

Exploring the Complexities of L2 English Academic Writing Towards a Comprehensive Approach to Teaching English for Academic Purposes¹

*Csilla Sárdi*²

Abstract

L2 English academic writing, now a well-established field of study, incorporates a large number of interrelated issues from the perspectives of context, participants, process and textual realisation, informing various instructional models of English for academic purposes in university contexts globally. This paper looks at a number of major theoretical traditions and relevant research findings focusing on the characteristics of academic texts, writers, readers and the writing process, and shows how each tradition has inspired the development of particular approaches to teaching L2 English academic writing. Textual features are discussed from the points of view of genre and register analysis, and contextual features are looked at in terms of individual novice L2 writer characteristics, including writing strategies, the relationship between L1 and L2 academic writing, and the cultural background of writers. Related instructional models include product-, process-, and genre-based approaches whose operationalisations are closely linked to particular theoretical traditions. The paper argues that the pedagogical considerations stemming from different theoretical backgrounds and empirical research results can complement each other in a useful way leading to a more comprehensive pedagogical approach, and that the application of a well-informed, carefully selected and carefully sequenced combination of teaching techniques and accompanying materials can contribute to the successful development of L2 English academic writing skills.

Keywords

academic text varieties, academic writing strategies, genre analysis, L2 academic writing instruction, process approach to writing, product approach to writing, register analysis

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² Pázmány Péter Catholic University, sardi.csilla@btk.ppke.hu

1. Introduction

econd language (L2) writing refers to the process of composing written text in a language other than the writer's first language (L1) (Godwin-Jones 2022). It is a complex process that involves various linguistic, cognitive, and socio-cultural factors, and is influenced by the writer's prior writing experiences, cultural background, and language proficiency level (see Godwin-Jones, 2022; Matsuda and Silva, 2020). While these features apply to L2 academic writing as well, the latter is also characterised by particular genre- and register-specific features which are typically used in academic prose. This is because the specific communicative purposes of academic writing are fulfilled in a contextually situated way, and because academic writers, both in L1 and L2, are expected to follow a set of discourse community-specific conventions that reflect the values, beliefs, and practices of the academic community (Hyland and Wong, 2019; Paltridge, 2004; Swales, 1990).

To succeed in university education, students must develop their academic skills: the ability to comprehend and interpret academic texts, and the ability to create written texts in various sub-varieties of academic writing, such as summaries, persuasive essays, laboratory reports and dissertations. This is a considerable challenge even in the students' native tongue (L1), because academic discourse differs markedly from other text varieties students may be familiar with, such as casual face-to-face conversations, fiction or news (Biber and Conrad, 2019). A significant objective of university education, then, is to help students master the specialised language of a particular profession, such as electrical engineering, finance, or English language education. Achieving success in any field of study requires, among other things, learning to make sense of and effectively use the specific language that is appropriate for particular situations and serves relevant communicative purposes in academic contexts.

In the past decades, L2 English academic writing has become an increasingly important field of study in applied linguistics (Flowerdew, 2020). This is because the global demand for English proficiency in academic and professional settings continues to rise, and because language intensive degree programmes have required and continue to require students to develop and demonstrate their academic literacy skills, including academic writing. In this paper, the term 'language intensive degree programmes' is used to denote English Medium Instruction (EMI) environments, in other words settings where English is used as a working language to teach academic subjects in countries where the L1 of the majority of the population is not English; traditional study programmes in languages such as English Studies

and English Language Teaching degree programmes for students whose L1 is not English; and degree programmes for English as a Second Language (ESL) students in inner-circle countries such as the UK and the USA (Coleman 2006).

In such contexts, L2 English university students are expected to fulfil writing tasks using text varieties that fall within the umbrella term of academic prose facing a significant challenge when it comes to understanding the differences between and creating text varieties relevant in their study programmes. Traditionally, such students were taught general vocabulary and grammar rules to prepare them for advanced study (Paltridge, 2004, p. 94). Recent research in Applied Linguistics has shown, however, that this is insufficient for success because of the differences in linguistic features between general and academic texts (Biber and Conrad, 2019; Flowerdew, 2020). To meet this challenge, the field of English for Academic Purposes (EAP) has emerged, focusing on teaching English-language skills specifically for the text varieties relevant in university contexts. Indeed, the ultimate goal of EAP is to develop and implement instructional approaches and materials that help students use the particular language varieties in their fields in a purposeful and effective way (Basturkmen 2021).

The aim of this paper is twofold. Firstly, it looks at characteristics of L2 English academic writing from the points of view of (1) the language features of academic prose, and (2) its context including the process of writing, and the writers as well. Secondly, it provides an overview of prominent pedagogical approaches available for the EAP profession for the enhancement of L2 English students' academic writing. In doing so, the paper argues that the pedagogical considerations stemming from different theoretical traditions and empirical research results can complement each other in a useful way leading to a more comprehensive pedagogical approach, and that the application of a well-informed, carefully selected and carefully sequenced combination of teaching techniques and accompanying materials can contribute to the successful development of L2 English academic writing skills.

2. Understanding L2 English academic texts: Genre and register

In order to describe different text varieties (both oral and written) and better understand their characteristics, several perspectives to text analysis have been introduced, including genre, register, style and domain (Lee 2001). Since these perspectives serve the purposes of analysing texts from different points of view, the same texts can be looked at using any or all of these perspectives. In this paper, I will focus on two perspectives: genre and register, because these are the

concepts which have been widely used in the EAP literature (Matsuda and Silva 2020). Since, over the past decades, the two terms have been defined differently by different authors causing some confusion among researchers and practitioners alike (Lee 2001), I will rely on the corresponding definitions provided in Biber and Conrad (2019), and Halliday and Matthiessen (2014).

The concept of 'genre' points to language features which are used to structure a text in ways conventionally associated with a particular text type (Biber and Conrad 2019, p. 2), while the concept of 'register' is concerned with the prevalent linguistic characteristics of a given text (Biber and Conrad 2019, p. 2; Halliday and Matthiessen 2014, p. 29). What is common in the two approaches is that the same philosophical underpinning guides their text analysis. Both perspectives posit that written text construction always takes place in cultural and situational context that is shaped by the relationship between the writer, the reader, the text, and reality. It is further posited that the situations are dynamic in nature, meaning that the relationship between the elements is not stable. Since written discourse cannot provide an exact depiction of reality, it will show, instead, the writers' interpretation of reality, which they arrive at by socially and discursively negotiating meaning in any given communicative situation.

As pointed out above, 'genre' is regarded an approach to text analysis which is primarily concerned with the structural elements of complete texts. Although every communicative situation is unique, there are situations that are similar and require typified rhetorical actions. These actions are developed and shared by readers and writers working in a particular communicative context. For example, in the case of research papers, business letters or news reports, the linguistic elements traditionally associated with the beginning, main body and ending of each text type show considerable differences which are conventionally determined, and the use of the typical linguistic solutions in any of the above cases will depend on these conventions. Taking typified rhetorical actions while also observing their sequence and applying corresponding linguistic choices help writers navigate the intricacies of writing and aid readers in comprehending the text (Bhatia, 2014; Tardy, 2009).

In comparison, the 'register' of a text refers to the typical occurrence of particular lexical and grammatical features in regard to the situation in which the text serves a purpose. This is because a register perspective to text analysis assumes that linguistic features serve communicative functions, and that particular language features are used in a large proportion, because of the purpose they serve in the situational context of the text. For example, abstract nouns and expanded noun phrases can frequently

be found in theme position in academic prose, because texts in this category tend to foreground participants in order to keep reality still for the purposes of observation and interpretation. In narratives, however, the use of pronouns in the theme position is a prevalent feature because they help foregrounding actions and processes in a story giving participants an assistant role (Halliday and Matthiessen, 2014).

When taking a register-centred approach to academic text analysis, the inherent variability and diversity of text varieties within the academic domain need to be taken into consideration. This is because academic writing encompasses a wide range of disciplines, and each of these is characterised by its own specific registers and conventions (Hyland, 2004). To further complicate the matter, academic prose is also characterised by a lack of clear boundaries between registers (Biber and Conrad, 2019). This means that academic texts often involve a mixture of different registers, blending features of formal, technical, and abstract language in varying ways and proportions. This diversity and complexity cautions against defining a single and unified academic register. Indeed, research has repeatedly pointed to the disciplinary and interdisciplinary nature of academic registers (Hewings, 2006; Hyland, 2004), which suggests that a careful consideration of disciplinary characteristics is needed for the development of a comprehensive understanding in regard to the register features of academic prose.

Academic texts are also characterised by complex textual features that are prevalent in a particular register. These features comprise both lexical choices and grammatical structures. In terms of lexical choices, academic texts include technical terms specific to various disciplines (e.g. the term *morphology*, which has its own specific and very distinct meaning in biology and linguistics, respectively), as well as academic vocabulary shared by but might be used differently in various disciplines (e.g. the use of *analysis*, *method*, *function* in physics, economics and language pedagogy, respectively) (see Hyland and Tse, 2007). Grammatical structures are characterised by complexity in terms of syntactic patterns. Sentences are often longer and more elaborately constructed, featuring subordination and coordination where clauses serve different functions. Complexity also manifests in the form of embedding, passive constructions, nominalisation and extended noun phrases. These language features make it possible to convey precise and nuanced meanings, to present ideas in a sophisticated manner, highlight relationships between concepts, and provide a detailed analysis of the subject matter.

3. Understanding the process of L2 English academic writing

We have seen above that the textual aspect of academic writing is concerned with the physical realisation of the meaning-making process the writer goes through while negotiating their ideas, creating a relationship with the readers, and helping them navigate through the text. To do so, writers need to construct a coherent piece of writing, one that contains logically and semantically consistent units of meaning in a conventionally acceptable way for their audience, while also applying lexical and grammatical devices which serve relevant purposes. In order to respond to a rhetorical situation, L2 academic writers go through a series of complex processes applying various strategies to support the writing activity. Below, an overview of academic writing strategies is provided first, followed by research findings in relation to the characteristics of L2 academic writers.

3.1 L2 English academic writing strategies

The concept of ‘language learning strategies’ has been defined as the (largely) conscious processes and actions employed by L2 learners which serve the purposes of supporting an individual’s learning and use of the L2 (Oxford, 2011; Rose, 2015). Consequently, L2 writing strategies comprise a set of processes and actions applied by writers when developing a written text, and a considerable amount of research (see Paltridge, 2004) has focused on L2 writing strategies of novice writers in academic settings, taking two basic approaches.

One approach regards the states of the writing process, i.e. planning, drafting, and revising, as an organising principle when identifying and grouping individual writing strategies (Matsuda and Silva, 2020). For example, at the planning stage, writers may find it useful to apply strategies such as creating a mind map to help collect, categorise, organise and evaluate content points and arguments they plan to include in their text. Drafting is a crucial stage of the process, and several workable strategies have been identified. Writers often find it useful, for example, to focus on particular elements of writing (e.g., content points) while ignoring others (e.g. accuracy and appropriacy) in order to reduce cognitive load and initial anxiety at the early stages of drafting. As for the revision stage, some strategies for editing and proofreading include seeking advice from peers, letting the text sit for a while before revision, and checking the clarity of content points without paying attention to language usage.

The other approach to writing strategy classification suggests that learning strategies in general, and writing strategies in particular may be categorised and placed in a taxonomy based on their orientation. For example, Mu and Carrington's (2007) as well as Raofi et al.'s (2017) taxonomy organise academic writing strategies into the four major categories of rhetorical, cognitive, metacognitive and social/affective orientations. Rhetorical strategies include processes that writers use to organise and present their ideas in line with the writing conventions acceptable to the discourse community in a particular rhetorical situation, and serve the purposes of organisation, text cohesion and genre awareness. Cognitive strategies encompass actions that writers use while undertaking the actual writing process such as generating ideas, imitating features of similar texts and revising draft versions of own text, while metacognitive strategies refer to the actions writers use to consciously control the process of writing for the purposes of planning, monitoring and self-evaluating. Finally, social/affective strategies denote actions that writers undertake to interact with others (i.e. supervisors and peers) in order to clarify content points and to regulate emotions and attitudes during writing. Also, drawing on previous writing experience, reducing anxiety and maintaining motivation and self-confidence are examples of writing strategies which belong in this category.

While major studies on L2 English writing strategies do not categorise the use of computer- and internet-assisted typing tools (i.e. checking inconsistencies in spelling, grammar, punctuation, as well as detecting plagiarism and suggesting linguistic solutions in line with the register of the text) as constituent parts of writing strategies, recent research findings indicate that the application of typing assistants and training in artificial intelligence-powered writing tools can promote the effective use of writing strategies and the development of a positive attitude towards technology acceptance in English academic writing contexts (Campbell, 2019; Nazari et al., 2021).

There has been some debate in the literature regarding the comparability of experienced and novice writers' strategies and the usefulness of overtly teaching the strategies applied by the former group (Adel and Erman, 2012). While not all writing strategies are used consciously by experienced writers, research has shown that students can benefit from explicit instruction regarding the effective use of such strategies (Hyland 2003). There has been some debate in the literature regarding the relationship between and transferability of writing strategies regarding the L1 and the L2 (Canagarajah, 2002; Jarvis, 2000; Silva 1993). These issues will be discussed in 3.2 below.

3.2 L2 English academic writers

A characteristic feature of novice L2 academic writers is that their proficiency in terms of morphological, syntactic, and lexical knowledge develops parallel with the development of their academic writing skills (Matsuda and Silva, 2020). L2 English students' actual knowledge base of grammar and vocabulary is different from that of their native speaker peers, and empirical research has repeatedly shown that L2 English students tend to produce texts that are shorter, less coherent and cohesive, and contain more errors than those written by their L1 peers (Hyland, 2003; Matsuda and Silva, 2020). These findings align with L2 English students' perceptions as to their relative slowness and insufficiency in text production caused by linguistic issues (Dong, 1998; Hwang, 2005).

Another feature of L2 English academic writers is that such writers have already developed their writing skills in their L1 by the time they are required to write academic texts in L2 English. While findings on the extent and nature of the impact of L1 on L2 English writing vary (see e.g. Chen and Baker, 2010; Yigzaw, 2013), it has been shown that proficiency in L1 writing may not always be successfully transferred to L2 writing situations (Björk et al., 2003; Hyland 2003). This is because not all aspects of proficiency in L2 writing have a direct link to L1 writing abilities. For example, students who are competent writers in their L1 may still find it difficult to develop high-quality texts in L2 English due to different textual and rhetorical conventions in their L1 and L2. Some of the consequences are that the composing processes in the two languages may differ, setting goals and collecting ideas in L2 may be more demanding, writers in their L2 may be less fluent and, as a consequence, their text will be less effective (Leki, 2000; Silva 1997).

Cultural differences are also regarded as an important feature in L2 academic writing (Hyland, 2003). Culture in applied linguistics is broadly understood as a network of socially formed and shared meanings that affects a group of people's knowledge and understanding of the world and shapes the activities they engage in, how they think, and what decisions they take (Kramsch, 2012). Since language use is inextricably linked to culture, the cultural background of L2 academic writers can strongly influence the ways they think about the aims of a writing task as well as about the process and product of writing. Students' and their teachers' differing cultural values can easily lead to different and even conflicting interpretations as to the aims, nature, and requirements of academic writing tasks.

Divergent attitudes to academic writing may also stem from the way 'knowledge' is conceptualized in different traditions (Hyland, 2003). In Western cultures, for

example, knowledge can be extended through analysis, critical thinking, speculation, and transformation, while many Asian cultures value existing knowledge and support the reiteration, description, and summary of well-established ideas. Such divergent attitudes have consequences in terms of beliefs about text quality and what is regarded as a piece of good writing: individuality, creativity, and originality from a Western, and a display of knowledge and respect towards outstanding scholars from an Asian point of view. This is closely linked to issues in writer identity as well. Thus, while expressions of the author's individually, authorial self, and voice are encouraged in Western cultures, L2 English writers from more collectivist cultures may find it difficult to realise these expectations (Ramanathan and Atkinson, 1999).

Differences in attitudes explain why students and their teachers with divergent cultural backgrounds may regard uncited borrowings from other people's work either as homage or plagiarism. As for L2 English students' attitudes towards plagiarism in European EMI environments, Doró (2016) has found that although students are aware of the negative judgment regarding plagiarism, they find it difficult to clearly identify instances of uncited borrowings and to understand why and how these should be avoided. Culture-based beliefs about knowledge, text quality, and writer identity can have an impact on the academic writing process and influence the evaluation of the end-product as well. This is particularly the case in cross-cultural teaching and learning contexts if the teachers are not aware of possible writing-related cultural differences, and the students do not clearly understand the expectations towards good quality academic texts in the given context.

4. Pedagogical approaches to L2 English academic writing

In the past decades, instruction in L2 academic writing has drawn on a range of theoretical frameworks, including the ones discussed above, enabling researchers and practitioners to better understand the complexities of the context, process and product of writing. As a consequence, several significant advancements have taken place in the field of L2 academic writing instruction. Since these advancements have been influenced by prevalent theoretical perspectives on language, learning, human behaviour, and the social aspects of academic writing, they have unfolded in a somewhat chronological manner mirroring the zeitgeist of any given time period. Therefore, it would be possible to place them in their historical context and enter into the dialogue accordingly (see e.g. Matsuda and Silva, 2020 for a historical perspective). The discussion below takes a different approach, and focuses on

the ideas themselves showing the link between the theoretical perspectives and the relevant pedagogical responses. This is done in order to suggest that existing theoretical underpinnings and pedagogical solutions remain relevant and valuable starting points and offer useful insights for effective L2 academic writing instruction within the framework of language intensive degree programmes.

Prevalent approaches to L2 academic writing instruction include product-, process-, and genre-based approaches. Their respective pedagogical considerations and characteristic features are outlined below.

4.1 Product-based approaches

Product-based approaches to L2 academic writing instruction are closely linked to theoretical and empirical work on the register analysis of academic texts (Paltridge, 2004). Such approaches (e.g. current-traditional rhetoric, paragraph pattern approach, contrastive rhetoric) focus on language patterns which serve particular rhetorical functions, and which may be used effectively at the sentence, paragraph and text level of written academic discourse. Accordingly, instruction is centred on rhetorical functions (e.g. compare and contrast, cause and effect, problem and solution), which are seen as textual organisational patterns. At the sentence and paragraph level, the major concern is the logical construction and arrangement of these patterns and the accurate and appropriate use of lexico-grammatical features which are commonly used to form these patterns in particular text varieties. At the text level, the major concern is the extension of the above principles so that they also become operational larger stretches of language beyond the paragraph level (e.g. for introductions or conclusions), and for complete texts (e.g. essays).

Since these approaches primarily focus on the organisational aspects of writing according to specific patterns at different textual levels, mastery of writing is regarded as developing the skills to identify, internalize, and reproduce these patterns within an academic context where the instructor's evaluation is in line with the conventions of the academic discourse community.

In line with the principles described above, instruction is primarily form-focused. Classroom tasks include the selection of appropriate sentences among various options within a given paragraph or text, as well as reading and analysing model texts and applying these insights to the students' own writing. A more complex task for students is to create a text on an assigned academic topic which requires the compilation and categorisation of relevant facts and ideas, the preparation of

an outline, and the composition of the text by developing a thesis statement, topic sentences and supporting claims and arguments based on research and in line with the outline. The text is composed of increasingly complex discourse structures, such as sentences, paragraphs, and sections, with each component nested within the larger structural level. All of this occurs within an academic context where the instructor's evaluation is regarded as representative of that of the discourse community.

4.2 Process-based approaches

Process-based approaches owe their existence to a shift, at a theoretical level, in focus from the organisational and formal features of the text to content, ideas in line with the writer's communicative purpose, emphasising the recursive, exploratory and generative nature of the writing process (Susser, 1994). This approach conceptualises writing as a multifaceted, exploratory and imaginative endeavour that shares similarities between L1 and L2 writers, where the development of proficient and efficient writing strategies is regarded crucial to becoming a skilled writer. This is because the writer's role involves exploring and conveying meaning, and the resulting text is of secondary importance, as its form is shaped by content and purpose.

This shift has resulted in a focus on the individual writer and their writing strategies in the process-oriented classroom, where it is the responsibility of the writer to identify the task and the audience, ensuring that the response to the task fulfils the needs of the intended readers. In such an environment, instructors guide, rather than control, students through the writing process. Instead of assigning the formal features of the academic text in terms of organisational patterns or syntactic and lexical characteristics, instructors encourage students to focus on their communicative purposes and to select and use language which serves these purposes and help successfully convey meaning. Consequently, the classroom is seen as a positive, encouraging and collaborative workshop environment, where instructors allow students sufficient time and minimal interruption to engage in their writing process. The aim is to assist students in cultivating effective strategies for initiating, drafting, revising, and editing their writing, thereby contributing to the enhancement of effective academic writing skills.

4.3 Genre-based approaches

The pedagogical approach that introduces genre analysis into EAP has been laid out in Swales (1990, p. 58). His work defines written academic discourse as a communicative event with a specific communicative purpose which is realised with the help of stages and move structures by members of discourse communities. This points to the students' needs to be aware of the genre-specific purposes of academic text varieties and be able to follow a set of conventions and expectations when pursuing their communicative goals in writing, because it is essential for success to become equipped for the demands of academic settings. This also means that a higher priority is given to the expectations and needs of the audience (i.e. university lecturers, supervisors, editors and publishers) than to the writer's personal experience, creativity and expressive power (Tardy, 2020).

Accordingly, genre-based instruction in L2 academic writing aims at facilitating students' effective navigation of the academic environment, recreating, to the greatest extent possible, the conditions of real-life university writing, focusing on written genres students need to be able to produce in and out of classroom settings (Hyon, 2017). This involves becoming familiar with academic genres and the specifications of writing tasks, analysing language and discourse features of different genres as well as the social and cultural context in which particular text varieties are produced. Additionally, instruction also entails carefully selecting and thoroughly studying materials that are suitable for a specific task, as well as evaluating, filtering, integrating, and organising pertinent information.

To reach these aims, academic writing instruction relies on needs analysis seeking answers to the question as to why students need to develop L2 English academic writing skills (Brown, 2016). Investigating learners' needs may entail a focus on necessities (i.e. what the learners need to know in order to successfully fulfil academic writing tasks), lacks (i.e. the gap between the learners' knowledge and abilities and what they are expected to be able to do), and wants (the learners' own perception as to what they need) (Sárdi, 2002). Carrying out a needs analysis makes it possible to carefully consider the target situation in terms of tasks, knowledge and language requirements. This information is taken into consideration during the design and implementation of an L2 English academic writing course creating a strong link between academic requirements, student needs and academic writing courses.

5. Conclusion

This paper has shown that a wide-range of instructional approaches to L2 English academic writing have been developed and put to practice in language intensive degree programmes in the past decades. Based on their orientation, it is possible to classify them as product-, process- and genre-based approaches. Depending on the focus of the theoretical principles and research findings which inform these respective approaches, each defines differently the focus, aim, content, and methodology of academic writing courses emphasising the aspects and features of academic writing it is concerned with the most. Thus, product-based approaches put an emphasis on the characteristics of academic text in terms of the purposes it serves in a given academic context and the corresponding lexico-grammatical features which are used to fulfil these purposes. Process-based approaches foreground the novice L2 writer, their individual characteristics including their cultural and linguistic background, and focus on the stages of writing students go through while engaging in the creative process that leads to text production. Genre-based approaches highlight the readers, whose role is to decide whether to initiate novice writers into the academic discourse community. Here a focus on academic genres becomes instrumental, because it helps raise students' awareness as to the structure of academic texts in terms of the rhetorical actions they perform, and shows how to present ideas in a way that is in line with the conventions of the discourse community and the expectations of the readers.

A comprehensive view on L2 academic writing clearly points to the complex and multi-faceted nature of L2 academic writing. Research into the field has offered a plethora of invaluable insights as to the characteristics of and links between related factors offering both (1) an extra-textual perspective: the cultural and situational contexts including the goals and topic of the text, the writer, the reader and their relationship, as well as decisions as to the kind of text that is being created, and (2) an intra-textual perspective: the linguistic realisations of extra-textual factors including the expression of meaning using lexico-grammatical tools.

The apparent complexity of L2 academic writing indicates that a focus only on one or some of these factors may render pedagogical approaches to L2 English academic writing less effective if they fail to adequately address aspects of academic writing which might be needed for the marked improvement of novice L2 writers' skills and achievements in any given situation. What is needed, then, is a comprehensive examination and reassessment as to the nature of L2 English writing instruction in order to avoid relatively simple and straightforward solutions

to complex issues. A careful evaluation of existing knowledge can serve as a valuable starting point for synthesizing information and developing relevant pedagogical models acknowledging that there is no single universal solution applicable to every situation. Such an endeavour can provide an opportunity for practitioners to break away from specific traditions, and challenge traditionally established institutional approaches to L2 academic writing instruction and critically evaluate readily available instructional models. Such an approach can be instrumental in determining what is relevant and meaningful for the purposes of teaching and learning in the specific institutional contexts of higher education.

Finally, although a focus on artificial intelligence (AI) has been beyond the scope of this paper, the rapid development of AI-based text generation tools, most notably the release for public use of the technology company OpenAI's ChatGPT on November 30 2022, needs to be mentioned here. While the chatbot's full impact on the future of education remains to be seen, its remarkable potentialities (e.g. generating text of required level of detail, length, style, genre and register), limitations (e.g. providing nonsensical answers to questions), as well as potential threats (e.g. evading plagiarism detection) have given rise to many speculations as to its effective use in educational contexts, especially writing instruction (Tate et al. 2023). Research is needed to understand how text generation tools will change the process and product of writing and how they can best serve the needs of novice writers and their teachers in the process of developing L2 English academic writing skills.

References

- Ädel, Annelie, and Britt Erman. "Recurrent word combinations in academic writing by native and non-native speakers of English: A lexical bundles approach." *English for specific purposes* 31, no. 2 (2012): 81-92.
- Basturkmen, Helen. "Is ESP a materials and teaching-led movement?." *Language Teaching* 54, no. 4 (2021): 491-501.
- Bhatia, Vijay. "Worlds of written discourse." *Worlds of Written Discourse* (2014): 1-248.
- Biber, Douglas, and Susan Conrad. *Register, genre, and style*. Cambridge University Press, 2019.
- Brown, James Dean. *Introducing needs analysis and English for specific purposes*. Routledge, 2016.
- Campbell, Madelaine. "Teaching academic writing in higher education." *Education Quarterly Reviews* 2, no. 3 (2019).

- Canagarajah, A. Suresh. *Critical academic writing and multilingual students*. University of Michigan Press, 2013.
- Chen, Yu-Hua, and Paul Baker. "Lexical bundles in L1 and L2 academic writing." *Language Learning Technology*, 14, no. 2 (2010): 30-49.
- Coleman, James A. "English-medium teaching in European higher education." *Language teaching* 39, no. 1 (2006): 1-14.
- Dong, Yu Ren. "Non-native graduate students' thesis/dissertation writing in science: Self-reports by students and their advisors from two US institutions." *English for Specific Purposes* 17, no. 4 (1998): 369-390.
- Doró, Katalin. "To see or not to see: Identifying and assessing plagiarism in non-native students' academic writing without using text-matching software." *EduLingua* 2, no. 1 (2016): 15-26.
- Flowerdew, Lynne. "English for Academic Purposes." *The Concise Encyclopedia of Applied Linguistics* (2020): 413-419.
- Godwin-Jones, Robert. *Second Language Writing*. Oxford University Press, 2022.
- Halliday, Michael Alexander Kirkwood, and Christian MIM Matthiessen. *Halliday's introduction to functional grammar*. Routledge, 2014.
- Hewings, Martin, ed. *Academic writing in context: Implications and applications*. A&C Black, 2006.
- Hwang, Kumju. "The inferior science and the dominant use of English in knowledge production: A case study of Korean science and technology." *Science Communication* 26, no. 4 (2005): 390-427.
- Hyland, Ken. *Disciplinary discourses, Michigan classics ed.: Social interactions in academic writing*. University of Michigan Press, 2004.
- Hyland, Ken, and Polly Tse. "Is there an 'academic vocabulary'?" *TESOL quarterly* 41, no. 2 (2007): 235-253.
- Hyon, Sunny. *Introducing genre and English for specific purposes*. Routledge, 2017.
- Jarvis, Scott. "Methodological rigor in the study of transfer: Identifying L1 influence in them interlanguage lexicon." *Language learning* 50, no. 2 (2000): 245-309.
- Lee, David YW. "Genres, registers, text types, domains and styles: Clarifying the concepts and navigating a path through the BNC jungle." (2001): 37.
- Leki, Ilona. "Writing, literacy, and applied linguistics." *Annual Review of Applied Linguistics* 20 (2000): 99-115.
- Matsuda, Paul Kei, and Tony Silva. "Writing." *An Introduction to Applied Linguistics* (2020): 279-292.

- Nazari, Nabi, Muhammad Salman Shabbir, and Roy Setiawan. "Application of Artificial Intelligence powered digital writing assistant in higher education: randomized controlled trial." *Heliyon* 7, no. 5 (2021): 1-9.
- Oxford, Rebecca L. "Language learning strategies." *The Cambridge guide to learning English as a second language* (2018): 81-90.
- Paltridge, Brian. "Academic writing." *Language teaching* 37, no. 2 (2004): 87–105.
- Rose, Heath. "Researching language learner strategies." *Research methods in applied linguistics: A practical resource* (2015): 421-437.
- Sárdi, Csilla. *English language needs and course design*. Kodolányi János Főiskola, 2002.
- Silva, Tony. "Toward an understanding of the distinct nature of L2 writing: The ESL research and its implications." *TESOL quarterly* 27, no. 4 (1993): 657-677.
- Silva, Tony. "Differences in ESL and native-English-speaker writing: The research and its implications." *Writing in multicultural settings* (1997): 209–219.
- Susser, Bernard. "Process approaches in ESL/EFL writing instruction." *Journal of Second language writing* 3, no. 1 (1994): 31-47.
- Swales, John M., and John Swales. *Genre analysis: English in academic and research settings*. Cambridge University Press, 1990.
- Tardy, Christine. *Building genre knowledge*. Parlor Press LLC, 2009.
- Tardy, Christine M. "Genre-based language teaching." *The encyclopedia of applied linguistics* (2020): 1-4.
- Tate, Tamara, Shayan Doroudi, Daniel Ritchie, and Ying Xu. "Educational research and AI-generated writing: Confronting the coming tsunami." (2023).
- Yigzaw, Abiy. "Students' first language writing skills and their English language proficiency as predictors of their English language writing performance." *Journal of Languages and Culture* 4, no. 6 (2013): 109–114.