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GenAI and BDDL Tools for Academic L2 English Postgraduate Writing in Tourism: A Local Case Study

Alejandro Curado Fuentes
University of Extremadura, C & eres, Spain

GenAI (Generative Artificial Intelligence) is being extensively explored for academic L2 (second language) English writing skills in higher education, but its impact on research writing at postgraduate levels remains underexplored. This study presents an examination of this context within the tourism degree at University of Extremadura. Four participants engaged in a 10-hour hybrid course about GenAI for academic writing in October 2024. The course also integrated Broad Data-Driven Learning (BDDL) tools as online corpus interfaces designed to assist with linguistic comparison and writing development. Participants' feedback was collected and analyzed by qualitative means (inclass discussions, task writing annotation, and final survey). Overall findings indicate notably positive responses and usage of these tools for both content and linguistic improvement in the texts. Despite the study's small sample size, these preliminary findings suggest that postgraduate researchers in tourism can adequately combine expert and linguistic knowledge in their leverage of GenAI and BDDL.

Keywords: GenAI, BDDL, academic writing, L2, EFL (English as a Foreign Language)

Introduction

The rapid expansion of Generative Artificial Intelligence (GenAI) is reshaping the academic landscape, leading to diverse educational communities' reactions, methodological approaches, and ethics-centered policies. In higher education, studies examine this issue by analyzing different learning contexts at macro-/meso- and micro-levels, such as implications for academic skills and pedagogical instruments, among other aspects (Chanpradit, 2025; Feng, Li, & Zhang, 2025; Godwin-Jones, 2024; Pigg, 2024). Several studies address academic writing in L2/EFL (second language/English as a Foreign Language) university contexts where GenAI is used across or within scientific disciplines (Azennoud, 2024; Cheung & Crosthwaite, 2025; Huang & Deng, 2025; Jiang & Su, 2025). Overall, most findings reveal positive effects from the development and integration of GenAI in L2 writing but also pinpoint major red flags and limitations in GenAI-generated texts, such as less authorial engagement with readers, minimal personalization, and overreliance on technical language.

Most literature deals with the applicability of these tools to academic writing at undergraduate levels, analyzing GenAI's strengths such as decreased workloads and personalized guidance, and weaknesses such as users' overreliance on GenAI's output for their own texts—compromising academic integrity—and minimal use of higher-order cognitive skills (Farrokhnia, Banihashem, Noroozi, & Wals, 2024; Rowland, 2023). In contrast, fewer studies explore upper-level academic writers' use of GenAI affordances (Ruff et al., 2024; Williams, 2024).

Alejandro Curado Fuentes, Ph.D., Associate Professor, Department of English Philology, University of Extremadura, Cáceres, Spain.

Compared to undergraduates, two main characteristics are revealed in L2/EFL writers at doctoral and post-doctoral stages: (1) more reliability on their epistemological bases, which allows them to discriminate and validate Gen-AI-generated information better, and (2) their capacity to better understand how Large Language Models (LLMs) operate, combining technical knowledge, critical thinking, and academic experience (Pérez Paredes, Curry, & Orda ñana-Guillam ón, 2025).

Additionally, because GenAI tools are in a constant state of learning, the refinement and adaptation of writing feedback and linguistic choices are key features to explore in academics' interactions with these technologies within disciplines and/or scientific areas. In this scope, a Broad Data-Driven Learning (BDDL) approach (Curado Fuentes, 2025; Pérez-Paredes, 2024) can strengthen and support the work with GenAI in EFL contexts, as BDDL encompasses the utilization of readily accessible internet-based tools to facilitate language learning, integrating various Natural Language Processing (NLP) tools available online, such as simplified concordancers, translation services, digital dictionaries, and collocation finders (Ordo ñana-Guillam ón, Pérez-Paredes, & Aguado-Jim énez, 2024).

This article presents a local case study investigating the strategies and attitudes of advanced participants (post-doctoral writers in EFL contexts) within the area of social sciences, and particularly the tourism specialization, as they engage with GenAI and Broad Data-Driven Learning (BDDL) tools for linguistic/discoursal support. The primary objective is to identify variations and similarities in their perceptions and practical approaches to using these tools for research/academic writing.

This study is qualitative in nature, as it focuses on only four participants in the tourism degree at University of Extremadura, Spain, who took a 10-hour course dealing with GenAI for academic/research writing (October/November, 2024). There, they attended off-line and on-line lectures and participated in discussions, followed by their submission of a practical written task using these technologies and the completion of an online survey about their ideas and impressions with the course. Overall, their answers and activities revealed positive reactions to the assistance of these tools for writing, especially in terms of their use during pre-writing and rewriting tasks, where human intervention and scrutiny were seen as key elements.

This article will begin by reviewing the relevant literature on the use of GenAI for academic writing and their application across disciplines. It will then outline the study's research questions and methodology, followed by a presentation of the results. The study will conclude with a discussion of the findings, their implications, the study's limitations, and suggestions for future research.

Literature Review

GenAI for Academic Writing

The proliferation of GenAI tools (e.g., ChatGPT, Gemini, Co-Pilot) has impacted all stages of the writing process, such as pre-writing, drafting, and re-writing (Pigg, 2024). The effectiveness of these tools hinges on the quality of user prompts, which require clear objectives, context, and guidelines. These affordances are generally considered useful for academic writing in higher education, even more so for L2 contexts (Cordero, Torres-Zambrano, & Cordero-Castillo, 2025; Ingley & Pack, 2023; Godwin-Jones, 2024).

Research indicates that academic writers frequently use GenAI for brainstorming, outlining, and generating initial drafts (Nordling, 2023; Pigg, 2024). Doctoral and post-doctoral researchers are leveraging these platforms to summarize texts, find general references, synthesize literature, identify research gaps, and simplify complex

concepts. The application of these tools is generally seen as advantageous for the enhancement of lexical choices and grammatical forms (micro-level focus), and to improve stylistic elements such as formality, tone, and cohesion (macro-level) (Barrot, 2023; Ji, Han, & Ko, 2023; Nordling, 2023).

However, human oversight remains crucial for tasks such as simplifying text, correcting conceptual errors and references, and infusing the writing with a unique authorial voice which takes reading audiences into account (Berber-Sardinha, 2024; Markey, Brown, Laudenbach, & Kohler, 2024). In fact, one key weakness detected in GenAI writing is a significant decrease in the author's involvement with readers, which reduces meta-discoursal strategies, such as evaluative language and personal references (Jiang & Hyland, 2024; 2025; Mo & Crosthwaite, 2025: Zhang & Crosthwaite, 2025).

Therefore, according to this literature, a significant concern among academic L2 English writers using GenAI is the challenge of maintaining a genuine voice by applying critical thinking for linguistic/discoursal analysis, stylistic evaluation, and deep cohesion. GenAI tends to perform poorly in achieving this text appropriateness by means of the lexical variation and deep cohesion that signal an author's personal experience and perspective. As a result, effective academic writers working with GenAI should focus on solid evaluation and revision processes by "drawing on both writing and content expertise" (Pigg, 2024, p. 8).

GenAI for Discipline-Specific Writing

Several studies address the use of GenAI within specific disciplines and/or scientific areas for academic writing in higher education. However, most participants in these studies are undergraduate students who use these tools in conjunction with their development of academic skills (Xia, Zhang, Huang, & Chiu, 2025). Fewer scholars approach higher levels of university writing, such as doctoral/post-doctoral writing. Furthermore, in these studies, ChatGPT is the primary tool used by participants, probably due to the expansion of this option over the past two to three years prior to the more recent popularization of other platforms (e.g., Google's Gemini and NotebookLM, Microsoft's Co-Pilot, and so on).

In experimental sciences and technology disciplines, studies conclude that ChatGPT is found most helpful by Master and doctoral researchers for linguistic revision (e.g., lexical-grammatical improvement of their written texts), and less readily solvent for overall macro-textual dynamics (e.g., thematic content alignment and specification according to particular needs), as observed through questionnaire responses and participants' interactions with the tools (Kramar, Bedrych, & Shelkovnikova, 2024; Liu & Wang, 2024; Ruff et al., 2024; Smit, Bond-Barnard, & Wagner, 2025). Most post-graduate students in these studies also used other tools, such as machine translators and paraphrasing assistants, but they seemed to rely on and appreciate ChatGPT more as they increased their integration during their writing processes, even though various reservations with GenAI also emerged, mainly due to perceived ethical dilemmas in terms of academic integrity and plagiarism (Kramar et al., 2024; Smit et al., 2025).

In social sciences, Jacob, Tate, and Warschauer (2023) focused on the critical thinking skills deployed by one graduate researcher (in education), who discerned ChatGPT's hallucinations, limitations, and biases during her content and thematic explorations. She found more positive aspects in the tool's offer of linguisticgrammatical choices for text writing and editing, which she adopted and re-applied according to individual needs. She also noticed lexical overuse and linguistic pattern overreliance, which she proofread and corrected with the help of colleagues.

In health sciences, Williams (2024) explored the possibilities of ChatGPT for post-graduates' academic writing focus on accuracy, organization, and clarity. Postgraduate students considered GenAI useful for planning, drafting, and revising texts by improving technical accuracy and ensuring adherence to disciplinary conventions in the bio-medical field. They detected most errors in the tool in terms of contextualization and specificity regarding the application of concepts and terminologies. However, compared to other AI tools (Bing and Bard), participants found ChatGPT to be more beneficial for this type of discipline-specific writing. Similarly, Milton, Lokesh, and Thiruvengadam (2024) observed highly positive reactions and attitudes among over 300 postgraduate writers using ChatGPT by conducting surveys in health sciences at an Indian university. These authors also noticed participants' preoccupation with overreliance on AI tools, which demeans more independent approaches.

It thus seems that L2 English writers at post-graduate levels better realize both the potential benefits and risks of GenAI for their academic writing needs. Issues of academic integrity and ethics are also paramount, as different studies confirm (e.g., Costa et al., 2024). Writers must discriminate GenAI-generated content from their own ideas and authorial voice, with a methodological need for shifting from product-focused to process-emphasizing techniques, such as paying attention to pragmatics, personalization, contextualization, and the cultivation of an individual authorial voice in their writing.

Parallel to this observation is that doctoral and post-doctoral-level writers already possess sufficient competences with domain-specific terminologies and conceptualizations, which help them discern the validity of content and specialized information. In contrast, their writing concerns shift more towards what ESP (English for Specific Purposes) researchers often notice in specialized L2 writing: the importance of "acquiring phraseological competence (...) and the most prototypical domain-specific collocational patterns in English" (Laso Martín & Comelles Pujadas, 2025, p. 183). Effectively coping with this diversity of lexico-grammatical specifications therefore seems to be a more important need among L2 English writers across scientific disciplines, which may affect how they use and apply GenAI tools.

Broad Data-Driven Learning (BDDL) for Academic Writing

Writers tend to use other digital tools in combination with GenAI for linguistic consultation and analysis. For example, they can incorporate BDDL (Curado Fuentes, 2025; P érez-Paredes, 2024) with easy-to-use internet tools which facilitate answers to linguistic queries that they may have, comparing frequently used phraseology in academic texts (Ordo ñana-Guillam ón et al., 2024). An important aspect of these tools is that they comprise vast amounts of human-written text, which can thus broaden the linguistic-discoursal alternatives and choices made during the writing process. Extending the use of these resources across diverse disciplines thus offers significant potential benefits, primarily fostering linguistic awareness through autonomous engagement (Ordo ñana-Guillam ón et al., 2024, p. 87).

Research Questions

This case study addresses a gap in the GenAI literature by attempting to answer the following two questions:

- 1. How do doctoral and post-doctoral L2/EFL writers in tourism studies approach their academic writing using GenAI and BDDL tools?
- 2. What are these writers' perceptions and ideas regarding the integration of GenAI and BDDL tools along the process?

Methodology

This investigation was conducted as a local case study centered on a 10-hour course (eight class hours plus two hours for task assignment) about GenAI for doctoral and post-doctoral university staff in social sciences (C áceres, Spain). The course curriculum included an in-class seminar, online discussions, and practical activities focused on prompt engineering, text-linguistic analysis, and critical thinking with GenAI. Another key component was corroborating GenAI output with linguistic resources based on the BDDL approach, which included simple concordancers and collocation lists for linguistic assistance.

The methodology for the analysis was developed by using three major instruments from qualitative case studies (Mabry, 2008; Sena, 2024): (1) observation (in class), (2) the use of documents (written tasks), and (3) final surveys on participants' impressions. A triangulation of these findings enabled a thorough understanding of developmental and attitudinal aspects in this course.

Participants

Six researchers and faculty members took the course. All the students attended both offline and online sessions. Two of them were tenured lecturers in business management and law, whereas four others worked in tourism, where two were pre-doctoral research assistants, and two were tenured lecturers. For this study, the focus is placed on the tourism participants (three females, and one male, ages between 24 and 52).

These participants' English proficiency level was B2 or higher, as this was a pre-requirement for course enrollment. All participants consented to having their course-related information accessed and analyzed for research purposes. However, their names in this study remain fictitious: (1) Marisa: works on her doctoral thesis about environmental factors in tourism analysis, (2) Begoña: does her doctoral research on the assessment of touristic quality, (3) Aurora: teaches and investigates within sociology, and (4) Pedro: does his teaching and research on topics related to urban and geographic planning.

Instruments

Data were collected through three primary instruments: in-class observation, a final writing task, and a final survey.

- 1. In-class observation: This type of observation was primarily carried out by annotating key ideas stated by students during the off-line four-hour seminar and by recording the online four-hour session. In the seminar, the main type of method was the lecture lead by PowerPoint presentations on key issues regarding GenAI for academic writing. However, students intervened and engaged in discussions at any time. The result was that the lecturers (the author of this article and a colleague from University of Murcia) spoke approximately 80 percent of the time, with the remaining percentage involving students' questions, opinions, interactions, and responses. In the online meeting, operated via the Zoom platform, the approach consisted of a first half of the session for lectures, focused on explaining and clarifying procedures; and second, the other half of the session had participants work with the tools by pairs. For this part, three separate rooms were created (one for each pair), which the two lecturers visited to discuss task progress and ideas.
- 2. Final writing task: Participants were required to complete a final project where they used any of the discussed tools for a writing proposal within their own academic field and topics of interest. The task instructions were:

"Use GenAI for any type of writing approach to your own texts. You can use it at any stages (pre-writing, drafting, writing, re-writing) and with any type of academic text of your own (research, teaching material, technical, and so on). In addition to GenAI, use any corpus tools for assistance and/or support with your writing. Please, specify each step you took for this activity and how you used the tools".

The analysis of this task centered on the dynamics of their writing process, placing attention on their key concerns regarding text writing at both micro- and macro-levels (e.g., lexical choices, grammar, text organization, authorial voice, thematic coherence, linguistic-discoursal nuances, and so on).

- 3. Final survey: An anonymous online survey was conducted using Google Forms to gauge participants' perceptions of the course after they had completed it. It consisted of a 31-item Likert scale (1-5), with 16 items for GenAI and 15 for corpus tools, covering general attitudes, perceived usefulness for linguistic performance, ease of use, and likelihood of future use, based on Hua et al. (2024). The survey demonstrated high reliability (Cronbach's Alpha > 0.96). The survey also included three open-answer questions:
 - (1) Which tools (GenAI and corpus) did you like best?
 - (2) Which types of texts would you use these tools most for and why?
- (3) Please comment on any advantages and disadvantages of these tools for your academic writing and/or other academic activities.

Results

In-class Observation

This approach provided direct evidence of some initial practices and attitudes by participants with GenAI, which can serve as background for the individual task developments and survey answers.

Mostly, the more experienced participants intervened in the discussions, whereas the two younger researchers listened, agreed, and took notes. One notable aspect of the faculty's contribution was the expression of ideas about ethical dilemmas using GenAI. Pedro, for example, conveyed considerable enthusiasm for the potential of GenAI tools in summarizing research. However, he also critically noted instances where these tools produced inaccuracies in bibliographical references. Aurora echoed this sentiment, emphasizing that while such AI-powered tools could serve as an excellent starting point, they could not substitute for genuine research. She reported utilizing them primarily for generating ideas and conceptual frameworks pertinent to her research topics.

In a more informal situation, during the session recess, Pedro put forward his concern with having to use GenAI in ways that the language does not sound robotic. He mainly complained about the fact that L2 English speakers already struggle more with linguistic revision and non-nativeness obstacles during journal article submission, and therefore, these tools could facilitate this process without having to strive for a more "human touch" if the intended content had already been clearly conveyed. Pedro's premises were thus considered for further discussion and activities.

The second part of the in-class session involved more specific strategies for writing with GenAI, such as prompt engineering and authorial voice focus. All the participants were interested in the explanations and examples provided and thought they would be useful in refining their interactions with GenAI tools. Searching for one's distinctive voice while using the tool was one main challenge addressed. Pedro voiced his complaint about having to consistently revise his texts to re-phrase the linguistic output. We then commented on the importance of academic integrity and accountability, reflecting on what plagiarizing meant. In general, the participants regarded the use of direct text provided by GenAI as risky, mentioning journal policies that specify

procedures about this practice. Aurora stated that the author's recognition of AI should be mentioned in the article using footnotes.

In the online session, the explanations focused on the re-writing process using GenAI and other tools to deal with micro- and macro-text approaches. Online corpus (BDDL) tools were familiar as linguistic assistants that could confirm and/or compare linguistic/discoursal choices along the writing process. The genre of research project proposals, considered important by all participants, was explored as an example where the writing could be refined to suitably adapt genre conventions, formality, deep cohesion, and linguistic nuances.

Students, working in pairs, explored textual and linguistic features. For example, one activity requested their statement of key objectives for research proposals using simple clear sentences. All the participants wrote sophisticated prompts in ChatGPT and Co-Pilot, specifying the need for clarity in the language (grammar and vocabulary), content, intended audience, and context (e.g., asking for research funding).

BDDL tools were also used to compare academic phraseology within social sciences texts from Corpus Mate and COCA (https://corpusmate.com, https://www.english-corpora.org). One example was the distinction using "aim" between phrases like "the project aims to" and "this work is aimed at", since both instances frequently appear in the corpora. Nonetheless, these linguistic distinctions were not always clear, as Marisa pointed out, as she could not differentiate between "when or where to use the expressions" (in her own words). In general, an active, more direct, voice was favored in this text register, and students noticed the importance of adapting a semi-academic tone by combining familiar language with specialized terms.

Writing Task Development

For the final writing task, participants dealt with re-writing more. They also integrated at least one corpus tool into their workflow, dealing with both micro- and macro-level textual analyses.

Marisa worked on an abstract about her research, which she aimed to submit to a conference. Initially, she wrote the abstract in Spanish and then translated it on her own into English without using any GenAI tools. Then, she asked ChatGPT to revise the writing by offering clear simple sentences with little subordination, few adverbs and linking words, and more familiar words for a general audience. The result was that ChatGPT divided the abstract into three small paragraphs according to research sections and provided shorter sentences. The tool reduced subordination and changed passive voice to active. It also used more familiar words. Marisa felt that the overall result was good, but she preferred all into one whole paragraph, which she asked the tool to do and simplify accordingly.

Then, she used Corpus Mate to make linguistic corrections. First, she changed academic phraseology which she considered odd in this type of writing. For example, she worked on the expression "technology that helps personalize services" in her abstract by searching for "help" as a verb in social sciences, and she found no instances of its use with "personalize". Instead, other expressions appeared, and all with the preposition "to" after "help". As a result, she decided to focus on the word "personalize" and see examples of its use in her academic area, finding the repeated expression "facilitate + personalization". Thus, she chose to replace the original phrase with "technology that facilitates the personalization of services". Second, Marisa went over five instances of academic lexical collocations, informed by Corpus Mate, and occasionally, Linggle, another corpus tool. These collocations were representative lexical co-occurrences in the corpora; for instance, instead of "expand knowledge", she saw that "broaden knowledge" was used more in social sciences. Third, Marisa relied on her own research knowledge to focus on terms. For example, ChatGPT had provided the noun phrase "a mix of research methods", and she confirmed with the corpus tools that the expression "mixed research methods" was more appropriate. Other examples were "degree" instead of "program" and "contents" instead of "courses". Finally, she made grammatical changes from active to passive voice. For example, she checked that the verb "design" appears more in the passive within methods sections (e.g., "was designed to").

The other young researcher, Begoña, targeted a research abstract text, but in her case, she had already submitted it to a conference. She used Gemini to revise the text, asking it to re-write the abstract for greater clarity, cohesion, and style. The result did not impress Begoña, who found the language "too bombastic and robotic, not sounding like human writing" (in her own words). As a result, she asked the tool to explain why this text lacks a human touch, since "it is evident that it has been written by AI". Gemini replied by giving three main reasons: (1) overly formal language (e.g., "delving into the significance of", "a selection of renowned authors" and so on), (2) lack of personal touch (e.g., needs personal anecdotes or experience, specific details, etc.), and (3) overemphasis on objectivity (similar reasons to the second point). Consequently, Begoña requested a more refined abstract by inserting thematic contextualization, which she manually provided in relation to her research area and topic. She also provided the tool with more information about the expected outcome of the research in terms of applicability within the regional touristic sector. The result was a more cohesive, personalized paragraph, "more directly representing my authorial voice" (in Begoña's words).

Then, Begoña consulted Corpus Mate's frequency charts (using social sciences texts) to replace three collocational items in the final abstract: "driving factor" for "push factor", "growing importance of" for "growing presence of", and "enriching experiences" for "enriching practices".

In the case of Aurora's task, the focus was the introduction section of a research article which she was writing for a high-impact journal. She explicitly mentioned this publication objective in her prompt to ChatGPT Scholar and instructed the tool to assume the role of an expert on family business. She was concerned with the provision of a text with a similar size (830-840 words) to her original one, asking the tool to shorten or add information in consecutive prompts. She also focused on the use of simple sentences and clear language, requesting for "more direct text and with fewer subordinates" (in her own words). In terms of content, she mentioned no complaints, since she found that the final version "faithfully represented" (in her own words) what she wanted to convey, especially in relation to the clearly stated research gaps, which the tool had underscored by creating bullet points. She found this strategy convenient and attractive for her introduction.

Then, she employed two corpora for further linguistic revision: Corpus Mate (social sciences texts) and COCA (academic texts), as she had already subscribed to COCA and had full access. This approach enabled her to compare results and discern appropriate lexico-grammatical choices according to their frequency over similarly crafted academic discourse. Like Marisa above, she made several linguistic corrections, based on the corpora information, which can be classified as: (1) academic phraseology (e.g., she chose "need for a greater understanding of" and removed "must increase the understanding of"), (2) subject-area collocations (e.g., "strategic role of customer integration" instead of "strategic position of customer integration"), (3) cohesion devices (e.g., "additionally", eliminating "further"), and (4) voice (e.g., "this literature focused on exploring the concept of" instead of "this literature was dedicated to exploring the concept of").

Finally, Pedro's task was the only one incorporating pre-writing and drafting strategies in addition to rewriting. For the pre-writing stage, he asked Elicit (elicit.com) to explore the topic of "climate change impact on urban planning and design" by summarizing top papers. However, only two of the eight retrieved papers were considered academically solid by Pedro (since the others were either published in unreliable sources or not found). Next, he asked Microsoft's Co-Pilot (institutional licensed version) to provide an outline of the research article that he would like to write on this topic, displaying different bullet points under headings and sub-headings which contained key issues and lines of work. Pedro saved this outline as reference for future writing.

Then, as drafting techniques, Pedro went on to write prompts in Co-Pilot for the development of the Introduction. Again, he asked for a general outline of this section, with different sub-sections and bullet points. Then, he attached three pdfs of journal articles he considered valuable references for the introduction. Co-Pilot summarized these papers by sections. Pedro then requested the writing of the whole introduction by following the provided outline and using ideas from the three papers for contextualization. Pedro was not satisfied with some parts, and, consequently, he manually changed them. For example, he corrected the inaccurate description of the methodology of one paper.

After he had a final draft for the introduction, Pedro moved to re-writing by asking Co-Pilot to proofread the text, focusing on clarity, conciseness, and "the necessity of making this research stand out, highlighting its research strengths within this topic" (in Pedro's own words). He also instructed Co-Pilot to discuss the changes to the text. The result was that the tool made 15 changes in terms of vocabulary, grammar, and phraseology, explained as aiming to convey more linguistic appropriateness/usage, conciseness, clarity, and academic style. Some examples include the verb "mitigate" instead of "contempt" followed by "warming" (for clarity), "has highlighted" and not "have highlighted" (for subject-verb agreement), "causing global warming" instead of "caused global warming" (for grammatical accuracy), "projected to continue rising" instead of "it is projected that they will continue rising" (for conciseness), and so on.

Finally, Pedro used COCA to double-check linguistic changes made by Co-Pilot. He discovered that, based on the corpus, all the changes corresponded to common academic usage, except for two cases: The adverb "dramatically" is less frequently used in academic texts than "significantly", and the collocation "request for government action" is less frequent then "demand government action". As a result, Pedro decided to use the more frequent options.

Survey Findings

The survey's Likert scale data revealed positive scores, with all scores but one being at least three out of five² (excluding the scores for "Difficulties with tools").

Table 1 displays the items and mean scores for the evaluation of GenAI, and Table 2 reflects the mean score satisfaction with the two types of tools according to survey sections.

Table 1 Survey Items and Their Mean Scores for the GenAl Tools

Survey section	Survey item	Mean score
	GenAI helps me with my academic writing.	4.5
	GenAI is useful for pre-writing work.	4.25
Academic use	GenAI is useful for drafting my texts.	4.25
	GenAI helps with paraphrasing and wording.	4
	GenAI is useful for other academic activities.	4.5

¹ This weakness was more frequent in the free version of Elicit at the time of this study, but this tool has substantially improved since then, especially in its premium updates.

² "Usefulness of corpus tools for academic writing" received a two-score from one of the participants.

	GenAI is useful for vocabulary enhancement.	4.5
Linguistic profitability	GenAI is useful to improve grammar.	4.25
	GenAI helps with text organization, cohesion.	4.25
	GenAI helps with the correction of mistakes.	4.5
	GenAI improves my linguistic competence.	4.25
	GenAI improves my linguistic confidence.	3.75
Difficulties with tool	My difficulties were technical/navigational.	3.25
	My difficulties were linguistic/discoursal.	4
	I would recommend GenAI to my colleagues.	4
Usability	GenAI is more valuable than other tools.	3.75
	I will use GenAI for writing in the future.	4.25

Table 2

Mean Scores for the Two Types of Tools by Survey Sections

Survey section	GenAI tools	Corpus tools
Academic use	4.33	4.25
Linguistic profitability	4.25	4.28
Difficulties with tools	3.62	3.62
Usability	4	4

The only worth-mentioning mean difference was in the "difficulties with the tools" section, where participants found technical or navigational issues less relevant in GenAI than in corpora (3.25 versus 4.25). In contrast, they considered the opposite in dealing with linguistic/discoursal issues (four in GenAI versus three in corpora).

After the Likert-scaled items, the participants answered the three open-answer questions: First, for their preferred tools, three participants mentioned ChatGPT, and one Co-Pilot. In turn, two people preferred Corpus Mate and Linggle as favorite BDDL tools, and two others Corpus Mate and COCA. Second, regarding their usual types of texts, all the participants alluded to research texts such as abstracts and articles, and one added academic texts for their university courses. They all mentioned the use of GenAI for research syntheses, outlines, and brainstorming, and three of them recalled its importance for linguistic revision.

Finally, their comments about advantages and disadvantages (Question 3) were the following:

Participant 1: "The best thing is that writing can be significantly sped up with GenAI, and this is good for research writing. However, corpus information is more reliable than GenAI for real language use because it was directly written by humans, and the quality of GenAI can be bad and repetitive sometimes".

Participant 2: "I think GenAI is the future".

Participant 3: "I think GenAI is more dynamic and easier-to-use than corpora tools, which need technical training (...) GenAI, however, must be consistently supervised and corrected by human intervention because it can make many mistakes and compromise academic integrity. It could also hinder or diminish the writer's linguistic competence in the long run if we don't practice writing".

Participant 4: "GenAI is very useful for research and academic activities. I use it every day now. This course has provided interesting ideas for improving their use and application. I think corpora are less interesting or necessary".

Discussion

The findings indicate a favorable adoption of GenAI among these four L2 post-graduate researchers in tourism, primarily for revising and enhancing their written work (abstracts and research article sections). The participants primarily focused on these tools to improve clarity, correctness, and the appropriate use of academic English in these research texts at both micro- and macro-levels of text analysis. They also adapted iterative rewriting to their needs, designing different prompts to ensure the final text accurately reflected their own ideas and voice. They also conducted pre-writing and drafting mechanics for outlining and guiding the organization of research texts.

At the time of the course, these participants had already used ChatGPT and Co-Pilot for research, as they pointed out in class, but they learned to improve their prompt refinement by specifying direct requests according to their writing needs. Even though the veteran faculty members showed more proactive involvement, the novel researchers were equally aware and knowledgeable about different key issues related to using these technologies, such as academic accountability, thematic/cultural biases, and machine-sounding language, as observed in other studies (Smit et al., 2025). Also, all four participants demonstrated an active engagement with the online activities and final writing tasks, providing enriching feedback and writing process examples.

An important developmental aspect is that, before the hands-on activities, there were more questions about how these tools could improve their writing, since these tools, as Pedro commented, have already provided correct English for what researchers intend to convey. However, as online activities and final tasks were carried out, participants realized the importance of adequately transferring one's voice to the text and choosing linguistic options that may make texts sound more human, as Begoña remarked in her final task. In this scope, not only prompt engineering but also corpus-driven input was appreciated, as surveys demonstrate, especially for revising the texts linguistically. These participants also confirm that L2 research writers at post-graduate levels are challenged more by linguistic nuances during re-writing, since they have more limitations and concerns with using appropriate academic English phraseology and correct linguistic patterns (Jacob et al., 2023; Kramar et al., 2024; Laso Mart ń & Comelles Pujadas, 2025, among others).

Another positive facet common to the four participants is their deployment of effective strategies for modeling the tools according to their field-specific, stylistic, and thematic needs. In all the prompts, clear and simple language was requested, and, after GenAI-generated texts were examined, all participants noticed different weaknesses, deficiencies, and mistakes in terms of content and language, which they targeted and solved by refining prompts and integrating corpus-driven findings. Bego ña and Pedro realized they had to input more specific details about their research to make their texts sound more natural and adequate. In the case of Begoña, she focused more on linguistic aspects, whereas Pedro was more concerned with achieving an appropriate incorporation of research background ideas. Marisa and Aurora used corpus tools more, focusing on a wider range of linguistic issues, such as appropriate field- and register-related lexical choices and linguistic patterns.

On the other hand, participants' misgivings point to their adoption of these tools for daily practice. As survey scores show, GenAI management entails more problems with linguistic analysis than with navigation, and corpus tools pose more difficulties with technical or procedural issues. This contrast suggests that participants have more doubts about how to produce effective language by solely relying on GenAI, whereas they realize the direct linguistic accountability of corpus tools to make sense of lexical collocations and linguistic patterns. This finding aligns with the literature (e.g., Hua, Lu, & Guo, 2024), observing that postgraduate students, trained with corpus tools, achieve optimal results in their production of field-specific linguistic patterns.

Another aspect is their shared realization of the danger of overusing GenAI because this technology can compromise academic integrity, human writing oversight, and linguistic competence. Still, many other comments allude to advantages and future use with GenAI as writers develop appropriate techniques and strategies. These participants progressed from a more direct reliance on some GenAI tools for research to a more nuanced use of these tools with grown awareness of prompt engineering and linguistic consultation to improve academic writing.

The findings also highlight that this group of participants in tourism demonstrate a great sensitivity to language, such as finding an appropriate authorial voice, managing cohesion, and refining lexical choices. The other two participants in the course (belonging to economics and law studies) displayed similar attitudes and developments, but one did not use corpora tools, and the other participant examined only one linguistic example. In other areas, as in experimental sciences and engineering (e.g., Liu & Wang, 2024; Ruff et al., 2024), postgraduate participants demonstrate less concern with linguistic nuances, and more reliance on direct AI methods, such as machine translation procedures, development of prompts for text edition, and so on. In our context, qualitative findings point to the value afforded by participants to human creativity. Tourism researchers actively engage with AI tools not as replacements for writing skills, but as aid in the complex process of research planning, evaluation, and linguistic revision, integrating not only GenAI but also BDDL dynamics.

Conclusions

In conclusion, this case study provides a snapshot of how researchers and faculty in tourism studies can incorporate GenAI and BDDL tools into their writing practices. It reveals different strategies adopted by participants along writing stages and alongside research-specific priorities and concerns. The two research questions of this study are answered next by considering major findings.

In terms of how these participants leverage these tools for academic writing within their discipline, it is observed that, before the course, they were already familiar with practices such as brainstorming, summarizing, analyzing strengths and weaknesses, re-phrasing, and so on, agreeing with the literature (e.g., Ji et al., 2023; Nordling, 2023). However, after the course, they learned to refine their queries with prompt engineering tactics for shaping their research texts according to their own authorial voices. This approach was a key objective in the course. Additionally, they reasoned how texts can sound less AI-like, seeking simple familiar language within formal academic contexts. They targeted a combination of both direct simple phases with appropriate lexical-grammatical choices in their approaches with both GenAI and corpus tools. Therefore, before the course, these tourism participants already possessed linguistic and cognitive skills for their leverage of these resources accordingly, and, during the course, with guidance and training, they learned to integrate these tools more effectively into their writing practices.

As regards their perceptions and ideas after the course, they value the usefulness and advantage of applying these tools to tourism-related writing as positive, mostly for their personal research dissemination and publication objectives. Their general impressions are indicators of future use of these technologies in their writing work. Another aspect recognized as important is the ability to combine expert and linguistic knowledge, which aligns with Pigg's (2024) observation about the importance of human evaluation for writing with GenAI. Additionally, difficulties emerge in relation to L2 English writing within academic contexts, such as the use of appropriate

English phraseology and lexical collocations (as examined in other studies—e.g., Laso Mart n & Comelles Pujadas, 2025).

The primary limitation of this case study is its small sample size and a focus on participants who willingly take a course on GenAI for academic writing. This approach hinders the possibility of extrapolating these findings and observations to writing practices in tourism, since, among other reasons, other faculty members and researchers may be against the use of these tools and/or ignore their advantages. Therefore, future work is necessary. Further research should contrast data from larger and more diverse samples to validate initial observations. Further research should also track the evolution of these practices as technology continues to expand, seeking to understand not only what tools are used, but how and why they are used in particular ways across different academic communities.

Finally, systematic approaches are essential to fully grasp the impact of GenAI on academic writing in L2 contexts of higher education. As Raitskaya and Tikhonova (2025) assert, GenAI holds significant potential for cognitive processes that reinforce and improve research methods and approaches. However, academic/educational communities are still only starting to realize and apply GenAI possibilities, leading to mixed reactions and results. There is a strong demand for research that focuses on long-term effects, disciplinespecific approaches, and theoretical frameworks about cognitive processing and meta-linguistic thinking with these tools.

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