/S0378-2166\(02\)00035-8](https://doi.org/10.1016/S0378-2166(02)00035-8)
- Imran, M., & Almusharraf, N. (2023). Analyzing the role of ChatGPT as a writing assistant at higher education level: A systematic review of the literature. *Contemporary Educational Technology*, 15(4), ep464. <https://doi.org/10.30935/cedtech/13605>
- Jacob, S. R., Tate, T., & Warschauer, M. (2025). Emergent AI-assisted discourse: A case study of a second language writer authoring with ChatGPT. *Journal of China Computer-Assisted Language Learning*, 5(1), 1–22. <https://doi.org/10.1515/jccall-2024-0011>
- Jebreil, N., Azizifar, A., Gowhary, H., & Jamalinesari, A. (2015). Study on writing anxiety among Iranian EFL students. *International Journal of Applied Linguistics English Literature*, 4(2), 68–72. <https://doi.org/10.7575/aiac.ijalel.v.4n.2p.68>
- Jobin, A., Ienca, M., & Vayena, E. (2019). The global landscape of AI ethics guidelines. *Nature Machine Intelligence*, 1(9), 389–399. <https://doi.org/10.1038/s42256-019-0088-2>
- Jouhki, H., Savolainen, I., Sirola, A., & Oksanen, A. (2022). Escapism and excessive online behaviors: A three-wave longitudinal study in Finland during the COVID-19 pandemic. *International Journal of Environmental Research and Public Health*, 19(19), 12491. <https://doi.org/10.3390/ijerph191912491>
- Kehoe, F. (2023). Leveraging generative AI tools for enhanced lesson planning in initial teacher education at post primary. *Irish Journal of Technology Enhanced Learning*, 7(2), 172–182. <https://doi.org/10.22554/ijtel.v7i2.124>
- Kostka, I., & Toncelli, R. (2023). Exploring applications of ChatGPT to English language teaching: Opportunities, challenges, and recommendations. *Teaching English as a Second or Foreign Language-TEFL-EJ*, 27(3). <https://doi.org/10.55593/ej.27107int>
- Kristiana, I. F., Karyanta, N. A., Simanjuntak, E., Prihatsanti, U., Ingarianti, T. M., & Shohib, M. (2022). Social support and acculturative stress of international students. *International Journal of Environmental Research and Public Health*, 19(11), 6568. <https://doi.org/10.3390/ijerph19116568>
- Kuo, Y.-H. (2011). Language challenges faced by international graduate students in the United States. *Journal of International Students*, 1(2), 38–42. <https://doi.org/10.32674/jis.v1i2.551>
- Landis, D. (2003). READING AND WRITING AS SOCIAL, CULTURAL PRACTICES: IMPLICATIONS FOR LITERACY EDUCATION. *Reading & Writing Quarterly*, 19(3), 281–307. <https://doi.org/10.1080/10573560308213>

- Leask, B. (2015). *Internationalizing the curriculum*. Routledge.
- Lee, J., Kim, N., & Wu, Y. (2019). College readiness and engagement gaps between domestic and international students: Re-envisioning educational diversity and equity for global campus. *Higher Education*, 77(3), 505–523. <https://doi.org/10.1007/s10734-018-0284-8>
- Li, M. (2024). Non-native English-speaking (NNES) students' English academic writing experiences in higher education: A meta-ethnographic qualitative synthesis. *Journal of English for Academic Purposes*, 71, 101430. <https://doi.org/10.1016/j.jeap.2024.101430>
- Lo, L. S. (2023). The CLEAR path: A framework for enhancing information literacy through prompt engineering. *The Journal of Academic Librarianship*, 49(4), 102720. <https://doi.org/10.1016/j.acalib.2023.102720>
- Li, L., & Kim, M. (2024). It is like a friend to me: Critical usage of automated feedback systems by self-regulating English learners in higher education. *Australasian Journal of Educational Technology*, 40(1), 1–18. <https://doi.org/10.14742/ajet.8821>
- Mahapatra, S. (2024). Impact of ChatGPT on ESL students' academic writing skills: A mixed methods intervention study. *Smart Learning Environments*, 11(1), 9. <https://doi.org/10.1186/s40561-024-00295-9>
- Mao, J., Romero-Hall, E., & Reeves, T. C. (2024). Autoethnography as a research method for educational technology: A reflective discourse. *Educational Technology Research and Development*, 72(5), 2725–2741. <https://doi.org/10.1007/s11423-023-10281-6>
- Maringe, F., & Jenkins, J. (2015). Stigma, tensions, and apprehension: The academic writing experience of international students. *International Journal of Educational Management*, 29(5), 609–626. <https://doi.org/10.1108/IJEM-04-2014-0049>
- Maslej, N., Fattorini, L., Perrault, R., Parli, V., Reuel, A., Brynjolfsson, E., Etchemendy, J., et al. (2024). *The AI Index 2024 annual report*. Stanford University.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396. <https://doi.org/10.1037/h0054346>
- Maslow, A. H. (1954). *Motivation and personality*. Harper & Row.
- Maslow, A. H. (1987). *Motivation and personality* (3rd ed.). Pearson Education.
- Moensted, M. L. (2022). Shame, anger and the lived experience of school disengagement for marginalised students: A recognition theory approach. *YOUNG*, 30(5), 525–542. <https://doi.org/10.1177/11033088221094459>
- Moses, R. N., & Mohamad, M. (2019). Challenges faced by students and teachers on writing skills in ESL Contexts: A literature review. *Creative Education*, 10(13), 3385–3391. <https://doi.org/10.4236/ce.2019.1013260>
- Mullins, G., Quintrell, N., & Hancock, L. (1995). The experiences of international and local students at three Australian universities. *Higher Education Research & Development*, 14(2), 201–231. <https://doi.org/10.1080/0729436950140205>
- Naznin, K., Mahmud, A., Nguyen, M., & Chua, C. (2025). ChatGPT integration in higher education for personalized learning, academic writing, and coding tasks: A systematic review. *Computers*, 14(2), 53. <https://doi.org/10.3390/computers14020053>
- Nichols-Besel, K., Yu, X., & Jamsen, K. (2022). International students' perspectives on online interfaces, identity, and environment in a U.S. writing center. *Journal of Comparative & International Higher Education*, 14(1), 113–131. <https://doi.org/10.32674/jcihe.v14i1.3192>
- Nsiah, H. (2017). Fear of failure and the academic performance of students from low-income families. *International Journal of Education Social Science Computer Review*, 4(10), 19–26.
- Ohno, S. (2016). Internet escapism and addiction among Japanese senior high school students. *International Journal of Culture and Mental Health*, 9(4), 399–406. <https://doi.org/10.1080/17542863.2016.1226911>
- Oppenlaender, J., Linder, R., & Silvennoinen, J. (2024). Prompting AI Art: An investigation into the creative skill of prompt engineering. *International Journal of Human–Computer Interaction*, 41(16), 10207–10229. <https://doi.org/10.1080/10447318.2024.2431761>
- Oyenyi, O. F., Bain, S. F., & Furgerson, K. L. (2016). Stress factors experienced by international students while attending a South Texas university. *Research in Higher Education Journal*, 30, 1–8.
- Ozfidan, B., Salam El-Dakhs, D. A., & Alsalim, L. A. (2024). The use of AI tools in English academic writing by Saudi undergraduates. *Contemporary Educational Technology*, 16(4), ep527. <https://doi.org/10.30935/cedtech/15013>
- Parra, E. B., Evans, C. A., Fletcher, T., & Combs, M. C. (2014). The psychological impact of English language immersion on elementary age English language learners. *Journal of Multilingual Education Research*, 5(1), 4.
- Peng, K., Ding, L., Zhong, Q., Shen, L., Liu, X., Zhang, M., Ouyang, Y., & Tao, D. (2023). Towards making the most of chatgpt for machine translation. *ArXiv* 230313780 <https://doi.org/10.48550/arXiv.2303.13780>
- Rahnuma, N. (2023). Exploring ESL students' experiences of academic writing in higher education- a cultural historical activity theory perspective. *Education Inquiry*, 1–23. <https://doi.org/10.1080/20004508.2023.2222450>
- Ren, X. (2022). Autoethnographic research to explore instructional design practices for distance teaching and learning in a cross-cultural context. *TechTrends: For Leaders in Education & Training*, 66(1), 47–55. <https://doi.org/10.1007/s11528-021-00683-9>
- Ryan, J. (2011). Teaching and learning for international students: Towards a transcultural approach. *Teachers and Teaching*, 17(6), 631–648. <https://doi.org/10.1080/13540602.2011.625138>
- Seo, J. (2019). Is the maker movement inclusive of ANYONE?: Three accessibility considerations to invite blind makers to the making world. *TechTrends*, 63(5), 514–520. <https://doi.org/10.1007/s11528-019-00377-3>

- Smit, R. (2012). Towards a clearer understanding of student disadvantage in higher education: Problematising deficit thinking. *Higher Education Research & Development*, 31(3), 369–380. <https://doi.org/10.1080/07294360.2011.634383>
- Starr, L. J. (2010). The use of autoethnography in educational research: Locating who we are in what we do. *Canadian Journal for New Scholars in Education*, 3(1), 1–9.
- Steele, J. L. (2023). To GPT or not GPT? Empowering our students to learn with AI. *Computers and Education: Artificial Intelligence*, 5, 100160. <https://doi.org/10.1016/j.caeai.2023.100160>
- Sukirman, S., Ibharim, L. F. M., Said, C. S., & Murtiyasa, B. (2021). A strategy of learning computational thinking through game based in virtual reality: Systematic review and conceptual framework. *Informatics in Education*, 21(1), 179–200. <https://doi.org/10.15388/infedu.2022.07>
- Telbis, N. M., Helgeson, L., & Kingsbury, C. (2014). International students' confidence and academic success. *Journal of International Students*, 4(4), 330–341. <https://doi.org/10.32674/jis.v4i4.452>
- Tseng, Y.-C., & Lin, Y.-H. (2024). Enhancing English as a Foreign Language (EFL) learners' writing with ChatGPT: A university-level course design. *Electronic Journal of e-Learning*, 22(2), 78–97. <https://doi.org/10.34190/ejel.21.5.3329>
- Tuan, Y.-F. (1998). *Escapism*. Johns Hopkins University Press.
- van Niekerk, J., Delpont, P. M. J., & Sutherland, I. (2025). Addressing the use of generative AI in academic writing. *Computers and Education: Artificial Intelligence*, 8, 100342. <https://doi.org/10.1016/j.caeai.2024.100342>
- Walster, D. (2017). Information policy and social media: Accept or decline. *TechTrends*, 61(3), 301–307. <https://doi.org/10.1007/s11528-017-0179-z>
- Wang, C. (2024a). Exploring students' generative AI-assisted writing processes: Perceptions and experiences from native and nonnative English speakers. *Technology, Knowledge and Learning*. <https://doi.org/10.1007/s10758-024-09744-3>
- Wang, Y. (2024b). Cognitive and sociocultural dynamics of self-regulated use of machine translation and generative AI tools in academic EFL writing. *System*, 126, 103505. <https://doi.org/10.1016/j.system.2024.103505>
- Wette, R., & Furneaux, C. (2018). The academic discourse socialisation challenges and coping strategies of international graduate students entering English-medium universities. *System*, 78, 186–200. <https://doi.org/10.1016/j.system.2018.09.001>
- Wirantaka, A. (2016). Paragraph writing of academic texts in an EFL context. *Journal of Foreign Language Teaching and Learning*, 1(2), 34–45. <https://doi.org/10.18196/ftl.1212>
- Woodrow, L. (2011). College English writing affect: Self-efficacy and anxiety. *System*, 39(4), 510–522. <https://doi.org/10.1016/j.system.2011.10.017>
- Yee, N. (2006). Motivations for play in online games. *Cyberpsychology & Behavior: The Impact of the Internet, Multimedia and Virtual Reality on Behavior and Society*, 9(6), 772–775. <https://doi.org/10.1089/cpb.2006.9.772>
- Yilmaz, R., & Karaoglan Yilmaz, F. G. (2023). Augmented intelligence in programming learning: Examining student views on the use of ChatGPT for programming learning. *Computers in Human Behavior: Artificial Humans*, 1(2), 100005. <https://doi.org/10.1016/j.chbah.2023.100005>
- Yuan, Y., Li, H., & Sawaengdist, A. (2024). The impact of ChatGPT on learners in English academic writing: Opportunities and challenges in education. *Language Learning in Higher Education*, 14(1), 41–56. <https://doi.org/10.1080/20004508.2023.2222450>
- Zeligman, H. S. (2022). The emotional challenges of adult learners of English as a second language: A teacher's reflection on a student's temper tantrum. *TESL Ontario*.
- Zhang, F. (2022). A theoretical review on the impact of EFL/ESL students' self-sabotaging behaviors on their self-esteem and academic engagement. *Frontiers in Psychology*, 13, 873734. <https://doi.org/10.3389/fpsyg.2022.873734>
- Zhao, W., & Shute, V. J. (2019). Can playing a video game foster computational thinking skills? *Computers & Education*, 141, 103633. <https://doi.org/10.1016/j.compedu.2019.103633>
- Zhao, X., Cox, A., & Cai, L. (2024). ChatGPT and the digitisation of writing. *Humanities and Social Sciences Communications*, 11(1), 482. <https://doi.org/10.1057/s41599-024-02904-x>
- Zhou, J., Shen, L., & Chen, W. (2024). How ChatGPT transformed teachers: The role of basic psychological needs in enhancing digital competence. *Frontiers in Psychology*, 15, 1458551. <https://doi.org/10.3389/fpsyg.2024.1458551>
- Zotzmann, K., & Sheldrake, R. (2021). Postgraduate students' beliefs about and confidence for academic writing in the field of applied linguistics. *Journal of Second Language Writing*, 52, 100810. <https://doi.org/10.1016/j.jslw.2021.100810>
- Zou, M., & Huang, L. (2023). To use or not to use? Understanding doctoral students' acceptance of ChatGPT in writing through technology acceptance model. *Frontiers in Psychology*, 14, 1259531. <https://doi.org/10.3389/fpsyg.2023.1259531>