

# ACADEMIC WRITING IN ADDITIONAL LANGUAGES (LX)

TEACHING RESEARCH AND EMERGING TECHNOLOGIES

Edited by Martin Testa Samuel Figueira-Cardoso





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# Contents

- 7 About the Editors
- 9 Notes on Contributors

Martin Testa & Samuel Figueira-Cardoso

13 Introduction

#### PART I. ACADEMIC WRITING AND LINGUISTIC THEORY

Marina Bondi, Fabiola Notari & Matteo Socciarelli

Individuality and Commonality in Thesis Writing:
 Designing EAP Materials for Classroom Activities

Antonio M. da Silva & Lucia Rottava

51 2. Exploring the Impact of Flipped Learning on Beginner-Level Portuguese Writing Skills: A Systemic Functional Linguistics Perspective

Margarita Vidal Lizama

73 3. Thesis Writing Workshop: A Case in Postgraduate Education in Spanish from an SFL-Grounded Approach

Martin Testa

95 4. Metadiscourse in Italian Linguistics: An Overview and Practical Applications for Academic Writing

Elena Ballarin

125 5. In the Lab with the Thesis: A Case Study of TesiLab

Ana Alexandra Silva & Maria João Marçalo

6. Challenges and Strategies in Academic Writing:A Needs Analysis at the University of Évora (Portugal)

#### PART II. ACADEMIC WRITING AND EMERGING TECHNOLOGIES

Oliver James Ballance & Averil Coxhead

170 7. Large Language Model AI and Lx Academic Writing: Challenges and Opportunities

Chin-Wen Chien

202 8. Influence of Gamification Activities and Tools on the Learning of Technical Terms and Academic Writing among Taiwanese Undergraduate and Graduate Students

Chiew Hong Ng, Yin Ling Cheung & Weiyu Zhang

9. The Use of Technology, Digital Tools, and Artificial Intelligence in Academic Writing in Additional Languages: A Review of Empirical Studies from 2014 to 2023

Cátia Martins, Samuel Figueira-Cardoso & Fernanda Reiff

242 10. Teaching Portuguese as an Additional Language and Academic Writing: The Co-Construction of Multilingual Identities in Telecollaboration Activities between Brazil and Canada

# About the Editors

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# Notes on Contributors

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**Elena Ballarin** teaches Italian for foreigners at the School for International Education of the Ca' Foscari University of Venice (Italy). At the same university, she has been giving seminars and workshops in academic Italian for undergraduate students for many years. She holds a PhD in Language Sciences with a thesis on academic Italian. She has a monograph and several scientific contributions to her credit.

Ana Alexandra Silva is a tenured Assistant Professor at the University of Évora (Portugal), where she earned her PhD in Linguistics in 2008. She also holds a BA in Teaching Portuguese and English Languages (University of Évora, 1996) and an MA in Portuguese Linguistics (University of Coimbra, 2001). Since 1996, she has been teaching linguistic and scientific disciplines at the University of Évora. She has published numerous books and scientific articles in prestigious journals and is a research member of the Center for the Studies in Letters (CEL–FCT R&D Unit, https://www.utad.pt/cel/).

Maria João Marçalo holds a PhD and an advanced degree in Linguistics from the University of Évora (Portugal), along with a post-doctoral degree in Applied Linguistics – Second Language Acquisition from Carnegie Mellon University (USA). She teaches Portuguese Linguistics and Portuguese as a Foreign Language at the University of Évora, where she also served as the director of the PhD Programme in Linguistics from 2013 to 2020. She is the author of several

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# Introduction

It is with great pleasure and anticipation that we present to you Academic Writing in Additional Languages (Lx): Teaching, Research, and Emerging Technologies. As educators, researchers, and language enthusiasts, we recognize the immense significance of writing skills in second language acquisition and academic success. This book is a testament to our shared commitment to supporting Lx learners in their journey towards effective academic writing proficiency.

In an increasingly interconnected and diverse world, where multilingualism is celebrated and valued, the importance of writing in a second language cannot be overstated. Lx learners face unique challenges when engaging in academic discourse, grappling with not only the complexities of language but also the expectations of scholarly communication within their respective fields. It is our collective belief that every Lx learner possesses the potential to excel in academic writing, given the right tools, guidance, and support.

And so on, and so forth...

The main problem with the first two paragraphs of this 'fake' introduction is that they were generated by artificial intelligence. This raises several fundamental questions: How should we integrate emerging technologies in academic writing classrooms? To what extent should these technologies be restricted? What impact might these technologies have on authors' voices?

In the context of these technological advancements, traditional writing classes, often limited to grammar correction, are likely to become – if they have not already – increasingly outdated. Consequently, there is an urgent need to integrate advanced linguistic frameworks and technological breakthroughs within the structure of academic education. Equally importantly,

the production and sharing of knowledge in our diverse, multilingual, and multicultural society – especially within universities and research centres – more often than not involves second language users. Given this reality, we believe that a contemporary approach to academic discourse must necessarily embrace a multilingual perspective.

This volume aims to address the teaching and researching of academic writing in the context of additional languages (often referred to in the literature as "Lx"), presented from the perspectives of four languages: English, Portuguese, Italian, and Spanish. Our aim for this publication is to integrate contemporary linguistic theories with cutting-edge technologies, while also broadening their application beyond English to encompass other languages. This effort seeks to bridge a critical gap in the existing literature, serving the needs of both practitioners and scholars engaged in the study of academic discourse across multilingual settings. Accordingly, this book is divided into two main sections: (1) Academic Writing and Linguistic Theory and (2) Academic Writing and Emerging Technologies.

The first part of the book bridges modern linguistic theory and current practices within academic writing research and teaching. In the opening chapter, Marina Bondi, Fabiola Notari, and Matteo Socciarelli discuss the balance between expressing individual viewpoints and adhering to community rhetorical norms in thesis writing, illustrated through the development of a course in an English as a Medium of Instruction programme in Italy. The following two chapters adopt a systemic functional linguistics (SFL) approach. Antonio M. da Silva and Lucia Rottava evaluate the effectiveness of flipped learning in enhancing Portuguese writing skills at the beginner level, using an SFL framework to analyse language development through classroom activities and external tools. Margarita Vidal Lizama outlines a writing workshop design grounded in SFL, aimed at improving thesis writing for postgraduate students in Spanish, focusing on textual meanings and pedagogical principles. In Martin Testa's chapter, the focus is on metadiscourse theory, which draws on the concept of language metafunctions from SFL. The text offers a comprehensive overview of metadiscourse within the context of Italian linguistics and provides practical insights for enhancing academic writing instruction. In the following chapter, Elena Ballarin examines a scientific-academic writing workshop at Ca' Foscari University of Venice (i.e. TesiLab), focusing on how undergraduate students develop awareness of research and academic communication through glottodidactic strategies. Lastly, Ana A. Silva and Maria J. Marçalo explore the challenges of academic writing through a needs analysis among students at the University of Évora (Portugal), aiming to develop a tailored academic writing curriculum responsive to student needs and current educational demands.

The second part of the book, as we have mentioned, focuses on instruction of academic writing in the context of emerging technologies. In the opening chapter of this section, Oliver J. Ballance and Averil Coxhead discuss the impact of large language models on Lx academic writing, addressing potential issues and offering pedagogical recommendations for integrating AI technologies into academic writing instruction. In the next chapter, Chin-Wen Chien assesses the effectiveness of gamification in teaching technical terms and academic writing, showing significant improvements and offering suggestions for future teaching integration. Chiew Hong Ng, Yin Ling Cheung, and Weiyu Zhang review the use of technology and AI in academic writing and its outcomes in the period 2014-2023, providing recommendations for enhancing academic writing through these tools. Lastly, Cátia Martins, Samuel Figueira-Cardoso, and Fernanda Reiff explore the unique challenges of teaching Portuguese in multicultural contexts, with a focus on telecollaboration and digital multiliteracies in fostering intercultural understanding and identity formation among students.

We trust that this volume will be embraced as a vital contribution to research and teaching of academic discourse. The publication is also an invitation to join an ongoing and critical dialogue on the nexus of theory and practice, a conversation made all the more pertinent by the advent of new technologies affecting the crafting and understanding of academic texts.

We also hope that this book conveys our conviction that despite technological innovations like those introduced by artificial intelligence, the careful oversight of teachers and researchers remains indispensable. It is essential not only for guiding the educational process but also for the public presentation of ideas, research, and results, and ultimately, for the production of knowledge in general.

Last but not least, we would like to express our deepest gratitude to the University of Warsaw and its programme, *Inicjatywa Doskonałości – Uczelnia Badawcza*, for their financial support and unwavering faith in our project. Their backing underscores their commitment to advancing knowledge, for which we are profoundly grateful. We also extend our sincere thanks to all the contributors to this volume for their patience and dedication to this rigorous endeavour.

We hope this volume proves to be insightful, and we look forward to engaging with you at future congresses and through forthcoming papers.



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# Individuality and Commonality in Thesis Writing: Strategies and Classroom Activities<sup>1</sup>

### 1.1. Introduction

The pervasive influence of English across cultural and linguistic boundaries has significantly impacted research and higher education, fostering the widespread use of this language in academic communication. The global nature of academic activities, publications, and research underscores the increasing significance of English in the international academic landscape, prompting changes in the study and teaching of English for Academic Purposes (EAP). This change also permeates English-medium domains of discourse. Intercultural perspectives concerning research writing (e.g. Mur-Dueñas & Šinkūnienė, 2018) often focus on language variation in native and non-native writing; similarly, recent work on research publication purposes delves into the interplay between authors' native languages and the international publication system, exploring how researchers develop genre awareness within their disciplinary fields (cf. Flowerdew & Habibie, 2022). The dominance of English in research has led to perceived discrimination between native and non-native speakers (Lillis & Curry, 2010; Ferguson et al., 2011), although debates over English

<sup>1</sup> The article has been jointly planned and discussed by the three authors: Marina Bondi has written the Introduction and Conclusion sections; Fabiola Notari has dealt with Course Context and Framework, Activity 1, and Activity 4 sections; Matteo Socciarelli has penned Activity 2 and Activity 3 sections. The Background section can be attributed to all authors. Correspondence concerning this article should be addressed to Fabiola Notari and Matteo Socciarelli via email: fabiola.notari@unimore.it.

in academic contexts also acknowledge that academic writing is not acquired through natural language acquisition, but through formal education. Specific features of language varieties, such as technical taxonomies, lexical density, rhetorical structures, and grammatical patterns, require learning by both native and non-native speakers (Römer, 2009; Tribble, 2017). The use of appropriate forms and rhetorical structures in specific academic contexts demands effort from speakers in their mother tongue and additional languages, leading to a continual reshaping of communication structures.

The increasing use of English in many professional and academic contexts has played a pivotal role not only in expanding the teaching of English at universities worldwide but also in determining the growth of teaching in English. English Medium Instruction (EMI) in higher education programmes exposes students to English not only during classes but also in exam preparation, presentations, essays, and final dissertations. This trend creates complex language contact situations similar to English as a Lingua Franca (ELF) (Mauranen, 2018), implying a heightened focus on the local organisation, topic negotiation, and careful use of metadiscourse, aiming for communicative efficiency, clarity, and explicitness (Mauranen, 2012, 2023; Wu et al., 2020). The rising popularity of programmes taught in English also draws renewed attention to EAP in many different contexts. Students are required to extend their skills to a wider range of situations of use. Research has focused mostly on the specificity of different contexts (cf. Griffin, 2023) and the impact in terms of classroom interaction and lecturing styles (e.g. Lasagabaster & Doiz, 2023). Attention to forms of writing is more recent in this perspective, but it is certainly becoming more and more relevant at higher education institutions worldwide.

An area that certainly needs to be studied further is that of MA/MSc and PhD thesis writing. Dissertations can help trace important stages in the development of academic literacy through the formative years when students develop their identity as academic writers (cf. Paré et al., 2011). Studying the rhetorical and linguistic features of dissertations can help understand learners' needs as well as variation across disciplines or between first and additional languages. Genre analysis has contributed greatly to describing different aspects of thesis writing. Ever since the early developments of the approach, thesis writing has been studied in its complexity, including textual organisation (e.g. Swales, 1990, 2004; Dudley-Evans, 1999; Paltridge, 2002; Bunton, 2002, 2005), specific language features (Shaw, 1992), citation practices (Thompson, 2001, 2005), or specific sections such as introductions (Samraj, 2008; Nguyen & Pramoolsook, 2014b), literature reviews (Kwan, 2006; Nguyen & Pramoolsook, 2015b), method chapters (Nguyen & Pramoolsook, 2015a), conclusions (Hewings, 1993), and acknowledgements (Hyland, 2004;

Zhang, 2012). Attention has also been paid to the evolution of the genre (Paltridge & Starfield, 2020) and its variation and hybridity in certain areas of the humanities (Starfield & Ravelli, 2006; Ravelli *et al.*, 2014; Paltridge & Starfield, 2023). At the same time, attention has constantly been paid to the learning process, providing textbooks and course materials for teaching the structure of the thesis (e.g. Swales & Feak, 2012; Paltridge & Starfield, 2019), and discussing different ways of supporting learners in their writing (Dong, 1998; Li & Vandermensbrugghe, 2011; Reynolds & Thompson, 2011; Yu, 2021). If early studies focused largely on PhD theses, more recently greater attention is being paid to the thesis writing needs of EMI learners at MA level (Adamson *et al.*, 2019; Mendoza *et al.*, 2023).

In this perspective, it may be worth investigating how EAP teaching is shaped by local and global linguistic forces, starting from the distinctiveness of the sociolinguistic contexts in which English is studied and the functional ranges and domains in which it is used. We therefore set out to discuss our experience of designing an introduction to thesis writing for Italian university students attending an English-medium MA in Languages for Communication in International Enterprises and Organisations. The programme is multidisciplinary, and the final dissertation must be written in English regardless of the subject studied, ranging from language sciences to economics and legal studies.

The chapter starts with a discussion of the tension between individuality – expressing an individual point of view – and commonality – adopting the rhetorical and linguistic choices of the specific discourse community addressed. The need to strike the right balance between the two is an issue that the authors feel to be central in the learning of academic writing skills for Italian university students. The sections that follow introduce and discuss the course context, the pedagogical rationale, and an analysis of activities meant to teach the students how to engage with the discourse community of their choice and to express their stance in reviewing the literature. The chapter closes with brief concluding remarks.

# 1.2. Background: Genre and Voice between Individuality and Commonality

The tension between individuality and commonality has been examined extensively in the literature (e.g. Gotti, 2009; Hyland, 2010; Flowerdew & Wang, 2015). From the point of view of EAP teaching, the key issue seems to be guiding the students to establish their own individual position through cognizance of the expected rhetorical patterns and the common linguistic choices in the discourse community. On the one hand, it is necessary to be aware of

the conventions of the discourse community and the standard organisation of dissertations; on the other, it is important to make sure students learn to position themselves.

The first aim should be to guide students towards an inductive and critical understanding of the principles that define a discourse community (Swales, 1990), connecting this understanding to the epistemology of their discipline and emphasising how it influences discursive practices. Echoing Bhatia's (1993) fundamental question: "Why do members of specialist discourse communities employ the language they do?", particular attention should be given to the idea that the differences between discourse communities extend far beyond the use of specialised language and topics (often the first aspects highlighted by students). It should also be kept in mind that, despite its groundbreaking contributions to the field, the concept of "discourse community" as originally delineated by Swales (1990) has not been without criticism for assuming an overly harmonious view (e.g. Mauranen, 1993, p. 14). To be fair, however, Swales's initial conceptualisation never depicted the concept of a discourse community as a uniform, unchanging, self-contained system that resists any evolution or ignores a heteroglossia of voices within its identity traits. This theme was revisited by Swales himself when he expressed his "dismay at the inertia" surrounding the concept he had introduced nearly three decades earlier (Swales, 2016, p. 3), thus acknowledging the need for continual reassessment in light of changing times.

When focusing on the notion of genre (Swales, 1990; Bhatia, 1993) in the context of materials development, it is essential to consider the multidimensional nature of genre knowledge. Drawing upon Tardy's (2009) foundational work, genre knowledge can be seen to unfold across four interrelated domains formal, rhetorical, process, and subject-matter knowledge. These domains do not exist in isolation; rather, they interact and consolidate as learners progress in their understanding and application of each of them. Ultimately, this journey leads to a transition from initial familiarity with genre concepts to achieving a state of fluency and expertise. The formal attributes of a genre adhere to its conventional structure but also provide a scaffold for students to express their individual insights and research aims. Students can appropriate a genre's recognisable form, content, and language use to convey their unique perspectives while maintaining commonality with established academic norms. In this fine balance, rhetorical knowledge empowers students to grasp the communicative intent and persuasive strategies inherent to different genres. Expertise in the subject matter is essential for students to challenge, expand, and make meaningful contributions to their field of study. However, for their input to be appreciated and taken seriously, they need to communicate it clearly so that their academic work is noticed and recognised.

Bridging these elements, process knowledge relates to the cognitive and compositional activities that underlie genre execution, including the ability to engage abstractly with concepts, construct texts, and navigate the expectations of different genre communities. Previous studies have consistently shown that while learners can develop formal knowledge at the declarative level (Starfield, 2003; Tardy, 2006), the acquisition and application of rhetorical and process knowledge are more complex, influenced by their academic background, goals, and disciplinary engagement (Kuteeva, 2013; Paltridge *et al.*, 2012; Thompson, 2013). This body of research situates the present study at a critical juncture, specifically focusing on translating theoretical underpinnings of genre knowledge (Tardy, 2009) into concrete writing practices for MA students.

In this context, nurturing metacognition, or 'thinking about thinking' (see Negretti & Kuteeva, 2011), becomes a pivotal element in EAP genre-focused instruction, especially aimed at preparing early-stage research students for their future thesis-writing endeavours. This metacognitive approach involves guiding students beyond the realm of *knowledge telling* – merely knowing what thesis writing conventions are – to *knowledge transforming* (Scardamalia & Bereiter, 1987).<sup>2</sup> In this more advanced stage, students move past rote learning to understand how writing conventions can be effectively substantiated and why they are important, leading to a more sophisticated, analytical, and epistemically guided approach in their writing. In this dynamic process, students are increasingly frequently asked to reflect critically on the thesis writing process, continuously adapting and refining their approach, ensuring it resonates with both their personal academic voice and the expectations of their scholarly audience.

Another area where the interplay between commonality and individuality is clearly manifest is that of academic voice. The concept of voice, often discussed in relation to that of stance, has received extensive attention since Matsuda's (2001) claims that it serves a paramount function in academic writing and in constructing author identity. According to Matsuda's (2001) definition, voice can be described as "the amalgamative effect of the use of discursive and non-discursive features that language users choose, deliberately or otherwise, from socially available yet ever-changing repertoires" (p. 40). In other words, authors construct their persona in discourse not only through linguistic and

<sup>2</sup> The term *knowledge telling* refers to the initial stage of writing development where writers focus on recounting information or knowledge as they know it, often adhering strictly to memorised structures or content without significant analysis or synthesis. This contrasts with *knowledge transforming*, a more advanced stage where writers actively re-shape and re-interpret their knowledge to meet specific rhetorical purposes, thereby creating new insights. This shift is crucial in thesis composition, as it requires the writer to not only present known information but to critically engage with it, offering new perspectives and contributing to the scholarly conversation.

rhetorical choices but also by drawing from contextual elements (i.e. the "social repertoires") that can derive from: a) the specific discipline the text belongs to (Hyland, 2008); b) the genre the written piece is part of; c) the research questions and how they are posed (Sansom, 2018); d) the epistemological view of the author(s) (Gray, 2017); e) issues of funding and institutional politics (Gross & Chesley, 2012). Thus, in the study of voice, content features should be taken into consideration, as they may influence voice creation even more than pure linguistic form features (Stock & Eik-Nes, 2016).

Equally important is the role of the reader as a dialogical counterpart, both as the recipient of the writer's expectations and as a party involved in creating and assessing authorial presence. In academic discourse, authors routinely seek to create solidarity with the readers by meeting their expectations, which originate from the discourse community they are part of and the expertise they possess. As argued by Hyland (2012), writers must then strike a balance between positioning and proximity, i.e. between revealing one's authorial presence through stance and voice (positioning) and conforming to common rules to establish association and involvement (proximity). This is obtained by crafting a disciplinary voice that serves multiple functions. It creates and communicates knowledge, engages writers and readers in communal endeavours, foregrounds authorial presence, furthering the discipline itself by providing a professional frame for the continuation of academic research. Authors thus seek validation from the reader by both creating an individual voice (more or less strong and emergent) and by adhering to disciplinary constraints that demonstrate their academic expertise.

These studies collectively underscore the multifaceted nature of voice in academic writing, encompassing both linguistic and content-related features as well as the influence of disciplinary and cultural contexts. They also attest to the complexity of the matter when such features need to be understood, learnt, and practised by novel or aspiring academic writers, especially those whose first language is not English. They need to be made aware of how the concept of voice intersects with disciplinary requirements and constraints, the expectations of the reader, and the possible gatekeeping of the discourse community at large. Ultimately, they need to understand that establishing a voice is a professional (cultural) as well as a linguistic undertaking that moves along the opposing yet intertwining pair of commonality/individuality.

Emphasising the difficulty in investigating the elusive connection

Emphasising the difficulty in investigating the elusive connection between the quality of second language writing and the establishment of voice, Liu (2022) argues that the teaching of voice should involve a multifaceted approach. This should cover genre knowledge and related constraints, foster reflection and evaluation of sources in the ideation of one's text, include explicit teaching of theoretical concepts on voice in a writing-to-learn perspective,

highlight "macro-implicit elements" (p. 13) that can influence authorial voice (such as cultural aspects of discourse communities, power dynamics in an ELF context), and should not shy away from the complexity of the concept itself with its interconnections.

#### 1.3. Course Context and Framework

This study presents a curated selection of teaching materials from the Introduction to Academic Writing course offered at the University of Modena and Reggio Emilia, Italy. Structured as an EAP thesis preparatory elective for Master's students, the course is part of the EMI programme called Languages for Communication in International Enterprises and Organisations. The interdisciplinary nature of the programme, spanning the core disciplines of Linguistics, Law, and Economics, together with the diversity of the student body introduce both dynamism and complex challenges to course design.

To effectively address these multifaceted demands, the curriculum is aligned with the integrated process-genre model (Badger & White, 2000; Galegane & Ntereke, 2022; Huang & Zhang, 2019; Xu & Li, 2018), leveraging both process (Anastasiadou, 2014; Akinwamide, 2012; Britton, 1975; Novia & Saptarina, 2021) and genre approaches (Bhatia, 1993; Cheng, 2007; Swales, 1990; Swales & Feak, 1994; Hyland, 2003, 2007) through three interconnected modules (Table 1.1). This alignment facilitates the blending of the acquisition of "common core skills" (Dudley-Evans & St. John, 1998) with insights into "disciplinary culture[s]" (Jordan, 1997, p. 5). Such a hybrid model is crucial in catering to the diverse English for General Academic Purposes (EGAP) and English for Specific Academic Purposes (ESAP) requirements of students from various academic backgrounds, reflecting an increasingly intercultural learning environment (Al Bloushi, 2024; Hill et al., 2020; Murray, 2022). Accordingly, the Pre-writing Process module introduces students to the fundamental theories of EAP while providing guidance for crafting a thesis statement and research outline. The Writing Process module delves into an in-depth exploration of each section of an MA thesis, focusing on both linguistic and rhetorical elements. The Post-writing Process module concludes the cycle, refining and synthesising acquired writing skills, underscoring the value of peer review and collaborative feedback. Overall, the decision to employ this model aligns with Hyland's observation on the effectiveness derived from combining various pedagogical approaches that exert "the most influence on L2 writing instruction worldwide". It tailors them to the specific case, thereby drawing strength "from an eclectic set of pedagogies united by commitment to needs analysis, contextual analysis, genre description and linguistic theories" (Hyland, 2002b, p. 126).

Table 1.1. Introduction to Academic Writing – Course Overview

Module 1 – The	Pre-Writing Process
Unit 1:	Course Overview and Foundations of Academic Writing
Unit 2:	Focus on the Pre-Writing Process
Module 2 – The	Writing Process
Unit 3:	Overall Thesis Structure, Moves, and Metadiscourse Markers
Unit 4:	The Abstract Section
Unit 5:	The Introduction Chapter
Unit 6:	The Literature Review Chapter
Unit 7:	Methods and Results Chapters
Unit 8:	The Discussion Chapter
Unit 9:	The Conclusion Chapter
Module 3 – The	Post-Writing Process
Unit 10:	The Post-writing Process and Students' Peer Review

## 1.3.1. The Materials: From Pilot to Refined Implementation

The evolution of pedagogical materials and activities underwent a tripartite refinement process. Initially, the materials were employed in a pilot course with 19 students during the autumn semester of 2022, which included a blend of interactive classroom activities, collaborative group projects, and home assignments. This approach was specifically designed to test realworld applications and facilitate immediate feedback, ensuring that students could directly engage with the material and develop practical skills in an active learning environment. The outcomes of the pilot study (Bondi et al., 2024), including student surveys, formative and summative assessments, and instructor reflections, informed the second stage. While the results were largely positive, showcasing high student grades, enthusiastic feedback, and effective instructor evaluations, they also highlighted the challenge of covering an extensive curriculum within the constraints of a three-credit course. These insights led to a panel discussion among instructors, focusing on how to revise the materials to better address the identified shortcomings. This targeted revision marked the beginning of the third stage, aimed at balancing educational efficacy and workload. To overcome this, we refined our approach, prioritising interactive learning experiences and reorienting theoretical content

for greater engagement and practicality. This collaborative and strategic effort laid the foundation for the current iteration of course materials, integrated in the first semester of 2023.

## 1.3.2. Rationale for the Different Pedagogical Activities

Drawing from both sociocultural theory (Vygotsky, 1978) and constructivist approaches (Piaget, 1973), the proposed pedagogical activities outlined in this chapter are designed to engage students in an active manner. As "it is control of appropriate discourses which distinguishes the brilliant student from the plodder" (Hyland, 2009, p. 5), the advantages of inquiry-based learning (IBL) (Johns, 1991) and 'learning by doing' (Dewey, 1966) are especially harnessed. This alignment with foundational educational theories finds resonance in empirical contemporary studies on English for Academic Purposes (EAP), which robustly substantiate the capacity of such approaches to foster students' autonomy, critical thinking, and academic language development (Kersten, 2023; Li & Wang, 2018; Nistor, 2020; Wale & Bishaw, 2020). Within the learning objectives of the pedagogical activities presented, this interplay is meant to emphasise hands-on, experiential learning over blind absorption of rhetorical conventions, in an endless construction of individual trajectories within socio-culturally accepted practices.

The outline of the programme ensured that the teaching curriculum offered learning opportunities to bolster writing confidence in aspects related to both commonality and individuality in voice. The activities were aimed at enhancing students' skills in developing a professional voice appropriate for the context (i.e. commonality). Simultaneously, they provided tools to analyse real samples of academic texts, appreciate individual expressions of voice and originality, and practise incorporating these elements into their own writing (i.e. individuality).

Home assignments focusing on voice were integrated throughout the curriculum, aligning organically with the macrostructure of the course (pre-writing, writing, and post-writing process) and the specific topic of each week. In total, five home assignments were related to the concept of voice. The diversity of the tasks reflects our commitment to the abovementioned theoretical principles and the inclusive teaching approach suggested by Liu (2022). Throughout the weeks, students learnt how to find and evaluate sources as the initial step in incorporating other scholars' voices in their own work; practised effectively synthesising different sources to avoid plagiarism and construct a robust argument, emphasising authorial presence through meticulous source usage in the literature review; examined specific markers of stance, particularly hedges

and boosters, as general discursive features of academic writing and tools to foreground or downplay authorial presence. A succinct summary of the various assignments is shown in Table 1.2.

Table 1.2.	Assignment Content (	(Focus: Teaching Voice)
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Course week	Macro structure and topic	Content of the assignment
Week 1	Pre-writing process	Topic decision; source identification, selection, and evaluation
Week 2	Writing process: Writing an abstract	Compact writing – verb choice and nominalisation
Week 4	Writing process: Writing the literature review section	Synthesis matrix; source synthesis
Week 6	Writing process: Writing the discussion section	Useful language detection from moves; stance (hedging)
Week 8	Writing process: Features of academic writing	Hedging and boosting

In the following sections, authentic, unmodified texts and writing tasks are sequentially presented, mirroring the escalating complexity students face throughout the course, where their zone of proximal development (ZPD) (Vygotsky, 1978) is progressively challenged. In tandem with these, actionable teaching strategies, such as warm-up activities and follow-up questions, are suggested. Their inclusion is instrumental in creating a "collaborative meaning-making" environment for students with both instructors and peers (Walsh, 2006, p. 32), which can foster their engagement in "discovery, inquiry, active problem-solving, and critical thinking". To offer insights into the practical and tangible effectiveness of these pedagogical methods and materials, selected student reflections are presented. Due to space constraints, these reflections are confined to the first and last activities of the course, providing a glimpse into the students' educational journey. This sharing of voices further highlights a learner-centred pedagogical approach which values students' input and experiences as critical elements of the educational process and foundational factors for future pedagogical strategies.

Activity 1 and 4 focus on the discourse community and general aspects of text structure, while Activity 2 and 3 focus on tools for enhancing an understanding of voice. All the information on the duration and positioning of the activities in the course are provided in more detail in the sections below, as well as in Tables 1.3–1.6.

# 1.4. Practical Applications

## **Activity 1: Engaging With Discourse Communities**

In the Pre-Writing Process module, students undertake a key activity titled 'Comparing Abstracts in Discourse Communities', whose structure is meant to enhance their comprehension of how writing embodies the contexts of writer, audience, and purpose. Anchored in Swales's (1990) concept of discourse communities, the task encourages students to critically analyse, compare, and reflect upon abstracts from diverse academic disciplines included in their programme.<sup>3</sup> This approach resonates with Hyland's view that abstracts are pivotal in reflecting the epistemological and social assumptions of their respective discourse communities (Hyland, 2000, p. 63). The educational strategy employed and the expected learning outcomes are succinctly presented in Table 1.3.

Table 1.3. Activity 1: Overview

Activity	Engaging with Discourse Communities
Module	Module 1 (Pre-writing Process), Unit 1
Educational Strategy	Interactive Warm-up, Comparative Analysis, Self-Reflection, Synthesis and Follow-up.
Description	The session starts with a warm-up and proceeds to a comprehensive 45-minute segment encompassing the analysis of abstracts using a comparative table and reflective writing. Students may opt to finalise their written reflections (250–450 words) in class or continue at home, submitting them via Moodle. This comprehensive approach equips the instructor with substantial insights to facilitate an effective 15- to 20-minute follow-up discussion in the subsequent class.
Language	English
Learning Outcomes	Development of critical analysis, reflective writing skills, and understanding of discourse community characteristics.
Learning Objects	<ul> <li>Selected abstracts from diverse disciplines for analysis</li> <li>Guided comparative table for facilitating comparison</li> <li>PowerPoint slides for warm-up and follow-up activities and additional support</li> <li>Moodle platform for uploading and sharing student reflections</li> <li>Brief reflective piece assignment (250–450 words)</li> </ul>

<sup>3</sup> For the purposes of this demonstration and due to space constraints in this paper, abstracts from only two of the various disciplines covered by the programme are discussed.

Activity	Engaging with Discourse Communities
Assessment	Formative: Based on participation (warm-up and follow-up), depth of analysis in comparative table, reflective writing clarity and argumentation.
Keywords	Discourse Communities, Analysis, Reflection, Engagement.
Estimated Time	1 hour in class, homework varies by student pace.

## Warm-up

Students might be encouraged to brainstorm criteria for identifying and defining a discourse community or to provide examples of discourse communities they are familiar with, including academic communities, professional groups, or even online forums. Alternatively, for students who already possess a foundational understanding of shared goals, common practices, and a sense of belonging, a more challenging approach may be introduced. "How do your discipline's theories and methods influence your communication and knowledge creation?" is a question that we have found useful for prompting students to apply these concepts directly to their own field of study.

# Comparative Analysis and Self-Reflection

After the initial discussion, students examine two distinct discipline-specific abstracts, with a focus on detailed reading (Step 1). The first, 'Conveying Deontic Values in English and Italian Contracts' (Bondi & Diani, 2010), offers insights into applied linguistics through its strong empirical-analytical approach. Here, the narrative is intricately woven into the methodology description, reflecting the discipline's tendency to incorporate rigorous, scientific patterns of reasoning (Hyland & Jiang, 2019). In contrast, the second abstract, 'Solidarity or Sovereignty? EU Cooperation in Civil Protection' (Ekengren et al., 2006), seamlessly integrates its narrative within sound legal argumentation, exemplifying case-based, analogical reasoning characteristic of courtroom practices. After careful reading, students are encouraged to engage in a comparative analysis (Step 2) by using a structured table (Figure 1.1).

As shown in Figure 1.1, the structured comparative approach integrates a gradual, exploratory analysis of texts. This methodology aligns with the course's EGAP framework by fostering critical awareness of key academic discourse features across various disciplines. Concurrently, it prepares the ground for ESAP, gently guiding students through the textual and argumentative dynamics peculiar to their specific fields. Notably, this activity avoids an immediate deep dive into more complex analytical categories, such as

Swales's (1990) move analysis or Hyland's (2005) metadiscourse markers. As a consequence, it particularly cultivates and strengthens foundational skills in reading, interpretation, and exploration. This process-oriented approach, integral to the curriculum, methodically enhances students' analytical capabilities, equipping them with more sophisticated genre and discourse analysis skills as they progress throughout the course.

#### STEP 2. Comparative Analysis

Analysis	Question to Answer	Abstract 1	Abstract 2
a. Specific Terminology	Which specific terms or concepts can you identify that are unique to this discourse community?	e.g. "deontic values"	
b. Sources of Authority/ References	Which scholars, studies, or institutions are referenced in the abstract?  Are there any mentions of key theories, previous research, or significant events related to the topic?		
c. Community's Common Goal	What overarching theme or interest does this abstract highlight as significant to its discourse community?		
d. Purpose of the Research	Does the abstract specify a particular field, objective, or niche topic related to the community's larger interest?		
e. Argumentative Structure	How do(es) the author(s) present the problem? How do they introduce a solution to the main objective? Is there a logical progression?	e.g. The author presents a gap	e.g. The authors present the inherent tension

Figure 1.1. Activity 1: "Engaging with Discourse Communities", Step 2. Comparative Table

Subsequently, the activity progresses to Step 3, where students are prompted to reflect upon the completed comparative table for each abstract. Questions like: "How does each discourse community stand out from the other?" or "Was there any aspect that surprised you?" may serve as useful prompts to shape their thoughts and prepare them for the ensuing written commentary in Step 4 (Fig. 1.2). This self-reflective task involves synthesising analytical observations into cohesive argumentation, marking the beginning of writing practice from the course's onset.

To support students in this challenge, a Writing Guide is provided (Fig. 1.2). Designed to be both accessible and practical, it acts as a compass

for students in the initial stages of academic writing, offering a clear framework and logical steps to organise their thoughts and effectively articulate their reflections. More broadly, it levels the academic playing field, bridging the gap between students with varying degrees of exposure to structured academic writing. For novices, it offers a much-needed structure and guidance, laying out clear parameters for organising thoughts and articulating them coherently, which are essential qualities in academic writing. Conversely, for those already familiar, it reinforces their existing knowledge, signalling that their prior studies, even from different contexts, are valuable and can be confidently applied and refined to excellence. In both cases, advancement in new tasks is facilitated, particularly in the articulation of an individual stance on the professional discourse communities they aim to join in their advanced studies.

#### STEP 4. Writing Guide

Now that you have reflected on the comparison questions, it is time to start writing. Write a brief commentary (min. 250, max. 450 words) on the differences and similarities between the two Discourse Communities. We are emphasising the importance of writing from the very first class. To assist you in this process, a Writing Guide has been provided. Use it as a tool to structure your thoughts and enhance the quality of your reflection.

#### **Writing Guide**

**Brief introduction:** Start with one or two sentences that introduce the main topic of your paragraph.

**Cohesion and Coherence:** Make sure that each sentence logically connects to the one before. Use conjunctions or discourse signals (like "however", "furthermore") to ensure a smooth transition between ideas.

Provide Specific Details: If you make a claim, back it up with specific details or examples.

**Sentence Variation:** Use a variety of sentence lengths and structures to keep the reader engaged.

**Conclusion:** End the paragraph with a sentence that summarises your main ideas and offers a transition to the next topic or paragraph.

**Review:** After writing, read through your paragraph. Correct any grammatical or syntax errors and ensure your ideas are clear and well-organised.

Figure 1.2. Activity 1: "Engaging with Discourse Communities", Step 4. Reflection

### Students' Insights and Follow-Up Discussion

The written reflections provided by students yielded enlightening insights, revealing diverse focal points and critical interpretations of the material, including positive feedback on collaborative activities and engaging discussions, as well as challenges in understanding the logic and implementation of genre analysis, particularly the moves and steps involved. Especially noteworthy was how the direct comparison between abstracts accentuated the distinctive features of each discourse community. A student's reflection effectively captured the essence of these differences:

In the applied linguistics abstract, specific references are made to methodologies and approaches that are strictly shared only within the discipline (e.g. corpus linguistics methods, cross-cultural approach, contrastive rhetoric). On the other hand, the abstract pertaining [sic] EU civil protection policies does not explicitly refer to scholars or studies and it highlights how it will draw from two practice examples (i.e. the 2002 floods in Central Europe and the 2004 Asian tsunami) to derive insights and fundamentals on the European Union's situation and problems on the issue of solidarity.

Similarly, other students observed what they defined as a narrative and exploratory tone in the legal abstract, which they suggested resembled a story-like approach to presenting research. In contrast, the applied linguistics abstract was perceived as adopting a more analytical and systematic style. This led to a fruitful classroom discussion on differing epistemologies, particularly focusing on the nuances within legal discourse which appeared less familiar to students. Through guided questions, examples, and PowerPoint presentations, the concepts of 'case-based' and 'rule-based' legal reasoning were introduced and explored to provide technical specificity to what they had intuitively grasped. Additionally, for more advanced classes wishing to delve deeper into specific analytical categories, Hyland's (2002a) taxonomy of reporting verbs may be used to further evidence the rhetorical strategies employed in different academic disciplines. In this context, the higher frequency and the greater variety of 'research acts' in the applied linguistics abstract, as opposed to the prevalence of 'discourse acts' in the legal abstract, can be particularly revealing.

Interestingly, beyond these distinctive differences, students also identified a common (rhetorical) structure. This recognition, though not explicitly framed in terms of ESP genre analysis, suggested their emerging understanding of an underlying structure shared across different academic disciplines:

Despite the different purpose of the research, it is possible to consider some similarities concerning the argumentative structure. Indeed, in both abstracts the authors present firstly the main goal and the central features and the problems of their studies with the support of previous theories or significant events. Finally, the authors highlight what is the solution of the problem [sic] and the methods that they have used. In conclusion, the two abstracts follow a logical progression.

As a matter of fact, a logical progression can be seen in both cases: each abstract begins with a brief introduction to the topic, followed by the

presentation of the objective of the study. Then the methods used are listed and finally each abstract ends with a concluding sentence.

All in all, this analysis offers, although briefly, a look into the processes pertaining to the academic world, that may vary according to the area of expertise but still maintain certain fundamental stylistic elements.

Summing up, it is worth mentioning that this initial writing task not only facilitated a content-rich discussion but also provided an opportunity to engage with students' early attempts at establishing their academic voice. While acknowledging their commendable efforts, particularly in the use of meta-language to guide the reader, we identified and shared with them key areas for improvement. These included paragraph structuring, maintaining formality, balancing personal pronouns with objective expressions, and avoiding repetitions. This feedback, acting as food for thought, implicitly set expectations for students' continued growth and refinement in their upcoming assignments.

# Activity 2: Finding Relevant Sources to Your Topic of Interest

Activity 2 and Activity 3 were chosen for their thematic unity, as they both engage students with the collection, evaluation, and inclusion of sources in their thesis, specifically in the introduction and literature review sections. The appropriate use of sources and references in thesis writing serves a dual purpose within scholarly discourse. Firstly, it signals the writer's professional engagement with the relevant discourse community by demonstrating a meticulous approach to referencing and avoiding plagiarism. In adhering to established citation conventions, the writer not only acknowledges the intellectual contributions of others but also positions themselves within a broader scholarly conversation, showing commitment to the ethical and intellectual standards upheld by the academic community. Secondly, the skilful incorporation of sources enables the development of the author's distinctive voice. Synthesising diverse scholarly perspectives into an argumentative discourse not only substantiates the writer's claims but also marks the emergence of an individual scholarly identity (Sun et al., 2022). By thoughtfully integrating and synthesising sources, writers can construct a narrative that is uniquely theirs, contributing to the ongoing academic dialogue with original insights and perspectives. Thus, the conscientious use of sources and references serves as a cornerstone for both professional engagement and the cultivation of an authentic scholarly presence in text, which are both markers of effective voice construction "conceptualised as a sign of individuality or as participatory, heard as part of a discussion" (Hutchings, 2014, p. 315). The content and learning outcomes are briefly illustrated in Tables 1.4 and 1.5.

Table 1.4. Activity 2: Overview

Activity	Finding Relevant Sources to Your Topic of Interest
Module	Module 1 (Pre-writing Process), Unit 2
Educational Strategy	Interactive and Theoretical Warm-up, Learning by Doing, Self-reflection.
Description	The activity is facilitated by an in-class discussion of the theoretical and practical points necessary for the understanding and completion of the task. Students briefly survey digital tools for finding relevant sources at the end of the class. Students engage with the activity at home and submit their final work on Moodle. Following completion and submission, they receive feedback in the form of personalised comments.
Language	English
Learning Outcomes	Selecting a topic of interest, utilising digital tools to collect sources, employing reading techniques to evaluate content of sources, and reflective writing skills.
Learning Objects	<ul> <li>Guided activity in fill-in-the-blanks style to guide collection of sources</li> <li>Writing prompt for self-reflection</li> <li>PowerPoint presentation for warm-up</li> <li>Moodle platform for submission and feedback</li> </ul>
Assessment	Formative
Keywords	Professional voice, Source collection, Source assessment, Reflection.
Estimated Time	30 minutes in class, assignment varies by student's pace.

## Warm-up

This assignment was imparted to the class at the end of the first lesson (week 1), whose overarching theme centred on the pre-writing process. Following the introduction of the fundamental principles of academic writing, students were made aware of the intrinsic interplay between reading and writing and their reciprocal impact. The in-class reflection revolved around the reading and writing model proposed by Murray, as elucidated in Kwan (2008). The model posits an informational process of collecting and connecting (data, sources, concepts) and a textual one of reading and writing. These four dimensions intricately influence, scaffold, and constrain one another, suggesting a non-linear relationship between reading and writing during thesis composition (while Kwan's model primarily addresses PhD dissertations, its applicability extends to MA theses). Consequently, writing informs reading by compelling writers to gather additional sources for comprehensive topic expansion or contextual re-evaluation. Following the model's discussion through reflective

questions such as "Which occurs before: reading or writing?" or "How does reading inform writing? Do you believe it also happens vice versa?", students were familiarised with practical methodologies for sourcing materials from online repositories and search engines, along with strategies for assessing their pertinence and applicability to a designated topic or objective. Lastly, an overview of two citation styles, APA and MLA, was presented.

## **Activity Description**

While seemingly straightforward in format, the home assignment sought to operationalise the principles presented in class concerning the acquisition and evaluation of sources as integral components of a process founded on an established academic praxis. Furthermore, being given at the beginning of the course, the assignment sought to invite students to begin considering authentic and relevant topics of interest for their MA thesis. Students were in fact tasked with the deliberate selection of a potential thesis topic and the selection of three pertinent sources related to the chosen subject, using tools previously illustrated in the course. They were also instructed to employ either the APA or MLA citation style when referencing these sources to begin practising. The concluding segment of the activity included the composition of a succinct explanation elucidating the perceived relevance and merit of the selected sources. The incorporation of a final reflection component within the assignment aimed at nurturing self-reflection as a mechanism for reconceptualising acquired and applied knowledge, as well as appraising the learning process. This reflective practice, as evidenced by studies such as Lew and Schmidt (2011), has demonstrated an impact on academic performance. For a comprehensive overview of the entire activity as administered to the class, refer to Figure 1.3.

# Activity 3: Incorporating Other Voices into One's Own Literature Review

Warm-up

This assignment was given to the class on the fourth week, following a comprehensive two-part exposition of literature review spread through the third and the fourth week of instruction, encompassing an exhaustive exploration of the section's multifaceted dimensions. This entailed an examination of its overarching role within the thesis, its communicative and rhetorical attributes as a distinct genre, explicated through the elucidation of Swales's (1990, 2004) CARS model along with its associated moves and steps, and a thorough consideration of its inherently argumentative nature. A proficient literature

	lule 1, Unit 2: The Pre-writing Process MEWORK
2	<ul> <li>Think about a possible research topic for your thesis.</li> <li>Using all the resources and reading strategies you have learned about in class, find three relevant papers that could be useful for your research.</li> <li>Complete the handout below.</li> </ul>
MY F	RESEARCH TOPIC:
THE 1)	THREE PAPERS I FOUND ( <u>cite them either in APA or MLA according to your field</u> ):
2)	
3)	
WHA	TTOOL(S) DID YOU USE TO FIND THEM? (OneClick? Google Scholar? Others?)
WHY	THEY COULD BE USEFUL FOR YOUR THESIS (brief comment, 50–200 words):

**Figure 1.3.** Activity 2: "Finding Relevant Sources to Your Topic of Interest". Complete Assignment

review advances an argument wherein the author isolates a gap existing in research and seeks to occupy it, thereby advocating for the significance of their own contribution. As a result, the nuanced management of voice becomes salient, compelling novice authors to develop skills in orchestrating multiple perspectives into a cohesive yet original argument, all the while adhering to established conventions in citation, reporting, and quotation (Hart, 2018). In doing so, they assert their claim for relevance and knowledge advancement with

proficiency, self-assurance, and precision. The synthesis of numerous sources, envisioned here as "recasting the information into a new or different arrangement" (Bloomberg & Volpe, 2008), poses a particular challenge for learners, who, potentially due to low writing confidence, may inadvertently assimilate sources without due critical scrutiny, presenting them as unchallenged and unquestionable segments of truth. The outcome is a literature review that may tend towards explanation rather than argumentation (Andrews, 2010; Aull, 2017), revealing a limited control over both the voices of other authors and the student's own authorial presence.

Table 1.5. Activity 3: Overview

Activity	Incorporating Other Voices into One's Own Literature Review		
Module	Module 2 (Writing Process: Literature Review), Unit 4		
Educational Strategy	Interactive and Theoretical Warm-up, Learning by Doing, Writing-to-learn.		
Description	The activity is facilitated and introduced by an in-class discussion of the theoretical and practical points necessary for the understanding and completion of the assignment. The learning tool included in the activity, the Synthesis Matrix, is illustrated in class during task presentation. Students engage with the activity at home and submit their final work on Moodle. Following completion and submission, they receive feedback in the form of personalised comments.		
Language	English		
Learning Outcomes	Pinpointing source topics, ideas, or standpoints, organising concepts, synthesising source contents, and practising synthesis by writing.		
Learning Objects	<ul> <li>Guided activity with tables to guide completion of Synthesis Matrix</li> <li>Writing prompt for practising synthesis</li> <li>PowerPoint presentation for warm-up</li> <li>Moodle platform for submission and feedback</li> </ul>		
Assessment	Formative		
Keywords	Academic voice development (commonality), Academic voice development (individuality), Developing an argument, Source organisation, Source synthesis.		
Estimated Time	45 minutes in class, assignment varies by student's pace.		

### **Activity Description**

The instructional objective was twofold: firstly, to increase learners' awareness of the elaborate organisation of source voices after their collection and selection, thereby illustrating the inherent complexities and mutual

# Module 2, Unit 4: The Writing Process – Literature Review HOMEWORK

The synthesis matrix (from Arizona University Writing Center)

A synthesis matrix is a table that can be used to organize research. When completed, it provides a visual representation of main ideas found in the literature and also shows where there is overlap in ideas between authors. A completed matrix will help to integrate all of the different resources together, which will facilitate the synthesis of information on a specific topic.

What does a synthesis matrix look like?

	Theme / concept 1	Theme / concept 2	Theme / concept 3
Source 1			
Source 2			
Source 3			

#### 1. Make your own synthesis matrix

Reading the sources you selected in the Week 1\_Unit 2 Homework sheet (or more, if you want to find extra literature), make your own synthesis matrix and fill it with the main themes/concepts of the papers. Make your matrix in this sheet by creating a table. If you want to, you can just focus on the Literature Review sections of the sources.

#### 2. Practise synthesis

Now that you have your matrix, use it (in conjunction with the knowledge you gained from Activity 1: How to synthesise which you carried out in class and which you can find in this week's handout) to write one or two paragraphs where you try to synthesize the information.

Write your paragraph(s) here:

Figure 1.4. Activity 3. Complete assignment

relationship between previous scholarly contributions and their own perspectives; secondly, to provide them with a pragmatic tool pivotal for facilitating this intricate process. In this context, explicit reference was made to the Synthesis Matrix, as illustrated by the University of Arizona Writing Center and the Florida International University (The University of Arizona, 2023; Florida International University, 2023). This matrix functions as a writing instrument

designed to systematise sources, breaking down their principal concepts, topics, and/or ideas. Upon completion, the matrix affords a comprehensive overview of the assembled literature, serving as a powerful instrument for visualising a conceivable organisational framework for the sources, aiding in developing a coherent and argumentatively sound trajectory in the construction of the literature review. The assignment ensured an organic continuation from the preceding section of the course, directing students to incorporate into the matrix the sources collected and selected during the previous activity. After compiling the matrix, the students were asked to provide a practical demonstration of synthesis skills by crafting a concise passage (one or two paragraphs) amalgamating information from each source into a cohesive and thematically unified synthesis. For a comprehensive overview of the entire activity as administered to the class, refer to Figure 1.4.

### Activity 4: Project-Based Activity on the Conclusion Chapter

As our academic programme advances, Unit 9 emerges as a pivotal moment, focusing on crafting the Conclusion chapter. Positioned towards the end of the course, this unit further develops genre analysis skills from previous modules and represents the final step in fostering students' autonomous exploration of rhetorical and discursive features in academic writing. To facilitate this transition, a project-based approach is employed to promote collaborative learning, peer feedback, and lessen direct instructor involvement. The anticipated learning outcomes and the pedagogical approach for this unit are detailed in Table 1.6.

Table 1.6. Activity 4: Overview

Activity	Crafting the Conclusion Chapter: A Project-Based Approach		
Module	Module 2 (Writing Process: Conclusion), Unit 9		
Educational Strategy	Project-based Learning, Peer Review, Facilitative Instruction.		
Description	This unit engages students in a project-based activity where they analyse research data to independently craft a conclusion chapter, supported by peer collaboration and instructor guidance.		
Language	English		
Learning Outcomes	Utilising effective academic language, creation and application of self-generated frameworks for critical analysis, enhancement of collaborative skills, synthesis of research data into coherent conclusions.		

Activity	Crafting the Conclusion Chapter: A Project-Based Approach
Learning Objects	<ul> <li>Selected conclusions from a single academic discipline</li> <li>Genre analysis table: mapping rhetorical moves &amp; keywords</li> <li>Research synopsis table</li> <li>Conclusion crafting assignment</li> <li>Google Scholar as a data-driven research tool</li> <li>Moodle platform for uploading and sharing students' outputs</li> <li>PowerPoint presentation for follow-up session</li> </ul>
Assessment	Formative: Evaluation based on clarity, coherence, and integration of research data in the written conclusion, as well as engagement in the peer review process.
Keywords	Conclusion chapter, Synthesis, Project-based learning, Peer collaboration, Independent writing.
Estimated Time	1.5 hours in-class activity, additional time for peer review and revision as homework.

### Warm-up

To foster the transition from instructor-led guidance to independent, critical thinking, students are organised into groups right away in the warm-up phase. Within each group, they assume various roles, including those of a moderator and a designated spokesperson, to improve collaboration and ensure effective communication in the subsequent plenary class discussions. Thought-provoking questions, such as: "What is the main aim of the conclusion chapter in a thesis?" and "How do discussion and conclusion sections differ?" are tackled through active searching in a collaborative and relaxed atmosphere (Step 1).

## **Analysis and Creation Phase**

Following the warm-up, the students, who remain in their respective groups, proceed to analyse three distinct conclusion sections in the field of applied linguistics (Step 2). Their objective is to identify steps and moves (Swales, 1990) without relying on a predefined framework and to pinpoint language cues and key phrases signalling both micro- and macro-level rhetorical structures. To support this inductive exploration, students may be encouraged to carefully read all three conclusions first. This approach allows them to identify recurring communicative functions characterising the genre more holistically before specifying and labelling them.

Once these initial insights are gathered, the students' next task (Step 3) involves applying their newly acquired understanding. For this purpose, they

are provided with a uniform 'Research Synopsis' table of a hypothetical study (Fig. 1.5). This tool acts as a foundation outlining essential research components to be integrated into a comprehensive conclusion. In doing so, students strategically leverage the linguistic patterns and rhetorical structural elements previously identified in the analysis phase (Step 2). To further expand their understanding of varied expression methods within the disciplinary field, they are encouraged to consult external academic papers. Concurrently, for a more in-depth grasp of the rhetorical structure and linguistic patterns, students can utilise resources like Google Scholar as a corpus, adopting a data-driven approach.

### STEP 2. Research Synopsis Table

Category	Details
Research Topic	Assessment of preposition usage in Italian language learners and the impact of Corpus Analysis Tool.
Methodology	Pre- and post-implementation assessment;     Corpus Analysis Tool used for learning enhancement.
Key Findings	Initial difficulties with English prepositions (53%);     Improvement post tool implementation;     30% increase in correct application.
Research Gap	Scarcity of research on preposition usage among Italian learners;     Innovative use of Corpus Analysis Tool in this context.
Teaching Implications	Corpus Analysis Tool enhances preposition learning significantly;     Potential for broader application in complex grammar instruction.
Limitations	Study based on a sample of 50 students from a single university.
Future Research	Broadening the scope to diverse linguistic backgrounds;     Further exploration into complex grammatical structures teaching.

Figure 1.5. Activity 4, Step 2. Creation Phase

### Students' Insights and Follow-up Discussion

After allowing time for the completion of the discussions and uploading them to Moodle, the next class session is dedicated to showcasing the diverse approaches and perspectives developed by the student groups through PowerPoint presentations. Accordingly, the labels students assigned to the moves in their analyses are initially compared with the classifications in Yang and Allison's (2003) well-established framework for Conclusion sections in applied linguistics. This exercise allows students to visually appreciate the extent to which their interpretations align with recognised academic standards.

In the context of the present research, this approach revealed that students had successfully identified all the key moves. Despite slight variations

in terminology, such as using *disclaimer* for "indicating limitations" and *establishing a niche for further research* instead of "recommending further research", their analyses demonstrated their ability to confidently apply procedural skills.

Building on this, further fruitful insights can be garnered by projecting and examining the individual conclusions written by each group, with a specific focus on the emergence of students' voices within various rhetorical moves. In our case, the activity led to an engaging discussion on metadiscourse use (Hyland, 2005).

To provide some concrete examples, we delved into the choice between using or avoiding hedges in the move "summarising the study". Consequently, students were presented with contrasting formulations, such as *the study attempts to provide* versus *the study offers*, to elicit discussions about the writer's stance and nuances in academic tone.

Similarly, students demonstrated diverse attitudes within the rhetorical move "indicating limitations". Some experimented with a direct, emphatic acknowledgement, using the formula it is essential to acknowledge the study's limitations, while others preferred a more cautious, face-saving approach, as exemplified by the expression a possible limitation of this study is.

Finally, there was also notable diversity in the expressions used to portray the significance of the research. Some students relied on frame markers to position the research within the academic landscape, as exemplified in *the study occupied a critical niche*. In contrast, others opted for engagement markers, using an inclusive pronoun to draw the reader in, evident in the expression *the study has deepened our understanding*.

Feedback from students on this project-based activity highlighted the value of independently and collaboratively exploring the impact of discursive and rhetorical choices in academic writing:

We put into practice all the competences learned during the Academic Writing course and took this exercise as an opportunity to work autonomously but we also practised how to work successfully as part of a team, considering everybody's suggestions.

Crucially, students acknowledged as the biggest hurdle balancing adherence to disciplinary conventions with the task of effectively communicating their intended message and unique voice:

The toughest challenge was to find adequate and appropriate academic language in order to adapt our ideas to the corresponding linguistic register of the text.

### 1.5. Conclusion

The present chapter has delved into the tension between commonality and individuality in academic writing through an analysis of the general design principles adopted for an introduction to thesis writing at MA level in an English as a Medium of Instruction context. The course combines attention to general and specific academic purposes and adopts an integrated process-genre approach, blending active problem-solving with reflection activities. This curriculum aligns with the long-standing ethos of EAP, characterised by continuous adaptation to cater to the diverse and evolving needs of students within the dynamic context of global higher education.

Regarding the methodological strategies applied, a sequence of carefully selected activities has been illustrated, designed to be conducted as classwork, individual tasks, or group projects. These initiatives pave the way for students to progress from an awareness of community conventions to appropriation of disciplinary codes through their unique voice.

The basic assumption of the chapter is that it is important to introduce students to the recognisable routines and established practices of their scientific community, particularly in the early stages of learning a genre. However, it is equally essential to help them discover the various values and beliefs they may convey, whether consciously or unconsciously, when engaging with others in a particular written text. Despite the standardising pressure of cultural and language-related factors, an appreciation of the multidimensional nature of a writer's identity – professional, institutional, social, and individual – emerges as fundamental for comprehensively supporting the academic writing process that students undertake.

A discussion of materials has been integrated with reflections on the teaching/learning experience. In response to the feedback received, it becomes evident how the pedagogical theories and methodological approaches selected for our course have found practical application in the students' learning experience. The awareness of common argumentative structures and disciplinary specificities in the Abstract section reflects the effective integration of the process-genre approach and underscores the importance of a flexible English for General Academic Purposes (EGAP) curriculum. At the same time, the emphasis on teamwork and the practical use of acquired competencies reaffirms the value of Project-Based Learning and Vygotsky's Sociocultural Theory, highlighting how collaborative learning can enhance the understanding and application of academic writing skills. Moreover, the challenge of adapting critical thinking to the appropriate academic language and voice underlines the journey from "knowledge acquisition" to "knowledge transformation" (Scardamalia & Bereiter, 1987), a process at the heart of constructivist approaches and inquiry-based

learning (IBL). Finally, through scaffolded exercises and formative feedback, students learn to navigate genre conventions while honing their distinct authorial voices, thereby embodying the essence of academic writing as both a communal endeavour and a platform for individual expression, in line with Hyland's concepts of proximity and positioning and Tardy's conceptualisation of genre knowledge.

Future research could substantiate these reflections with more specific studies. It would be interesting to explore students' perceptions of the results more thoroughly. More importantly, further work could explore the individual development of students through investigations of their trajectory and of their different academic outputs. The writing of dissertations appears to be a key site of identity development, where students grow as rhetorical subjects through the shaping of their disciplinary and personal voices (Paré *et al.*, 2011).

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**Abstract**: The increasing use of English in many professional and academic contexts has played a pivotal role not only in expanding the teaching of English at universities worldwide but also in determining the growth of teaching in English. This has heightened the need to teach thesis writing in many English-medium contexts. Focusing on the tension between individuality — expressing an individual point of view — and commonality — adopting the rhetorical and linguistic norms of the specific discourse community addressed, we discuss our experience of designing an introduction to thesis writing for an EMI (English as a Medium of Instruction) multidisciplinary MA programme in Italy. The chapter begins by exploring the interplay between commonality and individuality, then proceeds to describe the course's context and its educational underpinnings. The general principles are illustrated through an analysis of activities meant to teach the students how to engage with the discourse community of their choice and to express their stance: from engaging with discourse communities to finding relevant sources, incorporating other voices into a literature review, and working collaboratively on the conclusion section. The chapter closes with a brief summing up of the issues raised.

**Keywords**: genre analysis, thesis writing, identity, voice, community

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# Exploring the Impact of Flipped Learning on Beginner-Level Portuguese Writing Skills: A Systemic Functional Linguistics Perspective

### 2.1. Introduction

Flipped learning represents a learner-centred approach designed to facilitate access to linguistic knowledge through a variety of instructional materials, tasks, and opportunities for utilising an additional language prior to classroom activities. Renowned for its ability to enhance active learning and engagement (Bond, 2020), the flipped learning approach in language teaching encompasses activities such as watching grammar videos, completing focused quizzes, and participating in vocabulary exercises on platforms like Quizlet. This previously acquired knowledge is then organised in class by learners themselves through autonomous and individual tasks, including writing. This chapter, therefore, aims to analyse academic writing produced by Portuguese as an additional language (PAL) learners, with a focus on assessing the impact of flipped learning on their linguistic development throughout an academic year.

In order to comprehend how this approach influences knowledge construction in PAL, the present study employs the theoretical and analytical principles of Hallidayan systemic functional linguistics (SFL) (Halliday, 1978; Halliday & Matthiessen, 2014) to examine the interplay between vocabulary and grammar in language use. This perspective offers a comprehensive understanding of how language resources contribute to meaning construction, with a particular focus on the transitivity system (ideational metafunction) and the mood and modality system (interpersonal metafunction). By scrutinising these lexicogrammatical features in students' written production, valuable insights into their language development can be gleaned.

To evaluate the efficacy of the flipped learning approach in fostering the linguistic development of PAL beginner learners in written texts over the course of an academic year, the pre-activities provided to the learners prior to producing written texts are highlighted. From this information, specific objectives are formulated as follows:

- (1) Outline the lexicogrammatical patterns observed in the writing of PAL beginner learners exposed to the flipped learning approach over an academic year.
- (2) Assess whether students adjust their language use appropriately to different writing tasks.

The theoretical and practical contributions proposed by this study involve discussing findings within the context of flipped learning and its impact on lexicogrammatical development. Additionally, it provides a reflection on how these insights can inform teaching strategies for students with a background in a Latin language. By employing this approach, we can achieve a nuanced understanding of students' lexicogrammatical development and of how the flipped learning approach influences their writing in PAL at the beginner level.

This chapter is structured into three main sections, in addition to this introduction and the concluding remarks. The first section ("Theoretical Considerations") delves into reflections grounded in linguistic principles that form the analytical framework for examining student writing within an academic context underpinned by the flipped learning approach. The second section ("Analysis of the Teaching Proposal") is discerned to outline the writing-focused teaching proposal driven by flipped learning and to elucidate the impact of this approach on academic writing through the analysis of lexicogrammatical patterns in student writing. The third section ("Practical Considerations: Implementing Flipped Learning Strategies") presents suggestions on how to use this approach to teach academic writing for the benefit of learners of additional languages, including PAL. The chapter concludes with final remarks, as well as a reference list and an appendix.

### 2.2. Theoretical Considerations

# 2.2.1. Systemic Functional Linguistics and the Lexicogrammatical Dimension

Systemic functional linguistics (SFL), introduced by Halliday (1978), utilises an architectural analogy to elucidate the mechanisms of language. Halliday and Matthiessen (2014) assert that language possesses a structure that

underscores the relationship between text and grammar. They emphasise that the foundation for comprehending linguistic operation, whether in speech or writing, lies in the text. The authors argue that when individuals speak or write, they generate text; and it is this text that listeners and readers interact with and interpret. Halliday and Matthiessen claim that the term *text* encompasses any instance of language, across any medium, that holds meaning for someone familiar with the language. For them, we can define text as language functioning within its context (cf. Halliday & Hasan, 1985, Ch. 1; Halliday, 2010).

The text is always the result of learners' linguistic choices, opportunities for language access, and the context in which it is situated. With this assumption, text is conceived of in this study as an 'artifact' because it is based on the principle that the ability to write in any language (L1 or additional) is a process that continuously develops.

Hence, text represents the medium through which language learners, including those acquiring an additional language (AL) in an educational setting, encounter linguistic operation and can access appropriate lexicogrammatical choices based on the field of knowledge and the intended audience within that text. Various opportunities to engage with AL operation arise, one of which is flipped learning, enabling learners to apply this knowledge in classroom writing tasks. Thus, this study's focus lies in comprehending this operation concerning lexicogrammatical choices in academic writing.

SFL offers various lenses through which the term *grammar* may be viewed in relation to the text. According to Halliday & Matthiessen (2014, p. 4), while analysing three texts in English (i.e. spoken-monologic, written-monologic, spoken-dialogic),

[w]hen grammarians say that from their point of view all texts are equal, they are thinking of them as specimens. If we are interested in explaining the grammar of English, all these three texts illustrate numerous grammatical features of the language, in meaningful functional contexts, all equally needing to be taken into account. Seen as artefacts, on the other hand, these texts are far from equal.

The text invariably reflects learners' linguistic decisions, language access opportunities, and the contextual backdrop. Linguistic choices within a text can be scrutinised across different strata of language. The concept of language stratification, rooted in systemic functional theory, entails "a global dimension"

<sup>1</sup> In SFL, the functioning of language is described in terms of language strata. The concept of stratification, part of the cline of instantiation of language, pertains to "[o]rder of symbolic abstraction along the hierarchy of stratification. The strata in the organization of language are semantics,

that organises language in context into subsystems according to the degree of symbolic abstraction" (Matthiessen *et al.*, 2010, p. 218). These subsystems encompass the semantic, lexicogrammatical, phonological, and phonetic strata. Among them, this study emphasises the lexicogrammatical stratum, situated on a continuum between grammar and vocabulary. It bears underscoring that, from a systemic functional perspective, in analysing this stratum, each unit (linguistic or phraseological) constitutes an organic configuration, as each component serves a distinct function in relation to the whole (Halliday & Matthiessen, 2014).

Thus, considering the strata of language entails acknowledging its intricacy, encompassing alternative modes of expression – both oral and written. Consequently, content is enriched semantically and lexicogrammatically, allowing the potential meanings of a language to proliferate endlessly. This attribute is elucidated in the theory through the functions<sup>2</sup> that language serves in human life: comprehending our experiences (ideational metafunction), engaging with others (interpersonal metafunction), and constructing/organising discourse (textual metafunction). Therefore, discussing grammar within the framework of SFL entails recognising that it simultaneously interacts with worldly events and social processes while also structuring the interpretation of experiences and interactions, transforming them into linguistic expressions.

Building upon the multifaceted nature of language outlined above, the examination of linguistic choices and their realisation in the text is inherently linked to metafunctions, delineating the functions served by each linguistic element within the discourse. This interplay between linguistic choices, metafunctions, and grammar is depicted in Table 2.1.

Table 2.1.	Metafunctions and their reflexes in the grammar
	(adapt. from Halliday & Matthiessen, 2014, p. 83)

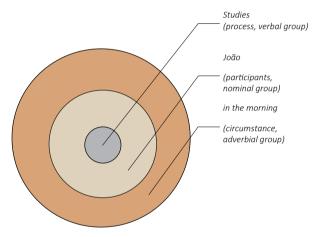
Metafunction		Definition	Corresponding status in clause
(experiential)		Construing a model of experience	Clause as representation
Ideational	(logical)	Constructing logical relations	_
Interpersonal		Enacting social relationships	Clause as exchange
Textual		Creating relevance to context	Clause as message

lexicogrammar, phonology (graphology) and phonetics; context is interpreted as a stratum above language" (Matthiessen et al., 2010, p. 218).

<sup>2</sup> Halliday (1994) emphasises that the concept of metafunction is used to understand how meanings are created and understood, and that it enables establishing relationships between language, text, its social use, and context.

To delineate the lexicogrammatical configurations within the corpus analysed in this chapter, the focus is placed on the ideational and interpersonal metafunctions.

Concerning the ideational metafunction, as described by Halliday and Matthiessen (2014), the linguistic choices manifested in each clause comprise a series of events that construct a process. These events encompass the participants involved as well as the circumstances surrounding them, thereby constituting what is termed as the *figure* within SFL. This *figure* comprises elements that configure grammatical transitivity within the lexicogrammatical system. For instance, in the example *João studies in the morning*, the clause establishes a semantic relationship between the words and their meanings. This sentence comprises three key elements: a participant (*João*), a process (*studies*), and a circumstance (*in the morning*). Figure 2.1 illustrates these elements.



**Figure 2.1.** Central and peripheral elements in the experiential structure of the clauses (adapt. from Halliday & Matthiessen, 2014, p. 222)

The three components of a figure – processes, participants, and circumstances – as defined within the concept of transitivity, serve distinct functions: (i) depicting a process unfolding over time, (ii) identifying the participants engaged in the process, and (iii) specifying the circumstances associated with the process (Halliday & Matthiessen, 2014).

<sup>3</sup> Halliday and Matthiessen (2014) discuss this model, developed within SFL since the 1960s, in detail. They examine it semantically (Halliday & Matthiessen, 1999, Ch. 4) and relate it to similar accounts in other theoretical frameworks, such as Tesnière's (1959) characterisation of the clause as a "little drama" within a dependency model. Like Tesnière, they observe a syntagmatic progression from the process nucleus of a clause through various participant roles to a circumstantial periphery or margin, as described by Halliday (1979). Further elaboration on this topic can be found in Van Valin and LaPolla (1997).

Processes, central to the lexicogrammatical configuration of the ideational metafunction, are termed *figures* due to their representation of changes in events. These figures encompass various types, including happenings, actions, perceptions, verbalisations, states, and possessions (see Halliday & Matthiessen, 1999). Regardless of type, all figures involve a process unfolding through time and participants directly engaged in this process, along with potential circumstances (Halliday & Matthiessen, 2014).

These processes, constructed through verbal groups, serve as the foundation for comprehending the transitivity patterns within a sentence and are categorised accordingly.

The transitivity patterns encode experiential meanings, reflecting perspectives on the world, lived experiences, and how individuals perceive and engage with events. Analysing these patterns enables us to grasp the field of knowledge, or "what is being talked about". Each clause entails a specific type of process: material, mental, behavioural, verbal, existential, or relational. Consequently, the type of process delineates the actions, facts, or achievements among the involved participants and may also situate them circumstantially (in terms of time, place, cause, etc.) (Eggins, 2003).

There are three main and three subsidiary types of processes located at three boundaries through which humans represent their experiences. The main types are material, mental, and relational processes: (a) material processes represent external experiences (actions and events such as doing, building, happening); (b) mental processes represent internal experiences (memories, reactions, reflections, and moods; examples include thinking, remembering, imagining, liking, wanting); (c) relational processes represent relationships (identification and characterisation, exemplified by being, seeming, having). In turn, the subsidiary types located at three boundaries are behavioural, verbal, and existential processes: (d) behavioural processes, situated between material and mental processes, represent behaviours (manifestation of psychological or physiological activities of humans, exemplified by sleeping, yawning, coughing, dancing); (e) verbal processes, situated between mental and relational processes, represent sayings (linguistic activities of participants, exemplified by saying, responding, affirming); (f) existential processes, situated between relational and material processes, represent the existence of a participant (being in the world, exemplified by existing, happening) (Halliday, 1985, 1994; Halliday & Matthiessen, 2004, 2014).

Transitivity affects not only the verb/process but also the participants. Depending on the type of process, the participants, realised by noun groups, receive different designations: (1) material: actor, goal, client, scope, attribute; (2) mental: senser, phenomenon; (3) relational: carrier; (4) behavioural: behaver, scope; (5) verbal: sayer, verbiage, receiver, target; (6) existential: existent.

The participants of a clause are grammatically realised by noun groups (Halliday, 1985, 1994; Halliday & Matthiessen, 2004, 2014). Finally, clauses can include circumstances indicating place, time, manner, cause, etc., which are realised by adverbial or prepositional groups.

Shifting to the interpersonal metafunction, as outlined by Halliday and Matthiessen (2014, p. 134), "the clause is also organized as an interactive event involving the speaker or writer and audience". In interpersonal interactions, participants assume roles: initiating the interaction entails adopting the role of the demander, while establishing verbal exchange requires something to be exchanged – be it information (linguistic content) or goods and services (tangible actions or products). Linguistically, the clause conveys "its interpersonal meaning as an exchange", and "the principal grammatical system [involved] is that of MOOD" (p. 134). Speech roles in linguistic interactions include "giving" or "demanding" goods and services or information. When the speech role focuses on "giving", this may involve "offering" goods and services or "stating" something about them. Conversely, when the role is "demanding", its purpose may be to request/order something ("command"), or to ask about something or for information ("question") (Halliday & Matthiessen, 2014).

The grammatical manifestation of speech roles and specific types of products is reflected in the functional constituents of mood, according to Eggins (2003). The constituents include the subject, finite operator, and residue. As clarified by Halliday & Matthiessen (2014), the *subject* is a nominal group, while the *finite*<sup>4</sup> operator is part of a verbal group. The constituents of the *residue* encompass the predicator (the lexical aspect of the verbal group's content), the complement (a non-essential linguistic element of the clause), and the adjunct (an element providing additional, albeit non-essential, information, typically formed by adverbial and prepositional elements).

Furthermore, verbal exchanges extend beyond mere affirmations or negations; they also serve to convey the speaker's stance, express opinions, or convey judgments. This interpersonal resource, known as *adjuncts of modality*, expresses *temporality* (relative to now and to expectation), *modality* (including modalisation – probability and usuality – and modulation – inclination and obligation) and *intensity* (degree and counter-expectancy) (Halliday & Matthiessen, 2014). In this chapter, the focus is on *modality*, which encompasses both modalisation (pertaining to propositions or information) and modulation (pertaining to proposals or goods and services). In other words, modality facilitates the attenuation or emphasis of an interaction through degrees of probability, habituality, obligation, or inclination (Fuzer & Cabral, 2014).

<sup>4</sup> According to Eggins (2003), the "finite element" belongs to a limited set of verbal operators that convey tense (such as *is*, *has*) or modality (such as *can*, *must*).

Lastly, although it is not the primary focus of this chapter, the textual metafunction pertains to linguistic choices that organise the text and dictate the flow of information, treating the clause as a message. This flow of information is inferred through thematic structure, which consists of theme and rheme (Halliday & Matthiessen, 2014).

# 2.3. Analysis of the Teaching Proposal

For the analysis of the teaching proposal, two key dimensions were considered: (a) the implementation of the flipped learning approach throughout an academic year within the context of teaching PAL to beginner learners, focusing on writing development; and (b) the examination of written tasks produced by these learners, with a particular emphasis on lexicogrammatical choices viewed through the lens of SFL. These analytical dimensions provide insight into the impact of writing instruction within the specific academic context under consideration.

The analysis of the proposal adopts a qualitative and longitudinal research approach. As described by Cohen *et al.* (2018), *qualitative research* delves into the causal processes involved in understanding how interventions or factors lead to particular outcomes, elucidating the mechanisms of their causal linkages. While quantitative research may reveal correlations and provide insights into the "what" and "whether", qualitative research focuses on the "how" and "why" – uncovering the processes underlying occurrences. A *longitudinal study*, as defined by Cohen *et al.* (2018), involves gathering data over an extended period, ranging from several weeks to many years. This chapter is positioned as a short-term investigation consisting in a study involving tasks guided by the flipped learning approach and aiming to elucidate the impact of this approach on learners' written productions in terms of their lexicogrammatical choices.

# 2.3.1. Teaching Proposal for Writing

The teaching proposal was implemented with beginner learners of PAL at a British university throughout the academic year 2022–23. This introductory module targets learners with at least a B2 level in another Romance language or those who have a Romance language as their L1. Spanning over 19 weeks from October to March, the teaching component offers 4 in-person contact hours per week, totalling 76 hours, followed by 2 weeks of revision comprising 8 hours. Additionally, learners are expected to dedicate a minimum of 6 hours per week to self-study. The course aims to develop all language skills and elevate students to B1 proficiency level in Portuguese by the end of the academic year.

It is structured into six general themes, further divided into smaller topics for each block of teaching, in line with the Common European Framework of Reference for Languages (CEFR).

To achieve the desired outcomes, the module adopts the flipped learning approach, drawing inspiration from works by Ahmed (2016), Birgili *et al.* (2021), and Bredow *et al.* (2021). In this approach, students are tasked with completing various tasks prior to face-to-face lessons, allowing class time to focus primarily on production skills, namely writing and speaking. Flipped activities encompass vocabulary sets on Quizlet (totalling 59 over 19 weeks) and short grammar videos with quizzes on Moodle (a total of 33 tasks over the same period) – the Virtual Learning Environment (VLE) employed in this context. Students tackle most tasks during the initial 10 weeks, with the latter half of the course devoted to content review and practical application of vocabulary and grammar structures across various tasks, capitalising on the module's intensive nature.

Writing activities are introduced from the outset, commencing from sentence-level tasks on sticky notes and progressively advancing to paragraphs, texts, blogs, and larger projects. Among these tasks, learners undertake 13 supervised writing activities distributed throughout the 19 weeks, serving as the focal point for data analysis in this study. These activities are designed to bolster students' skills by simulating exam conditions, with timed tasks typically lasting between 10 and 12 minutes each. Each student keeps a dedicated notebook to complete these tasks, with teacher corrections marked using 24 codes (e.g. G14 for present tense; G23 for accents). Students are encouraged to engage with feedback, rectify any errors, and provide a brief reflection elucidating "What Went Well" (WWW) and "Even Better If" (EBI). They also have the option to rewrite their texts, which fosters an environment conducive to continuous improvement. By promoting learner engagement with feedback from the outset, the module aims to cultivate a reflective approach towards the development of writing skills, exemplified by the following reflection from one of the learners at the midway point of the course:

Writing is a skill of mine that has dramatically improved overtime and I put that down to feedback. Having to come face to face with the mistakes you make allows you to be aware of where you're going wrong. These have been very successful as overtime [sic] the mistakes I were [sic] making have gone from using Spanish vocabulary to tense issues where we have included harder topics into our learning.

Six themes were proposed over the course of 19 weeks of classes. Table 2.2 lists the number of tasks produced by learners in each theme.

Theme 1	Identity and culture	4 writing tasks
Theme 2	Local area, travelling, and holidays	3 writing tasks
Theme 3	Lifestyle	1 writing task
Theme 4	Everyday life – now and then	2 writing tasks + 1 rewriting
Theme 5	What will my future be like?	No supervised writing tasks set
Theme 6	Local and global dimensions	3 writing tasks
	Total	13 supervised writing tasks + 1 rewriting

**Table 2.2.** Themes and number of tasks produced

From the pool of tasks produced – and given the qualitative nature of this study (Cohen *et al.*, 2018) – one text was selected to exemplify the work developed throughout the academic year and was subjected to detailed analysis. Following SFL, the criteria for understanding the ideational metafunction entail counting the clauses, identifying the verbal processes present in each clause, and discerning the functional configuration of these clauses. For understanding the interpersonal metafunction, the criteria involve identifying speech roles, analysing the lexicogrammatical configuration of clause constituents, and examining verbal exchanges in terms of modality.

# 2.3.1. Lexicogrammatical Patterns in the Students' Writing Production

The analysis conducted in this chapter aims to delineate the lexicogrammatical patterns observed in the writing of a beginner learner of PAL who was exposed to the flipped learning approach over an academic year. The objective is to understand the impact of the flipped learning approach on lexicogrammatical aspects. To achieve this goal, we analyse one representative text produced by a learner who completed all tasks and engaged with feedback throughout the academic year. Additionally, the text serves as an example that reflects the average performance of the group's students in terms of linguistic aspects and fulfilment of the proposed task.

The selected text for analysis was generated based on Theme 4, "Everyday life – now and then", which prompted learners to report on Vinícius Campos's $^5$ 

<sup>5</sup> As with the other materials used in the course, this is an authentic text available on the internet. It was written by a student, Vinícius Campos, at a school in Brazil. The text was available at https://matriculas.escolaterrafirme.com.br/, accessed on 10 Feb 2023. Please see the full text in the Appendix.

school life after reading a text about his experiences. Learners were also instructed to reflect on their own memories of primary and secondary school life, providing physical and psychological descriptions thereof. Flipped learning activities for this task included vocabulary sets on Quizlet and short grammar videos with quizzes on Moodle.

Learners were provided with Vinícius Campos's essay detailing his experiences in school (see Appendix 1) to guide their writing on the theme, enabling access to relevant information and enriching their linguistic repertoire in the AL. Furthermore, preparatory activities focused on grammatical concepts such as person, mood, and verb tenses.

The diverse tasks completed by the learner prior to the writing task in the classroom served as input for academic writing. Below is the complete text produced by the learner for analysis.

Eu creio que a vida escolar de Vinícius Campos ofrece muitas oportunidades para muitos alunos diferentes. Por exemplo, há muitos professores que melhoram a experiência para os alunos. Eles recebem muitas oportunidades, como viagens, uma grande variedade de máterias e atividades extracurriculares para os alunos para desfrutar.

Eles têm o objetivo de tornar os alunos inteligentes e independentes por meio [do] bom ensino, motivação e atividades. Pessoalmente, gostaria de ir para essa escola, pois parece uma oportunidade incrível.

I believe that Vinícius Campos's school life offers numerous opportunities for many diverse students. For instance, there are many teachers who enhance the experience for the students. They receive [provide] many opportunities, such as trips, a wide range of subjects, and extracurricular activities for enjoyment. They aim to make the students smart and independent through effective teaching, motivation, and activities. Personally, I would like to attend such a school because it seems like an incredible opportunity.

The learner's text is structured around a lexicogrammatical realisation consisting of five clausal complexes, each analysed individually. Within each complex, clauses are delineated with the symbol (//) for clarity in describing the transitivity system. The first realisation is illustrated in Example 1.

(1)						
Eu	creio//	que	a vida escolar de	Vinícius Campos	oferece	muitas oportunidades para muitos alunos diferentes
senser	mental process	textual element	goal	actor	material process	circumstance

In the example, two processes are employed to articulate the language learners' experience: a mental process and a material process. The lexicogrammatical choices, contingent upon the processes utilised, indicate that the meaning was derived from the learner's conscious experience of the world, underscored by the function of eu as the senser. Following the structure, the learner selects a clause containing a material process, with Vinícius Campos acting as a participant who assumes the role of the actor; subsequently, the actor is ascribed the goal of *a vida escolar* ('school life'). In the initial excerpt from the student's text, demonstrated in Example 1, it is evident that the constructed meaning encompasses information from the realm of "being" (through the mental process), namely, those elements of knowledge that constitute the learner's perceptions, alongside actions, or "doing" (material process), reflecting the learner's interpretation of the other's voice (Vinícius Campos). These voices are discernible in the learner's written text. Thus, the lexicogrammatical choices made by the learner in their text provide compelling evidence that the resulting text mirrors the learner's perspective on the activities (readings and supplementary grammar exercises) undertaken as part of the tasks offered in the flipped learning approach. The subsequent excerpt from the text can also be broken down into clauses, as depicted in Example 2 below:

(2)					
Por exemplo,	há	muitos professores//	que	melhoram	a experiência para os alunos
textual	existential	existent	textual	material	goal

element

process

The structure of the passage demonstrated in Example 2 is initially characterised by an existential process succeeded by a material process. The existential process denotes something that exists or occurs and is less frequent in clauses. Here, the "existent" participant represents the numerous teachers referenced in the earlier activities, enabling the learner to enrich their linguistic repertoire for use in their written text developed through flipped learning tasks. Furthermore, within the same passage, the material process highlights the action derived from prior reading, with the clause *enhancing the experience for students* serving the meta-function and thereby complementing the clause's meaning.

The progression of information in the analysed text, depicted in Example 3, reveals a shift in the semantic function of the participant mentioned earlier in Example 2 (*professores*), now assuming the role of the primary participant through the utilisation of a material process.

element

process

(3)			
Eles	recebem	muitas oportunidades, como viagens, uma grande variedade de materiais e atividades extracurriculares	para os alunos para desfrutar
actor	material process	circumstance	goal

In Example 3, the learner constructs the sentence using a material process. This linguistic decision reintroduces the participant *eles* (*os professores*) from the phrase illustrated in Example 2, thereby functioning as the "actor" of the sentence. Consequently, this function explicitly portrays the action undertaken by the author and maintains the shift in perspective within the text.

By opting for a material process, the learner emphasises the revision of the preceding excerpt of the text, choosing the pronoun *eles* to refer to *professores*. This selection persists in shaping the flow of information in the text; however, a relational process is chosen, as observed in Example 4.

(4)		
Eles	têm	o objetivo de tornar os alunos inteligentes e independentes por meio [do] bom ensino, motivação e atividades.
carrier	relational process	attribute

By selecting the relational process, the learner underscores, in their writing, the linguistic repertoire of information constructed in previous tasks. Consequently, the clause commences with a participant functioning as a "carrier", attributing to it the quality of 'making students intelligent and independent'. Thus, the occurrence of an adjectival phrase in the learner's text is observed.

It is worth noting that Example 4 indicates a certain proficiency of the learner in producing written text in the AL, as this grammatical construction reveals a degree of mastery of writing. In other words, the recurrence of relational processes underscores the argumentative nature of the text, evidenced by the writer's reiterated viewpoint on the subject at hand. This is not merely limited to reproducing excerpts from previous activities, including the information contained in the text that reports Vinícius Campos's experience, but rather involves constructing their own text with diverse linguistic choices.

In the final clause of the text, exemplified below, the learner shifts the text's focus from the perspective of others (*the teachers*, *they*) with material and relational processes to presenting their own viewpoint on the addressed topic.

,	_	•
1	_	
ı	)	

[Eu]	Pessoalmente,	gostaria de ir	para essa escola,	pois parece uma oportunidade incrível.
carrier	circumstance	behavioural process	identifier	attribute

The learner's personal perspective expressed in the text is conveyed through the behavioural process, typically associated with conscious function, with the participant *eu* focusing on the writer's viewpoint to express their understanding of the text read. The learner's linguistic choices, inferred from the phrase *para essa escola* and complemented by the descriptor *parece uma oportunidade incrível*, reflect this perspective.

Thus, from the standpoint of the ideational function, it was observed that the learner's writing encompassed five primary processes, with material processes predominating. The main function of material processes is to represent events and situate them within the text itself. This recurrence in lexicogrammatical choices imbues the clauses with the function of delineating a degree of change in the flow of events. It entails the engagement of the "actor" (the subject assumes this role) who contributes to the progression of the text through the selection of a temporally marked process, resulting in an outcome different from the initial phase (Halliday & Matthiessen, 2014). This distinctive trajectory is evident in the three other processes composing the phrases, which serve to signal the writer's viewpoint.

Changes in perspectives within the text, specifically the writer's viewpoint and the text read in the flipped learning task, can also be elucidated through the interpersonal metafunction. Semantically, the text embodies an exchange of information, initiated in Example 1 and continued in Example 5. In these instances, the writer constructs the text through linguistic and semantic choices that reflect their interpretation of the required theme for writing. These aspects serve as indicators that the linguistic repertoire was cultivated through the tasks undertaken via the flipped learning approach.

In the analysed written text, the learner adopts the dual role of speaker and listener/reader, as evidenced by the lexicogrammatical choices within the SFL framework, particularly through the interpersonal metafunction. These choices manifest as speech acts realised in writing, where the learner not only employs the additional language to convey information but also receives and seeks information, engaging in semantic exchanges (Halliday & Matthiessen, 2014).

These exchanges are structured grammatically, with the mood of the text determined by finite elements in the simple present tense, all expressing positive modality in declarative clauses. The subject of the clause alternates between *eu* and the referent addressed in the text (*eles*, *professores*), providing

a clear and objective distinction between the writer's opinion and information derived from texts read in flipped learning tasks.

Moreover, the structure of the residue, comprising the predicator, complement, or adjunct, is evident in the learner's writing. For instance, oportunidade incrível (predicator in Example 5) serves to offer additional information. Similarly, muitas oportunidades para muitos alunos (complement, Example 1), although non-essential, could potentially function as the subject. Additionally, por meio [do] bom ensino, motivação e atividades (adjunct, Example 4) provides supplementary information within the clause.

The recurrence of these structures in the text suggests that the learner's writing demonstrates characteristics suitable for an academic context. Several reasons can be distinguished: the learner produces the text with marks of authorship, uses adjuncts to indicate the writer's opinion within the text, and demonstrates an understanding of the source text being referenced. This proficiency may be attributed to the role played by the work done through the flipped learning approach in shaping the learner's lexicogrammatical choices in the AL.

Furthermore, concerning the interpersonal metafunction, the learner's writing reflects a positive polarity through choices related to modality, a linguistic resource used to express opinions or viewpoints. These occurrences observed in the learner's text include propositions aimed at providing information and can be seen in examples such as muitas possibilidades para muitos alunos (Example 1), muitos professores (Example 2), muitas oportunidades... (Example 3), bom ensino, motivação e atividades (Example 4), and uma oportunidade incrível (Example 5). They all convey varying degrees of probability, ranging from possible to certain. Grammatically, these instances appear in the text once as a finite operator (muitos professores in Example 2), once as a modal adjunct indicating certainty (bom ensino, motivação e atividades in Example 4), and in the remaining examples, as modal adjuncts indicating possibility.

Thus, the results regarding modality align with the analysis of transitivity, where the writer's viewpoint is evident throughout the written text. In summary, a representation of the learner's text can be visualised in Figure 2.2.

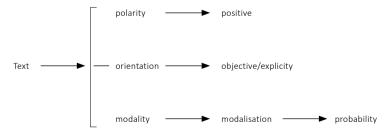


Figure 2.2. Interpersonal orientation of the text

Therefore, the lexicogrammatical analysis of the text under scrutiny may suggest the impact of the flipped learning approach on language teaching and the development of academic literacy. The written production demonstrates that the learner exhibits a diverse functional use of linguistic choices, surpassing the expectations for proficiency levels typically associated with beginners.

# 2.4. Practical Considerations: Implementing Flipped Learning Strategies

Incorporating flipped learning strategies into the teaching of academic writing for PAL beginner learners, as well as learners of other additional languages, with a focus on lexicogrammatical development, can significantly enhance their linguistic skills. Below, we outline actionable steps to be implemented within one or two sessions, or even throughout an entire module, drawing from the example utilised in this chapter, aimed at harnessing the benefits of flipped learning to support academic writing development.

- (1) *Pre-activity preparation*: Initiate the approach with pre-activities utilising flipped learning to introduce crucial lexicogrammatical concepts and relevant vocabulary pertinent to forthcoming writing tasks. Utilise instructional materials such as grammar videos and vocabulary exercises on platforms like Quizlet, Wordwall, and YouTube. Encourage students to independently engage with these pre-activities, ensuring thorough comprehension prior to classroom sessions. This facilitates learners in acquainting themselves with the linguistic resources essential for the writing tasks.
- (2) In-class collaborative tasks: Allocate class time for collaborative activities wherein students apply previously acquired knowledge to writing tasks. Foster an environment conducive to peer interaction and constructive feedback. Facilitate group discussions or pair work to encourage the application of learnt material, aiding learners in understanding how to adapt language appropriately to varied writing tasks. Additionally, besides focusing solely on linguistic aspects, foster an environment for students to share their strategies and insights with peers to enable the refinement of writing strategies and planning.
- (3) Individualised writing production: Provide opportunities for individualised writing practice within the classroom setting. Assign writing tasks that challenge students to showcase their comprehension of lexicogrammatical patterns introduced in pre-activities through flipped learning. To ensure the efficacy of these tasks, offer guidance and support as students engage with their writing assignments. Supply clear instructions, particularly regarding lexicogrammatical elements, and furnish targeted feedback on language use to aid learners in refining their writing skills through rewriting activities.

(4) Reflective evaluation: Allocate time for reflection at the end of each production session. Encourage students to contemplate their learning experiences, addressing challenges encountered and strategies employed during the writing process, either orally or through written reflection and subsequent discussion. Guide learners in identifying areas for improvement and establishing goals for linguistic development. For instance, in the course discussed in this chapter, the use of 24 marking codes for giving written feedback proved instrumental in aiding students' comprehension of feedback and identification of areas necessitating improvement.

By implementing these flipped learning strategies, we are confident that educators can effectively support AL learners in developing their academic writing skills while concurrently fostering autonomy and active engagement in the learning process.

## 2.5. Concluding Remarks

The central focus of this chapter was the flipped learning approach and its contribution to the writing produced by beginner learners of PAL within an academic teaching context. The primary objective was to illustrate the implementation possibilities of this approach over an academic year, where participants are encouraged to develop autonomy and linguistic competence in the target language through a range of tasks with varying levels of difficulty and challenges. The aim was to cultivate an understanding of how the target language operates and its usage across diverse academic contexts and purposes.

The proposed teaching framework encompassed six themes, each addressing a range of topics, and was implemented over a span of 19 weeks. For each theme, a set of tasks was provided to the students, as outlined in Table 2.2. The course was designed for learners of PAL who already had a proficiency level of at least B2 in another Romance language but had no prior knowledge or proficiency in Portuguese.

The analysis of the flipped learning approach was supplemented with an example of written text produced by one of the participants, which was linguistically examined through the lens of SFL. This analysis aimed to: (a) delineate the lexicogrammatical patterns observed in the writing of beginner learners of PAL exposed to the flipped learning approach over an academic year; and (b) evaluate whether students tailor their language use appropriately to different writing tasks.

Regarding the first objective, it was observed that the text, representative of the course participants, exhibits lexicogrammatical choices demonstrating a complexity and variety of language use beyond what is typically expected for the learners' proficiency level. All the phrases demonstrate grammatical

intricacy, showcasing a diversity of verbal and clausal groups characterised by recurring processes and circumstantial adjuncts. Notably, the linguistic selections aimed to emphasise the roles of participants in the clauses, reflecting a clear articulation of the learner's perspective on the topic of the text and the meanings derived from the readings. Interpersonally, the text displays indications of positive polarity and modality, underscoring the writer's positioning within the text.

Concerning the second objective, the findings indicate that the learner's writing offered compelling evidence that the activities undertaken in the flipped learning approach facilitated the development of the text and its informational flow. At the core of this process lies the incorporation of voices and information within the writing, enabling a dialogue with other texts.

When considering the results, aligned with the guiding objectives and in accordance with the analytical and methodological approaches followed in this study, we would like to highlight its contributions and possible limitations.

The first consideration pertains to the inclusion of data produced under different conditions and timeframes, shaped by a longitudinal methodological design, with data generated from numerous tasks that encompass various topics and proficiency demands as the weeks of the course progress. Such a design in future research could demonstrate changes throughout the process and the impact of different variables, including linguistic aspects such as grammatical, textual, and discursive structure and organisation, which require the production of texts with varying levels of complexity and mastery of the additional language. Moreover, a longitudinal study at subsequent levels could cover topics beyond those addressed at the beginner level, as well as text genres that require the articulation of different linguistic knowledge and proficiency challenges. This would allow, for example, for an examination of the relationship between the input provided by the flipped approach and the proficiency levels reflected in the texts produced by students.

The second consideration involves the learners' perspectives in two respects: (i) analyses that track the individual development of students who may be representative of a group exposed to the flipped approach, including their perceptions of the tasks offered prior to the written production proposal; and (ii) qualitative analyses of written productions from different course participants, ideally with varying linguistic backgrounds, to understand the relationship between students' autonomy in handling the materials provided beforehand and the written text produced in the various course tasks.

Moving forward, further research is needed to deepen our understanding of these findings. For instance, studies focusing on texts produced by more learners over the course of an academic year could provide additional insights. Although not addressed in this qualitative study, various factors may

also influence students' writing performance, such as linguistic proficiency, motivation to complete tasks, feedback provided in class, and learners' prior knowledge of the text genre requested for written production.

In addition, research that explores flipped learning with learners of varying proficiency levels would be valuable for understanding two intricate aspects of utilising an Lx: academic writing and the effects of the flipped learning approach. The integration of other skills – such as listening, speaking and reading – could shed light on which abilities might be more affected under different teaching and learning conditions. Similarly, comparative studies across different additional languages would broaden the scope of this initial study.

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**Abstract:** This chapter examines the effectiveness of the flipped learning approach in enhancing writing skills for Portuguese as an additional language at the beginner level. Flipped learning, a learner-centred teaching approach emphasising autonomous learning, extends beyond in-class activities, relying on teacher-provided materials and resources accessible to students outside the classroom. Recognised for its potential to boost active learning and engagement, the flipped learning approach involves activities like watching grammar videos, completing focused quizzes, and engaging in vocabulary exercises on platforms like Quizlet. To assess the impact of this approach on writing proficiency, specifically regarding choices and lexicogrammatical usage in Portuguese as an additional language, this study employs a systemic functional linguistics (SFL) framework. This framework investigates the relation between vocabulary and grammar in language use, offering a comprehensive perspective on how language resources contribute to meaning construction. The data derive from writing tasks completed by multilingual learners of Portuguese as an additional language within a British university context. The analysis concentrates on the transitivity system (ideational metafunction) and the mood and modality system (interpersonal metafunction). Examining these lexicogrammatical features in students' written production provides valuable insights into their language development. Moreover, it sheds light on the effectiveness of the flipped learning approach in fostering a robust understanding and acquisition of Portuguese language structures at the beginner level.

**Keywords:** flipped learning, Portuguese writing skills, systemic functional linguistics, Portuguese as an additional language, lexicogrammatical analysis, autonomous learning

## Appendix: Text provided to the learners

### Relatos de vida na Escola Terra Firme – 9° ano

### 1° Ano

Minha vida escolar começou no 1° ano, minha professora foi a Xuxa, ela foi muito marcante por ser uma professora que interagia muito com a turma, com suas ideias criativas. Também me marcou muito um passarinho que adotamos, que caiu de uma árvore e machucou a asa, então cuidamos dele até ele se recuperar e voltar a voar.

### 2° Ano

No segundo ano minha professora foi a Kátia. Com ela eu viajei o mundo através de um livro, e tivemos até passaportes fictícios. Eu tenho esse livro até hoje.

### 3° Ano

No terceiro ano, minhas professoras foram a Liz e a Bruna. Esse foi o ano que mais tenho coisas pra contar. Foi com a Liz que descobri minha criatividade, interesse pela arte e por maquetes, enfim, a construir coisas. Já com a Bruna eu ri muito por ela brincar com os alunos, mas mesmo brincando um monte ela consegue manter o controle e ensinar toda a matéria, ela sempre passava muitos quadros. E quando a tirávamos do sério ela falava "Se alguém falar mais um pio eu vou copiar mais um quadro inteiro". (O terceiro ano era dividido em duas turmas).

### 4° Ano

O nosso quarto ano iniciou com uma turma única, sendo que alguns amigos meus saíram da escola. Nesse ano minhas professoras foram a Rita e a Elisa.

### 5° Ano

No quinto ano comecei a estudar de manhã, tendo um professor para cada disciplina, éramos a turma mais nova e tínhamos que mudar de sala de acordo com a aula.

### 7° Ano

Nesse ano só lembro do acampamento que fizemos na escola. E nós fizemos um pouco de tudo, desde virar a noite, fazer panelaço e usamos fantasias.

### 8° Ano

No oitavo ano foi um ano bem difícil de conteúdo, eu tive que estudar muito. Mas no fim do ano fomos recompensados, tivemos um acampamento no TMA e foi muito divertido. Nesse ano começamos a vender para arrecadarmos dinheiro para formatura, já que não tinha um nono ano na escola.

### 9° Ano

Por enquanto estamos arrecadando dinheiro para formatura e decidindo para onde iremos depois da Terra, se passarmos de ano, começaremos a fazer cursinhos, vamos deixar isso pro futuro!

Vinícius Campos

# 3. Thesis Writing Workshop: A Case in Postgraduate Education in Spanish from an SFL-Grounded Approach

### 3.1. Introduction

In the Latin American context, teaching academic writing at the postgraduate level is an emergent field (Chois-Lenis et al., 2020). It predominantly focuses on teaching academic Spanish as an L1, since most postgraduate students on the continent are Spanish speakers, and there are relatively few students with different L1s pursuing postgraduate studies here. From a descriptive perspective, research in this domain has experienced sustained growth since the early 2000s, providing detailed linguistic descriptions of relevant genres in academic fields, along with their discursive, pragmatic, and lexicogrammatical features. However, the development of writing instruction in postgraduate education has progressed more slowly. Current teaching strategies in postgraduate writing in this context can be characterised by two main considerations: what to teach and how to teach it. According to the systematic review by Chois-Lenis et al. (2020), pedagogical activities focus predominantly on three main objectives: (1) developing self-assessment skills in writers, (2) practising reading and writing strategies for gathering information and planning and revising texts, and (3) learning about relevant genres in postgraduate training. Regarding the how to teach it part, the 'thesis writing workshop' is the most common pedagogical activity in the Latin American context. These workshops are typically organised around peer-review activities, but they may

<sup>1</sup> Nevertheless, at least in the Chilean context, the school system has seen an important growth in the number of students with L1s other than Spanish, which has posed important challenges to educative practices, particularly in public school settings. This is a major challenge that neither policy nor research have properly faced so far.

also include sessions where an expert provides feedback on students' writing. In general, explicit teaching of language knowledge is often overlooked in favour of 'practice-oriented' experiences.

This chapter discusses the design of a thesis writing workshop for doctoral students in social sciences, arts, and humanities, focusing on Spanish as an L1. While the challenges of teaching academic writing in an L1 might seem quite different from those of teaching it as a second language (L2), this chapter aims to provide a theoretically grounded alternative that addresses the diverse disciplinary fields that students bring to these workshops. It also offers explicit knowledge about language and its operation in specialised fields, thereby broadening the scope for further reflection on how such a framework could be applied to academic writing in Spanish as an L2. The proposed goal of the workshop is to develop students' semiotic resources and critical awareness of language, equipping them with tools they can continue to use in academic writing contexts, even after completing their degrees.

The theoretical and methodological framework for the workshop design is based in a socio-semiotic theory of language, specifically systemic functional linguistics (SFL), as developed by Halliday and Matthiessen (2014), Martin (1992), and Martin and Rose (2007, 2008). The pedagogical approach derived from this framework, known as genre-based pedagogy (Rothery & Stenglin, 1995; Rose & Martin, 2012), also informs the design of the thesis writing workshop. This framework has been applied in diverse teaching contexts and on various levels worldwide (e.g. Coffin et al., 2013; Dreyfus et al., 2016; Herazo, 2012; Humphrey, 2016; Kartika-Ningsih, 2022). Notably, it has also been applied to the teaching of Spanish as an L2 in various educational settings, particularly in the United States (Colombi, 2009; Brisk, 2016; Brisk & Ossa-Parra, in press; Ramírez, 2020). In Latin America, the pioneering work of Moyano (2010, 2017, 2018; Bassa Figueredo & Moyano, 2021) has been crucial in applying and adapting this pedagogy at the tertiary level in Spanish-speaking domains. The present chapter builds on this line of SFL application in Latin America and extends its reach to the postgraduate level.

The structure of this chapter is as follows: Section 3.2 introduces the linguistic and theoretical principles underpinning the design of the thesis workshop, detailing the language resources used and their sequencing in the workshop. This is followed by an exploration of the pedagogical principles guiding the teaching practice, highlighting specific adaptations made to suit the particular educational context and its aims. Section 3.3 describes some of the teaching activities and materials used to introduce textual meanings to students. The chapter concludes by emphasising the importance of teaching knowledge about language when instructing in writing, regardless of the language in question, the purposes of the teaching, or the educational level.

# 3.2. Theoretical Framework for the Thesis Writing Workshop Design

The workshop presented in this chapter organically integrates the explicit teaching of knowledge about language in specialised contexts with regular and scaffolded practices of writing, facilitated by a trained linguist. This approach sets it apart from typical workshops in the Latin American context, which often concentrate solely on writing exercises, editing, and peer feedback, without explicitly teaching about writing or the functionalities of language in specialised contexts.

A thesis writing workshop of the nature set out below provides significant learning advantages for students. Firstly, it clarifies common expectations regarding thesis writing across all disciplines at the postgraduate level. This universality is addressed through the concept of genre, viewing the thesis as a macrogenre with a relatively stable structure across social sciences, arts, and humanities.<sup>2</sup> Secondly, the instruction focused on language helps students identify and use linguistic patterns characteristic of writing within their own disciplines. This explicit teaching of linguistic patterns and resources proves beneficial not only in English-speaking contexts but also where Spanish is a second language (L2). The linguistic patterns discussed are linked to the three overarching functions or metafunctions of language: ideational (construing experience in a specialised manner), textual (organising the text as a flow of information), and *interpersonal* (evaluating ideas and incorporating the voices of others into the writing). The next section will introduce the theoretical underpinnings of this workshop design, drawing on key principles from systemic functional linguistics (SFL).

### 3.2.1. General Tenets in the Socio-Semiotic Model of Language in SFL

The model proposed by SFL understands language as a socio-semiotic system oriented to the production of meaning in context. In other words, language is understood as a system of meaning-making resources that users utilise in their social lives to accomplish the goals of their culture (Halliday, 1978). This model is organised around a series of theoretical principles, two of

<sup>2</sup> In the Latin-American context, students enrolled in academic Master's and doctoral programmes are expected to complete an original study as part of their graduation requirements. The nature of this research and the complexity of the written piece they are expected to submit varies between programmes. At the institution where this workshop is conducted, for example, both Master's and doctoral students may complete their programmes either with a monographic work (a thesis) or with a single research article or a collection thereof.

which are considered for the design of this thesis writing workshop: *stratification* and *metafunction*. These principles offer useful criteria to decide *what to teach* about language in the workshop, taking into account the relevant meaning patterns in doctoral thesis writing.

The *stratification* principle distinguishes different levels or strata in language and context, conceptualised as semiotic systems. In language, three strata are identified, from more concrete to more abstract: phonology-graphology, lexicogrammar, and discourse-semantics. The first corresponds to meaning choices in sounds and graphemes (Matthiessen & Halliday, 2009); the second organises meaning choices at the level of the clause; and the third corresponds to meaning choices in texts as whole units of meaning (Martin & Rose, 2007, 2008). Strata are related in terms of *realisation*: meanings at the more abstract level are manifested or codified in meanings in the immediate lower stratum; by the same token, meanings at the more concrete level symbolise or express those at the immediate higher stratum (Martin & Rose, 2008). In other words, patterns at the discourse-semantic stratum – e.g. the way information is organised in the text – are realised by meanings at the beginning of each clause in the text.

The metafunctional principle is related to SFL's understanding of language as a meaning-making resource in social life. This model posits that language serves to accomplish three general functions, known as *metafunctions*: construing the external and internal experiences of the user in the form of semiosis (ideational metafunction); enacting social relations between language users (interpersonal metafunction); and organising the semiotic resources that fulfil these metafunctions into coherent texts (textual metafunction). These metafunctions operate simultaneously whenever users create texts in context and extend through the three strata of language. Essentially, all texts involve the functioning of these three metafunctions at the same time, and meaning resources for each metafunction operate across the identified strata. The theoretical principles introduced above are traditionally represented in SFL as shown in Figure 3.1.

Figure 3.1 illustrates the strata and metafunctions in language. Additionally, this figure introduces another key principle in SFL's theory of language: its understanding of *context*. In this model, context is conceptualised as a semiotic system of a higher degree of abstraction than language. Context establishes a realisation relationship with language, similar to the relationship between strata in language; that is, language realises context and context is realised by language. For example, what we commonly refer to as the 'academic context' is, from this perspective, viewed as a series of texts (theses, papers, manuals, lectures, etc.) created within a particular social practice. These texts, on one

hand, respond to the possibilities and constraints of that practice (what can be said and how); on the other, they also shape and define what this academic context is. More importantly, the way these texts are created by and create context is enacted through language patterns in texts across different metafunctions and strata.

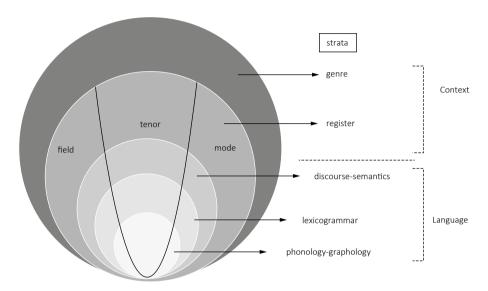


Figure 3.1. Stratified model of language in context proposed by SFL (adapt. from Martin & Rose, 2007)

In the Martinian model of context (Martin, 1992), two different strata are distinguished: *genre* and *register*. Genre is the more abstract stratum of context,<sup>3</sup> and it has been described as "staged, goal oriented social processes" (Martin & Rose, 2008, p. 6). These social processes are realised in language by recurrent configurations of meanings in register, organised consistently around a sequence of *stages* which constitute its *schematic structure*. The completion of these stages in any instance of genre enables fulfilling its social purpose. For instance, the review genre, which can function in academic contexts to assess the value and significance of a text in a particular domain (for example, when reviewing existing research), is constituted by a schematic structure with

<sup>3</sup> In the Martinian model of context, genre is proposed as the most abstract stratum in context, and its key defining features emerge from a teleological perspective, that is, from an emphasis on purpose rather than on structure. Understanding genre as 'the most abstract' stratum does not mean that it is less concrete or visible; rather, it means that it is further away from the semiotic materiality of language. For more detailed discussions on this concept of genre, see Martin (1992, 2016, 2023), and Martin and Rose (2007, 2008) for more accessible descriptions.

three obligatory stages: Context ^ Text description ^ Judgement (Rothery & Stenglin, 1995). The doctorate thesis, as a complex text, corresponds to a *macrogenre* (Martin, 1994), that is, a sequence of elemental genres organised in consistent steps. This implies that, from this perspective, each of its chapters can potentially consists of a sequence of different genres, among which it is possible to find reports, explanations, reviews, and others.

Register is the more concrete stratum in context and corresponds to the variables of the immediate situational context that have an impact on the way language can be used in a particular setting (Halliday & Hasan, 1976). These variables correspond to the nature of the activity at hand in the semiotic process (field); the nature of the relation established between users interacting through language (tenor); and the available semiotic modes or means of communication and the role played by language in the immediate context (*mode*) (Halliday & Hasan, 1976; Martin & Rose, 2008). These variables in register relate systematically to metafunctions in language: field to the ideational metafunction, tenor to the interpersonal metafunction, and mode to the textual metafunction (Martin, 1992). For the purpose of teaching knowledge about language in the thesis writing workshop, the register variables allow approaching the disciplinary differences in specialised writing. For example, the relation between users of language (tenor) could be potentially closer in a discipline like literature when compared to a field like geography; in other words, in literary research, the way the reader is addressed and positioned and the expression of the writer's feelings and values are potentially more relevant than in geographic research – nobody would expect a geographer to say 'the mountain is beautiful and deeply moving', but we could expect a literature expert to say 'these verses are profound and deeply moving'.

These theoretical principles form the foundation for the design of the thesis writing workshop presented here. The primary goal of the workshop is to teach students this knowledge about language in an accessible manner to encourage their reflection on how it operates within their own disciplines. While these general principles are briefly introduced in the form of a theoretical discussion, their main purpose is to be applied throughout the workshop in the analysis of various examples of graduate writing, including the students' own texts, as well as in writing practice.

### 3.2.2. Meaning-making Resources for Understanding Language in Academic Contexts

The design of the thesis writing workshop is organised around the explicit teaching and guided practice of meaning-making resources of the three metafunctions in the discourse-semantic stratum. This focus is consistent with

the orientation to *text* writing, as opposed to *clause* writing – the thesis is a full-fledged text and not a collection of clauses. The systems around which the workshop revolves are PERIODICITY (from the textual metafunction), IDEATION and *connexion* (from the ideational metafunction), and APPRAISAL (from the interpersonal metafunction) (see Martin, 1992; Martin & Rose, 2007, 2008; Hao, 2020; Martin & White, 2005). Due to space constraints, the chapter will consider in detail the theoretical principles and pedagogical choices in teaching PERIODICITY, and will only touch briefly on the other systems considered in the workshop.

The teaching sequence starts with resources related to PERIODICITY. The system of PERIODICITY organises textual meanings that function to structure the text as a flow of information (Martin & Rose, 2007, 2008). Understanding these textual meaning resources is key for students' ability to produce texts where information is clearly and systematically organised in waves or pulses at different levels in the text. Thus, initiating the teaching sequence with resources from this system is highly productive for several reasons. Firstly, it allows approaching disciplinary writing from the perspective of mode, which remains relatively stable across the thesis macrogenre, despite disciplinary variations. Secondly, it equips students with knowledge about language that they can easily understand and apply in the reading and analysis of texts and in their writing.

At the macro-level, students are made aware of the way titles and subtitles function to predict great chunks of information in the text – e.g. the whole thesis, a whole chapter, a section or subsection in a chapter. At the meso-level, the focus is on the way information is predicted in the first sentence of the paragraph and subsequently unfolded, creating coherent information units. At the micro-level, the discussion focuses on textual meaning resources at the level of the clause, that is on using the lexicogrammar stratum to explicitly show how information is organised in the clause and how choices at this level can contribute to providing information in a purposeful way at the paragraph level and consequently at the level of the whole text.

The different levels of information organisation in the text require the application of different PERIODICITY resources. Two meaning choices are relevant for textual meaning: *predicting* information and *accumulating* information. In technical terms, the first one is known as *Theme* and the second as *New*. Three different levels of information organisation in the text are distinguished: macroTheme/macroNew (at whole text/section level); hyperTheme/hyperNew (at paragraph level); and Theme and New (at clause level). These choices are represented in Figure 3.2.

Sessions 2 to 4 of the workshop focus on explicitly teaching these PERI-ODICITY resources and practising their application in students' writing. Model texts are analysed to show what adequate PERIODICITY looks like and what resources writers use to achieve it. Other texts displaying issues in the PERI-ODICITY hierarchy are presented to practise improving their organisation, first with the lecturer's guidance and then independently by the students. Finally, these principles are applied to the analysis and editing of the students' own writing, starting with one paragraph and finishing with a sequence of three to five paragraphs. The way PERIODICITY works in texts could be generalised, particularly at hyper and macrolevels, between Spanish and other languages. At the micro-level, in the clause, teaching academic Spanish as an L2 could address aspects of cohesion and the grammatical functions and structures related to it from the perspective of textual organisation, to make these choices more accessible for learners.<sup>4</sup>

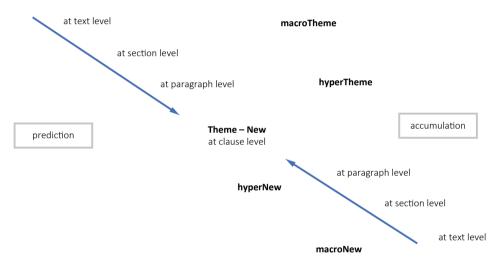


Figure 3.2. Hierarchy of PERIODICITY (adapted from Martin & Rose, 2008, p. 36)

The workshop continues exploring ideational resources for construing experience. In particular, it focuses on two main resources. First, it introduces the experiential organisation of the world around three meanings: things/people, qualities, and activities (Hao, 2020). These allow the students to understand that their disciplines are constituted in language at the most basic experiential level by these three kinds of meanings and that what distinguishes their fields from other specialised fields and from commonsense fields is the way they refer to those things, qualities, and activities. Most importantly, these three

<sup>4</sup> For example, textual organisation at the level of the paragraph explains why, after introducing a referent in a clause, we can have an 'implied subject' in subsequent clauses, as the coreference is established through the inflection in the processes of the following clauses.

basic ideational meanings allow making explicit that technical and specialised disciplinary knowledge implies creating categories of things/people and assigning them with special qualities. This discussion, which revolves around lexis, would also be relevant for students learning academic Spanish as an L2, as it provides a principled manner of understanding differences between commonsense and specialised lexis in this language. The following fragments exemplify the nature of the ideational choices at hand:

Table 3.1. Commonsense and uncommonsense choices for ideational meanings

commonsense field	uncommonsense field
people that move from one country to another	migrants
the action of moving from one country to another	migration
people have recently started to move from one country to another	the recent migration
people from other countries in Latin America have recently started to move from their country to ours	the relatively recent migration of nationals of different Latin American countries to ours

The second meaning resource taught in relation to ideational meanings is that of grammatical metaphor. This resource is considered key to creating uncommonsense knowledge. In simple terms, grammatical metaphor implies construing a sequence of activities as if it were only one activity. This pattern requires several transformations in the text, such as construing an activity as a thing and a logical relation as an activity (Hao, 2020). Grammatical metaphor is a fundamental resource for construing causality in texts in a complex and diversified manner. Exploring this meaning pattern from the point of view of the relations between activities and their realisation in grammar can provide learners of academic Spanish (both as an L1 and L2) with a clearer understanding of academic language patterns. The examples presented in Table 3.2 illustrate the functioning of this resource.

In the teaching sequence, Sessions 5 to 6 are dedicated to explicitly teaching these resources, identifying their use in different model texts and then exploring how they appear in the students' own writing. A common reflection that emerges in these sessions is the importance of understanding the kind of logical relation that the writer wants to construe and how this resource can sometimes be used to 'mock' the academic register without really construing relevant meanings for the text.

Table 3.2.	Meaning choices in 'congruent' (non-metaphorical)
	and 'incongruent' (metaphorical) realisation of activities

No grammatical metaphor	Grammatical metaphor
More people smoke today so more people die of cancer	The rise in smoking <i>produces</i> higher rates of death due to cancer
	The rise in smoking <i>leads to</i> higher rates of death due to cancer
	The rise in smoking <i>can possibly cause</i> higher rates of death due to cancer
	The rise in smoking <i>is associated with</i> higher rates of death due to cancer

The final section of the workshop turns to the interpersonal metafunction in discourse-semantics: APPRAISAL. The system of APPRAISAL organises interpersonal meanings for valuing people and things and for positioning the writer in their text and aligning them (or not) with other voices and with their readership (Martin & Rose, 2007, 2008; Martin & White, 2005). These meanings are organised around three general domains: (1) attitude, which includes resources for expressing feelings ('The author loves her writing'), appreciating things ('This writing is clear and precise'), and judging people's behaviour ('The writer is respectful to her reader'); (2) graduation, which includes resources for strengthening or softening attitudinal resources ('This writing is extremely clear and precise') and for sharpening or blurring the boundaries of meanings ('This writing is a kind of a story'); and (3) commitment, which includes resources for considering and introducing other voices in the text ('According to the writer, Paris was a party').

Together with ideational meaning resources, APPRAISAL resources are important teaching tools for exploring the specificities of students' disciplines in their writing. Different disciplines value things and people distinctly and require diverse patterns for the writer's positioning within the text (Hood, 2010, 2012; Hyland & Sancho-Guinda, 2012). Through our years of conducting workshops, we have observed that students from fields like Theology and Philosophy are often expected to position themselves very explicitly in their texts and to negotiate a very personal voice. In contrast, students from other fields, for example Education, are typically expected to construe a more objective, 'matter-of-fact' voice. There is, of course, potential variation within disciplines, which can be effectively addressed by understanding the meaning-making resources involved and how they are patterned differently in texts.

In the workshop syllabus, Sessions 10 to 13 are dedicated to exploring interpersonal meanings. Key meaning choices are explicitly taught to students

and are initially analysed in model texts, then in students' own writings, and finally applied in their writing or editing activities in the workshop. Sessions 7 to 9 are dedicated to formal considerations about academic writing, which often represent the primary concern for students at the beginning of the workshop. However, as the sessions progress, students gradually develop a deeper understanding of how language functions, shifting their focus from merely formal aspects of writing to how meaning is created. This is achieved by the explicit teaching of relevant recontextualised knowledge about language in academic contexts.

# 3.2.3. General Pedagogical Principles for Teaching at the Postgraduate Level: Genre-based Pedagogy and its Adaptations

Genre-based pedagogy emerges from the application of the model of language proposed by SFL to the design of explicit literacy teaching practices in primary and secondary school in Australia. The different pedagogical proposals in genre-based pedagogy share three important principles in their understanding of teaching language and teaching through language. The first principle is centring the teaching practice around a genre and not around fragments of texts or isolated linguistic features (such as tense or verb systems). The second principle is explicit teaching through clear scaffolding and modelling to show students how language works in specific genres to achieve certain social purposes. The third principle is developing an adequate metalanguage that 'translates' in an accessible manner the technical knowledge about language offered by the linguistic theory (Rose & Martin, 2012; Rose, 2020a, 2020b). These principles underpin different pedagogical models, including Teaching--Learning Cycle (TLC) (Rothery & Stenglin, 1995), Reading to Learn (R2L) (Rose & Martin, 2012), and adaptations and applications to other contexts such as Moyano (2007) and Kartika-Ningsih (2022).

In the context of the present thesis writing workshop, the pedagogical model assumed is that of the Teaching-Learning Cycle (TLC), with some adaptations. The TLC is oriented to the teaching of writing through a cycle constituted by three stages: *Deconstruction*, *Joint Construction*, and *Independent Construction*. These stages move from a higher level of support and scaffolding through to independent work by students. As this pedagogical model has been developed from pedagogical interventions in school subjects in primary and secondary education, its application to tertiary education and particularly to a writing workshop requires certain adaptations that respond to the constraints and possibilities afforded by the specific teaching context and the pedagogical goals of the workshop (Vidal Lizama, 2021). Therefore,

the pedagogical activities implemented in the workshop are grounded in the three stages in the Teaching-Leaning Cycle but at the same time adapt them to a varying extent.

Overall, the most general modification in the case of the thesis writing workshop is that the pedagogical activities are not oriented towards the writing of texts, but rather towards the analysis and editing of the students' existing writing. This is because writing a chapter in a thesis or even a section of a chapter takes much longer than the period of the workshop and, in general, the focus of the students when creating a text is set mostly on ideational meanings – their field and the knowledge they are construing. By using the students' existing texts, the lecturer can focus the pedagogical activities on the current patterns that their writing displays, opening up a space for a more 'distant' analysis of what they do when writing. To exemplify how this pedagogical model is adapted in more specific terms, the chapter below focuses on the first unit of the workshop, centred around textual resources.

The workshop opens with a 'diagnostic' assessment of students' writing, in which they are asked to share a sample from their doctoral projects. This diagnosis serves two purposes: firstly, it allows lecturers to become familiar with students' research and, from an SFL perspective, to have a sense of the fields involved in their projects. Secondly, it helps identify the challenges students face when writing in their disciplines and the aspects of meaning which they need to further develop. This diagnosis is grounded in the lecturers' deep understanding of how language works in academic contexts, and it is informed by the analytical tools provided by SLF and its discourse-semantic descriptions of language use in different disciplines, both in English (e.g. Halliday & Martin, 1993; Coffin, 2006; Hao, 2020) and Spanish (e.g. Leiva, 2022; Moyano, 2021; Oteíza, 2020; Vidal Lizama, 2020).

The teaching activities in the classroom follow the TLC, adapting some of its principles and integrating some aspects proposed by Moyano (2007). In the first stage of the model, *Deconstruction*, the lecturer is expected to select a model text that instantiates the genre being studied (e.g. a review) and to analyse it with the students, discussing its purpose and explicitly teaching its stages and the most relevant discourse-semantic and lexicogrammatical patterns. In our workshop, instead of teaching a particular genre through a model text, the aim is to teach textual resources on the discourse-semantic stratum, specifically in terms of PERIODICITY. Nevertheless, the general description of the model text still involves a discussion of its genre, purpose, and structure, emphasising the role of PERIODICITY resources for organising information and contributing to the staging of the genre.

The next stage, *Joint Construction*, supposes the writing of a new text within the deconstructed genre under the guidance of the lecturer. However,

in the thesis writing workshop, this stage is adapted to focus on the editing of a paragraph extracted from the introduction section of an academic paper, thus transforming it into a Joint Edition stage. Before beginning the editing process, the lecturer provides a general description of the paper, its goals, and overall structure. The focus then shifts to the schematic structure of the introduction (Hood, 2010) to clarify the genre in question and the specific role that the chosen paragraph plays in the unfolding of the introductory section of the model paper. Students work in pairs to create an edited version of the paragraph, applying the principles of information organisation discussed earlier. They then present their versions to the group, and the lecturer guides a discussion around the different meaning choices made and the textual, ideational, and interpersonal effects these choices have on the original paragraph. In this modification of the Joint Construction stage, the responsibility of supporting students' learning is shared between the lecturer and the student themselves. This shift from the original model, where the teacher guides the creation of a new text, is designed to accommodate the advanced level and identity of the students as highly proficient learners.

The final stage in the TLC corresponds to *Independent Construction*, where students are given the task of writing another text in the same genre, but within a new field. In the thesis writing workshop, students turn to their own writing to apply the knowledge gained from the analysis and editing process in the previous stage. This adaptation can be labelled as *Independent Edition*. Here, students progressively rewrite selected texts from their work: initially, they select a single paragraph to work on its textual organisation; then, they include two or three additional paragraphs either before or after the selected excerpt, expanding their editing efforts from the paragraph level to the subsection level in their texts. Finally, they are asked to rewrite the whole introduction section of their doctoral projects with textual meanings in focus and to provide a written reflection on what issues they identified in the original version in terms of PERIODICITY, how these issues were addressed, and what effects these changes had on the conveyance of meaning in the revised version.

The sequence of TLC stages is repeated to explore ideational meanings in the subsequent unit of the thesis workshop. The focus then turns to lexicogrammatical aspects of writing in Spanish and to formal features of thesis writing. The final unit explores interpersonal meanings related to APPRAISAL and integrates all the *knowledge about language* that students have developed throughout the workshop. A notable aspect of this workshop is that it is taught collaboratively by three linguistics professors, each with distinct research interests and expertise. Despite their individual specialisations, all the professors approach teaching and research from a general functional paradigm concerning language and have discussed the principles of the workshop design.

## 3.3. Resources for the Explicit Teaching of Information Organisation in the Paragraph: A Proposal for Deconstruction

An important pedagogical decision in the application of genre-based instruction is the selection of suitable model texts for explicitly teaching the meaning resources that are the focus of pedagogical practice. When teaching PERIODICITY resources during the *Deconstruction* stage, the idea of information organisation in different pulses – that is on different levels – of prediction and accumulation is introduced to students using the following model text, translated from a text found in Dreyfus *et al.* (2016, p. 81).

### (1) Texto modelo 1:

Respecto de la habilidad de transmitir electricidad, podemos posicionar todas las sustancias en uno de dos grupos. El primer grupo contiene materiales con muchos electrones que pueden moverse libremente. Estos materiales son llamados conductores porque pueden fácilmente llevar o conducir corrientes eléctricas. Los conductores son principalmente metales pero también se incluye aquí el grafito.

El segundo grupo contiene materiales con muy pocos electrones con posibilidad de moverse libremente. Estos materiales son llamados no-conductores y son conductores muy limitados de electricidad. Los no-conductores pueden ser usados para prevenir que la carga eléctrica se mueva a lugares no deseados. Por esto son también llamados aisladores. Algunos aisladores comunes son el vidrio, la goma, el plástico y el aire. Hay también unos pocos materiales, como el germanio y el silicio, llamados semi-conductores. Su capacidad para transmitir electricidad es intermedia entre los conductores y los aisladores. Los semiconductores han jugado un rol importante en la electrónica moderna.

To explicitly demonstrate to students how a text functions to predict information, they are first shown the opening sentence of the first paragraph (Respecto de la habilidad de transmitir electricidad, podemos posicionar todas las sustancias en uno de dos grupos) and asked how they expect the text to continue. The answer students always give is En el primer grupo... or El primer grupo... ('[in] the first group...'). Then, they are shown the rest of the paragraph, which confirms their prediction. Next, they are asked what the following paragraph should focus on, to which they respond Sobre el segundo grupo... ('with regard to the second group...'). The second paragraph is then revealed, thereby confirming the students' second prediction. At this point, the teacher explicitly highlights, albeit in general terms, three important aspects: (1) that the opening sentence of the first paragraph predicts the information for the

text as a whole, not just for the first paragraph; (2) that a similar structure is observed in how information flows in both paragraphs; and (3), that there is a difference in the amount or depth of information provided in paragraph 1 compared to paragraph 2. These differences are illustrated in Table 3.3:

**Table 3.3.** Information organisation: comparing the information structure of two paragraphs

	Paragraph 1	Paragraph 2
Predictive sentence of the text	Respecto de la habilidad de transmitir electricidad, podemos posicionar todas las sustancias en uno de dos grupos.	
Predictive sentence of the paragraph (topic sentence)	El primer grupo contiene materiales con muchos electrones que pueden moverse libremente	El segundo grupo contiene materiales con muy pocos electrones con posibilidad de moverse libremente
Description of the aforementioned topic (e.g. type of material)	Estos materiales son llamados conductores porque pueden fácilmente llevar o conducir corrientes eléctricas.	Estos materiales son llamados no-conductores y son conductores muy limitados de electricidad. Los no-conductores pueden ser usados para prevenir que la carga eléctrica se mueva a lugares no deseados. Por esto son también llamados aisladores.
Examples of material types	Los conductores son principalmente metales pero también se incluye aquí el grafito.	Algunos aisladores comunes son el vidrio, la goma, el plástico y el aire.

After highlighting these discourse patterns, the teacher asks the students if they think the text has fulfilled the prediction made at the beginning (i.e. talking about the two groups of materials) and if they believe the text can end at this point. Generally, the students provide a complex answer: on one hand, they note that indeed the text 'did what it promised' because it already presented the two groups mentioned at the start; on the other hand, they suggest that the text should have a final closing paragraph, so that it feels like a 'unified whole' or tells the reader 'what the purpose' of the information included therein is.

Following their responses, the students are shown the last paragraph, which confirms that the text indeed required a conclusion. This final paragraph not only consolidates the information provided earlier but also adds a third group of materials, the inclusion of which the students did not predict at the

beginning of the text. The students are then shown the differences in how information is structured among the three topic sentences: the first two refer to grupo, materiales, conductor, and moverse libremente, while in the last paragraph, the topic sentence introduces examples of materials (germanio and silicio) and assigns them the technical term semi-conductores. This introduces the idea that the choices in terms of the organisation of information throughout the text also depend on the choices made at the clause level.

Once the *Deconstruction* of the model text for teaching PERIODICITY is complete, a visual representation of the text is offered, following the technical representation in SFL, which shows the different levels or pulses at which information is organised, as shown below:

(2)

Respecto de <u>la habilidad de transmitir electricidad</u>, podemos posicionar todas las sustancias en <u>uno de dos grupos</u>. *El primer grupo contiene materiales con muchos electrones que pueden moverse libremente*. Estos materiales son llamados conductores porque pueden fácilmente llevar o conducir corrientes eléctricas. Los conductores son principalmente metales pero también se incluye aquí el grafito.

El segundo grupo contiene materiales con muy pocos electrones con posibilidad de moverse libremente. Estos materiales son llamados no-conductores y son conductores muy limitados de electricidad. Los no-conductores pueden ser usados para prevenir que la carga eléctrica se mueva a lugares no deseados. Por esto son también llamados aisladores. Algunos aisladores comunes son el vidrio, la goma, el plástico y el aire.

Hay también unos pocos materiales, como el germanio y el silicio, llamados semi-conductores. Su capacidad para transmitir electricidad es intermedia entre los conductores y los aisladores. Los semiconductores han jugado un rol importante en la electrónica moderna.

Explicit teaching of knowledge about language involves building an appropriate metalanguage with students to discuss textual phenomena. In this context, after deconstructing the model text, students are introduced to the concept of *topic sentence*. A topic sentence is defined as the first formal sentence of a paragraph (up to the first full stop) that predicts the content of the entire paragraph as a unit if the PERIODICITY of the paragraph is adequately organised. Nevertheless, not all writers manage to organise information in this way and therefore the position of the sentence is not enough to consider it predictive of the following pulse of information. This point is exemplified with

two samples of text, with the lecturer following the same logic of presentation as with the initial model text: first, introducing the paragraph's first sentence and then asking students about their predictions for what comes next. One of the examples used is the following:

(3)

A principios del siglo XX hubo, frente al arte decimonónico que orientó sus fuerzas creadoras hacia el intento de replicar la vida tal cual era, una reacción contraria, que quiso despojar al arte de su función mimética para centrarse en el plano exclusivamente estético: centrarse en la forma, que se libera de la imposición mimética, por sobre el contenido con el cual el espectador se debe sentir identificado. En consonancia con esto, José Ortega y Gasset plantea en 1925 un arte deshumanizado, que el espectador observa desde un plano intelectual o bien sensitivo, sin involucrarse a nivel emocional: "Alegrarse o sufrir con los destinos humanos que, tal vez, la obra de arte nos refiere o presenta es cosa muy diferente del verdadero goce artístico. Más aún: esa ocupación con lo humano de la obra es, en principio, incompatible con la estricta fruición estética" (Ortega y Gasset 3). El espectador vanguardista debe tener conciencia de que se encuentra frente a una ficción, un producto estético distinto a él, en vez de buscarse a sí mismo, o a su propia experiencia humana dentro del arte y descuidar así la primacía de lo sensorial, que es la materia prima de todo arte.

With this example, students are initially presented with the first sentence (highlighted in bold) and asked how they expect the text to continue. Generally, students are unable to predict what comes next because this first sentence does not function as a topic sentence. This leads to a deeper exploration of the concept of a topic sentence, where its characteristics – such as length and the ideational meaning it should convey – are discussed. The teacher then offers a possible alternative for organising this paragraph, starting with a new topic sentence:

(4)

A principios del siglo XX hubo un movimiento artístico que actuó como una potente reacción contraria frente al arte decimonónico.

This proposal is based on the content of the original paragraph, applying principles of relevant information prediction. This allows the teacher to delve deeper into deconstruction, explicitly presenting the textual, ideational, and

interpersonal patterns to consider when crafting a topic sentence. First, the discussion involves the extent of information presented in the topic sentence. For textual processing reasons, it is more appropriate and functional that the paragraph's first sentence is concise and brief, constituting a simple and accessible informational unit. The proposed modification is much shorter than the original sentence, which is partly achieved by avoiding constructing a lengthy clause complex, as was the case in the original version.

Second, from an ideational perspective, the topic sentence should introduce general notions from the field in question, allowing these notions to be unfolded and developed throughout the paragraph. Simply put, the principle to follow is 'I introduce what I'm going to talk about'. The proposed topic sentence introduces general notions that can be specified later in the paragraph's development: *movimiento artístico* and *arte decimonónico*. Both notions, which correspond to specialised terms in the art field, function as general categories from which more specific concepts, like different types of artistic movements or different expressions of art in the 19th century, can be derived. Thus, the new version of the topic sentence effectively 'introduces what it will say' and does not 'say it all at once'.

Finally, the topic sentence has the potential to position the paragraph from an interpersonal viewpoint, advancing the writer's evaluation of the notions they talk about, for example regarding their relevance, novelty, depth, etc. In the new version of the topic sentence, an explicit evaluation of 'artistic movement' is introduced, described as a *strong counter-reaction*. This signals its mould-breaking nature, which is positively evaluated in the art field. Thus, this new version of the topic sentence allows us to assume that the writer aligns themselves with the new artistic movement rather than 19th-century art.

The deconstruction of this new version of the topic sentence and the explication of principles for its elaboration make it clear to students that the entire paragraph requires reorganisation to allow its information to flow more appropriately. Thus, the teacher offers an alternative reorganisation that covers part of the paragraph's content:

(5)

A principios del siglo XX hubo, frente al arte decimonónico, un movimiento artístico que actuó como una potente reacción contraria. Mientras el arte decimonónico orientó sus fuerzas creadoras hacia el intento de replicar la vida tal cual era, este nuevo movimiento quiso despojar al arte de su función mimética para centrarse en el plano exclusivamente estético; en otras palabras, centrarse en la forma, que se libera de la imposición mimética, por sobre el contenido con el cual el espectador se debe sentir identificado.

Both versions are analysed and compared in detail, reiterating the practice of deconstruction to show how textual choices unfold in each of them and how they impact the way the field is construed in these paragraphs.

The model texts presented here are alternatives that can be used to explicitly teach *knowledge about language*, particularly about textual meanings. The crucial point is that students gain access to this specialised knowledge about how language functions and can see its explicit functioning in texts, as well as reflect on the implications of the different choices made by writers for the text and for the reader.

### 3.4. Final Remarks

The chapter has presented the general theoretical rationale for a design of a thesis writing workshop in the context of doctoral education in Spanish as an L1, along with the specific language knowledge that constitutes the focus of the teaching in the workshop and the pedagogical principles that inform the instruction. This workshop is based on the functional understanding of language offered by systemic functional linguistics, and it integrates and adapts the pedagogical proposal known as genre-based pedagogy. The chapter has argued that in order to teach writing to postgraduate students (and at any educational level), it is fundamental to make use of a theory of language that helps lecturers to understand the nature of writing practised within the disciplines of their students as well as allows them to explicitly teach knowledge about language and how it is used in disciplinary context.

In the Latin American context, where most postgraduate students have Spanish as their L1, challenges related to teaching academic Spanish as an L2 at the postgraduate level are almost non-existent. However, at other educational levels, namely in primary and secondary schools, the teaching of Spanish as an L2 has emerged as an important challenge. Approaching this practice from a perspective akin to the one presented here can greatly contribute to both the development of proficiency in the language and a deeper understanding of how it functions in social contexts. This knowledge can support students throughout their academic training and help them successfully meet the demands they encounter in educational, professional, and social practices.

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**Abstract**: This chapter presents the design of a writing workshop aimed at developing students' abilities in thesis writing in Spanish (L1) as part of their doctorate programmes in Social sciences, Arts, and Humanities. The theoretical foundations underpinning this design correspond to the language theory of systemic functional linguistics and its pedagogical proposal, known as Sydney School or genre-based pedagogy. The chapter discusses the pedagogical principles in the workshop design as well as the adaptations introduced to respond to the constraints and opportunities brought by the teaching context. The chapter proposes that, in order for postgraduate students to improve their thesis writing, they need to develop relevant knowledge about language (KAL) and how it works in specialised fields. This recontextualised knowledge is the base for critical reflection on writing. To exemplify this proposal, the chapter describes the overall syllabus of the workshop, then moving on to the discussion of textual meanings at the discourse-semantics stratum (PERIODICITY), which are considered the most productive starting point for teaching in the workshop design. The chapter finishes with a description of teaching activities aimed at developing students' knowledge in textual meanings.

**Keywords**: postgraduate thesis writing, writing workshop design, systemic functional linguistics (SFL), textual meanings, Spanish as an L1

# Metadiscourse in Italian Linguistics: An Overview and Practical Applications for Academic Writing

### 4.1. Introduction<sup>1</sup>

Metadiscourse theory is a fundamental component in the interaction between text and reader, offering insights into how interpersonal and textual aspects of discourse are represented on the surface of the text. Given the varying characteristics of textual genres, there exists potential diversity in how textual values manifest across different types of texts (cf. Ferrari, 2014, pp. 40–41). For instance, literary texts may offer considerable freedom in the use of linguistic resources, while scientific articles typically impose stricter controls over content organisation and the use of discourse markers (cf. Hyland, 2005; Sabatini, 1999).

An important contribution to metadiscourse research is the framework developed by Hyland (2005), whose work has led to what is often referred to as the 'second wave' of metadiscourse studies. This framework has been widely recognised for its comprehensive approach to understanding how authors guide readers through their texts (cf. Hyland & Jiang, 2022; Pearson & Abdollahzadeh, 2023). Following the establishment of Hyland's framework as a foundational theory, there has been a notable surge in research interest, marking the beginning of an expanding focus on metadiscourse studies. However, this interest contrasts sharply with the situation in the Italian academic landscape, which exhibits a considerable gap in metadiscourse research.

While there has been scholarly attention to related areas such as academic vocabulary (e.g. Ferreri, 2005; Spina, 2010) and the structural organisation of

<sup>1</sup> I would like to extend my gratitude to Dr Agnieszka Wiltos (University of Warsaw) for her invaluable comments on an earlier draft of this chapter. Errors are, of course, solely my own responsibility.

academic texts (e.g. Mastrantonio, 2021a; Pizziconi, 2020; Testa, 2023), the specific examination of metadiscourse in Italian remains remarkably limited. This observation is not due to a lack of scholarly activity in the broader field of text linguistics since Conte's seminal work in 1977 (cf. Andorno, 2003; Palermo, 2013; Ferrari, 2014; Ferrari *et al.*, 2021), but rather, it highlights a significant omission, underscoring an urgent need for focused research on metadiscourse within the realm of Italian linguistics.

This chapter aims to address this research gap by providing an analysis of metadiscourse with regard to academic writing in Italian, particularly emphasising its value for learners of Italian as a second language. In doing so, it seeks to equip both scholars and practitioners with 'a powerful analytical tool' (Hyland, 2017), contributing to a deeper understanding of academic discourse in Italian.

The structure of this chapter is as follows. It begins by offering an overview of the theoretical framework that informs the metadiscourse model (Section 4.2), delineating it from related notions such as *connettivi* ('connectors') and *segnali discorsivi* ('discourse markers') that are prevalent in the Italian scholarly literature (Section 4.3). The chapter then proceeds to examine the research on Italian metadiscourse (Section 4.4), highlighting the significant research gap in this area. Following this, the discussion turns to practical aspects of considering metadiscourse theory in academic writing pedagogy (Section 4.5). The chapter ends with some final remarks (Section 4.6).

### 4.2. Metadiscourse Theory

Metadiscourse theory emerges from a complex exploration of language beyond its mere propositional content. It draws inspiration from Halliday's (1970; also Halliday & Matthiessen, 2014) systemic functional linguistics (SFL), particularly its concept that language serves three overarching metafunctions, i.e. to represent experiences and ideas (ideational metafunction), to facilitate interaction (interpersonal metafunction), and to organise and refer to the text itself (textual metafunction). Within this framework, metadiscourse distinguishes itself by addressing the latter two functions, thereby stepping beyond the domain of propositional content to explore the realms of interaction and text organisation (cf. Hyland, 2005, p. 26).

Metadiscourse theory has been particularly thoroughly studied within the realm of academic discourse, as it acknowledges the multifaceted roles language plays in both the production and reception of academic texts. Such texts not only convey arguments but also employ rhetorical strategies to engage with and persuade other scholars of the validity of the claims made, highlighting the significance of ethos, logos, and pathos in academic writing

(Hyland, 2005, pp. 66–67). For instance, at the surface level, ethos can be established via citations and references (e.g. *according to Popper*); logos is typically constructed through the use of logical connectors (e.g. *thereby*); and pathos may be evoked through the choice of adjectives or certain cohesion strategies, such as word repetition. This perspective emphasises the need to analyse how authors construct their texts, rather than dictating whether the use of passive voice, the first-person singular *I*, or the inclusive *we* is 'more or less correct'. I will now delve into the principal characteristics of metadiscourse, starting with its customary distinction from the notion of propositional content.

### 4.2.1. Propositional Content

Hyland (2017, p. 18) claims that the term *metadiscourse* remains somewhat "fuzzy", primarily due to the prerequisite of delineating non-metadiscursive elements, typically identified as propositional content. Propositional content fundamentally pertains to the substantive essence conveyed within a text – "the 'what' that is communicated". In contrast, metadiscourse transcends the primary message, focusing instead on the *manner* in which this message is structured and relayed to the addressees.

The analysis of propositional content is closely associated with the concept of predication, which traditionally differentiates the 'naming' function attributed to nouns from the predicative role of verbs (Simone, 2005, pp. 361–363). This distinction is further expanded upon within the framework of functional grammar by Dik (1997, p. 105) to assert that central predications articulate specific States of Affairs (SoAs). These SoAs can be categorised into various types, such as Experiences (e.g. *John saw a bird*), Actions (e.g. *He shot at it*), Processes (e.g. *The bird fell down*), or States (e.g. *It was dead*).

Upon examining the examples below (from Andorno, 2003, pp. 69–70), it becomes apparent that a sentence such as (1a) consists entirely of propositional content, which can be interpreted as: 'with regard to Alice, x'. Moreover, as Simone (2005, pp. 361–363) has highlighted, propositions possess the capacity to be negated, a fundamental function within the semiotics of language.

<sup>2</sup> It should be borne in mind that the traditional distinction between nouns and verbs no longer stands. Lyons (1977, pp. 442–444) explains that rather than a strict dichotomy, the noun–verb relationship exists on a continuum. This ranges from first-order entities (tangible objects, e.g. concrete nouns), through second-order entities (elements with a temporal dimension, e.g. deverbal nouns), to third-order entities, which transcend time and space (e.g. abstract nouns). For instance:

<sup>1.</sup> I cherish that dog

<sup>2.</sup> I cherish that sunset (= 'the sun is setting')

<sup>3.</sup> I cherish peace

However, upon further scrutiny of additional examples, Andorno demonstrates that while example (1b) retains the same ideational metafunction, it diverges in its textual function due to the embedding of propositional content within a grammatical structure that shifts the focus to a different element, specifically, *Alice*. A similar argument can be made for (1c), wherein *purtroppo* ('unfortunately') directs the reader's interpretation of the propositional content towards a specific viewpoint, reflecting the assessment of the speaker. In a like manner, in (1d), the use of *dunque* by the speaker communicates that the following propositional content is the result of their inference.

- (1)
- (a) Alice seguì il coniglio bianco.
- (b) *E fu proprio* Alice *a* seguire il coniglio bianco.
- (c) Purtroppo, Alice seguì il coniglio bianco.
- (d) Dunque, Alice seguì il coniglio bianco.

Hyland (2005, p. 19) underlines the inherent vagueness of certain propositions, putting particular emphasis on the dual role of statements like the Socratic paradox "I am lying", which constitutes both a proposition and a commentary on itself. This insight prompts a re-evaluation of how propositional content is defined, especially in the context of illocutive markers, questioning whether it solely includes the most basic proposition or also encompasses metadiscursive elements (e.g. "I communicate to you that Alice followed the white rabbit"). Such ambiguity complicates the understanding of metadiscourse, rendering it a challenging and somewhat elusive concept (Hyland, 2017, p. 18). Consequently, a qualitative approach to analysis becomes essential (Ädel & Mauranen, 2010), recognising the difficulties in delineating clear boundaries within metadiscourse research (Pearson & Abdollahzadeh, 2023, p. 5).

#### 4.2.2. Metadiscourse

Hyland (2005, p. 23) insightfully notes that real texts transcend mere "lists of propositions"; rather, they represent acts of communication. This underlines the significance of metadiscourse, which aims to acknowledge the linguistic elements catering to the readers' needs, backgrounds, and intertextual experiences (p. 41). Consequently, this highlights the fundamental role of metadiscourse in reflecting "the writer's awareness of the reader and his or her need for elaboration, clarification, guidance and interaction" (p. 17). Metadiscourse is therefore defined as "the cover term for the self-reflective expressions used to negotiate interactional meanings in a text, assisting the

writer (or speaker) to express a viewpoint and engage with readers as members of a particular community" (p. 37).<sup>3</sup>

Hyland (2005) points out that the term *metadiscourse* was originally coined by Zelig Harris (1959) and further developed by Vande Kopple (1985) and Crismore (1989). Over the years, two main schools of thought on metadiscourse seem to have developed: one considers metadiscourse as only metatext or discourse reflexivity, primarily propelled by the work of Ädel (2006), Mauranen (1993, 2010), and Dahl (2004). The other, 'broad' school encompasses both the textual and interpersonal metafunctions and is primarily represented by the works of Vande Kopple (1985), Crismore *et al.* (1993), and Hyland (2005).<sup>4</sup>

Recent literature reviews (e.g. Hyland, 2017; Hyland *et al.*, 2022; Pearson & Abdollahzadeh, 2023) have reaffirmed the prominence of Hyland's (2005) metadiscourse model within the field. This model makes a distinction between the *interactive* and *interactional* dimensions of metadiscourse (see Table 4.1). The interactive dimension pertains to the organisation of discourse, ensuring coherence and alignment with the author's knowledge and rhetorical expectations (cf. Halliday's textual metafunction). The interactional dimension, conversely, involves the writer's intrusion into the discourse through personal comments, evaluations, and engagement strategies, thereby manifesting a textual "voice" or persona that interacts with the audience (cf. Halliday's interpersonal metafunction; Hyland 2005, pp. 49–50). This framework highlights the integrated nature of texts, wherein ideational, textual, and interpersonal components are interwoven and cannot be fully separated, a perspective that aligns with Halliday's emphasis on the integrated (meta)functions of language.

In the realm of academic discourse, the distinction between interactive and interactional metadiscourse offers a framework for understanding how texts engage with readers and navigate the presentation of information. By analysing the linguistic mechanisms that underpin text organisation, reader engagement, and the negotiation of meaning, metadiscourse theory explores the social dynamics of academic writing, highlighting the importance of linguistic choices in shaping effective and persuasive scholarly communication.

<sup>3</sup> Another frequently cited definition is that of Crismore *et al.* (1993, p. 40): "Linguistic material in texts, written or spoken, that does not add anything to the propositional content but is intended to help the listener or reader organise, interpret and evaluate the information given".

<sup>4</sup> For an exploration of previous categorisations of metadiscourse, see Hyland (2005, pp. 32–36). Pearson and Abdollahzadeh (2023) provide an updated overview, whilst D'Angelo and Consonni (2020) offer an erudite yet highly readable history of metadiscourse.

<sup>5</sup> Hyland adopts the terms interactive and interactional for metadiscourse, in line with Thompson's (2001) proposal. While the labels interpersonal and (meta)textual might be preferred for their alignment with Hallidayan terminology, the present chapter is not suited for such a detailed terminological debate.

Table 4.1. An interpersonal model of metadiscourse (Hyland, 2005, p. 49)

Category	Function	Examples
Interactive	Help to guide the reader through the text	Resources
Transitions	express relations between main clauses	in addition; but; thus; and
Frame markers	refer to discourse acts, sequences or stages	finally; to conclude; my purpose is
Endophoric markers	refer to information in other parts of the text	noted above; see Fig; in section 2
Evidentials	refer to information from other texts	according to X; Z states
Code glosses	elaborate propositional meanings	namely; e.g.; such as; in other words
Interactional	Involve the reader in the text	Resources
Hedges	withhold commitment and open dialogue	might; perhaps; possible; about
Boosters	emphasise certainty or close dialogue	in fact; definitely; it is clear that
Attitude markers	express writer's attitude to proposition	unfortunately; I agree; surprisingly
Self-mentions	explicit reference to author(s)	l; we; my; me; our
Engagement markers	explicitly build relationship with reader	consider; note; you can see that

Prior to advancing, I would like to offer brief remarks on each category, particularly in the context of academic writing in Italian.

As for INTERACTIVE metadiscourse, *transitions* serve a crucial role by aiding the reader in navigating the logical flow of the text. These transitions, which can be classified into categories such as addition, comparison, or consequence, act as markers that outline the structure of the argument and the logical plane of discourse (Ferrari, 2014, Ch. 9). This, in turn, facilitates the reduction of cognitive effort required for interpretation and topic recognition (cf. Lombardi Vallauri, 2009, p. 76).

<sup>6</sup> For a detailed discussion of the status of conjunctions like *ma* ('but') and *e* ('and'), either as grammatical conjunctions or textual connectives, cf. the recent work by Prandi (2023).

Frame markers serve as essential tools in guiding the reader through transitions in focus or topics within a text, thereby significantly contributing to the structuring of the narrative flow (cf. Palermo, 2013, pp. 143–188). These markers are crucial in indicating the activation status of topics (cf. Chafe, 1987), underscoring the importance of thematic structure in the composition of academic texts (cf. Testa, 2023). This is particularly notable when contrasted with their sparing use in alternative forms of communication, such as television or radio broadcasts (Palermo, 2013).<sup>7</sup>

Endophoric markers (or textual deixis/logodeixis; Conte, 1999; Andorno, 2003; Ferrari, 2014), enhance textual cohesion and coherence by linking various segments of discourse. These markers, functioning within the text as points of reference, are pivotal for internal clarity and ease of understanding (cf. Palermo, 2013, p. 131; Ferrari, 2014, p. 181). Such markers effectively structure the text to improve clarity and comprehension. It is worth noting that academic texts in Italian often incorporate Latin terms like infra, supra, and passim, not limited to Italian terms (Mastrantonio, 2021a, p. 353).

Evidentials play a crucial role in academic writing, as much of the argumentation relies on citing the work of other authors. This orchestration of varied voices within the discourse (cf. Roulet *et al.*, 2001), encompasses *diaphony* (the voice of the interlocutor), *polyphony* (the voice of a third party), and *autophony* (the voice of the author), and is of paramount importance in the negotiation of authority and credibility within scholarly texts. The interplay between the author's voice<sup>8</sup> and those of the sources, often expressed through reported speech (e.g. *secondo X*) and verbs of saying (e.g. *dire*, *affermare*, *ribadire*), is essential for crafting a layered and persuasive argument (cf. Palermo, 2013, p. 135). Moreover, *polyphony* in academic writing not only creates a distance and modulates certain statements but also enhances precision, for instance, through the use of citations (Ferrari, 2014, p. 235). Significantly, in Italian – and similarly in other Romance languages – the conditional mood may act as an evidential marker, reflecting a way to report potential facts while indicating that these facts are still subject to confirmation.<sup>9</sup>

<sup>7</sup> For example, a TV news segment might introduce a health topic casually with [Parliamo ora di] Salute. Una nuova ricerca ha dimostrato che..., whereas an academic text would formally introduce it with <u>Per quanto riguarda</u> la salute... (cf. Palermo, ibid.)

<sup>8</sup> It is noteworthy that the author's voice — owing to the depersonalisation inherent in scientific discourse — may occasionally manifest a polyphonic quality, as evidenced by expressions such as *chi scrive*, *l'autore/autrice*, [author's surname] *sostiene che...* (cf. Pizziconi, 2020, p. 50).

<sup>9</sup> For instance: Secondo la prima ricerca che ha tentato di quantificarli, la diffusa preoccupazione per i rischi di morte per fuoriuscita della CO2 da siti di stoccaggio terrrestri <u>sarebbe</u> eccessiva (Le Scienze in Masi, 2013, p. 323).

Lastly, *code glosses* are employed to offer clarifications or additional information, thus improving readability. These glosses, as Dyda (2021, p. 140) suggests, are crucial for explaining technical terms and concepts within the text, ensuring clarity and aiding comprehension through explanations (e.g. *cioè*, *ovvero*, *vale a dire*), examples (e.g. *ad/per esempio*, *come*, *quali*, *tra cui*), denominative structures (e.g. *chiamato*, *detto*, *conosciuto come*), and the elucidation of acronyms.

On the other hand, INTERACTIONAL metadiscourse focuses on the writer's presence in the text, their stance, and the engagement with the reader. *Hedges* and *boosters* play a critical role in reflecting the writer's confidence and commitment towards the propositions posited within the text. While the nomenclature and, occasionally, the conceptual underpinnings for hedges are diverse (cf. Ghezzi, 2022, p. 34), these elements, alongside boosters, represent some of the most extensively examined aspects of metadiscourse (cf. Hyland & Jiang, 2022; Pearson & Abdollahzadeh, 2023).

Attitude markers serve to express the writer's evaluative perspective towards the content, infusing the text with subjective judgments and enabling the writer to connect with the reader on an emotive level. Interestingly, studies like those by Ni (2023a) have noted their scarcity in non-native academic writing in Italian.

Self-mentions make the author's presence explicit in the text through the use of first-person personal pronouns. It is, however, pertinent to observe that in the context of Italian, as is the case for other Romance languages – except French and Gallo-Italic varieties (cf. Cardinaletti & Repetti, 2008) – there is a tendency to omit personal pronouns due to the languages' pro-drop characteristics. This feature suggests that understanding self-mentions requires looking beyond pronoun use to also consider verb conjugations. Colella (2017, p. 265) posits that phrases such as credo che, secondo me, and dal mio punto di vista embody instances of self-mention in such languages, given their implicit reference to the first-person singular. This point highlights the 'fuzzy' nature of metadiscourse (cf. Hyland, 2017), as such expressions can also be interpreted as hedges, thus complicating the clear delineation of self-mentions.

Lastly, engagement markers play a crucial role in augmenting the interactive aspect of the reading experience by fostering a dialogical approach. In addition to imperative and exhortative expressions (e.g. si noti come...; non si dimentichi che...; è necessario...), Masi (2013) posits that attention should equally be given to rhetorical questions, which are instrumental in enhancing engagement. Additionally, the use of Latin terms, such as vide ('see'), cfr. ('compare with'), and akin expressions, is a common practice in numerous academic traditions and warrants attention.

The interplay of interactive and interactional metadiscourse elements significantly enriches academic texts, boosting their clarity, coherence, and

the engagement of readers. As a result, the role of metadiscourse in academic writing has emerged as a key area of interest for scholars. Much of this research has focused on English as a Foreign Language (EFL) (cf. Hyland, 2017; Hyland *et al.*, 2022; Pearson & Abdollahzadeh, 2023). These investigations have revealed notable differences in the use of metadiscourse across various academic fields, such as applied linguistics, biology, business studies, and computer science.

It is crucial, however, to recognise that these insights primarily mirror the application of metadiscourse within the context of Anglo-American academic English (cf. Hyland & Bondi, 2006, p. 7). This tradition highly values clarity, analytical precision, and a rigorous approach to argumentation; it favours well-structured organisation, the use of up-to-date and consistent citations, and a cautious stance towards making claims (Hyland, 2005, p. 117). Considering English's status as the *lingua franca* for research and international discourse, it significantly influences the normative practices of other languages, such as Italian (Masi, 2013, p. 316). However, given that metadiscourse often mirrors the textual conventions associated with each "community's practices, values and ideals" (Hyland, 2005, p. 37), its manifestations can vary significantly across languages (cf. Hyland *et al.*, 2022). This highlights the need to examine metadiscourse both within individual languages and from a comparative, cross-linguistic perspective.

### 4.3. Similar Concepts: Segnali Discorsivi and Connettivi

Whilst it is true that research on metadiscourse has flourished in recent decades (cf. Pearson & Abdollahzadeh, 2023), it is important to acknowledge that the components comprising metadiscourse are certainly not a novel concept (cf. D'Angelo & Consonni, 2020). Within the Italian tradition of text linguistics and descriptive grammar, the non-propositional components of speech have been scrutinised through a variety of theoretical perspectives. This section will specifically address discourse markers (segnali discorsivi) and connectors (connettivi).

### 4.3.1. Segnali Discorsivi

Discourse markers are defined as elements that provide procedural instructions to the interlocutor on how to interpret an utterance within a specific context, thereby ensuring its coherence (Sansò, 2020, p. 46). Bazzanella (1995, 2011) posits that discourse markers serve three primary functions: interactional, metatextual, or cognitive. In terms of the *interactional* function, Bazzanella differentiates between the perspectives of the speaker and the interlocutor; for instance, turn-taking and turn-giving are associated with

the speaker, whereas interruptions and attention confirmation are pertinent to the interlocutor. The *metatextual* function pertains to the organisation of discourse, including topic introduction and closure, focalisers, exemplification/reformulation glosses, and markers of indirect speech. The *cognitive* function encompasses markers of cognitive processes, such as inference, commitment, or doubt concerning the truth/values of the propositional content expressed (cf. also Palermo, 2013, pp. 214–217). In this regard, they bear a striking resemblance to metadiscourse, encompassing not only Halliday's textual metafunction (i.e. text reflexivity) but also the interpersonal metafunction.

Discourse markers<sup>10</sup> have predominantly been studied in the context of spoken language (cf. Bazzanella, 1995, 2011; Sansò, 2020; Voghera, 2017). Sansò highlights that, from a sociolinguistic standpoint, discourse markers are more frequently found in the speech of younger individuals, particularly teenagers; in informal, improvised speech rather than in formal, controlled speech; and in dialogues more than in monologues (cf. Sansò, 2020, pp. 81–116).

A salient feature of discourse markers is their *multifunctionality*, manifesting both paradigmatically and syntagmatically. Paradigmatically, discourse markers elude straightforward classification into conventional grammatical categories, displaying a spectrum of transparency and interchangeability. Certain markers are transparent and can be modified with similar expressions, while others are fixed in form and cannot be easily replaced. Syntagmatically, the function of a discourse marker can vary significantly based on its situational context within an utterance (cf. Bazzanella, 2011).<sup>11</sup> The Italian discourse marker *allora* serves as a quintessential example of this multifunctionality. As elucidated by Sansò (2020, p. 29 and references therein), *allora*'s position at the beginning or end of an utterance enables it to undertake interactional, metatextual, and cognitive functions, thereby epitomising the dynamic and context-dependent nature of discourse markers.

<sup>10</sup> Sansò (2020, pp. 54–55) highlights the presence of various other expressions in Italian for these phenomena, including *marcatori del discorso* or *marcatori discorsivi* (Contento, 1994), *connettivi testuali* (Berretta, 1984), *marcatori pragmatici* (Stame, 1994), and *segnali funzionali* (Ghezzi, 2014; Molinelli, 2017). Similarly, the terminology varies within English-language literature, encompassing terms such as *discourse markers* (Schiffrin, 1987), *pragmatic particles* (Östman, 1981), *pragmatic connectives* (van Dijk, 1979), *discourse particles* (Aijmer, 2002), and *pragmatic markers* (Brinton, 1996). Curiously, Sansò does not reference the metadiscourse models proposed by Hyland (2005) or by Vande Kopple (1985).

<sup>11</sup> Degand (2014) observes that the left periphery is the *locus* for connecting the current message to previous discourse and setting the stage for what follows, aiding in turn-taking and topic introduction. In contrast, the right periphery is essential for reflecting on and adjusting the message, fostering listener engagement, and rounding off the discourse. Sansò (2020, p. 43) notes the consistent correlation across languages between the positioning of discourse markers and their roles, showing that their function may vary based on their location within an utterance.

Discourse markers diverge – at least theoretically – from metadiscourse, primarily due to their prevalent analysis within informal speech contexts (cf. Ni, 2023b, pp. 1002–1003). As detailed by Sansò (2020), discourse markers thrive in informal contexts, including bilingual and code-switching environments where speakers might employ different languages for the propositional content and for the discourse markers – a phenomenon less likely in formal writing due to its structured nature and the opportunity for revision. Furthermore, the two concepts differ in that discourse markers are more prone to grammaticalisation<sup>12</sup> and exhibit greater multifunctionality compared to metadiscourse. This is particularly true in the context of academic writing, where metadiscourse, adhering to a more formal register, tends to be more stable.

Conversely, akin to metadiscourse (cf. Ni, 2023b, p. 1000), discourse markers are characterised as elements of a procedural nature (Fraser, 1999, 2006; Hansen, 2006). That is, they do not fulfil the predicative or referential functions typical of verbs and nouns, thereby not contributing to the propositional content of the discourse in which they are embedded. Instead, their presence serves to navigate the listener or reader through the interpretation of the utterance (cf. Sansò, 2020, pp. 13–14). Moreover, many of the interactive (e.g. hedges and boosters) and metatextual functions (e.g. frame markers, exemplification, reformulation, etc.) are identified as common ground between Bazzanella's theory on discourse markers and Hyland's metadiscourse framework.

### 4.3.2. Connettivi

The concept of connectors (connettivi), a central theme in both descriptive grammar (Berretta, 1984; Serianni, 1988) and text linguistics (Ferrari, 2014; Palermo, 2013), embodies the critical role of linguistic elements that, far from merely generating coherence, are essential for ensuring textual cohesion (cf. Mastrantonio, 2020, 2021b). They achieve this by signalling the logical relationships between textual units, thereby assisting the reader in navigating

<sup>12</sup> From a diachronic perspective, discourse markers provide fascinating insights into grammaticalisation processes, as they often develop pragmatic alongside their original semantic meanings. For example, Italian *allora* has evolved from its original temporal meaning to adopt interactional and inferential functions (e.g. conditional *se... allora...*) (cf. Bazzanella, 2011).

<sup>13</sup> For instance (Sansò, ibid.):

a. Non so se ti devo dare altri dati (= 'I don't know')

b. L'argomento potrebbe essere non so # # la violenza negli stadi (= 'for example')

<sup>14</sup> It is noteworthy that the distinction between propositional and non-propositional (or 'parenthetical') content has led to the differentiation between two types of grammar: *thetical grammar* (parenthetical) versus *sentence grammar* (Kaltenböck *et al.*, 2011 in Sansò, 2020, p. 72).

towards a coherent understanding of the text (cf. Palermo, 2013, pp. 190–191). Connectors, as discussed by Ferrari (2010, 2014), have the unique ability to bridge textual units of varying scope – from single clauses to comprehensive sections – highlighting their indispensable function in directing readers through the logical interrelations within the text, such as opposition, exemplification, motivation, or reformulation (Ferrari, 2014, p. 134).

In addressing the challenge of a lack of unified terminology, Andorno (2003, pp. 176–186) notes the divergence in terms such as *segnali discorsivi* (Bazzanella, 1995) and *discourse particles* (Abraham, 1991), which focus predominantly on conversation analysis, versus *avverbi pragmatici* (Conte, 1999) and *pragmatic connectives* (van Dijk, 1979), which emphasise the pragmatic rather than the logical essence of propositions. This diversity of nomenclature reflects the broad spectrum of focus areas within discourse studies.

Ferrari (2014, pp. 136–160), drawing on Prandi (2006), categorises connectives into two primary functions: those that establish 'relations between events' – akin to Halliday's ideational metafunction – and those that pertain to 'textual composition'. While the latter closely align with the principles of metadiscourse theory, they mostly relate to the category of interactive metadiscourse (i.e. establishing logical connections between textual units), rather than interpersonal metadiscourse.

Bazzanella (1985 in Palermo, 2013, pp. 192–199) draws a crucial distinction between *semantic* and *pragmatic* connectors. Semantic connectors include coordination (e.g. *Ha chiuso la porta <u>ed</u> è uscito*), subordination (e.g. *È uscito di corsa perché era tardi*), juxtaposition<sup>15</sup> (e.g. *Ho fame; mangerò un panino*), and parenthetical expressions (e.g. *Marco*, <u>ne sono tutti convinti</u>, è un gran centravanti). The first two categories are explicit in nature, directly delineating the relationship between clauses, whereas juxtaposition and parenthetical expressions are implicit, demanding greater cognitive effort from the reader for text interpretation (cf. Palermo, 2013, p. 199). Pragmatic connectors, on the other hand, convey the speaker's attitude towards the statement or the act of enunciation, requiring context for full comprehension. For instance, *allora* carries a semantic meaning in *Se c'è il sole*, <u>allora</u> vado al mare, illustrating a conditional relation, but holds a pragmatic value in <u>Allora</u>, ci vogliamo sbrigare? *Il treno sta partendo!*, expressing urgency or impatience (Palermo, 2013, p. 210) (cf. Section 4.3.1, above).

Lastly, Conte's (1999) notion of avverbi pragmatici ('pragmatic adverbs') further enriches textual analysis by differentiating between two subtypes: utterance modifiers (modificatori di enunciato) and enunciation modifiers

<sup>15</sup> It is also noteworthy that punctuation can encode textual functions (cf. Diadori, 2020; Ferrari 2014, p. 41; Ferrari *et al.*, 2021, Ch. 3; Mortara Garavelli, 2003; Palermo, 2013, pp. 217–229).

(modificatori di enunciazione) (cf. Andorno, 2003, pp. 180-186). The former encompasses modifiers that influence the illocutionary force, such as hedges and boosters, as well as textual connectors like reformulation, exemplification, and transitions. This subtype bears a striking resemblance to Hyland's interactive category of metadiscourse, which focuses on the textual organisation and the writer's stance towards the content. The latter subtype – enunciation modifiers - relates to the speaker's attitude towards the act of enunciation, akin to attitude markers. This is closely aligned with Hyland's interactional category of metadiscourse, emphasising the interpersonal relationship between the writer and the reader. While Conte's framework is specifically applied to adverbs and does not map directly onto all aspects of Hyland's model, the parallels between the two highlight a profound similarity in conceptualising the role of pragmatic elements in shaping discourse. Despite Conte's focus on a single part of speech (i.e. adverbs), the parallel with Hyland's broader metadiscourse framework accentuates the pivotal function of pragmatic tools in shaping academic writing.

### 4.4. Studies in Italian Metadiscourse

Recent studies have sought to encapsulate the current state of metadiscourse analysis, with a consensus that Hyland's framework stands as the most referenced within the 'second wave' of metadiscourse research which commenced post-2006 (cf. Hyland & Jiang, 2022; Pearson & Abdollahzadeh, 2023). Despite this widespread engagement with metadiscourse analysis in various linguistic contexts, a notable lacuna persists within the Italian academic sphere, particularly concerning metadiscourse in Italian as a second language (cf. Ni, 2023a, 2023b).

Hyland (2017) himself endeavours to summarise the current state of research in regard to the widespread distribution and academic engagement with metadiscourse, highlighting a preponderance of studies emanating from the United States, complemented by noteworthy contributions from Spain, England, Iran, and China. His analysis further explores how metadiscourse is used by students of English as a foreign language, with particular focus on those with Persian, Chinese, and Spanish as their first languages (L1). Interestingly, Italian is scarcely mentioned, with Vergaro (2005) serving as the only reference to metadiscourse research in Italian. Additionally, Hyland (2017) scrutinises the influence of explicit instruction in metadiscourse and corroborates the efficacy of such pedagogical strategies, evidencing marked enhancements in the quality of students' writing and their comprehension of texts (p. 27 and references therein).

Hyland and Jiang's (2022) comprehensive bibliometric review analyses the entirety of 431 scholarly articles on metadiscourse indexed in the Web of

Science Core Collection from 1983 to 2020, highlighting a surge in interest post 2006. Their findings reveal a predominant use of English (90.51%) in the journals citing metadiscourse research, followed by a considerably smaller percentage for Spanish (6.12%) and marginal representations for other languages such as Russian, Portuguese, French, Catalan, Chinese, Afrikaans, Dutch, and German, notably excluding Italian. The dominance of English, as Hyland and Jiang (2022, p. 19) caution, is largely attributable to the preponderance of English-language journals within the Web of Science database, suggesting a linguistic bias inherent to the platform's composition.

Pearson and Abdollahzadeh (2023) have recently undertaken an exhaustive systematic review exploring the domain of metadiscourse in academic writing, scrutinising an extensive corpus of 370 empirical studies published from 1990 to 2021. Their review reveals a considerable dependence on Hyland's (2005) framework, with particular emphasis on metadiscursive elements such as hedges, boosters, and self-mentions. Their findings highlight that the vast majority of the examined corpora comprised academic texts in English, engaging both native speakers and students with a variety of L1s, including Spanish, Chinese (Mandarin and Cantonese), Persian, Arabic, French, Czech, Russian, and Japanese. Despite the linguistic diversity, their analysis indicates a dominant focus on English, accounting for 97.16% of the analyses included in the review, whereas other languages like Spanish, Persian, Chinese, Turkish, Arabic, Slovene, Catalan, Indonesian, and French have been examined only marginally (p. 21). Notably absent from the review is Italian. Furthermore, the study further identifies several impediments to the incorporation of metadiscourse in educational contexts, namely the lack of metadiscourse in conventional educational resources, insufficient teacher training, and curriculum limitations that prioritise content over language use (p. 15 and references therein).

Nevertheless, a number of studies have explored the concept of metadiscourse within the Italian context, albeit not all strictly adhering to the framework proposed by Hyland (2005) (e.g. Vergaro, 2005; Pastucha-Blin, 2015; Colella, 2017; Klimová, 2017; Ghezzi, 2022). Additionally, certain works have examined metadiscourse through the lens of translation from English to Italian (e.g. Scarpa, 2018) or have utilised Bazzanella's model of discourse markers (e.g. Van Impe, 2019). Furthermore, comparative analyses between English and Italian metadiscourse strategies within analogous genres have been conducted (e.g. Giannoni, 2005; Masi, 2013).

Vergaro's (2005) research constitutes a comparative exploration of FYI letters in Italian and English using Vande Kopple's metadiscourse model and Swales's rhetorical moves. The study reveals significant cultural and linguistic differences in business communication between the two languages. Italian

letters often start directly with a SUBJECT move, reflecting a reader-responsible culture, whereas English letters typically begin with an OPENING SALUTATION move and include background information, indicative of a writer-responsible culture. Furthermore, English correspondence commonly invites further contact at the conclusion, a practice less observed in Italian letters, which emphasise polite endings. At the micro-textual level, the study notes differences in the use of personal pronouns, modal expressions, and illocution markers, with English letters favouring first-person pronouns and modal expressions, and Italian letters often starting with illocution markers. <sup>16</sup>

Pastucha-Blin's (2015) study delves into the use and impact of metadiscourse in persuasive texts in Italian aimed at women, particularly within the beauty and wellness sectors. Focusing on textual (i.e. 'interactive') metadiscourse, Pastucha-Blin (pp. 161–171) identifies key metadiscursive elements (e.g. source citations, clarifications, etc.) that are used to construct compelling narratives, although the study does not include a statistical examination and somewhat overlooks Hyland's (2005) work on metadiscourse, instead drawing from his earlier studies (i.e. Hyland, 1998). This investigation emphasises the critical role of metadiscourse in crafting engaging and persuasive messages in the realm of beauty and wellness for women, illustrating the subtle power of language in directing reader engagement and interpretation.

Colella (2017) conducts an in-depth analysis of epistemic modal markers<sup>17</sup> in academic texts, utilising the CoDIS corpus from the University of Bologna to scrutinise how these markers adjust the level of certainty in scholarly writing. The findings indicate a more frequent use of intensifiers in general prose than in academic texts, with academic authors favouring hedges – particularly verbal and adjectival – to express caution and uncertainty. Verbs like *sembrare* or *apparire* are notably common in academic writing, highlighting a careful approach to stating claims and an emphasis on the author's responsibility in expressing uncertainty.

Klimová's (2017) study explores the use of persuasive-promotional rhetoric in the introductions of academic texts in Italian, reflecting Hyland's (2005) observation of the growing rate of employing persuasive elements in

<sup>16</sup> E.g. "Vi informo che... ['I inform you that...'], Abbiamo il piacere di comunicarVi che... ['We are pleased to inform you that...'], Con la presente Vi informiamo che... ['With this (letter) we wish to inform you that...']" (p. 118).

<sup>17</sup> Epistemic modal markers may include adverbs or adverbial phrases, adjectives, and verbs. Compare the following propositional content (1) with its possible hedged (2) and boosted (3) versions (pp. 261):

<sup>(1)</sup> Mario è malato

<sup>(2)</sup> Mario deve essere malato / Probabilmente Mario è malato / Penso che Mario sia malato

<sup>(3)</sup> Certamente Mario è malato / Ovviamente Mario è malato / Ti assicuro che Mario è malato.

scholarly communication. Focusing on a corpus of 30 scientific articles from conference proceedings by Italian-speaking scholars, the research examines the disciplinary and cultural characteristics of academic writing in Italian studies. Employing Swales's (1990) model, Klimová analyses rhetorical strategies and notes that Italian academic introductions typically start with general information about the research topic (i.e. Move 1), often without highlighting the novelty or significance of the field, marking a distinctive method of establishing research territory. Additionally, Klimová observes a more indirect approach to pointing out research gaps (in Move 2) and a concerted effort to promote the authors' work (in Move 3), suggesting a subtler form of persuasive rhetoric in Italian academic writing compared to English.

Ghezzi (2022) delves into the use of intentional vagueness markers<sup>18</sup> in spoken Italian, analysing a corpus spanning 1976 to 2010, based on listener phone-ins to Radio Popolare in Milan. This study identifies trends in the evolution of the markers across different generations. Ghezzi's work reveals that individuals' use of vagueness markers can evolve over their lifetime, suggesting their role in linguistic changes within the community. While not directly aligned with Hyland's model, the research highlights shifts in vagueness markers prevalence, such as the reduced use of *cioè* from the 1970s and the rise of *tipo* in the early 2000s. Additionally, Ghezzi's findings underscore the rich pragmatic functions of Romance languages, including the creative use of verb tenses to express vagueness, exemplified by the use of the future tense to convey approximation (e.g. *saranno le tre*, 'it's *probably* 3 o'clock').

Scarpa's (2018) study delves into the pragmatic aspects affecting the translation of technical and scientific documents, employing Hyland and Tse's (2004) framework of metadiscourse. Scarpa references research by Palumbo and Musacchio (2010) on translating economic texts from English to Italian, which identified an increased use of connectors in Italian translations, attributed to the tendency towards explicitation. Scarpa suggests that translating hedges from the source to the target text involves various strategies to maintain pragmatic equivalence. Moreover, Scarpa notes a shift towards depersonalisation in translations into Italian (and French) from English, aimed at reducing the distance between author and reader. 19

<sup>18</sup> Ghezzi (pp. 45, 83) categorises vagueness markers into two types: 'bushes' for approximating propositional content (e.g. *quel coso*) and 'hedges' for diluting illocutionary force or a speaker's commitment to truth (e.g. *mi sembra, magari*, etc.).

<sup>19</sup> Scarpa (p. 191) offers the following example:

a. Now we start at point P and go through point A to point Q to find [...].

b. Percorrendo il circuito dal punto P al punto Q passando per A, si trova [...].

Van Impe's (2019) Master's thesis examines the employment of discourse markers by Dutch-speaking students with Italian as a second language (L2), analysing 208 written assignments from 19 participants during the 2014–2015 academic year at Ghent University. These students, predominantly female and at A1–A2 proficiency levels, showed a marked improvement in their use of discourse markers across four writing assignments. Van Impe found a significant increase in the frequency of discourse marker usage, with a 74% accuracy rate and a decline in errors over time. This underscores the critical role of discourse markers in enhancing L2 learners' ability to produce coherent and cohesive academic texts in Italian, highlighting their growing linguistic competence.

Giannoni (2005) investigates the approaches to negative evaluation in academic discourse by comparing ten English and ten Italian discussion sections of research articles in linguistics. Giannoni's quantitative analysis reveals that Italian academics often adopt more indirect strategies for criticism, such as expressing scepticism, whereas their English counterparts are more likely to point out specific errors or shortcomings directly. A significant finding is that negative evaluations are substantially more common in English texts, nearly triple the frequency compared to Italian ones. However, Italian academic discourse tends to incorporate more words per instance of criticism, suggesting a tendency towards a more nuanced and less direct form of critique.

Masi (2013) explores metadiscourse in online popular scientific writing, comparing English and Italian articles from sources like Scientific American and Le Scienze, respectively. The study identifies significant linguistic differences in the presentation of scientific information between the two languages. Italian texts tend to use more evidentials and a wider variety of reporting verbs, particularly favouring concludere over dire, in contrast to the English preference for say. Additionally, English texts are more prone to hedging, indicating a more cautious stance in making claims, with the use of boosters nearly double as prevalent as in Italian articles. Italian discourse often uses an inclusive noi ('we'), promoting a sense of community among readers. Furthermore, Masi draws attention to the multifunctional nature of metadiscursive elements, illustrating this through a specific example where the usage of the word actually deviates from its conventional categorisation. Typically identified as a booster used to strengthen the speaker's commitment to the statement, actually in expressions such as may not actually instead takes on a hedging quality (p. 325).

Various studies have delved into the metadiscourse employed by Italians using English as a foreign language (EFL) (e.g. Ziggiotto, 2016; Malavasi, 2023). Ziggiotto's (2016) longitudinal corpus-based study at the University of Padova involved 136 EFL students and analysed 272 essays written across their first and second years of university. This research observed a significant increase in

the use of metadiscourse, especially textual metadiscourse, by second-year students, indicating a heightened sensitivity and awareness of academic language, structure, coherence, and style (p. 97). Notably, the use of attitude markers remained constant, suggesting a preference for opinion-based essays over logical connections (p. 106). An interesting aspect was the higher occurrence of endophoric markers and evidentials in the second year, hinting at more sophisticated referencing and evidence citation. Ziggiotto also noted some L1 interference, such as the misapplication of *in fact* under the influence of the Italian *infatti* (p. 129).

Malavasi (2023) compared metadiscursive constructions in linguistics essays by Italian EFL students and native English speakers, finding differences in the variety and type of metadiscursive units used. Despite a similar total number of metadiscursive four-word bundles, Italian EFL students exhibited a more limited range compared to their native English counterparts. This suggests that native speakers employ a broader array of metadiscursive strategies, while Italian students lean towards safer, more familiar expressions. Malavasi also highlighted the prevalent use of transition markers by Italian students, possibly reflecting teaching emphases on these elements for textual coherence. Additionally, Italian students showed a preference for first-person pronoun phrases, contrasting with the English students' use of more impersonal constructions, pointing towards different stylistic tendencies in academic writing between the two groups.

Finally, there has only been a handful of contemporary research endeavours that have undertaken the task of analysing Hyland's model of metadiscourse in relation to students studying Italian as a foreign language, with notable contributions from Ni (2023a, 2023b).

Ni (2023a) scrutinises the metadiscursive elements prevalent in academic writing by Chinese university students, juxtaposing essays penned in their L1 Chinese (n = 10), against those crafted in their L2 Italian (n = 10), at a B2 proficiency level. Ni's observations underscore a predilection for metatextual over interactional functionalities in both first and second language productions, with a marginally higher occurrence of interactional mechanisms in the Italian manuscripts. Although logical connectors, evidentials, and frame markers find frequent application in both linguistic contexts, there is a notable scarcity of attitude markers and expressions of personal stance. The research illuminates a conscious eschewal of hedges in Chinese essays, aimed at conveying authority, a practice that perseveres in Italian compositions but may also hint at a lack of awareness about the significant role of hedges (cf. Xu, 2015) in engaging the reader and softening assertions in Italian academic writing. Moreover, Ni identifies a predilection for paratactic structures, indicative of the influence from their first language, Chinese. These findings unveil a significant

challenge for Chinese learners in meeting the stylistic and structural demands of Italian academic discourse.

Lastly, Ni (2023b) conducts a longitudinal analysis on the acquisition of metadiscursive markers by Chinese university students learning Italian as a second language (N = 24). This research marks one of the initial attempts to scrutinise the full range of Hyland's metadiscourse categories in the context of Italian L2/FL learning. Ni accentuates the profound influence of Chinese rhetorical traditions on the learners' employment of metadiscursive markers across narrative and argumentative texts. The study reveals a preference for interactional over metatextual markers, notably logical connectors (p. 1008), and observes a decline in the use of interactional markers as the learners' linguistic proficiency progresses – a trend parallelling observations in English language acquisition studies (cf. Bax et al., 2019). Despite a growth in linguistic proficiency, the consistent use of metadiscursive markers indicates a developmental plateau, underlining the need for greater focus on metadiscourse in Italian language teaching strategies. Ni's (2023b, p. 1010) analysis underscores the persistence of cultural and rhetorical influences from the learners' L1, particularly the preference for a 'circular' argumentation structure (i.e. hypothesis-arguments-hypothesis) and the frequent use of inclusive 'we' (noi, nostro, possiamo, etc.) to engage the reader and promote a unified viewpoint. These insights suggest that metadiscursive practices in second language writing are shaped by a confluence of intertextual transfer, personal style, and cultural heritage. Consequently, Ni advocates for tailored teaching methodologies that enrich metadiscursive comprehension and utilisation among second language learners, with the aim of bridging the rhetorical style divide between native and non-native speakers.

Before transitioning to the practical applications, it is pertinent to highlight De Marco's (2023) exploration of the pedagogical implications arising from her comparative study on explicit versus implicit instructional approaches for enhancing pragmatic competence in L2 learners, particularly in terms of discourse markers (segnali discorsivi). De Marco identifies the acquisition challenges these markers pose due to their lower saliency, often leading to their neglect in favour of content words (cf. van Patten, 2004) and the notable absence of these elements in teaching materials (p. 86 and references therein). De Marco champions explicit instruction for its ability to enhance learners' pragmatic competence by encouraging reflection on the pragmatic differences between L1 and L2. This approach, she argues, is supported by evidence favouring explicit over implicit methods in mastering language pragmatics, including discourse markers (cf. Nuzzo & Santoro, 2017). She recommends a combined approach, leveraging both explicit and implicit strategies, to comprehensively meet learner needs and significantly improve their pragmatic competence in L2.

## 4.5. Practical Applications

Hyland (2005, p. 197) serves as a reminder that metadiscourse is not so much "a teaching methodology" per se, but rather a potent analytical lens for examining the rhetorical and textual norms prevalent across varied academic genres and communities. Educators are, therefore, encouraged to be receptive of the diverse rhetorical standards within specific communities and genres, as well as to the distinct interactional conventions second language (L2) writers may introduce into their academic writing. In this sense, metadiscourse theory prioritises the cultivation of both rhetorical (Swales, 1990, 2004) and metapragmatic awareness (cf. Sansò, 2020), over mere adherence to prescriptive grammatical standards (cf. Hyland, 2005, p. 185). Hyland (p. 178) also underscores the instrumental role of metadiscourse in easing the reader's cognitive load through strategic emphasis on key points, signalling direction, previewing structure, and connecting sections and ideas.

Focusing on pedagogical considerations, Hyland clarifies that this approach requires a combination of analytical and creative efforts in engaging with texts. These efforts include scrutinising text fragments (cf. Marinetto, 2020) to identify instances of metadiscourse, analysing their forms, and interpreting their meanings. Additionally, it may consist in manipulating texts through exercises like filling in gaps from which metadiscursive elements have been removed and reflecting on the effect of their inclusion. It also involves considering how metadiscourse caters to various audiences, for example, by comparing different genres and discussing how these differences affect the text's clarity, impact, and reader engagement. It is pertinent to note that introductions and abstracts are particularly apt for such analysis: they often contain metadiscourse and are succinct enough for classroom use (cf. Bondi, 2010). Following this, I shall delineate five examples of activities that could be either adapted or elaborated upon for the instruction of metadiscourse.

A proposed initial activity centres on the analysis of metadiscourse by examining both published academic texts related to the students' thesis topics (e.g. introductions or abstracts from published research) and the students' own writings (e.g. the introduction or abstract of their Bachelor's theses for those currently working on their Master's thesis). In preparation, instructors should select an appropriate academic text in Italian for analysis. The task for students involves identifying and marking various elements of metadiscourse within these texts, differentiating between *interactive* and *interactional* metadiscourse. The goal is to deepen students' comprehension of how authors employ metadiscourse to navigate readers through their arguments and engage with

them at the textual level.  $^{20}$  Students are encouraged to use an 'open' template for metadiscourse categories, filling it with examples they discover in their analysis, thereby highlighting that metadiscursive inventories are 'open' rather than fixed and prescriptive:  $^{21}$ 

(2)

- (a) Quest'asserzione è *chiaramente* tautologica, viola *cioè* la massima di quantità che vuole che i contributi siano informativi. Poiché tale violazione è palese, l'interpretante considererà che il locutore *a un qualche livello* stia comunque rispettando il principio di cooperazione, e che voglia suggerire qualcosa di diverso da quanto ha asserito esplicitamente, *cioè* «Nelle guerre accadono sempre cose terribili, è la loro natura e non serve lamentare quel disastro particolare». Attiva un'implicatura di riparazione, questa volta legata alla massima di relazione, *anche* il seguente scambio: (...) (Ferrari, 2014, p. 70)
- (b) Come si dimostra dettagliatamente in Levinson (1985), Andorno (2003) e Fele (2007), la nascita dell'analisi conversazionale si colloca tra gli anni Sessanta e Settanta in terra statunitense, e si sviluppa a partire da ricerche condotte da Harvey Sacks, Emanuel Schegloff e Gail Jefferson (1974) su un corpus di telefonate registrate dal Center for the Scientific Study of Suicide di Los Angeles. La situazione delle ricerche odierne riconducibili alla disciplina è molto complessa ed è in forte movimento: ci si limita qui a delinearne alcune caratteristiche definibili come "standard", vale a dire riconducibili pur con distinguo significativi dalla maggior parte dei conversazionalisti come punti di riferimento. (...).

Oggetto dell'analisi conversazionale è l'interazione (tipicamente) parlata tra individui, in tutte le sue forme, (...) (Ferrari, 2014, p. 21).

Examples (2a) and (2b) illustrate a variety of metadiscursive devices utilised in academic writing, including code glosses (cioè; vale a dire), attitude markers/boosters (chiaramente; molto; forte), transitions (anche), and hedges (a un qualche livello; pur...). Example (2b) showcases the use of predicate

<sup>20</sup> Cf. Pizziconi (2020, pp. 73–81). Although his activities refer to discourse markers, they can be easily transferrable, adapted through the more expansive lens of 'metadiscourse'.

<sup>21</sup> Some expressions that are worth considering include per quanto riguarda, relativamente/in relazione a, dal punto di vista + adjective and sotto il profilo + adjective, etc. as frame markers; affermare, menzionare, replicare, sostenere, etc. as verbs of saying for evidentials; plausibile, si può (avanzare l'ipotesi), etc. for hedges; si deve, è necessario/indispensabile che, bisogna, etc. for engagement markers; si pensi a, è il caso di, nello specifico, come nel caso di, etc. for code glosses (cf. Mastrantonio 2021a, pp. 353–357 and references therein).

topicalisation as a frame marker (*Oggetto dell'analisi conversazionale è l'interazione...*), thus enhancing the text's information flow. Interestingly, the use of evidentials (e.g. *Come si dimostra dettagliatamente in* [Author/s]) reveals naming conventions within the field of linguistics, where linguists are typically referred to by their surnames, whereas authors from other disciplines, such as sociology, are mentioned by their full names. Moreover, the text maintains an objective tone by minimising self-mentions, opting for the impersonal *ci si limita* over more direct forms such as *mi limito* or *ci limitiamo*.

A second activity involves the comparison of different genres, such as scientific articles and popular science articles from websites like Le Scienze (see Masi, 2013). If we take a look at the following examples from a text<sup>22</sup> published on Le Scienze, it is evident that the introduction (3a) typically employs evidentials found in popular science journals, which are less commonly encountered in scientific articles, where the citation of the source of the 'recent study' would be mandatory. Furthermore, example (3b) from the body of the article illustrates the typical use of evidentials in popular science articles, providing detailed descriptions of the researchers. In contrast, scientific articles would likely cite such information using a format such as 'Surname (Year)', and direct quotations would mandatorily include the year of publication and page number, even though they are correctly placed within quotation marks in this example.

- (3)
- (a) Uno studio recentemente apparso sulla rivista Astronomy & Astrophysics descrive come l'intelligenza artificiale può imparare dalle simulazioni cosmologiche di formazione ed evoluzione dell'universo a misurare correttamente la massa delle galassie
- (b) Nicola R. Napolitano, già ricercatore INAF e ora professore ordinario presso l'Università degli Studi di Napoli Federico II, spiega che "in questo modo, è possibile superare i problemi intrinseci alla dinamica delle galassie. I modelli dinamici, infatti, hanno bisogno di pesanti assunzioni sulla distribuzione dei moti interni delle galassie, che possono non essere totalmente corrette, e necessitano un esborso di risorse enorme per ottenere risultati sufficientemente accurati".

Additionally, it can be beneficial to analyse and engage in controlled practice that compares the use of metadiscourse in academic writing with colloquial expressions. For instance, consider the excerpt from an abstract in

<sup>22</sup> Intelligenza artificiale: pesare le gallassie con MELA (Le Scienze, 22.02.2024), https://www.lescienze.it/news/2024/02/22/news/intelligenza\_artificiale\_pesare\_le\_gallassie\_con\_mela-15195924/

example (4a). This can be contrasted with more colloquial expressions, potentially translations of social media references to academic articles (4b). Such an activity promotes the skill of 'translating' the same topic across genres/registers, from strictly academic contexts (cf. La Grassa, 2020; Pizziconi, 2020) to non-academic ones (cf. Ferrini, 2020; Siebetcheu, 2020).

(4)

- (a) (...) *Nel prossimo capitolo* verranno *dunque* esaminate le caratteristiche dello strumento della class action ed, *in particolare*, le differenze che sussistono tra il modello adottato negli Stati Uniti e quello contenuto nella proposta della scorsa legislatura. *Nel terzo paragrafo*, attraverso l'utilizzo della metodologia dell'analisi economica del diritto, si indagheranno le conseguenze *in termini di* efficienza dell'introduzione di questo strumento nell'ordinamento italiano. *Infine*, verranno presentate alcune considerazioni conclusive sul ruolo della class action all'interno delle politiche che vengono predisposte per tutelare i risparmiatori.<sup>23</sup>
- (b) (...) Allora, nel capitolo che viene dopo, (...) Poi, nel terzo pezzo, useremo (...) E per finire, ci faremo due chiacchiere su (...)

A third activity would consist in comparing academic texts to explore the use of metadiscourse across different disciplines. For this, instructors should select two academic texts (e.g. introductions) from different disciplines – e.g. one from literature and another from applied linguistics – to facilitate this analysis. This approach is predicated on the finding that disciplines such as applied linguistics tend to feature more interactional but less interactive metadiscourse compared to the hard sciences, like biology (cf. Hyland & Jiang, 2018, 2020). Students can be then engaged in a detailed examination of these texts, noting the differences in metadiscourse that reflect the unique writing conventions of each discipline. Through comparing, for instance, a humanities text – which might employ numerous attitude markers – with a scientific text – characterised by its use of evidentials – students can develop a deeper understanding of how academic communities articulate their ideas and interact with their audiences.

A proposed fourth activity may centre on the persuasive function of metadiscourse, highlighting how it modifies the tone and clarity of text, aligning it more closely with academic writing norms. Initially, students may be presented

<sup>23</sup> Porrini, D. (2010). Tutela del risparmiatore: strumenti di regolazione e class action. In S. Adamo, E. Capobianco, & P. A. Cucurachi (Eds.), *Regolamentazione del mercato finanziario e contratti con gli investori* (pp. 201–223). Edizioni Scientifiche Italiane.

with a straightforward paragraph, lacking metadiscourse, to underscore the distinctive traits of academic writing compared to literary texts. Academic texts often exhibit *explicit* textual relations (Sabatini, 1999), in contrast to literary texts where *implicitness* demands greater inferential and interpretative effort from the reader (Ferrari, 2014, p. 258). The following example compares the thematic structures of two texts, highlighting that the first text (5a) provides enhanced readability, while the second excerpt (5b) presents a notably long subject before the verb, thus complicating the reading process. Moreover, from a rhetorical standpoint, the first example foregrounds the 'objective of assisting very young patients'. It also includes engagement markers (e.g. *è necessario dunque*) which serve to exhort the reader, thereby introducing a persuasive element to the discourse:

(5)

- (a) Al fine di migliorare la prognosi dei piccoli pazienti, *è necessario dunque* riconoscere tempestivamente l'infezione, prevenire l'insorgenza di complicanze e trattare adeguatamente i neonati più compromessi e a rischio.<sup>24</sup>
- (b) Il riconoscimento tempestivo dell'infezione, la prevenzione dell'insorgenza di complicanze, e il trattamento adeguato dei neonati più compromessi e a rischio migliorano la prognosi dei piccoli pazienti.

Lastly, a suggested fifth activity may address metadiscourse at the micro-textual level. Mastrantonio (2021a, p. 362; the examples are his) outlines a progressive approach starting with simple, universally understood concepts, supported by basic sentence structures to illustrate these concepts (6a). The methodology progresses through the incorporation of transitions (6b) to enhance chronological coherence, followed by the introduction of subordinating connectors (6c), which allow for exploration of thematic structure variability (6c vs 6d). The advanced stage (6e) involves complex morphosyntactic phenomena such as nominalisation (*sciogliere* > *scioglimento*) and the construction of complex nominal phrases (*lo scioglimento dei ghiacci*), in line with Halliday's (1989) notion of *grammatical metaphor* (cf. Testa, 2023).

(6)

- (a) La temperatura aumenta. I ghiacci si sciolgono.
- (b) La temperatura aumenta, quindi i ghiacci si sciolgono.

<sup>24</sup> Dallai, V. (2022). Studio retrospettivo monocentrico sulla meningite batterica del piccolo lattante e correttezza dei trattamenti antibiotici empirici [Master's thesis, Università degli Studi di Modena e Reggio Emilia].

- (c) Dal momento che la temperatura aumenta, i ghiacci si sciolgono.
- (d) I ghiacci si sciolgono dal momento che la temperatura aumenta.
- (e) L'aumento della temperatura *causa* lo scioglimento dei ghiacci.

In summary, the practical considerations outlined above serve merely as examples and are inherently flexible, capable of being adapted, expanded, or otherwise customised to meet the specific needs and time constraints of students.

## 4.6. Conclusions

This chapter has explored the implications and benefits of applying Hyland's (2005) metadiscourse framework in the context of academic writing in Italian as an additional language (Lx). It highlights how bridging the gap in metadiscourse research within the Italian context can not only enhance the learning experience for individuals studying Italian as an additional language but also enrich metadiscourse theory by incorporating perspectives from languages beyond English.

Moreover, metadiscourse theory not only aids students in crafting academic texts but also equips them with essential critical skills for engaging with the literature they encounter in their academic endeavours. Engagement with authentic texts allows students to improve their skills in analysing and applying metadiscursive elements, thereby expanding their repertoire for text creation.

Finally, this discussion advocates for viewing metadiscourse as a *dynamic* and *evolving* concept. It suggests that metadiscourse should be regarded as a flexible category open to expansion and requiring contextual sensitivity, rather than as a fixed set of metadiscursive strategies. Embracing this perspective aims to enhance students' metapragmatic and rhetorical awareness (cf. Sansò, 2020; Swales, 1990), or what might be termed *metadiscursive awareness*, ultimately strengthening students' communicative and persuasive skills.

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**Abstract**: Metadiscourse theory plays a crucial role in understanding the interaction between text and reader by illuminating how interpersonal and textual elements are manifested across textual genres. The advancement of metadiscourse studies is largely credited to Hyland's framework, which initiated what is described as the 'second wave' of metadiscourse research. This framework has gained extensive recognition for its ability to detail how authors navigate readers through texts, thus establishing itself as a fundamental theory in contemporary discourse analysis. Despite the growing global interest in metadiscourse, its application remains largely focused on English, with other languages receiving comparatively less attention. In Italian linguistics, while related fields such as academic vocabulary and text structure have been explored, research remains significantly lacking in terms of metadiscourse. This chapter addresses this gap by offering a detailed analysis of metadiscourse in Italian academic writing, highlighting its implications for learners of Italian as an additional language. By focusing on Hyland's framework, the chapter aims to provide both scholars and practitioners with a robust analytical tool to advance the understanding of academic discourse in Italian.

**Keywords**: metadiscourse, Italian linguistics, academic writing, academic discourse

## In the Lab with the Thesis: A Case Study of TesiLab

#### 5.1. Introduction

The conveyance of knowledge is reliant on language and its forms. When addressing specialist audiences, language tends to adopt a more specific and formal tone (Ciliberti & Anderson, 1999). The written form is the natural *habitat* for the linguistic dimension of scientific dissemination, and it symbolises the science it transmits. Vedovelli (2020, p. 6) posits that science, viewed as a symbolic form, is intrinsically linked to language, assuming the attributes of the language employed for its communication within a particular discourse community.

Dissertations are often the first scholarly work produced by a student to showcase their research and scientific expertise. It can range from an expository paper finishing a Bachelor's degree to an argumentative Master's thesis. This study's primary focus is not on the linguistic aspects of academic writing; instead, it delves into the glottodidactic strategies employed to assist various student groups in crafting their Bachelor's or Master's theses. It undertakes a comprehensive review of scientific literature spanning from 2004 to 2021, including critical earlier contributions (Ciliberti & Anderson, 1999; Lavinio & Sobrero, 1991; Sobrero, 1991; Lavinio, 1998; Werlich, 1976). This review aims to grasp how the scientific community addresses the hurdles encountered by Italian students in thesis writing (De Mauro, 2008, 2014) and to identify methodological and operational suggestions that have arisen from the scientific debate.

Like other Italian universities, Ca' Foscari University of Venice has implemented academic writing workshops and courses dedicated to thesis writing within individual departments. Additionally, it has created an academic writing workshop that is open to all Bachelor's and Master's degree students across the university. This case study analyses the didactic format of this workshop, known as *TesiLab: Scientific-Academic Writing Workshop for Thesis Writing*, set for the academic years 2022/23 and 2023/24. The project is ongoing, and this

report will present the partial data collected thus far. The sample examined consists of 169 students who have attended the workshop.

The case study adopted a qualitative research methodology, using electronic questionnaires as a diagnostic tool. The guiding research questions were focused on two main areas: the perception of the communicative aspects and the organisation of content in academic writing, as well as the teaching strategies to guide students in this process.

The study focused on two main aspects. Firstly, it aimed to evaluate students' familiarity with the linguistic structures characteristic of academic writing and their capability to construct these forms effectively in thesis composition. Secondly, regarding the didactic perspective, the effectiveness of the workshop format and strategies that support academic writing process were assessed.

The following paragraphs will discuss academic writing in the context of scientific monographs and theses, justify the academic setting of this research, and describe the theoretical didactic model adopted along with the educational context in which it was implemented. Subsequently, the sample, research instruments, and data obtained will be analysed in an attempt to answer the research questions. Finally, this first experimental phase will be evaluated by identifying its strengths and weaknesses. Based on this evaluation, modifications to the teaching format will be suggested with the aim of improving it.

## 5.2. Academic Writing

Academic writing serves as a conduit for the dissemination of knowledge and the discussion of scientific findings. It is a meticulous process that involves revising and systematising epistemological theories, as well as reviewing the knowledge acquired by scholars and disseminating new scientific propositions. Consequently, the purpose of academic writing significantly influences its form and attributes. Notably, its formal tone distinguishes it from texts related to everyday communication (Cerruti & Cini, 2007; Palermo, 2013), underscoring its adherence to stringent guidelines that shape its structure, allow to clearly present research findings, and facilitate critical analysis by readers (La Grassa, 2020; Pizziconi, 2020).

It is important to recognise the diversity within academic texts, which manifests itself across linguistic and textual dimensions. It stems from the specific socio-cultural contexts of various academic communities and languages, as well as the unique features of different disciplinary areas (Singh & Lukkarila, 2017; Mastrantonio, 2021; Testa, 2023). Despite these differences, the scientific community employs universally accepted communication standards that transcend national and cultural barriers, ensuring the longevity of knowledge through specialised elements and interdisciplinary engagement (Gualdo & Telve, 2011; Ballarin, 2017).

For students, the process of engaging with academic and scientific writing often begins with the drafting of a dissertation. In the Italian academic tradition, this process starts with writing a thesis to complete the three-year Bachelor's degree; it takes on a more scientific character with the writing of the thesis at the end of the Master's degree; it fully acquires the characteristics of a monographic text when it represents the final stage of the doctoral level.¹ The dissertation can therefore be conceived of as an expository type of text in case of the Bachelor's degree and an argumentative type in case of the Master's degree and the doctorate (Werlich, 1976).

Written scientific communication also needs to be placed in the context of specific situations and settings. For the purposes of this paper, it is relevant to mention the formative context, when content is conveyed through a scientific publication, and the co-formative context, when a confrontation between different subjects is established (Ballarin & Nitti, 2020). The process of writing a thesis seems to belong precisely to the latter, since although the student is called upon to rework and present the results of their research, it is desirable that this process takes place in a continuous dialogue with their thesis advisor.

The monographic form of writing, and the dissertation in particular, is also addressed to a specialist audience. Its purpose is to contribute to the development and in-depth study of a given discipline from both an epistemological and more of a strictly practical point of view. The primary aim of a dissertation is to demonstrate that the student has mastered the knowledge acquired during their studies, has developed a certain awareness and critical thinking in the use of research tools, and is able to develop and express their own original contribution to the discipline.

Learning to write at the university level involves mastering the ability to work with multiple genres of text and managing the various dimensions that facilitate written production. Indeed, writing encompasses not only skills in orthography, morphology, syntax, lexicon, and text structure (...), but also includes the ability to cognitively process and organise ideas, as well as overseeing a domain of encyclopaedic knowledge<sup>2</sup> (Troncarelli, 2021, Sec. 2, my translation).

<sup>1</sup> On this point, see in particular the work of Serianni (2015) on argumentative texts and the contribution of Lubello (2019) on the writing process.

<sup>2 &</sup>quot;Imparare a scrivere per l'università comporta l'acquisizione della capacità di elaborare più generi di testo e di gestire le diverse dimensioni attraverso cui si realizza la produzione scritta. L'attività di scrittura implica infatti, non solo competenze ortografiche, morfologiche, sintattiche, lessicali e testuali (...), ma anche capacità di elaborazione cognitiva e di organizzazione delle idee, nonché di controllo di un dominio di conoscenze enciclopediche".

However, the ability to represent complex content in hierarchically organised sequences, from macro- to micro-information, is also part of the process of knowledge processing and synthesis (De Antoni & Zambelli, 2004). In this process, students are called upon to demonstrate their ability to synthesise material from their university courses. The challenge of writing extends beyond the realm of grammatical precision and textual cohesion. It involves mastering the art of expressive linguistic strategies, ensuring both internal and external coherence – a skill set not always comprehensively addressed within the educational framework of schools (D'Aguanno & Tarallo, 2020, p. 147).

With regard to the difficulty that Italian students generally have in writing a complex text (Sposetti & Piemontese, 2017), it is worth mentioning De Mauro's studies (2008, 2014) and the research project *UniverS-ITA*. The Written Italian of University Students: Sociolinguistic Framework, Typological Trends, Didactic Implications,<sup>3</sup> which aimed to study students' formal and informal written Italian, integrating both the sociolinguistic and the typological dimensions.

These recent studies (D'Aguanno & Tarallo, 2020; Troncarelli, 2021), building on previous research (Sobrero, 1991; Lavinio & Sobrero, 1991; Lavinio, 1998, 2011), highlight how the writing difficulties experienced by undergraduate and postgraduate students can be attributed to lack of didactic attention paid to writing practices during their studies.

Recent and past research has centred the debate on this topic around two primary concerns. The first concern is the inadequate mastery of academic discourse skills observed in students at the end of their secondary education. The second issue pertains to the linguistic deficiencies identified among young Italians, prompting recommendations for enhanced language training in the third cycle of education (Polselli & Fatone, 2021).<sup>4</sup>

Many Italian universities, including Ca' Foscari University of Venice, have established academic writing workshops and courses to support students

<sup>3</sup> The project is documented and illustrated on its reference webpage at https://site.unibo.it/universita/it.

<sup>4 &</sup>quot;Se guardiamo agli studi sviluppati nell'arco temporale di questo trentennio, osserviamo, dunque, due tratti distintivi del dibattito: da una parte, si rileva il perdurare delle denunce/aspettative circa una (in)compiuta padronanza delle competenze necessarie per il discorso accademico al termine della scuola secondaria; dall'altra, emerge il continuo lavoro su dati empirici per documentare le debolezze linguistiche dei giovani italiani e chiedere di affrontare in modo sistematico la formazione linguistica nel terzo ciclo" (Polselli & Fatone, 2021, p. 218).

Translation: Reviewing the research conducted over the past thirty years, we identify two distinct characteristics of the ongoing debate: on the one hand, there is the recurring concern about the incomplete mastery of skills required for academic discourse upon concluding secondary school; on the other hand, there is an ongoing effort to analyse empirical data to highlight the linguistic shortcomings of young Italians, advocating for a systematic enhancement of language training in the third educational cycle.

in writing their theses (Sposetti, 2014). This was highlighted in a study by Borghetti and Pugliese (2021), which noted a lack of institutional tools integrated into the curricular part of the *cursus studiorum*, across Bachelor's, Master's or doctoral programmes. The present paper aims to illustrate one of the initiatives promoted by Ca' Foscari University of Venice to support its undergraduate students during thesis writing. The experiment's context will be examined, and the strengths and weaknesses of this educational proposal will be highlighted in the following paragraphs.

## 5.3. The Research Context

Italian universities are currently promoting internationalisation by welcoming exchange students and encouraging local students and staff to participate in international experiences (Coonan et al., 2018). This shift has led to the co-existence of Italian and English as languages of instruction and communication in university settings. Although universities offer academic English and academic writing courses, Italian students continue to face challenges with academic language proficiency in academic Italian. This linguistic weakness has led universities to seek solutions for native speakers.

Since the 2014/15 academic year, Ca' Foscari University of Venice has been implementing a project in collaboration with the Placement and Tutoring Office and the Centro Linguistico di Ateneo. This initiative, as described by Ballarin (2017), includes academic Italian language seminars for undergraduate and graduate students, aimed at enhancing linguistic awareness in academic contexts.

Starting from the academic year 2022/23, the cycle of seminars was interrupted and then resumed and reformulated on the initiative of the ADiSS (Ca' Foscari Orientation, Tutoring and Campus Services Office). The new edition, named *TesiLab: Scientific-Academic Writing Workshop for the Drafting of the Final Thesis Paper*,<sup>5</sup> focuses more on thesis writing and adopts a workshop-seminar hybrid approach.

The initiative was implemented multiple times during both the academic year 2022/23 and 2023/24. Each cycle was offered in various formats, including multimedia, distance learning, and in-person teaching with support from multimedia platforms. The distance learning workshops were structured as two-day events, with a total commitment of 7 hours. This included 4 hours of video lectures (2 hours per session) and approximately 3 hours of self-study with interactive materials on a multimedia platform. 6 Conversely, face-to-face

<sup>5</sup> The webpage https://www.unive.it/pag/9147 presents and describes the cycle of workshops to *Cafoscarini* students.

<sup>6</sup> The multimedia platform employed for the course was Moodle LMS 4.3 (https://moodle.org/?lang=it).

workshops consisted of a single 4-hour meeting, complemented by 3 hours of self-study using the Moodle multimedia platform.

The study groups were organised as follows: for the video-call sessions, each group had a maximum of 15 people, while the in-person sessions were attended by approximately 30 participants each. The difference in attendance was anticipated during the organisational and design stages, as it was necessary to maintain the seminar format of instruction by encouraging robust interaction between students and faculty, as well as among students themselves.

The didactic approach used was based on the flipped classroom model, as proposed by Bergmann and Sams (2016), to optimise the limited time and accommodate distance learning requirements. This model allows for practical activities to be given more attention in the classroom, while students can independently learn theoretical content (Bonaiuti *et al.*, 2017). However, the focal point of this paper is not the theoretical framework per se, but rather its practical implementation. Specifically, it examines whether structuring seminars in accordance with this model can wholly or partially fulfil the objective of adequately preparing students for their culminating academic endeavours.

## 5.4. The Research: Sample and Design

This research focused on the analysis of glottodidactic strategies within the setting of a seminar specifically targeting academic writing and thesis composition. The primary goal was to determine the degree of awareness among students regarding the organisation of scientific research, their knowledge of text linguistics, and their understanding of the textual mechanisms of academic communication.

The research methodology adopted is qualitative, as the aim was not to find significant differences between the groups, but rather to evaluate the didactic proposal's strengths and weaknesses (Dörnyei, 2007; Silverman, 2020). Given its limited sample size, this study can be categorised as a case study.

The experiment was conducted between the 2022/23 and 2023/24 academic years, with a total sample of 169 students.<sup>8</sup> The sessions were structured as follows. In the first year, there were three entirely online

<sup>7</sup> Due to the time constraints of this workshop, the flipped classroom strategy emerged as an ideal approach. This method reverses the conventional learning model by replacing traditional classroom lectures with active, collaborative activities and discussion opportunities. Through the use of a multimedia platform, students accessed extensive materials in advance, allowing classroom sessions to concentrate on practical exercises and interactive discussions, both between the teacher and students and among the students themselves.

<sup>8</sup> The TesiLab project is currently in its development phase and is slated to continue throughout the 2023/24 academic year.

sessions: two in September, two in November–December and two in June. In the middle of the second year, there were five sessions, with one online class in September, one in October, two in November–December and one in-presence class in November.

The scheduling of sessions shows that their number doubled in the first semester of the academic year 2023/24, and the number of students who participated in the first semester of the academic year 2023/24 (N = 79) had already reached the number of students who had participated in the previous academic year (N = 78). This increase confirms the satisfaction with the initiative, as the number of sessions was increased due to the high demand from students.

To assess the reliability of the research, it was necessary to examine the nature of the sample. In fact, as previously indicated, it consisted of 169 students, to whom several online questionnaires<sup>9</sup> were submitted. Out of the 169 participants, 116 completed the questionnaire. This represents a response rate of 68.6%, which indicates reliable data collection.

The questionnaire opened by asking participants to indicate their age (see Table 5.1), with responses predominantly falling within the 20 to 25-year-old range:

Age	Numerical computation	Percentage
20–25 years	88/116	75.8%
25–30 years	19/116	16.4%
Over 30 years	7/116	6%
Under 20 years	2/116	1.7%

Table 5.1. Age of the participants

The responses to the following question revealed that 91% of the participants identified as female, while 9% identified as male. Out of the 116 participants, 94% reported Italian as their mother tongue, while the remaining 6% reported Russian, Serbian, Brazilian Portuguese, Romanian, or Spanish. The educational background of participants prior to their university studies is detailed in Table 5.2 and the field of study that each participant was pursuing at the moment of filling out the form  $^{10}$  is outlined in Table 5.3.

<sup>9</sup> The entrance questionnaire (see Appendix 1) was administered to students before the workshop, and the exit questionnaire (see Appendix 2) was distributed after the workshop's conclusion.

<sup>10</sup> Participants could choose more than one option to indicate their area of study.

Table 5.2. Pre-graduate education

Type of secondary school education	Numerical computation	Percentage		
Grammar School	76/116	65.5%		
Technical school	36/116	31%		
Modern School	4/116	3.5%		

Table 5.3. Type of university studies

University studies area	Numerical computation	Percentage		
Humanities	40/116	34.5%		
Language Studies	57/116	49.1%		
Science Studies	7/166	6%		
Economics	31/116	26.7%		
Language Studies (BA) – Economics (MSc)	1/116	0.9%		

The data shows that 84.6% of participants came from the humanities/linguistics field, while only 6% of the attendees were students of 'exact' sciences. The factors contributing to this stark discrepancy in attendance rates are not definitively known. However, one plausible explanation could be the rigorous schedules of science students, who often find themselves engaged in numerous curricular workshops, leaving little room for extra-curricular activities.

Another potential factor might be the nature of scientific studies themselves. This includes the use of subject-specific vocabulary when it conveys meaning more precisely than a similar non-technical term. The language used in science, both in general and in particular, is built on the need for clear, objective, and value-neutral expression. This requirement dictates the use of precise terms and specific textual conventions, ensuring that scientific-academic texts adhere to standardised, mono-referential codes. <sup>11</sup>

<sup>11</sup> According to Cortelazzo (2011, *Definizione*): "La necessità che il testo si basi su codici standardizzati e che ammettano una sola interpretazione spiega l'esistenza di terminologie, ma anche di schemi uniformi e ora sempre più codificati di strutturazione dei testi (sicché le lingue tecniche e scientifiche sono molto più regolate di quanto sia, o possa essere, la lingua comune; ed esistono enti di regolazione). L'esclusione della soggettività dell'autore fa sì che le asserzioni scientifiche siano focalizzate sul processo e non sull'autore o sull'agente degli eventi rappresentati".

Translation: The requirement for texts to rely on standardised codes which permit only a singular interpretation explains the presence of specific terminologies and the development of uniform and increasingly codified text structures. This results in technical and scientific languages being more regulated than everyday language and overseen by regulatory bodies. The elimination of authorial subjectivity ensures that scientific claims concentrate on the process rather than on the author or the agents involved in the discussed events.

If this assumption holds, it is particularly true for 'exact' sciences, where empirical data and quantifiable evidence often take precedence over theoretical argumentation. However, this remains a research element that requires further investigation.

The following question regards the participants' academic endeavours – whether they are pursuing or have completed a specific degree – revealing the level of specialisation of the participants. Out of 116 respondents, 62% were pursuing a Bachelor's degree, while 38% had already obtained a Master's degree. These results highlight the importance of enhancing writing and research organisation skills among novice scientific writers.

The section on personal information in the entry questionnaire concludes with two questions that inquire about the informant's previous academic writing experience. The first question asks if the participants have previously attended any academic writing seminars. Only 6.9% of the respondents confirmed their attendance at such events.

The data suggests that students do not utilise specialised tools from their respective disciplines, instead opting for a transdisciplinary approach to research planning.

# 5.5. Data Analysis: Participants' Understanding of Academic Writing

In the initial section of the entry questionnaire, participants were asked about their expectations and perceptions of academic communication. The same question was later asked in the satisfaction questionnaire at the end of the workshop. The responses obtained before and after the workshop (see Appendix 1 and 2) are presented and discussed below.

As can be seen, most of the participants had high expectations regarding the immediate applicability of the workshop: they attended it because they wanted to obtain practical tools for starting their thesis writing. At the end of the workshop, these expectations were largely met: the didactic format seems to have provided them with the necessary tools to embark on their own research path and begin the process of thesis writing.

The next question assessed the level of interest in each of the topics on the programme before the workshop began. This question was also repeated in the exit questionnaire to gauge participant satisfaction. Participants rated each topic covered in the workshop on a scale from 0 (low interest) to 5 (high interest) (see Table 5.4).

From the data compiled in Table 5.4, it can be seen that the highest liking scores were in the 4–5 range, indicating a general satisfaction among participants. Interestingly, the score of 5 was slightly lower than 4, suggesting that while expectations were largely met, they were not exceeded.

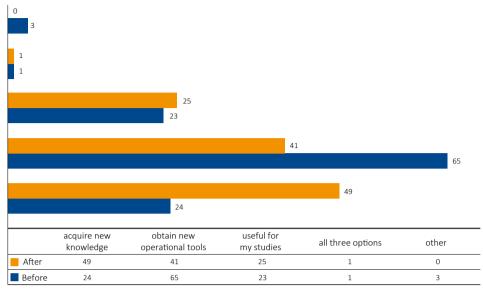


Figure 5.1. Expected and perceived satisfaction before and after the workshop

Table 5.4. Expectations and satisfaction

		0	1	2	3	4	5
	Before	1	3	2	19	39	53
How to make a bibliography	After	0	0	1	18	32	65
T	Before	1	1	0	6	24	84
The structure of a thesis	After	0	1	2	5	30	78
	Before	2	1	3	6	19	85
How to write abstract and introduction	After	0	1	0	16	39	60
	Before	2	1	3	18	37	55
Scientific and academic writing	After	1	1	2	23	44	45

The ratio of teaching time to format also seems to have met with the approval of the participants (see Figure 5.2). These are the input and output data obtained for the question "Do you think that 7 hours (4 in class, 3 autonomous) are enough?" The input and output data were broadly equivalent. However, a small proportion of participants indicated that more time was needed.

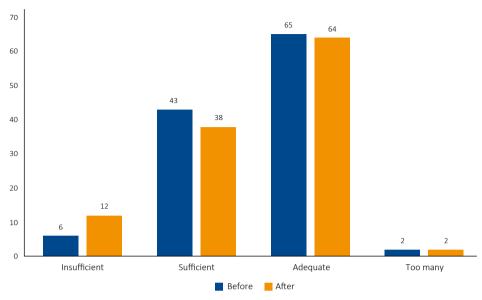


Figure 5.2. Workshop time (hours)

Following the first year of the experiment (2022/23), and upon examining the partial data, there was a need for further investigation of students' language awareness. Consequently, additional questions were introduced in the questionnaires, and these were only answered by participants in the first semester of the academic year 2023/24. Although these data are preliminary, they offer valuable insights as the experiment continues.

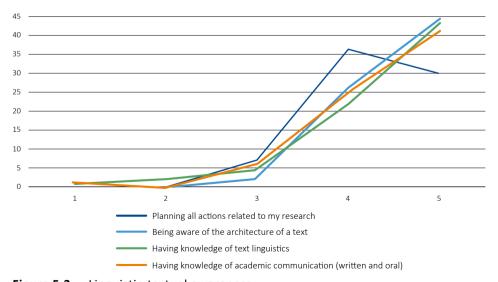


Figure 5.3. Linguistic-textual awareness

Figure 5.3 shows the responses to the question "I think it is important for my thesis (rate your level of interest: 1 = a little; 5 = a lot)". It revealed that most descriptors, with the notable exception of 'research planning', predominantly received the highest values of recognition. It is noteworthy that research planning was absent at value 4.

The majority of respondents recognised the importance of text linguistics and academic communication elements in their thesis writing. These data were confirmed by two questions in the final satisfaction questionnaire. The answers are shown in Figures 5.4 and 5.5. Following participation in this workshop, individuals were asked to rate their learning experience on a scale from 1 (a little) to 3 (a lot).

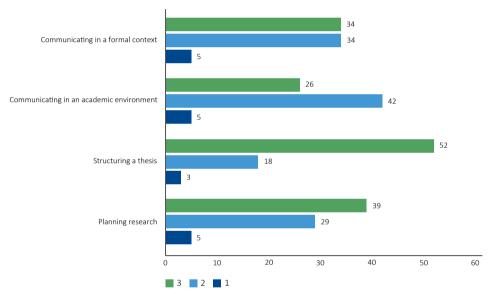


Figure 5.4. Awareness of academic language

At the end of the workshop, participants should be aware that academic writing involves several critical components and stages. These include a good relationship with their thesis advisor, conducting thorough bibliographic research, and possessing a solid grasp of text linguistics and formal language use.

The data reveals that the project's didactic strategy was focused on the writing process rather than the act of writing itself. The TesiLab workshop prioritised academic planning above linguistic elements. Nevertheless, it inevitably touched on linguistic phenomena typical of academic language, such as the use of formal and specialised vocabulary, depersonalisation in grammatical

structures, and syntax variations across different scientific fields. For instance, in the 'exact' sciences, coordination is preferred, whereas the 'human' sciences tend to favour subordination.

The section below offers insights and practical suggestions to optimise this teaching proposal.

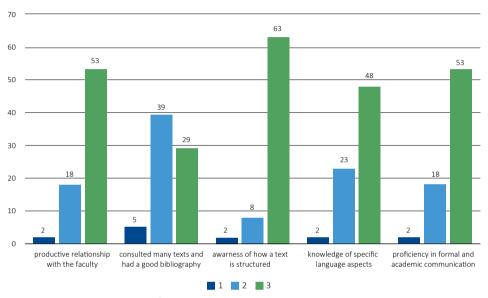


Figure 5.5. Awareness of academic writing

## 5.6. Practical Suggestions

The analysis of the partial data and the feedback received so far has revealed both strengths and weaknesses in this lab's framework. The teaching proposal tested here has proven to be optimal in terms of time investment for students: a lab session delivered through one in-person meeting or two online sessions – supplemented by a multimedia platform with comprehensive materials – minimally impacts the workload of students who are concurrently engaged in their studies and possibly preoccupied with exams. This aspect is a notable advantage in the context of the proposal. However, some issues become apparent once the experience is over, as seen in the data discussed above.

The scope of content covered by TesiLab is constrained by the schedule of 4 lecture hours and 3 self-study hours. This constraint hampers thorough examination of textual genres associated with different types of theses, such as compilation, argumentative, or experimental theses. Moreover, it also limits the exploration of the linguistic nuances of academic communication,

including its morphosyntactic and lexical features. Therefore, it is necessary to allocate more time in the lab to enhance and enable students to practise the composition of various expository and argumentative text types, without overburdening their workload.

It might also be beneficial to differentiate TesiLab sessions by the type of thesis, namely offering separate classes for Bachelor's and Master's students. This approach would allow for more targeted focus on text structure and design in sessions concentrated around Bachelor's theses, while sessions devoted to Master's theses could more thoroughly address the nuances of academic communication and its linguistic characteristics.

For a workshop focused on the Bachelor's thesis, the primary objective is to plan and design a scientific text. This can be achieved through the use of teaching techniques that assist students in reorganising their text. An example activity involves analysing various thesis indexes, where students work in groups to reconstruct the text's logic and enhance their understanding of its structure.

Regarding a workshop for the Master's thesis, the main objective is to guide students in exploring the specific linguistic macro-phenomena characteristic of academic language. This exploration includes phenomena related to formal and specialised lexicons, as well as morphological phenomena such as depersonalisation. An engaging activity involves manipulating short informal texts to transform them into formal academic language and vice versa.

Although the duration of the workshop seems optimal, a slight increase in the workload would provide students with more opportunities to practise crafting academic scientific texts, such as theses, and to refine their linguistic skills. To fine-tune this didactic proposal, a possible adjustment might involve organising a full-day session of 6 hours for in-person meetings, dividing the time between theoretical instruction and practical exercises (4 + 2 hours). For online sessions, expanding the format from two 2-hour meetings to three 3-hour meetings could be considered. This adjustment accounts for the need to reduce the density of topics introduced per hour in distance learning to manage concentration and cognitive load more effectively.

Finally, it is suggested that the Moodle multimedia platform be maintained as a space for carrying out activities and as a repository for supplementary study materials.

## 5.7. Conclusions

This case study analysed responses from 116 questionnaires completed by 169 participants, the majority of whom were female and under 30 years of age, with the majority aged between 20 and 25. They were predominantly native Italian speakers and had completed secondary education, mostly in lyceums and technical institutes. Their university studies were mainly programmes in the field of humanities and linguistics, with some in economics, highlighting an underrepresentation of 'exact' sciences students. The participants were mostly in the process of completing a Bachelor's degree, alongside a significant number working on their Master's theses. They perceived thesis writing as a process rather than a singular act. They appreciated learning about the textual components of the thesis, the organisation of research phases, and the structuring of thesis components such as the abstract, introduction, paragraphs, conclusions, and bibliographical research. Although many participants expressed a desire to improve their writing skills in general, this need appeared to be secondary to their immediate academic requirements.

Despite some departments offering training workshops on thesis writing for specific disciplines, the TesiLab participants showed a strong preference for training activities in general academic language. Writing a scientific text goes beyond individual subject areas, and the textual structure of a thesis relies more on academic language in general rather than the specialised language of a particular department.

Regarding the didactic format of TesiLab – characterised by a limited number of training hours and primary reliance on asynchronous methods facilitated through the Moodle multimedia platform – participants expressed a preference for this approach over synchronous learning. However, this figure needs further verification as only one in-person session was conducted. We may nonetheless intuitively assume that it is more convenient to take advantage of extracurricular training outside of university facilities.

Post-workshop feedback indicates that having completed the sessions, the students understood the importance of structuring monographic academic texts and recognised that a didactic context like TesiLab was not sufficient to fully address and resolve all complexities of writing.

Academic writing cannot disregard the act and the process, but these two aspects must be addressed at different times. This statement opens up a subsequent reflection which cannot be answered within the scope of this chapter but can certainly be addressed at a later stage of the research.

The need for more focused writing instruction in academia is well-documented, and universities are seeking tools to assist students. While the Italian academic community's response in establishing stable, institutional language training paths remains lukewarm, extracurricular programmes like TesiLab may offer a more effective solution for teaching and analysing academic writing, especially in the final stages of university education.

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Abstract: In the realm of academic discourse, the conveyance of knowledge and scientific breakthroughs predominantly relies on written texts. These texts adhere to conventions established by the broader scientific community, influenced by specific linguistic and cultural contexts as well as the particular scientific disciplines they represent (Ciliberti & Anderson, 1999). This standardised format allows for comprehension and exchange of ideas beyond national and cultural barriers. Moreover, academic writing exhibits high levels of specialisation across different scientific disciplines (Gualdo & Telve, 2011; Ballarin, 2017). This research focuses on dissertations as a specialised form of academic writing. In particular, it explores glottodidactic strategies aimed at preparing students to write their dissertations at the end of their university education. The focus of this paper is a case study conducted during the TesiLab: Scientific-Academic Writing Workshop for Thesis Writing at Ca' Foscari University of Venice. The workshop was dedicated exclusively to undergraduate students and took place during the academic years 2022/23 and 2023/24. The aim of this survey was to investigate students' awareness of research project organisation, text linguistics elements, and academic communication mechanisms. A qualitative methodology was employed (cf. Dörnyei, 2007), using diagnostic tools such as online questionnaires and a critical analysis of workshop assignments produced by a representative sample of students. The preliminary findings from this ongoing experiment support the study's initial hypotheses and address the research questions, providing a rationale for its continued exploration.

**Keywords**: academic discourse, academic Italian, academic writing, glottodidactic strategies, written Italian

## Appendix 1: Questionario di ingresso

8 I miei studi rientrano nell'area (se hai scelto "altro"):

Gentile Studentessa/Studente, ti ringrazio fin da ora per la preziosa collaborazione. Il questionario dura pochi minuti e si prefigge l'obiettivo di indagare sui tuoi bisogni formativi e sulle tue aspettative riquardo questo laboratorio. L'analisi del questionario si svolge in forma anonima, i dati saranno trattati in merito a un'indagine scientifica, Resp.Le Elena Ballarin (ballarin@unive.it). Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 "Codice in materia di protezione dei dati personali"? ☐ Sì □ No Sezione 1: Dati conoscitivi (Quesiti 1-11) Relativi al tuo profilo personale 1 La mia età è: a. meno di 20 anni b. 20-25 anni c. 25-30 anni d. più di 30 anni 2 Riconosco il mio genere come: a. F (femminile) b. M (maschile) c. Non so/Non voglio rispondere 3 La mia lingua madre è: a. italiano b. altro La mia lingua madre è (se hai scelto "altro"): 5 Ho conseguito il mio diploma di scuola superiore presso un: a. Liceo b. Istituto tecnico c. Istituto professionale d. Altro Ho scelto "altro" perché (motiva, per favore, la tua risposta): 7 I miei studi rientrano nell'area (puoi scegliere più di un'opzione): a. umanistica b. linguistica c. scientifica d. economica e. altro

- 9 Sto per conseguire una laurea di tipo:
  - a. triennale
  - b. magistrale
- 10 Ho già frequentato seminari/corsi simili:
  - a. Sì
  - b. No
- 11 I seminari/corsi che ho già frequentato sono (se hai risposto "sì"):

#### Sezione 2: Dati esplorativi relativi all'indagine (Quesiti 12-17)

- 12 Freguento questo laboratorio perché desidero:
  - a. acquisire nuove conoscenze
  - b. ottenere strumenti operativi
  - c. avere utilità per i miei studi
  - d. altro
- 13 Ho scelto "altro" perché (motiva, per favore, la tua risposta):
- 14 Ho interesse per questi argomenti (valuta il tuo grado di interesse)

Da "0" (per niente) a "5" (moltissimo) per ogni argomento proposto:

- a. Come fare una bibliografia
- b. La struttura di una tesi
- c. Come scrivere abstract e introduzione
- d. La scrittura scientifico-accademica
- 15 Da questo laboratorio mi aspetto di (puoi scegliere più di un'opzione):
  - a. Imparare a scrivere una tesi
  - b. Conoscere la scrittura scientifica e accademica
  - c. Migliorare la mia scrittura in generale
  - d. Ottenere strumenti per concludere il mio lavoro
  - e. Altro
- 16 Ho sceltro "altro" perché (motiva, per favore, la tua risposta):
- 17 Per raggiungere i tuoi obiettivi, ritieni che 7 ore (4 ore in presenza e 3 ore di lavoro autonomo) siano:
  - a. Insufficienti
  - b. Sufficienti
  - c. Adeguate
  - d. Troppe

Grazie per la collaborazione!

#### Appendix 2: Questionario finale per TesiLab

Gentile Studentessa/Studente, ti ringrazio fin da ora per la preziosa collaborazione. Il questionario dura pochi minuti e si prefigge l'obiettivo di indagare sui tuoi bisogni formativi e sulle tue aspettative riguardo questo laboratorio.

L'analisi del questionario si svolge in forma anonima, i dati saranno trattati in merito a un'indagine scientifica, Resp.Le Elena Ballarin (ballarin@unive.it).

- 1 Dopo aver frequentato questo laboratorio ho:
  - a. acquisito nuove conoscenze
  - b. ottenuto strumenti operativi
  - c. ricevuto utilità per i miei studi
- 2 Voglio aggiungere "altro" perché (se nessuna delle tre opzioni precedenti risponde veramente alla domanda)
- 3 Ho ottenuto informazioni adeguate su questi argomenti (valuta il tuo grado di soddisfazione).

Da "0" (per niente) a "5" (moltissimo) per ogni argomento proposto

- a. Come fare una bibliografia
- b. La struttura di una tesi
- c. Come scrivere abstract e introduzione
- d. La struttura scientifico-accademica
- 4 Avrei voluto approfondire maggiormente (puoi scegliere più di un'opzione):
  - a. Imparare a scrivere una tesi
  - b. Conoscere la scrittura scientifica e accademica
  - c. Migliorare la mia scrittura in generale
  - d. Ottenere strumenti per concludere il mio lavoro
  - e. Altro
- 5 Ho scelto "altro" perché (motiva, per favore, la tua risposta)
- 6 Ritieni che 7 ore (4 ore in presenza e 3 ore di lavoro autonomo) siano state:
  - a. Insufficienti
  - b. Sufficienti
  - c. Adeguate
  - d. Troppe
- 7 Avrei preferito questa modalità di laboratorio:
  - a. Laboratorio in presenza (in un'aula dell'università)
  - b. Laboratorio in presenza (in un'aula dell'università) e materiali integrativi su piattaforma Moodle
  - c. Laboratorio online (mediante videochiamata su Zoom)
  - d. Laboratorio online (mediante videochiamata su Zoom) e materiali integrativi su piattaforma Moodle
  - e. Altro
- 8 Ho scelto "altro" perché (motiva, cortesemente, la tua risposta)

- 9 Dopo aver frequentato questo laboratorio (valuta il tuo grado di soddisfazione): Da "0" (per niente) a "5" (moltissimo) per ogni opzione proposta
  - a. Sono soddisfatto/a relativamente alle mie aspettative
  - b. Ho ricevuto assistenza e attenzione durante il laboratorio
  - c. Ho ricevuto strumenti operativi utili
  - d. Il/la docente del corso si è rivelato/a preparato/a e competente
  - e. Il/la docente del corso si è dimostrato/a chiaro/a e disponibile
- Dopo aver frequentato questo laboratorio penso di aver imparato a (1 = poco; 3 = molto):
  - a. Pianificare una ricerca
  - b. Strutturare una tesi
  - c. Comunicare in ambito accademico
  - d. Comunicare in ambito formale
- 11 Credo che per scrivere una buona tesi sia necessario avere (1= poco importante; 3 = molto importante):
  - a. Una proficua interrelazione con i docenti
  - b. Consultato tanti testi e avere una lunga bibliografia
  - c. Consapevolezza di come è strutturato un testo
  - d. Conoscenza di alcuni aspetti specifici della lingua
  - e. Padronanza della comunicazione formale e accademica
- 12 Commenti e suggerimenti:

Grazie per la collaborazione!

Ana Alexandra Silva University of Évora Maria João Marçalo University of Évora

# Challenges and Strategies in Academic Writing: A Needs Analysis at the University of Évora (Portugal)

#### 6.1. Introduction

A significant number of students begin their university education without the necessary preparation for academic writing. The Portuguese high school curriculum barely grazes the surface of the subject, focusing minimally on textual cohesion and largely omitting the skills required for effective academic writing (cf. Buesco et al., 2014, p. 21). Terms like dissertation, thesis, and scientific article often remain vague concepts to students, who may struggle to define them or understand the complexities involved in crafting such pieces. Academic writing demands not only a firm grasp of grammar and syntax but also critical thinking, the ability to analyse and synthesise information, recognise various argumentative strategies, and construct and defend a thesis with relevant evidence. Moreover, students may find it challenging to integrate information from diverse sources, adhere to proper citation standards, and present arguments coherently and persuasively. The transition to university-level writing, which often involves specialised knowledge and a deep comprehension of research methodologies, poses a significant hurdle.

This gap in knowledge may also stem from insufficient instruction on academic writing during students' university education. Despite a strong emphasis on learning course content, there's an underlying assumption that students come equipped with academic writing skills. Consequently, academic writing training is often absent or offered in a limited and inconsistent manner, failing to ensure students develop the necessary competencies for their success in academia and their future beyond it. As Donald Murray (2013, p. 24) observes, writing is a craft that can be learned and practised, underlining the

responsibility of universities to offer academic writing programmes to their students.

The role of technology and digital environments in academic writing presents a twofold challenge. While easy access to online resources can inadvertently encourage plagiarism due to a lack of understanding of proper citation, the prevalence of informal and digital communication can also influence students to adopt an informal writing style inappropriate for academic contexts. Graça Pinto (2018) emphasises that the increase in writing frequency due to digital communication does not necessarily equate to improved writing skills:

Even if these new electronic communication mediums are associated with a digital literacy level suitable for their acceptable use, it cannot be said that users, often overly dependent on these tools, inevitably possess writing skills that enable them to produce high-quality written works. (Pinto, 2018, p. 10, our translation)

Moreover, writing-related anxiety and lack of confidence can deter students from pursuing knowledge in academic writing. The pressure to produce written assignments in a short period can compromise quality, leading to an aversion to writing and hindering the development of critical thinking skills.

To bridge these gaps, universities, including the University of Évora, are adopting measures such as writing workshops, support programmes, and one-on-one tutoring, as well as incorporating academic writing training into their curriculums. These efforts aim to foster a culture of excellence and rigour in academic and scientific writing.

The objective of this chapter is to establish a foundational understanding of the core issues within academic writing, highlighting its significance for educators, students, and academic institutions. This exploration encompasses a variety of textual forms, including abstracts, reports, scientific articles, posters, and dissertations, with a particular emphasis on the structural and organisational elements that underpin academic texts.

This chapter is structured as follows. Section 6.2 delves into contemporary debates, spotlighting recent studies on the integration of artificial intelligence tools, such as ChatGPT, into the academic writing process. Section 6.3 outlines an exploratory and descriptive study designed to perform a targeted needs assessment. This section elaborates on the research methods employed,

<sup>&</sup>quot;Se esses novos meios de comunicação eletrónicos estão associados a um domínio de literacia digital compatível com o seu uso em níveis aceitáveis, não se poderá dizer que quem deles se vale, não sem um grau exagerado de dependência em muitos casos, possui inevitavelmente um domínio da escrita que o capacite a dela oferecer bons exemplares de composição".

including the rationale behind the use of questionnaires, and provides an overview of the study's design and implementation. Section 6.4 presents the findings derived from the questionnaire-based research. It interprets the data in the context of the literature review, discussing its implications for the integration of AI tools in academic writing. Section 6.5 proposes a comprehensive course structure for *Práticas de Escrita Académica* at the University of Évora, detailing goals, pedagogical strategies, evaluation methods, and a syllabus. The chapter concludes with reflections on the challenges encountered during the curriculum development process and articulates future ambitions for the course.

# 6.2. Academic Writing

Academic writing is scientific writing produced by a researcher for an audience that shares the same academic interests. The goal is always to communicate new discoveries, innovative analysis perspectives, scientifically grounded ideas, and theories, or simply to meet a request made by a teacher in the context of the subject taught.

Academic writing results from scientific research process, which requires careful and critical reading of literature already written on the topic. The student should be able to distinguish between relevant and irrelevant information, thereby filtering it. The goal is for the former to be conveyed clearly and concisely. To develop empirical work, the student must consult various bibliographic sources, thus ensuring better results for the study they intend to carry out. Reading for documentation purposes should steer clear of plagiarism, meaning the student should know how to interpret, structure, and defend their conceptions while using bibliographic references appropriately and accurately. The student may fall into an excess of quotations, which is also not advisable. Each citation should aim to justify a statement made by the student.

#### 6.2.1. Academic Text Genres

Academic text genres are distinguished by characteristics and principles that aim for the following objectives: (1) to understand the structure of different academic writing genres; (2) to identify the textual elements necessary for writing any academic work; and (3) to practise the elaboration of the main types of academic work. Among these genres are abstracts, reports, scientific articles, posters, and dissertations, each with its own unique features and requirements.

An *abstract* (Port. *resumo*) encapsulates the research theme, problem, objectives (both general and specific, if present), theoretical-methodological approach, and key findings within 150 to 300 words. The abstract should make

clear the scope of the discussion and the nature of our intervention. What has been said about X so far, and how do we diverge from these positions or advance them? What is the interest of our contribution to the particular field of study and the discipline in general? What the reader wants to know is whether we have reached relevant conclusions. Again, if we have not yet managed to satisfy these criteria convincingly, we must go back and re-think the project (Guimaraes, 2019, pp. 12–13).

A *report* (Port. *relatório*) integrates an abstract summarising its contents, an introduction presenting the theme together with the problem under investigation along with the objectives, and a development section detailing the theoretical and methodological foundation and analysis categories. The latter consists of an analysis and discussion of results, leading to a conclusion that synthesises the findings and revisits the initial discussion, addressing the research question if applicable and suggesting future research directions.

A scientific article (Port. artigo científico) serves as a means of scholarly communication, often blending textual and visual elements (e.g. graphs, tables, figures), though with emphasis put on the former. It includes a title that briefly describes the content, an abstract aiming to attract readers (see above), and five to eight keywords. The introduction<sup>2</sup> and literature review sections are critical, offering a synthesis of existing research and highlighting the study's significance and objectives. The methods<sup>3</sup> section describes the study design and procedures for replication, while the results section presents findings without personal bias. The discussion interprets these findings in light of the literature review, and the conclusion summarises the article's trajectory and major outcomes, possibly suggesting avenues for future research. Bibliographic references cite all the sources used. The IMRaD format – Introduction, Methods, Results, and Discussion – is a format commonly applied in the structure of scientific articles (cf. Section 6.2.2, below).

A *poster* (Port. *póster*) focuses on scientific communication through a more synthetic and visually driven format, suitable for academic and professional venues such as conferences and congresses. It prioritises visual elements over textual content, presenting the research introduction, methodology, results, and a succinct discussion. Organisational clarity, visual appeal, and information balance are key, with consideration given to readability and colour usage to maintain interest without overwhelming the viewer.

<sup>2</sup> The introduction should include: a) arguments for the relevance of the chosen subject; b) the existing gaps in the literature related to the proposed subject; c) literature review as a fundamental element supporting the questions posed; and d) objectives and hypotheses of research.

<sup>3</sup> Essential elements to include in this section are the identification and description of the population and instrument (or equipment) used and the analysis of the data obtained through the instrument.

A dissertation (Port. dissertação) involves selecting a research topic and question, followed by a systematic exploration of existing literature to identify uncharted or insufficiently studied areas. This lengthy process, typically spanning three to five years, requires maintaining a clear focus on the research topic and its boundaries. Systematic data collection and recognition of research limitations ensure the research question is thoroughly addressed, laying the groundwork for a significant academic contribution.

#### 6.2.2. Architecture and Composition of Academic Texts

Academic writing is a process which begins with guidelines set by an advisor, emphasising the importance of exchanging ideas and perspectives to advance the work. Graça Pinto (2015, p. 25) underscores that academic writing flourishes through continuous engagement with its governing rules, prerequisite instruction, and the examination of diverse viewpoints on the topic, both in writing and through discussions with experts.

This type of writing challenges authors to delve into existing research and formulate their own subjects of inquiry. According to Hyland (2003), it is a form of language use that is socially constructed, adhering to conventions, and is both constrained and guided by expectations.

The pursuit of original ideas is at the heart of academic writing. These ideas are scrutinised for their novelty and subject to critical evaluation. Critical reading involves interrogating the text with questions like "What does the author mean?" and "What is the main argument?", employing critical thinking to assess both the document and our interpretation of it. Being critically analytical is essential for knowledge advancement, involving a thorough examination of arguments and evidence, and the capacity to identify a subject's limitations.

Moreover, academic writing requires proficiency in organising and articulating the generated ideas. Reading strategies must be selective, given the impracticality of reviewing all available sources on a topic in today's digital age. Effective selection involves a preliminary analysis of abstracts or indexes to determine a document's relevance to the subject. Exploring the various parts of a given work is also of great importance. For example, reading the first sentences of each paragraph can help to get an idea of the subject matter, contributing to identifying relevant and less relevant issues for the work to be written.

Techniques for organising notes include annotations, diagrams, paraphrases, and summaries. Annotations aim to add comments to the text, to clarify it, or to critique it. Diagrams offer a more visual way of taking notes. Mind maps, charts, or graphs can be very effective ways of annotating. In turn, paraphrases allow expressing ideas and information in other ways, by using

one's own words. The application of such a strategy aids in understanding the text. Finally, summaries focus on the key points of the original text, aiming to put forward a shorter yet faithful version of the document analysed.

One of the distinguishing features of scientific writing is not taking the conclusions presented by other authors at face value, without first making a critical judgment of the arguments and evidence presented. The ability to formulate and defend an argument is a fundamental part of the research process. Developing this skill supports critical thinking, reasoning, making choices, and the ability to evaluate evidence.

In terms of form, scientific writing should be: (a) *formal* (avoiding subjectivity); (b) *structured* (complex ideas need to be managed in a way that produces unambiguous statements); and (c) *technical* (making use of terminology pertinent to the study area).

The structure is crucial for clarity and coherence, facilitating the reader's understanding of the text and navigation through it. The basic model typically includes an introduction, development of ideas, and a conclusion summarising key points. The IMRaD format – Introduction, Methods, Results, and Discussion – is widely adopted for its simplicity, logical form, and efficient communication of research findings. Nevertheless, some scientific fields or disciplines may prefer the use of a particular type of structure, so it is prudent to confirm with the department or professor. Pilatti *et al.* (2023, pp. 916–921) highlight the importance of both the elements preceding the main body of the text (title, abstract, keywords) and the text proper (introduction, method, results, discussion), as well as components following the text, like acknowledgments and references, in crafting a well-rounded academic article.

# 6.2.3. Academic Writing and Al

Recent scholarly works on academic writing have explored a wide range of topics, including the integration of information literacy, the impact of artificial intelligence (AI) and large language models, as well as the emotional and cognitive aspects of writing. Yu (2023) introduced a self-assessment scale that integrates information literacy and academic writing, emphasising the need to address cognitive, metacognitive, social, and emotional aspects of academic writing. The use of ChatGPT in academic writing has raised concerns regarding plagiarism, with Jarrah *et al.* (2023) advocating for responsible practices and proper citations to maintain academic integrity. Utami *et al.* (2023) examined Indonesian students' perceptions, barriers, and recommendations for optimising AI in teaching academic writing, highlighting the need to improve features and AI literacy. Hwang *et al.* (2023) discussed the potential of large language models like ChatGPT as assistants for non-native English-speaking researchers,

as well as the ethical considerations involved in using AI for manuscript writing. Langum and Sullivan (2023) surveyed research on academic writing in English as an additional language, calling for more support for doctoral researchers in the humanities. Badley (2023) reflected on the concept of writing, but from a different perspective, exploring authorship and post-authorship through the lens of autoethnography and post-academic writing. Mulyono *et al.* (2023) demonstrated that an online academic writing workshop based on genre analysis increased the creativity and self-efficacy of Indonesian TVET instructors in academic writing.

These recent contributions underline the dynamism and complexity of academic writing as a domain being redefined by digital technologies. The integration of AI, particularly large-scale language models like ChatGPT, presents both advantages and challenges for researchers and educators. The articles also draw attention to the multifaceted nature of academic writing, encompassing cognitive and emotional dimensions.

## 6.3. Methodology

#### 6.3.1. Research Design

The present exploratory study aims to conduct a needs analysis (NA) of a specific group of students, those enrolled in the academic writing course *Práticas de Escrita Académica*, part of the Bachelor's degree in Education Sciences (Port. *Ciências da Educação*) at the University of Évora, Portugal, in the 2023/2024 academic year. This course is mandatory for students in the Education Sciences programme and takes place during the second semester of their first year, comprising a total of 78 hours, including 30 hours of in-class activities, which equates to three credits. Additionally, the schedule includes a one-hour tutorial guidance session every week. The main objective of this course is the improvement of students' written texts. Therefore, the competencies to be developed by each student consist of enhancing writing in practical terms, meaning that such learning does not imply specific theoretical knowledge from the field of Linguistics.

The *Práticas de Escrita Académica* course, in the 2023/2024 academic year, had a total of 53 enrolled students: 50 from the Education Sciences programme, two from the Studies of Philosophy and Contemporary Culture programme, and one from the International Relations programme. While mandatory in the Education Sciences curriculum, the course is optional for other degrees offered at the University of Évora. Only about 30 students regularly attended the course. The remaining students did not attend classes either due to schedule conflicts or because they had not yet arrived in Portugal,

which was the case with international students, 16 of whom were enrolled but only three attended classes.

Conducting a Needs Analysis (NA) is essential for developing content that aligns with students' expectations and needs, thereby facilitating the creation of teaching materials aimed at enhancing academic writing skills. This analytical process, described by Brown (1995) as comprehensive collection and evaluation of subjective and objective data, aims to establish and confirm curriculum goals that meet students' language-learning needs within specific educational contexts. It involves identifying the linguistic requirements of students to ensure their success at the university and in future career pursuits (target situation analysis), evaluating the strengths and weaknesses in their language skills and learning experiences (current situation analysis), and considering the subjective and perceived needs of both students and educators (learning situation analysis).

The NA methodology is geared towards understanding the needs, deficiencies, and desires of students. Needs refer to the essential skills and knowledge students must acquire to effectively perform their desired roles derived from their experiences and representing the objectives to be achieved. Deficiencies highlight the gap between students' current abilities and their goals, indicating what they are presently unable to achieve. Desires encompass the legitimate expectations and aspirations of students, guiding the curriculum development to ensure it satisfies these needs and expectations. Utilising questionnaires, researchers commonly gather data on these aspects to tailor the curriculum to effectively address the specific needs, deficiencies, and desires of students, thereby shaping the course context and enhancing the overall learning experience.

A comprehensive NA should document specific details about participants, such as their education level, nationality, gender, age, and main academic status, tailored to the objectives of the research. Additionally, it should outline the materials used in the NA, detailing the procedures for information collection, with questionnaires being the primary tool in this context.

#### 6.3.2. Data Collection Methods

The development of the needs analysis questionnaire (see Appendix) was a multi-step process designed to ensure the collection of relevant and reliable data. It involved setting clear goals, including gathering sociodemographic details of the students enrolled in the *Práticas de Escrita Académica* course, understanding their academic backgrounds, assessing their writing skills and main difficulties, collecting information about their previous experiences with academic writing, and exploring their personal expectations and concerns

regarding the course through open-ended questions. The questions were crafted to be concise, clear, and unbiased, featuring mainly multiple-choice and Likert scale questions, accompanied by a couple of open-ended ones to capture personal perspectives.

We chose Google Forms as the platform for creating and distributing the questionnaire, ensuring respondent anonymity by not collecting email addresses. For close-ended questions, statistical methods were applied to categorise and summarise responses, with the use of graphs and tables to underscore significant points. Open-ended responses were analysed for content or themes to identify recurring patterns. To visually present the most frequently mentioned words in these responses, a word cloud was created using the free version of the Venngage software.<sup>4</sup>

This combination of quantitative and qualitative analysis methods provided a comprehensive understanding of the students' needs as identified on the basis of the questionnaire.

#### 6.4. Results and Discussion

The survey was distributed through the course unit's Moodle area, with students given 30 days to respond. In total, 29 responses were collected, ensuring anonymity since no emails were gathered. The age of participants ranged from 18 to 50 years, with a significant prevalence of women at 93.1% (N = 27) compared to males at 6.9% (N = 2), aligning with the trend of female predominance in education-related fields. In terms of academic background, an overwhelming 96.6% (N = 28) of respondents were first-year students, with one third-year student taking *Práticas de Escrita Académica* as an elective. This indicates that nearly all surveyed students were pursuing degrees in Education Sciences. When asked about previous academic writing experience (Q5, see Appendix), 51.7% (N = 15) answered that they had gained it during research project preparation, 17.2% (N = 5) in specific course subjects, 20.7% (N = 6) cited secondary education, and 10.3% (N = 3) had no prior exposure.

With regard to writing competence (Q6–Q11, see Appendix), self-assessment of academic writing skills (Q6) revealed diverse responses: 51.7% (N = 15) rated themselves at an intermediate level, 17.2% (N = 5) recognised weaknesses, and 31% (N = 9) believed their skills were above average. None considered their skills excellent.

The survey also probed into challenges faced in academic writing (Q7). Grammar was a major issue for 58.6% of students (N = 17), followed closely by difficulties with text structure and organisation for 55.2% (N = 16) and

<sup>4</sup> https://infograph.venngage.com/infographics.

argumentation for 44.8% (N = 13). Technical aspects like evidence use and citation, along with formatting styles, troubled 51.7% (N = 15).

Regarding areas for improvement (Q8), 58.6% (N = 17) struggled with managing and using bibliographic sources, highlighting concerns over plagiarism. Other areas needing improvement included planning, drafting, paraphrasing, summarising (48.3%, N = 14), text revision, editing (24.1%, N = 7) and preparation for publication (17.2%, N = 5). These items are essential for constructing an Academic Writing curriculum that can address what has been identified as a deficiency or weakness in students' prior education.

Understanding of academic writing task instructions (Q9) was adequate among 79.3% of students (N = 23), with the majority choosing intermediate to high levels on the Likert scale. However, 20.7% (N = 6) claimed to struggle with understanding these instructions.

In terms of style usage (Q10), 55.2% of students (N = 16) were unsure of their writing style, while 34.5% (N = 10) opted for a formal style, and only a minority identified their style as technical (3.4%, N = 1) or informal (6.9%, N = 2).

The last question in this block (Q11) revealed that awareness of plagiarism and techniques to avoid it was high, with 89.7% (N = 26) affirming understanding, contrasting with a small 10.3% (N = 3) unaware of what it entails.

Part 4 of the questionnaire (Q12–Q18, see Appendix) aimed to collect information related to possible previous experiences in the field of academic writing. Data on the frequency of academic writing use among students (Q12) showed that 86.2% (N = 25) had engaged in it either "frequently" or "very frequently", though a small portion (13.8%, N = 4) answered "rarely" or "never". It would be expected that, for people undergoing higher education, these skills would be utilised at least "frequently".

Feedback on their work (Q13) was deemed crucial by 75.9% (N = 22) of the students, with varied preferences for additional support methods (Q14), including office hours (35.7%, N = 10), study groups (25%, N = 7), workshops (21.4%, N = 6), and self-study materials (17.9%, N = 5). Inquiry into preferences for learning modalities (Q15) showed a strong favour for face-to-face classes (79.3%, N = 23), with fewer students valuing books and other printed materials (10.3%, N = 3), as well as digital resources or online courses (6.9%, N = 2). Both Q14 and Q15 highlight the significant importance of interpersonal relationships in learning.

Lastly, the questionnaire revealed low awareness and utilisation of academic writing resources provided by the university (Q16), with only 10.3% (N = 3) using such resources, 37.9% (N = 11) aware of them but not using

<sup>5</sup> This question yielded 28 responses.

them, and 51.7% (N = 15) unaware of their existence. This suggests a need for better promotion and integration of these resources into the Academic Writing curriculum, e.g. through partnerships with the library, promotion of specific workshops (cf. Guimarães, 2019, pp. 21–28), or even the use of tutorials. The University of Évora currently has access to some of the most important reference databases, such as Scopus, Web of Science, Library, Information Science & Technology Abstracts, as well as full-text databases like Academic Search Complete, Annual Reviews, Business Source Complete, CINAHL Plus with Full Text, ERIC, and others. It also provides access to a wide range of publishers, such as Elsevier, De Gruyter Online, IEEE Xplore, JSTOR, Oxford University Press Resources, Springer Link, and others. 6

The questionnaire included two open-ended questions as its final items, focusing on the students' personal expectations for the course (Q17) and their concerns about academic writing (Q18). Being non-mandatory, these questions received a notably lower response rate, with the first question attracting 19 responses and the second only 9.

Responses to Q17 revealed a genuine interest among students in the topic of academic writing. One student expressed high expectations for improving their skills, noting a significant improvement already and a belief in their potential to get even better. Another highlighted their curiosity about developing academic writing skills as a positive expectation. These responses underline a common desire among students to enhance their capabilities, with comments like the anticipation of gaining new skills to produce superior work or the importance of this semester for improving the clarity of idea expression. There is an acknowledgment of the challenges ahead, with students hoping for improvement by the course's end despite expecting initial difficulties.

To visually represent the themes emerging from the responses, a word cloud was created (see Figure 6.1), showcasing the most frequently mentioned

<sup>6</sup> Cf. https://widgets.ebscohost.com/prod/customerspecific/s7469463/searchbox v8.html

<sup>7 &</sup>quot;As minhas expectativas pessoais em relação ao desenvolvimento destas competências são altas, já sinto que melhorei bastante, mas sei que consigo ser melhor".

<sup>8 &</sup>quot;As minhas expectativas são positivas, uma vez que tenho curiosidade em desenvolver as minhas competências de escrita académica".

<sup>9 &</sup>quot;Penso que vá ser útil para ganhar novas competências para elaborar melhores trabalhos".

<sup>&</sup>quot;Tenho algumas expectativas, acredito que este semestre será importante para melhorar a minha capacidade de expressar ideias de forma mais clara. Espero que esta disciplina me de oportunidade para que eu possa melhorar minha habilidade de pesquisa, análise crítica e a forma organizar os meus pensamentos."

<sup>11 &</sup>quot;Acho que no início irei ter algumas dificuldades mas espero no fim ter melhorado". "Sinto que vai ser uma cadeira muito desafiante para mim".

terms. For Q17, words like *melhorar* ('improve'), *a escrita* ('writing'), *espero* ('I hope'), *competências* ('skills'), *expectativas* ('expectations'), *dificuldades* ('difficulties') and *desenvolvimento* ('development') were prominent, reflecting a forward-looking attitude among students regarding their academic writing competencies.



Figure 6.1. Q17 word cloud

The second question (Q18) highlighted a specific perspective from a student who had chosen the subject as an elective, advocating for its inclusion as a compulsory element of the curriculum right from the first year. This student, a female aged between 25 and 50 in her third year of a Languages and Literatures degree at the University of Évora, emphasised the importance

<sup>12 &</sup>quot;Esta disciplina devia fazer parte da componente obrigatória do meu curso no 1º ano. Seria uma ferramenta importantíssima para formar alunos mais competentes. Espero sinceramente conseguir compatibilidade no horário para frequentar as aulas presenciais e não perder esta oportunidade".

of academic writing skills and expressed a desire to attend face-to-face classes to fully benefit from the subject.

A word cloud was generated to visually represent the recurring themes in the responses to Q18 (see Figure 6.2). For this question, the most frequent word was  $n\tilde{a}o$  ('no'), followed closely by action verbs, like tenho ('I have to'), fazer ('to do'), and conseguir ('to achieve'). This suggests that students not only recognise their own challenges but also feel a sense of responsibility to act in addressing them.



Figure 6.2. Q18 word cloud

The gathered data are crucial for curriculum development, pinpointing student needs and expectations. The next phase involves using these insights for designing a curriculum aimed at enhancing students' academic proficiency, demonstrating a thoughtful approach to curriculum construction based on a thorough needs analysis.

#### 6.5. Practical Considerations

#### 6.5.1. Stages of Building a Curriculum in Academic Writing

Building a curriculum for a Practical Academic Writing programme requires detailed planning, taking into account the specific needs of the students and the educational objectives of the institution. We present a proposal for a guide to developing an effective curriculum:

- (1) Definition of Course Scope: Identify the target audience of the course (undergraduate, Master's, or doctoral students); identify the field (social sciences and humanities, exact sciences, arts, or others).
- (2) Definition of Learning Objectives: Identify what students should be able to do at the end of the programme. This includes writing skills, understanding of ethics in writing, and knowledge of different styles and formats.
- (3) Needs Assessment: Conduct surveys or questionnaires addressed to students (or teachers) to identify existing gaps in academic writing skills.
- (4) *Content Development*: Define the key topics to be covered, such as research, thesis, argumentation, citations, plagiarism, revision, and editing; include case studies, real examples, and problem-based exercises to contextualise learning.
- (5) Pedagogical Strategy: Choose a pedagogical approach that encourages the practical application of the skills taught; include interactive activities, such as writing workshops, peer reviews, and group discussions.
- (6) Resources and Materials: Select or create teaching materials, including style manuals, citation guides, and good examples of academic writing; use online resources, software, and research databases.
- (7) *Evaluation Methods*: Build a variety of formative and summative assessments, such as essay drafts, literature reviews, and research projects.
- (8) Continuous Feedback and Revision: Plan regular sessions for student feedback on the writing process; evaluate and adjust the curriculum based on student analyses and changes in best practices in academic writing.
- (9) Student Support: Offer tutorials where students can receive additional help; encourage students to participate in extracurricular activities aimed at writing development.
- (10) Syllabus Implementation: Launch the academic writing programme and monitor its implementation; continuously collect feedback in

order to make adjustments, always prioritising the needs of the students and the demands of the institution.

The ten suggested steps can help create a curriculum that aims to develop the necessary academic writing skills. It is essential that the curriculum be dynamic and capable of adapting to new needs and challenges that may arise.

#### 6.5.2. Curriculum Proposal for Practical Academic Writing

The proposal presented in this section will take into account the needs expressed by the students, as well as their expectations regarding the target subject: academic writing. We will start from the construction stages for the presentation of our proposal.

#### (1) Course Scope:

- Target audience: undergraduate students.
- Area: social sciences and humanities, more specifically the degree
  in Education Sciences, in which the course is mandatory, but also
  other degrees in the field, such as International Relations, Languages and Literatures, or Studies in Philosophy and Contemporary
  Culture.
- (2) Learning Objectives: The central objective of this course unit consists in improving the quality of written texts that serve the purposes of the above-mentioned set of first-cycle degrees. Therefore, the skills to be developed by each student consist in the practical improvement of writing, which means that such learning does not imply specific theoretical knowledge from the field of linguistic studies.
- (3) *Needs Assessment*: Conducting a questionnaire survey at the beginning of each academic year, aimed at students, to identify existing gaps in academic writing skills.
- (4) Content Development:
  - Academic and scientific writing:
  - $\bullet\,$  Basic rules of academic ethics (integrity, humility, trust).
  - Academic textual typologies (characteristics and principles).
  - Architecture of texts (mechanisms for organising academic text).
  - The literature review section (rhetorics and strategies).
  - Issues of bibliographic referencing; use of scientific authorities; information literacy in the preparation of academic works: research and exploration of bibliographic databases; bibliographic management tools.

• Linguistic skills and techniques: <sup>13</sup> spelling/accents; punctuation; simple/complex sentence (structure, basic order); textual cohesion and coherence; discursive connectors; dictionaries and manuals.

#### (5) Pedagogical Strategy:

- The student must acquire the continuous ability to rethink and rewrite the material produced by themselves, simultaneously improving their knowledge and written expression.
- Collaborative writing workshops in the various typologies addressed in the syllabus.
- · Peer review.
- · Group discussion.
- (6) *Resources and Materials*: Bibliography; didactic materials; style manuals; citation guides; online resources, software, and databases.
- (7) Evaluation Methods:
  - Formative evaluation (essays, summaries, literature reviews, research projects).
  - Summative evaluation (exams).
- (8) Continuous Feedback and Revision:
  - Bi-weekly sessions for student feedback on the writing process.
  - Evaluating and adjusting the curriculum based on the best practices of academic writing.
- (9) Student Support:
  - · Tutoring sessions.
  - Workshops on relevant themes:
  - Bibliographic Research, EDS, and databases: how to search; simple vs. advanced search; using Boolean operators; databases, etc.
    - Mendeley: how to install Mendeley tools (Mendeley Reference, Mendeley Cite, Web Importer); how to create a Mendeley library; create groups; create collections; how to use Mendeley Cite in Word; making citations and bibliographic references.
    - Scientific Publication and Open Access: predatory vs. indexed journals; how and where to publish; transformative agreements of B-on; indexed journals without payment of fees, etc.
- (10) Syllabus Implementation:
  - Launching the academic writing programme and monitoring its implementation.

<sup>13</sup> These topics will be addressed in any of the key topics of the first point of the syllabus. It is not intended to teach the linguistic contents specifically – rather, they can be clarified and explained when students, in the course of their academic writing movements, express doubts or ask questions.

 Continuously collecting feedback in order to make adjustments, always prioritising the needs of the students and the demands of the institution

This comprehensive approach ensures that the curriculum not only meets the current academic writing needs of students but also remains flexible and responsive to future changes and advancements in the field. Through a combination of practical application, continuous assessment, and targeted support, students are equipped with the skills and knowledge necessary to succeed in their academic and professional endeavours.

#### 6.6. Final Considerations

The deficiency of academic writing skills among university students is a multifaceted issue, requiring an approach from various fronts. This gap in proficiency can be attributed to a combination of educational, social, and individual circumstances, as we have already pointed out in Section 6.1.

Firstly, lack of inadequate groundwork at the secondary education level often leaves students unprepared for the rigours of academic writing expected at the university level. Secondary schools may prioritise general writing skills without placing significant emphasis on the academic style and conventions necessary for university-level work. As a result, students enter higher education without a solid foundation in critical thinking, argument development, evidence use, or adherence to academic formats.

Secondly, the transition to university often coincides with a significant shift in expectations. Students are expected to engage with complex texts, synthesise ideas from various sources, and contribute original thoughts to ongoing academic conversations. The leap from structured and often prescriptive writing tasks in secondary education to more open and research-intensive university projects can be daunting. Without explicit instruction or support, students may struggle to meet these new expectations.

Moreover, the teaching of academic writing at universities is not always consistent or systematic. Courses that focus specifically on writing skills may be optional or not integrated into the core curriculum, leading students to overlook their importance. Class sizes and the volume of work can also limit the amount of personalised feedback students receive from their instructors, thus hindering their ability to learn from writing experiences.

The proliferation of digital communication means that today's students are heavily influenced by informal writing styles, more suited to social media than to the academia. Answers to Q10 (see Appendix) prove that students adopt an informal style (6.9%) despite being in an academic context. This integration

of colloquial language into formal texts may inadvertently weaken proficiency in academic writing. Together with insufficient feedback and opportunities to practise and refine their skills, students' academic output may not develop the depth and formality required.

Furthermore, individual factors, such as language barriers, can exacerbate these challenges. In Q17 (see Appendix), one of the students mentions the need to 'improve her writing and grammar so that the texts make sense'. <sup>14</sup> These students may face additional obstacles beyond mastering the structure and content of academic writing.

Lastly, university resources aimed at supporting academic writing, such as libraries, writing workshops, and tutoring services, may be underutilised due to students' lack of awareness or the perception of stigma associated with seeking help. For students already struggling with time management, dedicating hours to these services may seem like an additional burden rather than a beneficial complement to their studies. However, such an investment is crucial for the rest of their academic journey to proceed as expected of a student in the university context.

To bridge this knowledge gap, we have presented our proposal for an Academic Writing course curriculum. Raising awareness among academic authorities is crucial for this course to be offered to the students who need it. Our proposal pertains only to the area of social sciences and humanities, but we recognise the need for creating a similar proposal, albeit adapted to the needs of students of exact sciences or arts. By systematically integrating the teaching of writing into the university experience, institutions can help promote the development of capable and confident academic writers.

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**Abstract**: University students frequently struggle with academic writing, a problem stemming from various factors but often marked by a pervasive uncertainty about how to approach such tasks. This issue is prevalent regardless of the institution's size or location, from large urban universities to smaller peripheral ones. Many students enter university ill-prepared for academic writing's complexities. This chapter seeks to break down academic writing into its components, from text genres to how they are structured. We also consider recent studies on academic writing, including those examining the role of tools like ChatGPT. Our research is exploratory, focusing on students enrolled in the academic writing course *Práticas de Escrita Académica* [Practical Academic Writing] which is part of the Education Sciences programme at the University of Évora (Portugal). We aim to understand these students' needs through a multi-part questionnaire that gathers sociodemographic data as well as information on academic background, self-assessed writing skills, and challenges and prior experiences with academic writing. The findings inform the development of a tailored curriculum for an academic writing course designed to be flexible and responsive to evolving educational demands.

**Keywords**: academic writing, university students, research methodologies, curriculum development

# Appendix:

1 – Idade () 18–25

# Análise de Necessidades – Práticas de Escrita Académica (2023/2024)

Instruções: Selecione a opção que melhor descreve a sua experiência ou opinião em relação a cada uma das seguintes questões. As suas respostas são confidenciais e serão utilizadas para melhorar a qualidade do ensino de escrita académica na nossa instituição.

### Parte 1: Informação sociodemográfica

	() 26–50
	() mais de 50
2 -	- Género
	() Feminino
	() Masculino
	() Prefiro não responder
	Parte 2: Background Académico
3 -	– Em que ano/semestre está atualmente matriculado(a)?
	() Primeiro ano/segundo semestre
	() Segundo ano/quarto semestre
	() Terceiro ano/sexto semestre
	() Mestrado
	() Doutoramento
4 -	– Qual é o seu curso?
	[Espaço para resposta escrita]
5 -	- Qual foi a sua última experiência formal com escrita académica
	() No ensino secundário
	() Em disciplinas específicas do meu curso
	() Na elaboração de um projeto de pesquisa ou monografia
	( ) Nunca tive experiência formal
	Parte 3: Competências de Escrita
6 -	- Como avalia as suas competências atuais em escrita académica?
	() Insuficiente
	() Pobre
	() Razoável
	() Boa
	() Muito boa

7 - Quais as áreas da escrita académica sente necessidade de melhorar (selecione
todos os que se aplicarem).
() Gramática e pontuação
() Estrutura e organização do texto
() Desenvolvimento de argumentos
() Uso de evidência e citações
() Conhecimento de estilos de formatação (APA, MLA, CHICAGO etc.)
() Outros
8 - Quais as áreas da escrita académica sente necessidade de melhorar? (sele-
cione todos os que se aplicarem)
() Planificação e rascunho inicial
() Revisão e edição do texto
() Paráfrases e sumário de textos-fonte
() Gestão e uso de fontes bibliográficas
() Preparação para publicação/submissão de trabalhos
() Outros
9 – Compreende completamente as instruções relativas às tarefas de escrita
académica?
() Nunca
() Raramente
() Às vezes
() Quase sempre
() Sempre
10 – Como descreve o seu estilo de escrita académica?
() Formal
() Informal
() Técnico
() Não sei
11 – Sabe em que consiste o plágio e como evitá-lo?
() Sim
() Não
Parte 4: Experiências com Escrita Académica
12 – Com que frequência tem necessidade de realizar atividades de escrita
académica (como redação de relatórios, ensaios, artigos e outros) no seu curso?
() Muito frequentemente
() Frequentemente
() Ocasionalmente
() Raramente
() Nunca
\ / INUILA

13 – Acredita que receber feedback é útil para desenvolver as suas competências	
de escrita académica?	
() Sempre	
( ) Na maioria das vezes	
() Às vezes	
() Raramente	
() Nunca	
14 – Que tipo de apoio adicional acha que seria mais benéfico para o desen-	
volvimento das suas competências de escrita académica?	
() Tutorias	
( ) Workshops sobre temas específicos	
( ) Grupos de estudo ou escrita colaborativa	
() Recursos ou materiais de autoestudo	
15 – Qual a modalidade que considera mais adequada para aprender escrita	
académica?	
( ) Através de aulas presenciais	
() Através de cursos online	
() Com a ajuda de livros e materiais impressos	
() Recursos digitais	
16 - Conhece os recursos de escrita académica oferecidos pela universidade	
(tutorias, bibliotecas, bases de dados)?	
( ) Sim, e já os utilizei	
( ) Sim, mas nunca os utilizei	
( ) Não conheço esses recursos	
17 – Quais são as suas expectativas pessoais em relação ao desenvolvimento	
das competências de escrita académica durante o curso?	
Eanago mayo youngate accepted	

[Espaço para resposta escrita]

18 – Existe algo mais que gostaria de partilhar sobre suas experiências ou preocupações relacionadas com a escrita académica?

[Espaço para resposta escrita]

PART II: ACADEMIC WRITING AND EMERGING TECHNOLOGIES

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# 7. Large Language Model AI and Lx Academic Writing: Challenges and Opportunities

# 7.1. Background

#### 7.1.1. Artificial Intelligence, Machine Learning, and Deep Learning

In popular culture, artificial intelligence (AI) is often imagined as a machine with human-like intelligence: a machine with a mind. However, the non-public character of the mind is also a well-established philosophical issue, typically referred to as the problem of other minds (Hyslop, 1995). Put succinctly, we can only observe other peoples' behaviour, not their thoughts, and so our knowledge of other minds is never direct, but rather inferred from observation of behaviour. Similarly, in psychology, the ability to explain, predict, and interpret behaviour by attributing mental states to others is referred to as theory of mind, using the word theory to emphasise the ascriptive and indirect quality of our knowledge of other minds (Astington & Dack, 2008). Naturally, such inference-based understanding of other minds could be extended to the idea of artificial intelligence, and Alan Turing, a pioneer of artificial intelligence, developed the eponymous *Turing Test* on this very principle (Turing, 1950). This test aims to evaluate a machine's capacity to exhibit human-like intelligence in natural language conversations, with a human judge engaging in text-based dialogues with both a human and a machine, unaware of their respective identities. If this judge cannot consistently distinguish between the two based on their responses, the machine is deemed to have passed the test by exhibiting the same kind of verbal behaviour we would normally associate with a human mind. The Turing Test has been very influential in framing AI as capable of exhibiting linguistically intelligent behaviour. However, it is

important to note that a machine can pass such a test without possessing many important human cognitive functions such as problem-solving, perception, or decision-making (Mahowald *et al.*, 2023). And, in addition, not all applications of AI are concerned with linguistically intelligent behaviour.

In current academic discussions, questions about the presence or absence of mind take second place to an interest in the mechanisms of machine learning (ML). In the context of ML, AI is defined in terms of a machine that is capable of successfully modifying or improving its own programme without further assistance from the programmer. The important point here is not whether a machine appears human-like in any respects, or has a mind, but whether it is able to improve its own performance on tasks, effectively extending its initial programming. This refocusing of the definition of artificial intelligence readily encompasses the diverse range of practical applications that machine learning can be used for, including object identification (such as naming objects in a picture), prediction (for instance, forecasting when components are likely to fail in an industrial setting), or navigation in a dynamic environment (e.g. guiding an autonomous vehicle). Machine learning has become the dominant paradigm within AI, focused on developing systems to learn patterns from data and improve performance over time without further explicit programming.

The fundamental mechanism in machine learning models is known as *backpropagation* (Goldberg, 2016). First, the programme provides initial instructions on how to approach a dataset to achieve a specific result. Second, the programme provides instructions on how to evaluate success or failure. Third, the programme provides instructions on how to modify the initial instructions in light of the evaluation. With huge data sets and innumerable iterations of trial, evaluation, and modification, the machine refines its calculation parameters and becomes increasingly proficient at achieving desired results: that is, it has implicitly "learnt" from the patterns present in the data.

Within the broader field of machine learning, the deep learning neural network approach has become particularly significant because of its remarkable efficiency in handling incredibly complex pattern learning tasks (Goldberg, 2016). The core concept of the deep learning approach lies in modelling highly distributed relationships between data points within vast datasets, mirroring the interconnected nature of neurons in the human brain. This approach to modelling excels at autonomously extracting abstract and intricate features from data, proving especially effective in demanding tasks like image and speech recognition. Advances in hardware, such as powerful Graphics Processing Units (GPUs), have facilitated the training of extremely complex neural networks on incredibly large datasets. Examples of AI apps using such deep learning neural network approaches would include DeepL (translation AI), DALL-E (image generation AI), and ChatGPT (natural language generation AI).

## 7.1.2. Large Language Model (LLM) Artificial Intelligence

Large language models are AI models dedicated to natural language processing tasks (Gatt & Krahmer, 2018; Stahlberg, 2020).¹ They are trained on extensive language datasets (language corpora) through a deep learning neural network approach. In simple terms, the model is given a short extract from a dataset and tasked with predicting the next word that follows on the basis of the words in the extract, i.e. predicting an unseen word from the words that precede it. These predictions are then compared to the actual word that comes next in the extract. Based on the accuracy or inaccuracy of the predictions, the model dynamically adjusts the predictive strength associated with each given word in relation to the linguistic features of the initial extract. Over countless iterations of this process, the model continuously refines its predictions for unseen words until it achieves the desired level of predictive accuracy.

Of course, there is much more that could be said about how these predictive relationships are modelled, and such a discussion would encompass topics such as self-attention mechanisms, attention scores, encoder-decoder processes, multi-head attention, positional encoding, feedforward neural networks, layer normalisation, and residual connections (Gatt & Krahmer, 2018; Goldberg, 2016; Stahlberg, 2020). But for our purposes, it is sufficient to understand the basic point that large language models are probabilistic models of linguistic co-occurrence based on vast quantities of language data, without significant commitments to any pre-specified linguistic analysis.

It is also important to highlight that once a large language model has been trained, a fine-tuning process can be applied by overlaying the general language model with a specialised model tailored to specific areas of discourse (see, for instance, Hu *et al.*, 2023). This can be conceptualised as constructing a new model on top of the original comprehensive, or generalised, language model. In contrast to the initial training on a broad dataset, this time, the model is trained on data that more narrowly represent the targeted area of discourse. Instead of adjusting arbitrary predictive values, as done at the outset of training a large language model, values in this new model are extracted from the general LLM and refined to align more closely with the new, discourse-specific re-training data. This approach enables efficient development of specific models capable of generating language tailored for particular tasks or contexts, such as customer service, webpage content, or even academic papers.

<sup>1</sup> Or, for a more accessible overview, see Clarke, Milmo, and Blight's visual explanation in the Guardian Online: https://www.theguardian.com/technology/ng-interactive/2023/nov/01/how-ai-chatbots-like-chatgpt-or-bard-work-visual-explainer

Now that we have a basic understanding of large language models and some insight into their functioning, let us consider the types of real-world tasks that they can be used for. Otter, Medina, and Kalita (2021) provide a useful overview of the main uses of LLMs, including: information retrieval; information extraction; text classification; summarisation; question answering; machine translation; and text generation. They do, however, acknowledge that there are many other possible uses which are currently under-researched or under-discussed, such as grammar correction or style mimicry. Clearly, many of these applications of LLMs have potential for supporting, or possibly even supplanting, various stages of the writing process.

An alternative approach to conceptualising the uses of LLMs in relation to Lx writing would be to consider the extent to which their use contributes to various aspects of text generation or text analysis, with a third set of applications drawing heavily on both. Elaborating on these broad categories, we suggest the following uses for an LLM:

#### Text Generation:

- (1) Generating novel text: to generate a text or a section of a text.
- (2) Text extension: to complete a given sentence, paragraph, or section of a text.
- (3) Text revision: to edit for clarity, tone, style, structure, or accuracy.

#### Text Analysis:

- (1) Text classification: to determine the topic or category of a given text.
- (2) Sentiment analysis: to establish an author's position or stance on a topic.
- (3) Text evaluation: to generate an evaluation of the qualities of a text.

# Text Analysis and Generation:

- (1) Text translation: to rewrite a text in another language.
- (2) Text summation: to create a concise summary of a longer text.
- (3) Conversation: to simulate discussion of a topic.

And, finally, a further alternative perspective on how LLMs can be used focuses on how users interact with them. Here, the primary distinction is between environments in which the user interacts with an explicitly AI-orientated interface, such as https://chat.openai.com/, a web-based interface to ChatGPT, or whether the LLM is integrated within an environment with an ostensible purpose beyond interaction with the LLM. Examples of the latter would be integration of LLMs within word processing systems, email

clients, or customer service platforms. In these cases, the user may not even be aware that AI is being used to provide suggestions for sentence completion (word processing and email), to identify and retrieve texts for them (search engines), or to respond to their messages (customer service platforms). However, in both situations, user input can be viewed as providing the LLM with a prompt that triggers it to produce an output on the basis of its model of language, as described above. Importantly, the prompt determines the output that will be generated, and this has quickly led to interest in the art of "prompt engineering" – writing prompts that are likely to generate outputs with desired qualities. For instance, Giray (2023) provides a helpful overview of this topic, recommending prompts for generating academic writing include at least four facets: (1) instruction: what you want the LLM to do; (2) context: the situation or text type you want the output to relate to; (3) input data: information you want to feature in the output; (4) output data: specifications for qualities you want the output to conform to.

# 7.2. Large Language Models and Lx Academic Writing

Hyland (2019) provides a useful overview of the development of Lx writing pedagogies (for alternative, and largely complementary, perspectives, see also Cumming, 2016; Ferris, 2021; Ferris & Hedgcock, 2023; Grabe, 2012). While Hyland acknowledges that the approaches are not mutually exclusive, he outlines a series of shifting priorities, from a focus on language structures, to a focus on text functions, to a concern with creative expression, down to a focus on the writing process, content, and then genre. It is informative to consider how LLMs can intersect with each of these historical concerns of Lx writing pedagogy. Each discussion is illustrated with one shot (i.e. unedited first try) examples generated in ChatGPT-3.5.<sup>2</sup>

# 7.2.1. LLMs and Structure-Focused Lx Writing Pedagogies

Hyland (2019) suggests that a focus on language structures in writing pedagogy emerges from structural linguistics and the behaviourist learning theories that were prominent in the 1960s (and see also Silva, 2016 for discussion of Lx writing research in this period). In this approach, there is an emphasis on learning linguistic structures as the foundation of formal text units, and writing is viewed as a straightforward product of control over these underlying linguistic structures. Successful writing is seen as little more than

<sup>2</sup> Note that OpenAI also have a more advanced model available via paid subscription: ChatGPT-4.

the coherent arrangement of words, clauses, and sentences structured according to syntactic rules, and hence writing pedagogy involves imitating and manipulating models of such structures. Within this tradition, typical pedagogical approaches follow four stages: familiarisation with grammar and vocabulary, controlled writing through fixed patterns, guided writing by imitating model texts, and finally, free writing of novel compositions.

In two main ways, the availability of LLMs largely obviates a need for writing pedagogy focused on learning to manipulate such structures. First, if the learner has proficiency in an alternative LLM-supported language, then LLMs can reliably provide syntactically sound machine translation (see Example 1). Alternatively, if the learner writer can supply a rough approximation of their target structure in the target language, the LLM can supply a sophisticated, error-free reformulation of the target in the prompt (see Example 2, which contains deliberate errors in the prompt).

(1)

# Prompting an LLM for a translation to a target language

- **Prompt** = 将这句话翻译成英语:墨西哥经济在过去十年中经历了快速增长。
- **Output** = The Mexican economy has experienced rapid growth over the past decade.

(2)

# Prompting an LLM for a reformulation within the target language

- **Prompt** = Please improve this sentence for me: Mexico ecnomy grow rapid 10 years.
- **Output** = Over the past decade, the Mexican economy has undergone rapid growth.

Both outputs were returned by ChatGPT-3.5 in response to entering the prompts indicated. This, we would suggest, provides strong evidence that a great deal of the structural knowledge previously needed by writers can now be provided by LLMs, either through translation, or via very loose, even error-rife, approximation in the target language. Of course, in either case, there is an obvious issue as to whether or not the output accurately represents the prompt writer's intended message – a subject we will return to later in the chapter – however, at face value, in both cases, the prompts generated the kind of outputs we had envisioned and could be considered to have successfully circumvented the necessity of our being able to produce suitable structures in the target language ourselves.

## 7.2.2. LLMs and Function-Focused Lx Writing Pedagogies

Hyland (2019) discusses an alternative perspective on L2 writing pedagogy that shifts the focus from a strict emphasis on language structures to a consideration of text functions. While acknowledging the importance of grammar and vocabulary, this approach makes more explicit connections between language structures and writer purposes, emphasising the idea that specific language forms serve particular communicative functions. For instance, writing an effective paragraph can be seen as involving, among others, composing a topic sentence, supporting sentences, and transitions. This approach still retains influences from the structural model, treating paragraphs almost as syntactic units where functional units can be fitted into given slots, but more attention is given to the rhetorical function of such units. Furthermore, this functional perspective can also be extended to entire texts, viewing an essay, for example, as being composed of structural entities like Introduction-Body-Conclusion, or teaching organisational patterns such as narration, description, and exposition. While functional orientations are perhaps less well-represented in academic literature than the others, they remain highly influential in popular Lx academic writing textbooks, such as Bailey (2018), Hogue and Oshima (2023), or Oshima and Hogue (2007).

Large language models can easily support writers in the production of functionally defined text. As illustrated above, writers able to produce suitable functional writing in an alternative LLM-supported language can easily produce high quality machine transitions or access powerful editing support for structural features within the target language. However, LLMs can also successfully interpret a wide range of functionally defined prompts and produce outputs corresponding to the requests. For instance, prompts can request sentences fulfilling specific functions, such as exemplification, explanation, or topic establishment (Example 3); larger functionally defined text sections, such as abstracts, introductions, or executive summaries (Example 4); or paragraphs fulfilling specified functional roles (Example 5).

(3)

# Generating a topic sentence with an LLM

- **Prompt** = Write a topic sentence for this paragraph: While acknowledging the importance of grammar and vocabulary, this approach... [i.e. see the preceding paragraph, minus the actual topic sentence]
- Output = The approach discussed in this paragraph shifts its focus beyond grammar and vocabulary, emphasizing the connection between language structures and writer purposes, particularly highlighting how specific language forms fulfil communicative functions.

(4)

# Generating a summary with an LLM

- **Prompt** = write a summary to go at the end of this section of an academic book chapter: 1.1 Artificial intelligence, machine learning and deep learning... [and rest of subsection]
- Output = In contemporary discussions, the focus shifts from anthropomorphic perceptions of artificial intelligence (AI) to the mechanisms of machine learning (ML) and deep learning. ML emphasizes a machine's ability to self-improve, expanding beyond linguistic intelligence to encompass diverse practical applications. Deep learning, particularly neural networks, excels in complex pattern learning tasks, revolutionizing AI capabilities.

(5)

# Generating writing with a specified organisational pattern with an LLM

- **Prompt** = Write a paragraph defining what a topic sentence is, explaining how to write one, and explaining and exemplifying the features of a successful and unsuccessful topic sentence.
- Output = A topic sentence serves as the main idea or point of a paragraph, guiding the reader and providing a clear focus for the ensuing discussion. To craft an effective topic sentence, one should encapsulate the central theme of the paragraph, conveying a specific message to the reader. It often appears at the beginning of the...

Clearly, then, LLMs are capable of drafting coherent and relevant, functionally defined writing on many user-specified topics. While a writer using an LLM in this way would certainly benefit from an understanding of which functions are appropriate for which genre, audiences, or contexts, many of the mechanics of actually drafting corresponding text would appear to be delegable to LLMs.

# 7.2.2. LLMs and Creative Expression-Focused Lx Writing Pedagogies

Hyland (2019) introduces a third orientation in L2 writing pedagogy, shifting the focus from linguistic structures or language functions to creative expression. The creative expression orientation views writing as a self-discovery process, with teachers providing a supportive and non-directive environment for students to construct their own meanings within. According to this perspective, writing is learnt, not taught, and instructors aim to stimulate writers' ideas

through pre-writing tasks like journal writing and reading parallel texts. The role of the teacher is to create space for students to develop their individual views on a topic, and so responses to the students' texts are considered crucial, and error correction is a relatively minor concern. Key sources within this tradition would include Elbow (1998a, 1998b), Moffett (1982), and Straub (2000).

Here, then, the relationship between large language models and the aims of pedagogy are rather less straightforward. Arguably, LLMs do have the potential to enhance expressivist L2 writing pedagogy by providing a technological scaffold that aligns with the goals of fostering creativity, self-expression, and meaningful engagement with ideas within the L2 writing classroom. For instance, LLMs can be used to quickly and easily generate numerous creative writing examples, and thereby expose developing writers to diverse writing styles, genres, and voices (Example 6). They can also serve as a valuable tool for generating prompts and prewriting activities (Example 7). Furthermore, LLMs can offer instant feedback on the content and coherence of students' writing, aligning to some extent with the expressivist emphasis on engagement with ideas rather than a fixation on formal errors (Example 8). However, there would also appear to be obvious limits on the extent to which LLMs can truly engage with a writing pedagogy focused on individual expression and audience response – a topic we will return to later in the chapter when discussing LLMs in relation to *linguistic form*, *meaning*, and *intentionality*.

(6)

# Generating examples

- **Prompt** = Write three different newspaper articles reporting on different international conflicts.
- Output = Article 1: Tensions Escalate in Eastern Europe as Border Dispute Intensifies. Eastern Europe is once again the focal point of global concern as tensions between neighboring nations continue to... Article 2: Humanitarian Crisis Deepens in Conflict-Ridden Middle Eastern Nation. The humanitarian situation in [Middle Eastern Nation] has reached a critical juncture as...

(7)

# Generating stimulating prompts for creative writing examples

- **Prompt** = Suggest some stimulating creative writing prompts to use with teenage refugee background students in the New Zealand context.
- Output = Absolutely, here are some creative writing prompts tailored for teenage refugee background students in the New Zealand context:
   (1) Journey to Aotearoa: Imagine you're writing a diary entry from the perspective of a refugee who has just arrived in New Zealand.

Describe your journey to this new land, your first impressions... (4) Kiwi Legends: Research a Māori legend or myth and reimagine it in a contemporary setting. How would the characters...

(8)

# Generating instant feedback

- Prompt = Read the abstract to this paper [abstract for this chapter entered]. What are the most and least original aspects of the paper?
   Who would be interested in reading it? How could it be improved?
- Output = The most original aspect of the paper appears to be its exploration of the implications of large language model artificial intelligence (LLM AI) specifically within the context of teaching, learning, testing, and producing academic writing ... The least original aspect might be the introductory explanation of artificial intelligence, machine learning, deep learning neural networks, and LLMs, as these topics have been extensively covered in...

# 7.2.4. LLMs and Process-Focused Lx Writing Pedagogies

Hyland (2019) also outlines the related, process-based approach to L2 writing pedagogy, which slightly de-emphasises the writer's position as an independent producer of texts, instead accentuating the cognitive processes involved in different stages of the writing task. The widely accepted planning—writing—reviewing framework, proposed by Flower and Hayes (1981), views writing as a non-linear, exploratory process where planning, drafting, revising, and editing are recursive and interactive activities (but see also Raimes, 1998; Scardamalia & Bereiter, 1987; and Zamel, 1983). This perspective recognises the complexity of writing tasks and the differences between skilled and novice writers, categorising their respective approaches as knowledge-telling and knowledge-transforming models. Process-oriented teachers guide students through the writing process, focusing on strategies for generating, drafting, and refining ideas, as well as providing extensive feedback. This orientation aims to develop metacognitive awareness, encouraging students to reflect on the strategies they employ in writing.

Large language models can significantly impact the process-oriented approach to L2 writing pedagogy. LLMs have the potential to support each stage of the writing process, offering suggestions for planning, directly helping with the generation/writing of drafts, and providing instant feedback on drafts or their revision or analysis, as illustrated in relation to other pedagogical foci above. However, as with expressivist pedagogies, LLMs will not have been trained to model the exact audience, context, and purpose of communication

the writer has in mind, even if the prompt provides some general indication of these considerations. In other words, even though LLMs are remarkably adept at identifying genre indications in prompts and adapting their outputs correspondingly, they cannot intuit the likely expectations of particular readers in specific contexts, such as the lecturer on a course that the learner is taking. There are limits to the extent to which an LLM can model the precise details of any particular context, audience, or purpose of writing (see Example 9).

(9)

# Attempting to generate a text suitable for a specific context, audience, and purpose

- Input: Write a short "discussion board post" for an MA class's LMS. Discuss the pedagogical uses of vocabulary profilers and demonstrate a deep understanding of the lectures and readings introduced on LALS522. Include academic citations.
- Output:

Title: Exploring Pedagogical Applications of Vocabulary Profilers

Dear classmates,

As we delve deeper into the intricacies of Language Analysis and Linguistics (LALS522), one tool that has sparked considerable interest and discussion is vocabulary profilers. These tools offer invaluable assistance in language teaching and learning by analyzing texts and providing insights into the complexity and appropriateness of vocabulary. In this post, I aim to explore the pedagogical applications of vocabulary profilers, drawing upon the insights gleaned from our lectures and readings.

Vocabulary profilers serve as powerful aids in language instruction by offering teachers and learners a comprehensive understanding of the vocabulary demands of texts. According to Nation (2001), vocabulary size and coverage significantly influence reading comprehension and language proficiency. Vocabulary profiling tools, such as the Range and the Compleat Lexical Tutor, provide detailed analyses of text complexity, lexical density, and word frequency distributions (Cobb, 2000). By utilizing these profilers, educators can make informed decisions about text selection, ensuring that materials align with learners' proficiency levels and learning objectives (Nation, 2013).

... [three more paragraphs] ...

I look forward to our continued exploration of this fascinating topic and welcome your insights and reflections.

Best regards,

[Your Name]

#### References:

Cobb, T. (2000). Making Corpus-Based Tools and Resources More Accessible to Language Learners: The Case for a User-Friendly Interface. In M. O'Donnell (Ed.), Applied Linguistics and Language Teacher Education (pp. 83-103). Springer.

Hu, M., & Nation, I. S. P. (2000). Unknown Vocabulary Density and Reading Comprehension. Reading in a Foreign Language, 13(1), 403–430.

Laufer, B., & Nation, P. (1999). C Language Testing, 16(1), 33-51.

Laufer, B., & Ravenhorst-Kalovski, G. C. (2010). Lexical Threshold Revisited: Lexical Text Coverage, Learners' Vocabulary Size and Reading Comprehension. Reading in a Foreign Language, 22(1), 15–30.

Nation, I. S. P. (2001). Learning Vocabulary in Another Language. Cambridge University Press.

Nation, I. S. P. (2013). Learning Vocabulary in Lexical Sets: Dangers and Guidelines. TESOL Journal, 4(3), 235–239.

Nation, I. S. P., & Webb, S. (2011). Researching and Analyzing Vocabulary. Heinle Cengage Learning.

Webb, S. (2005). Receptive and Productive Vocabulary Learning: The Effects of Reading and Writing on Word Knowledge. Studies in Second Language Acquisition, 27(1), 33–52.

We hope readers would agree, given its length and the level of detail provided, that this "short discussion board post" would be quite improbable, even for an extremely capable and motivated student, and would immediately arouse suspicion. It would in our context, at least. And, while it might seem more appropriate as a post offered by a lecturer on the course, not only does it lack the discursive, discussion-fostering tone you would expect from a lecturer's post, it obviously uses an incommensurate term of address ("dear classmates"). As an aside, it is also worth noting that while at first glance, the citations all seem (amazingly enough) relevant to the context indicated via the prompt, they are not always used accurately in terms of their relationship to the specific points being made in the output text. For instance, the citation given to Nation (2013) is not relevant to the points made in the sentence it appears in. And in fact, at least one citation appears to be entirely fictious, i.e. the citation to a Cobb (2000), an important scholar in this field, does not seem to correspond to any existing publication, credible as the details otherwise sound. But, perhaps more pertinently in relation to contextual appropriacy, while ChatGPT-3.5 does correctly recognise how the university course code "LALS522" would typically feature in the requested text type, the model incorrectly predicted a relationship to the words "Language Analysis and Linguistics", rather than the actual wording, which is *Linguistics and Applied Language Studies*. This is an obvious problem given the intended audience for this output, but an unsurprising occurrence when we reflect on how LLMs actually work.

The power of large language models is truly awe-inspiring, bordering on magical, but skilful prompting, evaluation of outputs, and editing are still needed to achieve a high degree of contextual appropriateness. That is, developing a suitable text still involves the LLM user in the writing process. While

the actual writing processes in LMM-supported and non-LLM-supported Lx writing may be vastly different, the idea of a deeper understanding of the writing process helping someone to develop from a novice, knowledge-telling writer to a skilled, knowledge-transforming writer seems equally relevant to both. Consequently, it is probably the process-focused pedagogical orientation that most directly addresses, and hence can accommodate, using LLMs within Lx writing programmes. In fact, we would argue that developing an LLM-aware process approach should be the main priority for the field going forward, as LLMs are here, and they have radically changed the possible ways in which writers can approach text.

## 7.2.5. LLMs and Content-Focused Lx Writing Pedagogies

Hyland (2019) presents a fifth perspective on L2 writing pedagogy which he describes as focused on content. Mohan's (1986) seminal work explores the importance of content knowledge in relation to writing pedagogy and continues to provide much of the rationale for continuing interest in Content and Language Integrated Learning (Coyle, 2007). However, from Hyland's discussion, it seems just as reasonable to describe the content approach as input-focused, recognising the role of relevant reading in establishing a model for appropriate writing, and the role of content knowledge and schema development in supporting the writer's voice. Hence, while continuing to draw on aspects of the approaches outlined above, the content approach overlays those features by selecting themes to establish a sense of coherence and purpose in terms of the content written about in a course.

Much as with pedagogies focused on creative expression, content-focused pedagogies can be supported by large language models through various applications of text generation and analysis. This can be done, for instance, via generation of topic related readings (cf. Example 6), generating schema building activities (cf. Example 7), or conducting LLM-based ideation (Example 10).

(10)

# Conducting LLM-based ideation

- **Prompt** = What are the 10 main ways LLMs can support the writing process?
- Output = Language Model (LM), like the one you're interacting with, can support the writing process in numerous ways. Here are ten main ways:

   (1) Generating Ideas: LLMs can assist writers by suggesting ideas or providing prompts to kickstart the writing process. By offering a diverse range of topics and angles, LLMs can inspire creativity.
   (2) Research Assistance: LLMs can quickly retrieve information on various topics...

However, even more so than with creative-expression focused pedagogies, it is essential that teachers and learners recognise that LLMs are not designed to generate factual content. They are designed to generate natural, human-sounding language (cf. discussion of Example 9 above, and see Mahowald *et al.*, 2023, for a discussion). The extent to which the propositional content of LLM outputs reflects facts about the world is, to some extent, a statistical epiphenomenon. It is probably best to avoid referring to it as LLM-based "research", with its connotation of discovering truths and facts, and to think instead of LLM-based ideation, the generation of ideas and concepts about a topic which nonetheless very much leaves responsibility for verification of the corresponding facts in the hands of the user. While, in virtue of producing natural-sounding human language, LLM-generated texts will correspond to recognisably meaningful ideas and concepts, the extent to which these ideas and concepts reflect facts about reality is at best indirect, at worst palpably false, because LLMs have no language external model of the world (Dale, 2021; Mahowald *et al.*, 2023).

## 7.2.6. LLMs and Genre-Focused Lx Writing Pedagogies

Hyland (2019) finally introduces the genre-oriented approach to L2 writing pedagogy, emphasising writing as purposeful, contextualised communication with readers (see also Hyland, 2003, 2007; Paltridge, 2014). This perspective moves beyond the traditional focus on subject content, composing processes, and textual forms. Genres, according to this approach, are abstract, socially recognised ways of using language for specific purposes. Teachers adopting a genre orientation believe that writers follow social conventions to organise messages coherently and purposefully, aiming to achieve specific goals. Genre teaching incorporates explicit attention to the discoursal and contextual aspects of effective texts, as well as links between these features and their lexicogrammatical realisation.

As would be expected in light of the discussion above, large language models can also significantly augment genre-oriented writing instruction, or even obviate the need for close engagement with the production-focused aspects of such an approach. This is because deep-learning-based neural networks implicitly model genre in the data sets they are trained on and hence are able to generate and analyse text from a genre perspective. As with the discussion of process-based pedagogies above, we should recognise that an LLM does not have a representation of the specific genre (context, audience, and purpose) that the writer has in mind, but rather infers relations between genre clues in the prompt provided and abstract patterns in the training data. Consequently, the usefulness of an LLM to a learner within a genre-focused approach will depend on the extent to which the training data provides an appropriate model

of the genre geared for the user's particular audience and purpose as well as the user's ability to effectively prompt the model and recognise whether the LLM output is relevant or not. Again, both generative and analytical uses are possible:

(11)

# Generating text from a genre-informed perspective

- **Prompt** = write a polite professional email to a fellow academic who is not personally known to me informing them that the review process has taken longer than expected and a decision on their submission will not be available until next year
- Output = Subject: Update on Review Process for Your Submission. Dear [Recipient's Name], I hope this email finds you well. I am writing to provide you with an update on...

(12)

## Generating text to exemplify genre features

- **Prompt** = write a methods section for a scientific paper reporting a clinical trial
- Output = Methods. Study Design. This clinical trial employed a randomized, double-blind, placebo-controlled design to investigate the efficacy and safety of [intervention] in [target population] over a [duration] period. The study was conducted in accordance with...

(13)

# Analysing a text from a genre-informed perspective

- Prompt = Analyse this text extract. What type of text is it from?
   What is the purpose of this extract within the broader text? What steps or moves are used to achieve what rhetorical purposes, in this extract? [penultimate paragraph from Ballance (2023) Sampling and randomisation in experimental and quasi-experimental CALL studies: Issues and recommendations for design, reporting, review, and interpretation]
- Output =

This text extract appears to be from an academic or scholarly piece, likely from a research paper or article discussing the field of Computer-Assisted Language Learning (CALL). The purpose of this extract within the broader text is to address the methodology and design considerations in research within the field of CALL, specifically focusing on the use of experimental designs and the prevalence of quasi-experimental designs.

The text employs several rhetorical moves to achieve its purposes:

Introduction and Context Setting: The extract begins by acknowledging... Assertion and Explanation: The text asserts the importance of key...

Argumentation: The text argues that due to the complexity of... Recommendations: Towards the end, the extract provides...

Call to Action: The extract concludes by emphasizing the importance of...

(14)

## Revising/editing a text from a genre-informed perspective

- **Prompt** = Rewrite this academic text for a non-expert audience blog post [as Example 13]
- Output = In the world of computer-assisted language learning (CALL), researchers are constantly seeking better ways to understand how technology can enhance language learning. They use different methods to test their ideas, much like scientists in other fields. But there's a catch: sometimes, the way these studies are set up might not give us the full picture...

# 7.2.7. Overview of LLMs in Relation to Writing Pedagogies

On the basis of the review above, it seems obvious that LLMs will necessitate a sea change in writing pedagogy. Many of the mechanics of writing, such as constructing well-formed sentences, paragraphs, or texts, or conforming to the norms of a particular genre, purpose, or register, can be managed by providing simple prompts to the LLM. The prompt can be used to generate texts with such features, but it can also serve editing (e.g. linguistic error correction), restructuring (e.g. improving coherence), or transformation purposes (e.g. translation or changing tone or register). However, it is important to note that although LLMs can generate texts with requested properties, it is ultimately the writer who will have to judge whether or not it contains factual inaccuracies, whether the output genuinely represents the message they wished to convey, and whether the form of the message is appropriate for a particular audience. Furthermore, LLMs can also support the writing process through various text analysis uses, such as ideation, exemplification, or feedback on specified features of text entered as part of a prompt. LLMs have a huge amount to offer Lx writers, teachers, and learners.

# 7.3. Critical Issues in the Use of LLMs for Lx Academic Writing

As outlined above, the integration of LLMs into the teaching and learning of academic writing in other languages has great pedagogical potential, so much so that it is likely to result in a paradigm shift. However, this paradigm shift brings with it several critical issues that demand careful consideration. This section delves into six interrelated issues surrounding the use of LLMs for Lx academic writing.

# 7.3.1. Limited Support for, and Increasing Marginalisation of, Minority Languages

There are an estimated 7,000 languages in the world (Leben, 2018), but they vary greatly in terms of their number of speakers, status (both social and existential), and resourcing. In the current landscape of LLMs, the gap between the most populous, well-resourced languages and minority languages, and even just relatively minor languages, is vast. Generating an LLM that can successfully model a specific language requires access to a vast quantity of digital written text and a fairly significant investment of finances and expertise to actually develop and train the model. Hence, it seems very unlikely that LLMs will be developed for the vast majority of languages unless these inequalities are addressed (for discussion see Bender *et al.*, 2021; Mahowald *et al.*, 2023).

At present, most minority languages simply do not have the quantities of digitised written text available for developing an LLM, and even relatively large, national languages with millions of speakers, such as Khmer or Kinyarwanda, do not appear to have LLMs which can process them effectively. Neither language is supported in DeepL, and when translations are requested in ChatGPT-3.5, the prompt for a translation into Kinyarwanda is declined ("Sorry, but I can't assist with that translation"), and the requested translation into Khmer fails a simple reverse translation test (i.e. entering an initial prompt to translate to the target language, copying the translation, and then prompting to translate back again). This is not the case with well-supported languages, such as Chinese, where the outputs provide excellent translations in each case (see Example 1, for instance). As we are unable to read Khmer, we cannot assess the initial translation generated (from English into Khmer),

<sup>3</sup> Please note, if you wish to test this yourself, it is essential that you open an independent session (a new "chat") to test the reverse translation, or else the original-language prompt will be used to produce an output for the second, translated-version prompt. That is, if a single session/the same chat is used, the LLM will use the original-language prompt to construct its output, rather than actually trying to translate the new translated-version prompt from scratch, and so may falsely indicate that the LLM is able to generate an appropriate reverse translation from the target language alone.

but on the basis of the reverse translation (from Khmer back to English), we would suggest it is likely to contain very significant inaccuracies that amount to a substantially different proposition about the topic at hand.

As discussed, LLMs will affect academic writing in Lx differently depending on the writer's existing linguistic resource and the current state of support for relevant languages in the LLM used. For users with proficiency in a well-supported language targeting outputs in another well-supported language, machine translation will be an increasingly viable option, although this does not guarantee that they will be able to evaluate the translation output appropriately if their proficiency in the target language is too low. For writers without proficiency in a well-supported language, LLMs are still usable, but through the target language itself, and hence use will be mediated to a far greater extent by their proficiency in the target language, as it will determine the quality of the prompts that they are able to construct as well as their ability to interpret the outputs generated. And, of course, LLMs appear to have little to offer to writers aiming to produce academic texts in languages that are not well-supported, regardless of the proficiency the writer brings to the prompt construction.

As a consequence, differences in level of support for different languages have profound practical and ethical implications for Lx academic writing, as LLMs offer radically diverse opportunities to writers depending on their language backgrounds. While it seems likely that the development of LLM support for more languages will be a priority for many powerful language groups, inequalities are likely to remain, especially for those with fewer financial, written, and digital resources, and those with fewer speakers. Even when progress is made in expanding the range of languages supported by LLMs, it still seems likely that existing support will continue to improve for those already established, and many languages are unlikely to ever receive significant support. Smaller and less wealthy language communities are likely to not only remain marginalised in this technological landscape but to become increasingly marginalised as the LLM productivity gains for larger, more affluent language groups further enhance their advantage.

## 7.3.2. Content Issues

Aside from translation availability and accuracy issues, the propositional reliability and accuracy of text generated by LLMs are central concerns when considering their application to any high stakes writing, such as Lx academic writing. Often referred to as AI hallucinations, factual errors in LLM-generated texts are common (see discussion around Example 9 above for an illustration), and recognising these errors can be particularly difficult because they are

presented in fluent, seemingly coherent, stylistically appropriate prose. Issues of reliability and accuracy become particularly critical when LLMs are employed for ideation or "research", and when writers are not experts on the content of the texts they are generating. There are two underlying reasons for content issues in LLM-generated text.

First, outputs from LLMs are extrapolated from the data that the LLM has been exposed to during training. The texts produced by an LLM are not based on a model of the propositional content of the training data, but a model of linguistic regularities in the data. Consequently, the output generated in response to a prompt is a probabilistic assessment of what linguistic features would occur in response to the prompt if it had occurred in the training data. That is, outputs are determined by the relationship between prompt and training data, without any reference to knowledge of the world independent from the latter. Many facts about the reality will be well-represented by this model, because much language use has a consistent relationship to the world. But not all language use is factual, and even if the training data only comprised well-attested factual information, generalisations about linguistic relationships would not always correspond to facts about the world, because there are facts about the world which are weakly represented in linguistic data or otherwise contravene the linguistic generalisations modelled. This is illustrated quite neatly in the discussion of Example 9 above, but to offer a second, less formal example, consider the following:

(15)

- Prompt = Why did James Brown call Fred Wesley "Friendly Fred"?
- Output = James Brown affectionately referred to Fred Wesley as "Friendly Fred" due to Wesley's amiable and friendly personality. Fred Wesley is a talented trombonist and music arranger who collaborated extensively with James Brown. The nickname likely reflects the positive and agreeable nature of Fred Wesley, and it was likely a term of endearment used by James Brown to highlight the friendly and cooperative working relationship they had.

Now, this is extremely impressive, as much of this information is true and accurate, and ChatGPT also hedges its claims appropriately, but the answer to the question is also suspect if you happen to know the lyrics to the 1973 classic, "More Peas", by Fred Wesley and the J.B.s, with lead vocals by James Brown:

Think of somethin' friendly-ol' Friendly Fred Like a-Friendly Fred is like a cheese box (How is that?) Square \*laughs\*

With knowledge of these specific lyrics, and paying particular attention to the social and political context in which they were uttered and the relationship between the two men and their personalities, we can feel fairly sure that James Brown was calling Fred Wesly "Friendly Fred" to tease him for being "square", likely intending to imply that Fred was a proverbial Uncle Tom, as compared with James himself, who for many years went by the moniker of "Soul Brother No. 1". The point here is that ChatGPT's output seems remarkably accurate in many respects, but ultimately fails to provide a credible answer. There is a slim possibility that if these specific lyrics were included in the training data, a more accurate answer could be proffered (and for all we know, they were). However, in the end, the LLMs' outputs are determined by regularities of linguistic co-occurrence in the training data without reference to an external world or specific information about any people, places, or things. There will always be facts about the world that the linguistic model abstracted from the training data does not align with, simply because reality is more extensive than our linguistic representations of it. LLM interfaces are making great effort to improve the resilience of outputs (Ji et al., 2023), and in preparing this paper, we were surprised to see that many attempts to prompt ChatGPT-3.5 to hallucinate were essentially rebuffed:

(16)

- Prompt = What did Herbert von Plumpbosson invent?
- Output = I'm sorry, but there is no historical information or records about an inventor named Herbert von Plumpbosson. It's possible that this name is fictional or not widely recognized.

However, the essential problem remains: LLMs are models of language, not of facts about the world, and they can only generate facts about the world to the extent that language data happens to model linguistic regularities that correspond to reality. The better attested in the data, the more linguistically regular, and the less contextually dependent a language–fact relationship is, the more likely it is an LLM can generate text that is factually accurate. The less well-attested, less linguistically regular, and more contextually dependent a language–fact relationship is, the more likely it is an LLM will hallucinate.

# 7.3.3. Linguistic Form, Meaning, and Intentionality

Although implicit in the discussion above, the content issue can also be viewed in terms of the relationship between linguistic form, meaning, and intention. LLMs demonstrate a mastery of lexicogrammatical forms, style, and text conventions, providing a robust foundation for generating convincing

texts. The whole point of a generative LLM is to produce such well-formed texts. However, if we allow ourselves to anthropomorphise for a moment, we could say that an LLM is essentially indifferent as to the meaning of its outputs. As long as the form of the text is adequate (i.e. as determined by predictive accuracy in training), it does not matter to the LLM what the text means. In reality, of course, LLMs being sophisticated statistical models of interrelations between data iteratively trained to generate outputs that are also defined in terms of linguistic forms, it is simpler just to say that they lack intentionality. That is, they do not mean, they simply produce textual outputs in response to analysis of a prompt, although this might not be immediately obvious to new users, because we cannot help but imbue well-formed text with meaning (Dale, 2021; Videla, 2023). While outputs generated by an LLM will have a meaning (or a range of possible interpretations), the LLMs do not *mean* them, they lack intentionality, calling into question their status as *bona fide* text.

The lack of intentionality in LLM outputs makes user judgement indispensable in the context of Lx academic writing. The LLM users' assessment of what the LLMs output means is what makes the output meaningful as an act of writing. There is only a certain degree of probability that any generated text aligns with a writer's intended meaning, and as with the discussion of content above, these probabilities are sensitive to how well-represented the writer's intention is in relation to the abstractions made by the LLM from the training data and how successful the prompt given to the LLM is in terms of triggering an output that aligns with the writer's intention. When an LLM produces a text output which the user has not critically engaged with, it cannot be viewed as having been written by them in any consequential sense. We might want to make a slight exception for the case of translation because of the intentionality in writing the untranslated text, but parallels still exist. If the output is not critically engaged with, the LLM user cannot be viewed as having consequentially contributed to the translation produced. In both cases, it is the act of critical judgement as to whether the output's meaning corresponds with the user's intention that aligns the user's activity with the concepts of writing or translating, respectively. From this perspective, the LLM output only becomes a text when, or if, it is authenticated by the user, if the user critically engages with the output and thereby imbues it with their intentionality.

In sum, while the training of the LLM ensures that the form of the text generated meets a statistically predicated standard, whether the meaning of the form corresponds to an intended meaning lies in the user's judgement. Users must bridge the gap between the linguistic forms generated by LLMs and their intended meaning. This reliance on user assessment highlights the collaborative nature of Lx academic writing with LLMs. It underscores the fact

that while LLMs can provide a sophisticated scaffold for linguistic expression, the ultimate responsibility for interpreting and infusing meaning into the generated text lies with the human writer and their audience.

Lx writers using LLMs should approach the texts that they generate very critically, and readers, who will often be unaware of exactly what role an LLM may have played in generating a text, even more so. We should probably assume that many texts are going to be produced with the aid of LLMs, but without the robust, critical engagement needed to ensure that cogent arguments grounded on factually accurate information are being presented. An LLM can assist in formulating grammatically correct and reasonably coherent texts, but it is initially the writer, and then ultimately the reader, who will have to discern meaning, or meaninglessness, within the text.

# 7.3.4. Redefinition of the Knowledge Lx Writers Need to Bring to the Writing Task

The integration of LLMs into Lx academic writing will necessitate a redefinition of the knowledge types that writers need to bring to the writing task. Many of the mechanics underlying different stages of planning, drafting, and editing can be supported by LLMs in a variety of different ways, and so there will be corresponding changes in the resources that the writer will need to bring to the process. We might consider here the parallels with learning to write Chinese in a computer-mediated environment. Modern interfaces allow Romanised pinyin script to be entered (e.g. "mai"), and the writer can then select the character they intended ( $\mathcal{F}$  = "buy",  $\mathcal{F}$  = "sell",  $\mathcal{F}$  = "wheat",  $\mathcal{F}$  = "bury",  $\mathcal{F}$  = "step forward",  $\mathcal{F}$  = "vein",  $\mathcal{F}$  = "smog"). The writer does not need to know how to write each character in full, only to be able to recognise which character corresponds to their intended meaning, subtly changing the type of knowledge and skills needed to write in Chinese in an electronically-mediated environment. In much the same way, but to a far greater extent, an LLM user can prompt the generative LLM to produce a text, but they will need to decide whether the output represents their intended meaning or not.

The details of the knowledge base needed to write effectively with an LLM will vary depending on how the writer intends to use the LLM, their linguistic resources within the languages supported by the LLM, and the extent of their knowledge regarding the content matter. But in broad terms, LLMs radically change the balance of receptive and productive skills needed to produce effective writing. Receptive knowledge of the target language is an indispensable component of meaningful use but, providing the writer is in a position to evaluate outputs, much of the productive knowledge underlying traditional composition can be delegated to the LLM. However, with that being

said, a new, indirect productive skill is also needed to effectively facilitate this selection process: that is, the ability to engineer prompts that generate texts that are more likely to match intended meanings. And when we consider the skills needed to generate texts with relevance to a particular context, audience, and purpose of writing, many traditional aspects of creative-, process-, and genre-based writing pedagogies remain just as important as ever.

The redefinition of knowledge types needed for LLM writing invites the metaphor of the conductor of an orchestra. Prior to LLM-based writing, an academic writer would aspire to master the intricacies of writing a particular text type, much like a musician might aspire to become a virtuoso performer on a given instrument. But the technical brilliance with which the LLM can perform invites the writer to take on a different role, closer in nature perhaps to that of a conductor. The metaphor of conductor underscores the collaborative nature of academic writing with LLMs, with the writer orchestrating the harmony between their intentionality and the LLMs' text generation capabilities. The prompts provided by the writer serve as the conductor's baton, guiding the LLM towards generating content that not only meets linguistic standards but also aligns with the expectations of the audience. In the end, it is the writer-conductor who takes responsibility for the piece, whether or not they can actually play any of the metaphorical instruments themselves.

## 7.3.5. Academic Assessment Issues

Changes in the writers' roles and responsibilities have some major implications for assessing both the development of academic writing skills and for the assessment of academic writing itself.

In terms of addressing the development of academic writing skills, the availability of LLMs invites reconsideration of the relative value of several different aspects of the writing process. A distinction between product-focused and process-focused assessment is relevant here. In product-focused assessment of academic writing skills, grades are awarded primarily on the basis of the quality of the text produced by the learner. This seems obviously problematic in relation to LLMs, as the linguistic qualities of the product can be handled quite effectively by the LLM with minimal input from the writer. For instance, there seems little point in rewarding Lx writers for producing grammatically well-formed sentences when these are automatically generated by LLMs, which are also reasonably proficient in handling coherence, cohesion, text structure, and register. The aspects of product assessment that still seem pertinent in an LLM-adapted pedagogy would seem to be those related to the meaning of the text, such as the readers' response to the text, the quality of the argument presented, the informativeness of the text, and so forth. In other

words, assessing the development of academic writing skills from a product perspective seems inseparable from evaluating the academic quality of the text produced.

In contrast, process-focused approaches to assessing academic writing skills would seem more able to accommodate LLM use in Lx academic writing. While every stage of the writing process can be influenced by the use of LLMs, there does not seem to be any reason not to develop assessments examining how LLMs are being used to support, as opposed to circumvent or avoid, desirable stages in the writing process. In fact, it is our view that such assessments are not only desirable but will increasingly become necessary. For Lx writers in particular, LLMs are an invaluable resource, and, as a consequence, learning how to use them effectively should be a pedagogical priority.

From the perspective of assessing the quality of academic works themselves, there does not seem any obvious reason to be concerned about the use of LLMs, although their availability does perhaps put more onus on assessors and reviewers to critically engage with the logic and content of the work submitted. For extremely mundane topics, LLMs probably can produce texts of reasonable informative value and accuracy without critical engagement, but it is not entirely clear why such texts would be assessed from an academic perspective. For any academic writing task that legitimately requires logic and the marshalling of credible evidence, the possibility of an LLM generating an appropriate output without consequential human guidance seems remote, and hence there would not appear to be any particularly serious challenges to assessing the academic quality of a text produced with the aid of an LLM, nor of attributing authorship of a quality text to the LLM user. LLMs cannot think for us, and meaningful use of an LLM does not so much replace human intelligence but require it. LLMs are a new resource for the writers' intelligence and expertise to engage with.

#### 7.3.6. Ethics

The infusion of LLMs into Lx academic writing raises myriad ethical considerations. From the potential biases embedded in training data to the responsible use of LLMs to generate academic content, ethical dimensions permeate every aspect of LLM use. Biases present in training data may be inadvertently reinforced by LLMs, raising concerns about perpetuating inequalities and misrepresentations in academic discourse (Bender *et al.*, 2021). Furthermore, intellectual property concerns have also been raised (Lund *et al.*, 2023), although the relationship between the intellectual property of the training data and the outputs of an LLM is far from straightforward and would seem most relevant to the development of LLMs rather than their use

in academic writing. Writers and educators must also grapple with the ethical implications of how LLMs change the writer's role in the production of a text and its implications for what credit can reasonably be attributed to the human author. This challenge will have to be addressed not only by writers using LLMs, but also those involved in assessing the integrity and value of academic outputs, whether the use of LLMs has been made explicit or not. And, importantly, as LLMs become increasingly integrated within all of our digital engagement with text, it will become increasingly difficult to avoid using them in text production or to accurately demarcate the contribution that they have made.

## 7.3.7. Summary of Key Issues

In conclusion, the critical issues surrounding the use of LLMs for Lx academic writing highlight the need for a balanced, informed, and ethically sound approach. As a field, we need to navigate the different opportunities that LLMs will offer to different users, the dangers of widespread production of counterfactual LLM outputs, the complex interplay between form, meaning, and intentionality that LLM use presents, the necessary redefinition of how various knowledge types are seen as relating to the writing process, the need to adjust our assessment of the intricacies of the writing process, and the wide range of ethical considerations that LLM use engenders. The fundamental issue is how to harness the potential of LLMs for Lx writers while safeguarding the integrity and value of academic writing.

## 7.4. LLMs in Practice

As Section 7.2 illustrated, LLMs have tremendous power and potential to inform Lx writing pedagogies, whether through text generation, text analysis, or the combination of the two, but as Section 7.3 highlighted, there are many potential pitfalls accompanying LLM use as well. In this section, we reflect on how teachers can address LLM use in their pedagogical practice and outline seven main tasks for writing teachers to engage in:

# (1) Talking openly about the use of LLMs

It is our belief that LLMs are now an indispensable tool for writers, and for Lx writers in particular. Consequently, we also believe that classroom discourse needs to acknowledge and engage with the use of LLMs. Even if LLM use is not discussed, it seems highly likely that LLMs will still be used, but learners may be unaware of their limitations and poorly equipped to exploit their full potential. Classroom discussion, whether *ad hoc* or designed as

a deliberate activity, has the potential to militate against the potential dangers of LLMs and foster their effective and ethical use. Some initial questions for discussion could include:

- Have you ever used a large language model (such as ChatGPT, DeepL, Grammarly, or Microsoft Word's Grammar Checker) to help with your writing?
- If yes, what was your experience like?
- If no, why not?
- What do you think are the main advantages of using LLMs in academic writing?
- What are some potential drawbacks or challenges associated with using LLMs for writing assistance?
- (2) Explicitly incorporating the use of LLMs within instructions and rubrics

Apart from an open discussion of LLMs in classroom discourse, it is important that task instructions and marking rubrics also explicitly address the use of LLMs. Both instructions and rubrics should specify what constitutes legitimate and illegitimate use of LLMs in their context, and how learners should document their use of LLMs, including word processing software that may have LLMs embedded within them. This should further promote discussion about LLMs and their use and help to increase transparency around how learners are using them. It also provides a point of reference for discussion should you suspect an LLM has been used inappropriately in completion of a task or assessment.

# (3) Explaining and exploring how LLMs work

Effective use of LLMs will inevitably be mediated by the users' understanding of how they work. At the most basic level, it is essential that users understand that LLMs are not a general intelligence model, and so cannot be expected to perform any aspects of the writing process requiring skills such as problem solving, judgement, or reasoning. At a more advanced level, the more the user understands about how LLMs derive outputs from inputs, the more they can finesse their inputs to tailor the LLMs' outputs. How much is worth explaining will likely reflect the learners' ages, interests, and computer literacy. But not everything has to be explained in a technical or abstract manner, and guiding learners through different LLM interactions might be just as effective as technical explanation. For instance, with

reference to Giray's (2023) recommendations for writing prompts discussed in Section 7.1 (prompts should provide: 1) instruction; 2) context; 3) input data; 4) output data), learners could be presented with an initial writing task and asked to use an LLM to generate a short text in response. Their initial attempts at prompting are likely to focus on the 'instruction' aspect, but they could then be guided to iteratively address the other three facets (context, input data, and output data) and to reflect upon differences in the results obtained and the implications of these differences for effective LLM use. At the most extreme end of the spectrum, highly motivated learners might like to learn about and consider how they could use Low-Rank Adaptation (LoRA) models (localised adaptions which overlay large models) to further refine and enhance outputs.

## (4) Scaffolding learner use of LLMs

It also seems sensible to provide structured, supervised practice in using LLMs for different pedagogical purposes, as illustrated in Section 7.2 above. The details of such exercises will differ depending on the learners' intended uses and teachers' pedagogical perspectives, but they should be designed to raise awareness not only of the potential for LLMs to assist with a specific writing task, but also the options available for how to approach the task and the potential pitfalls to guard against.

For instance, if learners and teachers are interested in exploring the use of LLMs for translation, an exercise might guide learners to explore deciding how much text to translate at a time (words, phrases, sentences, paragraphs, sections, whole texts), how to guide and monitor the LLM's approach to translation (e.g. asking it to highlight potential issues or to offer a range of translation choices), and how to assess the translation quality (e.g. back translation techniques, comparing multiple LLM translations, comparison with non-LLM translations). Again, much as with the preceding point, the quality of learner LLM use will vary depending on their level of skill with using such resources, and so structured exercises to explore techniques and develop skills are highly desirable in the modern writing classroom.

# (5) Encouraging experimentation with and reflection on the use of LLMs $\,$

Implicit in the points above is the value of experimentation with inputs to LLMs and reflection on the quality of the outputs. Journalling, classroom discussion, peer review, or consultations are all potentially effective means of cultivating a reflective attitude to the use of LLMs amongst learners.

## (6) Exemplifying the use of LLMs

Other potentially effective means of teaching learners how to use LLMs skilfully involve modelling. Providing annotated models of effective prompts or outputs could be informative, and teachers might also consider modelling their own use of LLMs with their learners.

## (7) Providing feedback and feedforward on learner use of LLMs

And finally, where possible, teachers should provide constructive feedback and feedforward on learner use of LLMs. We acknowledge that this is very often difficult to do when it is unclear whether, or to what extent, an LLM has been used in producing a text or assessment task. However, the more dialogue teachers can create about the use of LLMs in academic writing, the more likely it is that they will be aware of how and when LLMs have been used; and the more opportunities there are for learners to use LLMs in classroom activities under teacher supervision, the more opportunities there will be to provide feedforward on the types of LLM use that learners display.

# 7.5. Conclusion: The Future of Lx Academic Writing in the Age of LLMs

We have argued in this chapter that the availability of LLMs will radically change the Lx academic writing landscape. As practitioners and researchers, it is essential that we endeavour to address the following areas through both systematic research and critical reflection on practice.

First, we need to develop a clearer, and preferably robust and evidence-based, understanding of what LLMs can do, but also what they cannot do. This is a considerable challenge given how new the technology is, the wide range of innovative ways in which it can be exploited to support Lx writing, and the high likelihood that there will be continuous and rapid advances in the development of new and better LLMs. As practitioners, it would be advisable for all teachers of writing to gain hands-on experience of using LLMs to support many different stages of their own writing process, and to encourage an open and collaborative approach to the use of LLMs with their students. We have little hope of ensuring that LLMs are used ethically and responsibly if we do not fully engage with them, and it seems inevitable that people learning to write in an Lx will be engaging with this technology either directly or indirectly, when it is further embedded within the software and applications that they already use. As researchers, we need more systematic studies of LLM use in relation

to the writing process, although much work in the area is already underway (see for instance, Fyfe, 2023; Pereira *et al.*, 2023).

Second, in tandem with developing our understanding of the opportunities that LLMs offer to writers, we need to actively develop models of productive LLM use so that we can promote effective and ethical practices, as well as potentially guard against and more easily identify malign or misguided approaches to their use. Teachers need to think about how they can incorporate education about LLMs within existing writing courses to provide both an understanding of this new technology and practical experience of using it. As a research community, we need intellectual space for such innovations to be shared and discussed within, and this could be particularly challenging for those of us working in contexts where the reaction to the release of LLMs has been negative and characterised by punitive action against their use. But such discussions are essential, both to equip Lx writers with models of best practice and to ensure that the many negative potential impacts of LLM use are identified and addressed. From our current vantage point, it seems inevitable that LLMs will change the process in which a novice, knowledge-telling writer develops into a skilled, knowledge-transforming writer, and it is probably the process-focused pedagogical orientation that has most to offer Lx academic writing with LLMs.

Third, we need to acknowledge in particular that prompt engineering is currently an essential skill for effective use of LLMs and is likely to remain so, and therefore it is vital that sufficient attention is paid to this subject both in our pedagogical and research agendas.

Fourth, as academic communities, we need to recover and re-evaluate our largely unconscious dispositions towards form, meaning, and intentionality. For many of us involved in Lx academic writing over the years, the struggle to help emerging writers produce largely comprehensible text has been at the forefront of our efforts. Morrison (2023, p. 159) tells an anecdote, quoting a colleague as saying: "If my students produced insipid writing that was grammatically correct? I would be delighted. A+". But the ability to produce a fluent, professional-sounding, linguistically acceptable text is now just a few clicks away, as long as you are not too concerned with meaning. The question is, then, to what extent does this text represent the writer's understanding of the topic, and its seductive veneer of comprehensibility aside, what does it really have to tell us about the topic at hand? Fundamentally, this is both the opportunity and the challenge that LLMs represent: they can offer unparalleled support to Lx writers in expressing their thoughts on academic topics in a range of target languages, but it is also possible for them to misrepresent our intentions, or, in the worst cases, provide a false impression of intentionality where actually there was little, or even none.

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**Abstract**: This paper discusses the implications of large language model artificial intelligence for teaching, learning, testing, and producing Lx academic writing. The paper first provides a brief, non-technical description of artificial intelligence, machine learning, deep learning neural networks, and large language models (LLMs), drawing out the applications of the latter most relevant to the field of Lx academic writing. It then discusses and exemplifies the relevance of LLMs to influential models of academic writing, as outlined by Hyland (2019): structural, functional, creative expression, process, content, and genre-focused writing pedagogies. The next section discusses six major issues raised by the emergence of LLMs: differences in language support, the prevalence of LLM hallucinations, lack of intentionality, redefinition of the knowledge Lx writers need to bring to the writing task, assessment issues, and ethical issues. The paper concludes with recommendations as to how this technology can be incorporated within a consistent and defensible pedagogy, the research agenda needed to support such a pedagogy, and the need for a revaluation of the underpinnings of academic writing that the emergence of this technology necessitates.

**Keywords**: computer-assisted writing, computer-assisted language learning, academic writing, artificial intelligence, large language models

# 8. Influence of Gamification Activities and Tools on the Learning of Technical Terms and Academic Writing among Taiwanese Undergraduate and Graduate Students

## 8.1. Introduction

Undergraduate and graduate students in TESOL (Teaching English to Speakers of Other Languages) fields are required to engage with Swales's (2004) "genre set" (p. 211) through writing an academic paper, thesis, or dissertation for graduation (Zareva, 2013). Even after years of training, they are not familiar with technical vocabulary within the TESOL academic research field, such as research terms (e.g. data collection, literature review), the structure of an academic paper (e.g. introduction, method), or language issues (e.g. grammar, writing style) (Cheung, 2010; Okamura, 2006). They may struggle and face various challenges, for instance with gaining awareness of the issues connected with research and academic discourse (Sakamoto & Tamanyu, 2014). They lack confidence as emergent researchers and authors, doubtful about their proficiency in academic writing and in the knowledge of their respective disciplines (Zareva, 2015).

Gamification is a process of enhancing services with affordances for game-like experiences, using game-based mechanics, aesthetics, and game thinking to engage people, motivate action, promote learning, and solve problems (Hamari & Huotari, 2012). Gamification applications have been widely integrated in education in order to get learners involved, engaged, and excited about dry subjects (Baldeón *et al.*, 2015). In order to equip non-native English speaker (NNES) learners with competence in technical terms and academic writing, the present study integrated gamification activities into two graduate school courses and one undergraduate course at a northwestern university in Taiwan.

The study explored the influence of gamification activities and tools on Taiwanese undergraduate and graduate students' learning of technical terms and academic writing, particularly in TESOL. It focused on two issues formulated as the following questions. First, what were NNES learners' perceptions of gamification in learning technical terms and academic writing? Secondly, how did gamification improve NNES learners' results in acquiring proficiency in technical terms and academic writing?

## 8.2. Literature Review

Gamification in education is highly valued and implemented due to its benefits. These include: (1) enhancing teamwork and collaboration, (2) boosting student engagement and participation, (3) elevating motivation levels, (4) improving the ability to store and retrieve information, (5) fostering discussion and the exchange of information, (6) offering viable means for evaluation.

First, gamification can promote teamwork and collaboration (Baldeón *et al.*, 2015; Blackburn & Stroud, 2015). For example, in one study, the Kahoot! platform was used among nine adults of various ages and proficiency levels in learning Turkish in the Republic of Cyprus (Antoniou *et al.*, 2016). The analysis of a questionnaire, observation, and focus group interview revealed that the game-based quiz provided an interactive and playful means for encouraging learners to work together using the technology available in the classroom to learn grammar.

Gamification can increase learners' engagement and participation in class (Chen et al., 2020). Each learner has a voice and makes contributions regardless of their level of shyness (Blackburn & Stroud, 2015; Zikirina, 2016). Budiati (2017) used Kahoot! to teach Present Simple tense to 40 freshmen majoring in Nursing. The analysis of the questionnaire showed that learners became more interested in class and paid more attention to the introduced grammatical structure.

Gamification can increase learners' motivation, as argued by Zarzycka-Piskorz (2016), who used Kahoot! to review grammatical content among 112 undergraduates in Poland. The result of the questionnaire showed that participants regarded the online game as fun and effective in learning difficult grammar. A similar study was conducted by Yapıcı and Karakoyun (2017). The integration of Kahoot! among fifteen sophomore pre-service Biology teachers in a teacher education programme in Turkey motivated the subjects to study their discipline more diligently.

Gamification can facilitate learners to store and recall information (Aslan & Seker, 2017; Zainuddin *et al.*, 2020). In Aslan and Seker's (2017) study, the Socrative software was employed among 53 junior pre-service

teachers in Turkey. The results of the questionnaire and interviews revealed that, compared to traditional instruction, Socrative offered active participation in feedback. More than 90% of the participants agreed that Socrative helped them comprehend, focus on, and practise the content.

Gamification can lead to deeper discussion and exchange of information (Blackburn & Stroud, 2015). Instructors in the study carried out by Awedh et al. (2015) first gave lectures on computer architecture to 38 sophomores in Saudi Arabia, and subsequently posted a five-question quiz on the related topics on Socrative. Later, the group held a discussion followed by collaborative learning involving the entire class. The result of the questionnaire revealed that Socrative increased learners' level of communication with their classmates and teachers through collaborative information exchange.

Lastly, gamification can be used for assessment (Borrell *et al.*, 2017; Sanchez *et al.*, 2020; Shiao, 2014; Zikirina, 2016). Kahoot! was used by Borrell *et al.* (2017) as a pre-lesson assessment tool among 666 freshmen and sophomores. The results of the quizzes revealed that learners improved their overall academic performance in their subjects thanks to quizzes on Kahoot!, as they motivated them to prepare for upcoming class. Moreover, the result of the questionnaire distributed by Vignier and Ferris (2014) revealed that participants of the study preferred Socrative as an assessment tool rather than traditional paper-and-pencil tests because of the instant feedback. Hence, Socrative is regarded as a good tool for formative assessments because it enables teachers to save grades and assess the information specific to individual learners (Fakhr & Khalil, 2016).

However, gamification has been criticised as having certain drawbacks. First, Featherstone (2016) criticised the extrinsic motivation forces that gamification creates, such as high scores, competition, and rewards. Second, gamification was described as beneficial only in rote learning scenarios (Featherstone, 2016). Moreover, Ismail and Mohammad (2017) identified the threat of meaningless and useless implementation of gamification activities.

Gamification tools have also been widely used for different courses in the tertiary education. Studies dealing with such application have been conducted worldwide, for example in Taiwan (ChanLin, 2017), Korea (Bae & Kim, 2014), and the United Kingdom (Blackburn & Stroud, 2015; Dakka, 2015). Bae and Kim's (2014) experimental study integrated clickers and smartphones into classroom instruction among undergraduates in Korea. The analysis of the questionnaire and undergraduates' feedback on clickers revealed that the devices fostered effective communication between the instructor and the learners.

Hadiri's (2015) study focused on an online learning module for twelve faculty members from the University of Hawaii in Manoa instructing them

on the use of Socrative. Based on the results of the questionnaire and the post-test, compared to older faculty members, younger faculty members scored higher and felt more comfortable in using Socrative for student assessment. Current empirical studies (e.g. Hadiri, 2015; Wu et al., 2017) dealing with undergraduate students' learning experience and performance through gamification activities mainly collected insights from quantitative data. In order to fill in the literature gap, this study also employed content and discourse analysis to analyse qualitative data obtained from online responses and audio clips.

## 8.3. Method

Both qualitative (responses to quizzes on gamification tools, audio clips) and quantitative data (pre-test, delayed post-test, questionnaire) were collected in this teacher-led case study. Case studies concentrate on a particular situation or phenomenon within a defined system (Merriam, 2009). The subjects were students attending one undergraduate and two graduate courses. The focus of analysis was the learning of technical terms and academic writing by Taiwanese EFL students.

# 8.3.1. Setting and Participants

This teacher-led case study encompassed one undergraduate and two graduate courses, all instructed by the same teacher and researcher during the 2018 academic year. A total of 51 students voluntarily participated in the study, including 38 undergraduates and 13 graduate students. They will be referred to here under pseudonyms.

The undergraduate course (henceforth: Class A) was a two-credit mandatory course for seniors aimed at providing a foundational understanding of research methods in English language teaching. This would acquaint students with purposes, designs, and methodologies of research. Among the 38 undergraduates, only four were male, and the remainder were female. Only 23.7% reported taking academic writing courses previously, and 50% had conducted research projects related to sociolinguistics.

The two other courses, Class B and Class C, were three-credit classes at the graduate level. Class B introduced newly enrolled graduate students to basic research methodology, ensuring they were conversant with its purposes, designs, and methodologies. Six graduate students, all female with an average age of 24, enrolled in Class B. Only Sally had completed prior research-related coursework. Two students, Sally and Helen, reported engaging in research projects during their undergraduate studies.

Class C was designed for second-year graduate students, providing a basic overview of research in computer-assisted language learning. Seven graduate students, all female with an average age of 26, registered for Class C. All except Diana had taken Class B.

In these courses, the instructor utilised various gamification tools to create weekly warm-up quizzes. Online tools such as Kahoot! and Plickers were selected, as they are available to use free of charge. The choice of these tools was informed by their advantages and disadvantages as indicated in analyses by several scholars (e.g. Decker, 2013; Marshall, 2016; Porcaro *et al.*, 2016), including aspects like quiz format, grading, feedback, grouping, and registration requirements.

Drawing from empirical studies (e.g. Backhouse et al., 2014; Bae & Kim, 2014), a conceptual framework was established (see Figure 8.1). Initially, both undergraduate and graduate students were considered learners in this study. Through lectures, journal articles on TESOL technical terms and academic writing, quiz designs utilising gamification tools, and post-discussion sessions led by the instructor, these students gained knowledge and understanding of technical terms and academic writing. This was facilitated by immediate feedback from the instructor, tools, as well as peers, transitioning their roles from mere learners to both learners and participants in gamification. Ultimately, they evolved into emerging researchers and members of the academic and professional TESOL community.

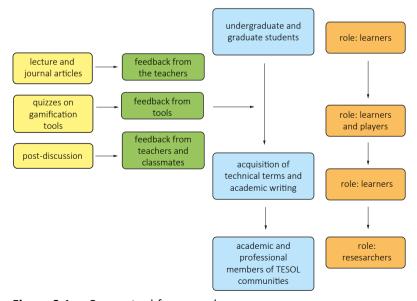


Figure 8.1. Conceptual framework

## 8.3.2. Data Collection

This study collected data from participants' responses to quizzes on the gamification tools, audio recordings, a pre-test, a delayed post-test, and a questionnaire. Initially, quizzes tailored to the content covered in previous lessons (e.g. literature review, structure of an academic paper) were constructed using various gamification platforms (e.g. Kahoot!, Plickers). At the start of each session, participants were invited to fill out the quiz individually on their private devices within a five-minute window.

Following the completion of the quizzes by all participants, the instructor revealed the answers and facilitated a class-wide discussion. With the instructor's support and guided questioning, the participants employed specific technical terms to construct sentences or to articulate aspects of their own research. These discussions were audio-recorded for subsequent discourse analysis.

A multiple-choice examination assessing the students' knowledge of technical terms and aspects of academic writing was developed to serve as both a pre-test and a delayed post-test. The initial five questions addressed the structure of an academic paper and APA formatting, while the subsequent fourteen questions delved into research methodology, covering topics such as research paradigms, observations, experimental studies, and interviews. To ensure content validity of the test, the researcher sought the insights of three experts in TESOL and academic writing. Additionally, a pilot test was conducted among graduate students and seniors not participating in the study.

The questionnaire was devised drawing upon recent empirical research (e.g. Aslan & Seker, 2017; Budiati, 2017; Cardoso, 2011; ChanLin, 2017; Ciaramella, 2017; Günaydin, 2015; Wang & Lieberoth, 2016; Wang, 2016; Wu et al., 2017; Yoon, 2017). It was reviewed by three experts to validate its content, followed by a trial run with five graduate students and seniors. The reliability of the questionnaire was assessed, yielding a Cronbach's alpha value of  $\alpha$  = .84.

The questionnaire consisted of three sections, totalling 35 questions. The first section, comprising five questions, gathered general information about the participants. The second section, containing twenty questions, explored participants' perceptions of the use of gamification tools for learning technical terms and academic writing. The final ten questions in the third section aimed to capture participants' views on the discussions following the use of gamification tools.

# 8.3.3. Data Analysis

The study involved both qualitative and quantitative data analysis. Scores from the pre- and post-tests, along with questionnaire responses, were tabulated

in spreadsheets. The quantitative data from these sources were analysed to ascertain means, standard deviations, and percentages, facilitating a comparison of participants' learning outcomes from the teaching of technical terms and academic writing through gamification tools and subsequent discussions. Inferential statistics, specifically correlation analysis, were applied to examine the link between participants' experience (such as previous coursework and research projects) and their attitudes towards gamification and learning, utilising IBM SPSS Statistics (Version 20).

Analysis of participants' feedback on gamification tools followed a structured approach. Initially, the researcher immersed herself in the data through repeated reviews of the responses. This was followed by the generation of initial codes from the data. Subsequently, the data were re-examined to identify emerging themes relevant to the research questions.

Discussions post-use of gamification tools were recorded with the participants' consent. These recordings were transcribed verbatim by the researcher, and the transcripts were analysed using both discourse and thematic analysis techniques. The study's codes and themes, once organised into a coherent framework pertinent to the research objectives, were verified through member checking.

## 8.4. Results

An analysis of participants' responses given on various gamification platforms, including audio clips, a pre-test, a delayed post-test, and a questionnaire, was conducted to explore issues related to their perceptions of these tools, their performance on quizzes, pre-, and post-tests, and their views on post-discussion activities.

## 8.4.1. Participants' Perception of Gamification Tools

Table 8.1 showcases the positive impact of gamification tools on participants' journey towards becoming professional TESOL members. These tools were particularly valued for "exchanging information with classmates" (mean = 6.33) and "gaining knowledge in technical terms" (mean = 5.90).

Additionally, Table 8.1 indicates that prior coursework positively influenced participants' attitudes towards gamification tools in their professional TESOL development, especially in "filling the gaps in knowledge" (correlation = 0.34) and "exchanging information with classmates" (correlation = 0.22). Engagement in relevant research projects was found to have a modest impact on their attitudes, notably in "discussion with the instructor" (correlation = 0.11) and "gaining knowledge in academic writing" (correlation = 0.11).

**Table 8.1.** Influence of Gamification Tools on Becoming Professional TESOL Members

Statements	mean	SD	related courses	related projects
#2 gaining knowledge in technical terms	5.90	0.83	0.18	-0.08
#5 discussion with the instructor	5.84	1.00	0.10	0.11
#6 information exchange with classmates	6.33	0.79	0.22	0.10
#12 filling the gaps in knowledge	5.73	1.04	0.34	0.10
#19 gaining knowledge in academic writing	5.84	1.02	0.18	0.11

Table 8.2 demonstrates participants' favourable views on the features of gamification tools, with "providing feedback" (mean = 6.18) and "providing corrections" (mean = 5.96) being highly appreciated. Opinions on Wi-Fi services varied significantly, reflected by a lower mean score of 4.82 and a higher standard deviation (SD = 1.68).

Table 8.2. Attitude toward Features of Gamification Tools

Statements	Mean	SD
#3 providing corrections	5.96	0.87
#9 easy to use	5.69	1.09
#10 feeling comfortable in using	5.71	1.08
#11 low Wi-Fi service	4.82	1.68
#14 element of competition	5.63	1.09
#17 providing feedback	6.18	0.99

## 8.4.2. Participants' Performance on Quizzes

Table 8.3 reveals that participants from Class A showed the highest level of accuracy on Test 7 (82%), followed by Test 1 on research topics (76.42%) and Test 2 on academic paper structure (75%). The least accuracy was observed in Test 5 on topic sentences, with a mere 38.95% correctness.

No question across all the tests was answered with 100% accuracy. The highest accuracy was noted for Question 2 of Test 2 ("Which one is true about the title?") at 90.63%, and for Question 1 of Test 7 at 88%. The correct response

7

88%

for Test 2, Question 2, highlighted that "Key words are revealed in the title". Meanwhile, one participant incorrectly chose "the title is full of jargon", and two opted for "the abbreviations of terms are included".

Tests	Q1	Q2	Q3	Q4	Q5	Total
1	83.33%	83.33%	61.76%			76.42%
2	53.13%	90.63%	81.25%			75%
3	78.95%	42.86%				59.21%
4	50%	57.89%	52.63%			53.51%
5	14.29%	47.47%	47.37%	65.79%	23.68%	38.95%
6	52.63%	47.47%	55.26%			58%

82%

Table 8.3. Class A Participants' Performance in Quizzes

76%

A low percentage of participants (14.29%) correctly answered Question 1 of Test 5, which asked: "Where can you see this sentence? 'Considering all of the above, this study will employ multiple sensitive tests of word knowledge to determine the vocabulary acquisition benefits which a learner of French derives from a period of extensive reading. In particular, the study addresses the following questions...". The correct answer was "Introduction".

Table 8.4 illustrates that over half of the participants in Class B correctly answered five quizzes. They achieved 100% correctness in answering Question 3 (case study) of Test 1 and Question 3 (APA format) of Test 4.

		<del>-</del>			
Tests	Q1	Q2	Q3	Q4	Total
1	40%	20%	100%	60%	56.67%
2	50%	16.67%	83.33		50%
3	50%	50%	50%		50%
4	16.67%	33.33%	100%		50%
5	66.67%	83.33%	83.33%	16.67%	66.67%

**Table 8.4.** Class B Participants' Performance in Quizzes

Class B participants encountered difficulties with specific questions in Tests 2 and 5, highlighting a need for clearer question formulation and enhanced understanding of complex concepts. On Question 2 of Test 2,

concerning triangulation, only Helen identified the incorrect statement as "multiple funders". This misinterpretation suggests a lack of clarity in the question's wording, as most participants failed to recognise the "not true" aspect, selecting options like "multiple theoretical perspectives" and "multiple investigators" instead.

Question 4 of Test 5 was "How should the survey be laid out?", where the accurate response was "The heading of the first page of the survey should contain your logo, your company name, and survey name". Only Irene approached this answer correctly, indicating a gap in participants' understanding of survey presentation standards or a lack of clarity in the question. These insights, alongside participant responses, were shared in Online Post #1:

## Online Post #1: Answers for Question 4 of Test 5

- Random or specific groups (Mandy 0504)
- By questionnaires (Helen 0504)
- Questionnaire (Jenny 0504)
- Questionnaire (Sally 0504)
- Type cover letter and the questions (Irene 0504)
- Investigate by questionnaires and Reflection (Viola 0504)

In contrast, Class C demonstrated a stronger grasp on the quiz content, with over 60% correctly completing four specific quizzes (see Table 8.5). Their perfect scores in questions related to error analysis (Question 4 of Test 1), cognitive academic language proficiency (Question 2 of Test 2), ethnography (Question 4 of Test 3), and research methodology (Question 2 of Test 4)

underscore their effective engagement with the material. Table 8.5. Class C Participants' Performance in Quizzes

Tests	Q1	Q2	Q3	Q4	Total
1	66.67%	44.4%	44.4%	100%	63.89%
2	50%	100%	63.64%		71.43%
3	28.57%	57.14%	57.14%	100%	61%
4	33.33%	100%	58.33%		63.88%

However, a notable challenge for Class C was Question 1 of Test 3, which tested their ability to identify the outlier among future research directions. The correct answer, "Plato system", was only selected by 28.57% of participants, revealing a common misconception that "mobile language learning" was less

relevant (the others being "web 2.0" and "virtual world"). This mistake points to a need for further discussion and clarification on emerging research areas and the distinctive role of the "Plato system" in future investigations.

## 8.4.3. Participants' Performance on Pre- and Post-Tests

Table 8.6 reveals that participants from the three classes exhibited notable enhancements in their post-test scores (mean = 64.46) compared to the pre-test scores (mean = 49.46). The highest pre-test performance was observed in Class C, with an average score of 60.71. This class, consisting of second-year graduate students, had previously engaged in courses related to research methodology. Class A had the lowest average score (41.84) among the groups, attributed to its members being senior undergraduate students without prior exposure to research-focused courses. On the post-test, Class B outshone its counterparts with an average score of 69.17, reflecting the most substantial improvement from pre- to post-test, an increase of 23.34 points.

	Pre-test  mean SD		Post	-test
			mean	SD
Class A	41.84	11.76	59.21	10.94
Class B	45.83	10.21	69.17	14.63
Class C	60.71	9.32	65	5
Overall	49.46	9.94	64.46	5.00

Table 8.6. Results of Pre- and Post-Tests

Table 8.7 indicates that in the pre-test, Class A predominantly answered Questions 1 and 16 correctly (N = 28, 73.7%). All Class B members correctly answered Question 2, whereas 100% of Class C participants accurately responded to Questions 1 and 7. Questions 1 (outline of the academic paper) and 2 (abstract) pertained to the structure of an academic paper, whereas Questions 7 (ethnography) and 16 (experimental study) involved research methodologies.

In the pre-test, all three classes performed poorest on Question 4, concerning APA formatting, with no correct answers from Classes B and C and only two correct responses from Class A. No Class B participants answered Question 18 correctly, just as no Class C participants correctly answered Question 14. Question 13 focused on sampling in survey research, and Question 18 dealt with variable types in experimental studies. In the post-tests, all participants

correctly answered Questions 1 and 2. Participants from Classes B and C also achieved 100% accuracy on Questions 7 and 8. Question 4 remained challenging for Classes A and B, with only six and two participants, respectively, answering correctly. Furthermore, no Class C participants provided the correct answer to Question 19, which involved an ethical dilemma related to confidentiality.

	pre-test		post	-test
	top correct rate	low correct rate	top correct rate	low correct rate
Class A	Q1, 16	Q4	Q1, 2	Q4
	(N=28, 73.7%)	(N=2, 5%)	(100%)	(N=6, 15.78%)
Class B	Q2	Q4, 18	Q1, 2, 7, 8, 11	Q4, 18
	(N=6, 100%)	(N=0, 0%)	(N=6, 100%)	(N=2, 33%)
Class C	Q1, 7	Q4, 13	Q1, 2, 3, 5, 7,	Q13, 19
	(N=7, 100%)	(N=0, 0%)	8 (N=7, 100%)	(N=0, 0%)

Table 8.7. Accuracy in the Pre- and Post-Tests

## 8.4.4. Participants' Perceptions of Post-Discussions

According to Table 8.8, participants found the post-discussion sessions highly beneficial for their professional development, especially for "clarifying misunderstanding of terms" (mean = 6.41), followed by "better comprehension of academic writing" (mean = 6.20).

Statements	Mean	SD	related courses	related projects
#1 awareness of technical terms	5.92	0.84	0.52	-0.09
#2 awareness of academic writing	6.10	0.83	0.29	0.03
#3 comprehension of technical terms	6.12	0.89	0.31	-0.22
#4 comprehension of academic writing	6.20	0.92	0.24	0.14
#5 using technical terms	5.94	0.95	0.32	-0.15
#9 clarifying misunderstanding of terms	6.41	0.67	0.25	0.06

Table 8.8. Attitude toward Post-Discussions as Professional Learning

Excerpt 1 captures a dialogue on an academic paper's structure between Helen, Irene, and Mandy from Class B. Irene queried why "Introduction" was deemed correct, while Mandy suggested "Conclusion", likening it to a summary.

Helen clarified the correct answer, drawing from knowledge acquired in previous lessons.

## **Excerpt 1: Discussion from Class B**

**Irene:** "Where can you see this sentence? 'Considering all the above, this study will employ multiple, sensitive tests of word knowledge to determine the vocabulary acquisition benefits which a learner of French...' Why is the correct answer "Introduction"?

**Helen:** This sentence seems to talk about an overview, what the study will be about?

**Mandy:** I thought the answer is "Conclusion." Because the first line is "Considering the above..." I thought it was about to make the conclusion. It was the summary.

**Helen:** In last week's class, we learnt that the introduction should include four elements, which are background, motivation, purpose, and solution. In the sentence above, we can see phrases such as "purpose of the study" and "this study will employ." So it is the Introduction.

**Mandy:** Yes. You are right. Thank you for your clear explanations.

**Irene:** Helen, thank you for clarifying my misunderstandings of Introduction and Conclusion sections.

Figure 8.2 showcases a poster created by the instructor summarising the misconceptions held by Class A participants, including topics such as sentences in literature reviews, discussions, and conclusions. Additionally, it highlights the new insights participants gained about research questions.

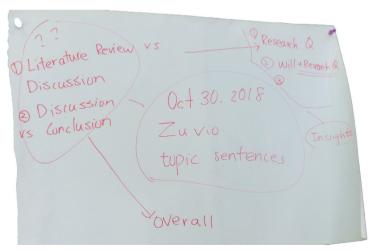


Figure 8.2. Poster on the Instructor's Leading Discussions

Excerpt 2 features a conversation between Chloe, Diana, and Emily from Class C concerning literature reviews and terminologies. Unfamiliar with the meaning of the term "precursor", Diana listened as Chloe looked up and shared the definition. Emily's inquiry about "further, fuller research" led to Chloe elucidating that a pilot study precedes the main investigation.

## Excerpt 2: Discussions in Class C

Emily: What is a "precursor for further, fuller research"?

Diana: Precursor? What does it mean?

**Chloe:** (*Googles the word "precursor.*") Something that happened or existed

before another thing.

Emily: Thank you, Chloe. How about "further, fuller research"? What

does it mean?

Chloe: What you will do later or in the future.

**Diane:** So a "pilot study" is something we do before our research.

Excerpt 3 features an exchange between Judy, June, and Rose from Class C centred around the nuances of academic writing. June expressed confusion over the term "explore" in an academic context, prompting a search for its definition on Google. Rose pointed out that terms such as "tell", "talk", and "is" are deemed too informal for academic discourse. June, after reviewing the definitions, alongside Rose's observation that "explore" was frequently encountered in academic texts, pointed out that "describe" and "discuss" were terms introduced in a preceding lesson. Excerpt 3 underscores the collaborative effort in deciphering academic language and its conventions, implying an interactive learning process within the group. This interaction not only helped clarify the usage of specific terms but also reinforced the importance of adopting a formal tone in academic writing.

# Excerpt 3: Discussions in Class A

**Judy:** Which verb will be more appropriate for you to describe a study for an academic paper? The four items were "tell", "talk", "is", and "explore". The correct answer is "explore".

**June:** I do not understand the true meaning of the word "explore" in the study. Let me google it first.

Rose: "Tell" and "talk" are the same and they are too colloquial. "Is" is too colloquial.

**June:** "Explore" means "to search for and make discoveries about something".

Rose: I can see "explore" a lot in academic papers.

**June:** Last week, the teacher introduced other verbs that can be used in an abstract for an academic paper. We can use "describe" or "discuss", too.

**Judy:** Yes. These verbs: "explore", "describe", and "discuss" are interchangeable.

The correlation between academic writing courses and participants' attitudes towards post-discussions as a form of professional learning was notably strong, particularly in terms of "awareness of technical terms" (correlation = 0.52), followed by "using these technical terms" (correlation = 0.32) and "comprehension of technical terms" (correlation = 0.31). However, the relationship between participants' involvement in related research projects and their perception of post-discussions as beneficial for professional learning was relatively weak.

Table 8.9 demonstrates a positive reception of post-discussions as a community practice, especially in regard to "having more discussions with classmates" (mean = 6.45) and "having interactions with classmates" (mean = 6.45), illustrating the value placed on collaborative learning and interaction within the academic community.

Statements	Mean	SD
#6 having more discussions with classmates	6.45	0.81
#7 having more discussions with the instructor	6.18	0.84
#8 having interactions with classmates	6.45	0.72
#10 scaffolding as a TESOL member	5.88	0.86

**Table 8.9.** Attitude towards Post-Discussions as a Community of Practice

#### 8.4.5. Concerns about Gamification Tools

Concerns have been raised regarding the implementation of gamification tools in educational settings, primarily focusing on two aspects. The first concern relates to the restrictive nature of time constraints imposed by these tools, which may hinder deep thinking about academic writing and the understanding of technical terms. Participants often felt compelled to respond hastily. Excerpt 4 captures Rosa from Class A voicing frustrations over the competitive elements and time limitations associated with using gamification tools for learning.

## Excerpt 4: Discussions from Class A

Rosa: You got the highest scores.

**Jacky**: It was not a big deal. Everyone knew the answer. It's a matter of immediately clicking on the answers.

**Rosa:** I was not good at answering the questions on my cell phone. With the time constraint, I just quickly read the question and clicked one answer

The second concern refers to the diverse features offered by different gamification platforms, which could influence the learning experience. Excerpt 5 depicts a conversation between Diana and Emily from Class C, discussing their preferences between Quizizz and Kahoot! based on the pacing and visibility of question options. Emily favoured Quizizz for the option of giving self-paced responses, whereas Diana appreciated Kahoot! for its comprehensive display of multiple choices.

#### Excerpt 5: Discussion from Class C

**Diana:** Quizizz is an online platform that we used today. Compared to Kahoot!, Quizizz did not show all the options for answers to the questions. It only showed the answers that we posted. If we all got the answers right, we could not see the alternatives. Maybe Kahoot! was a better tool for us to discuss.

**Emily:** For Kahoot!, I read the question and all the options. I had to choose the questions with a time limit. I did not have time to think. But I preferred Quizizz. I could take my time to read the questions, think through them, and type in my answers.

These excerpts collectively highlight the complexities of integrating gamification into educational practices, underscoring the need for careful consideration of tool features and their impact on learning dynamics.

#### 8.5. Discussion

The analysis of participants' responses in gamification tools, audio clips, the pre-test, the delayed post-test, and the questionnaire, grounded in the conceptual framework and research questions discussed earlier, revealed several key findings. Firstly, participants generally held positive perceptions of, and attitudes toward, gamification tools. This positivity stemmed from the ability of these tools to facilitate the exchange of ideas and provide immediate feedback.

Secondly, despite the varied quizzes designed for three different classes, participants across the groups demonstrated a good level of proficiency, particularly in understanding different research designs. However, each class exhibited unique weaknesses: Class A encountered difficulties with the structure of academic papers and crafting topic sentences; Class B grappled with issues related to questionnaire design and the use of triangulation; Class C

faced challenges with addressing future research directions. Thus, the study uncovered that the participants struggled with various elements of academic writing, including unfamiliarity with technical vocabulary, constructing topic sentences (e.g. "This study explored..."), and grasping the overall structure of an academic paper.

Thirdly, there was a notable improvement among participants from the pre-test to the post-test, especially regarding the structure of academic papers and the comprehension of research designs. This aligns with prior research indicating that interactive response systems enhance learners' motivation and promote active participation in their learning journey, potentially leading to academic success (Aslan & Seker, 2017; Cardoso, 2011; Liu, 2014; Stowell & Nelson, 2007). Nonetheless, participants' performance in areas such as APA formatting, understanding variables, or ethical considerations was less commendable.

Furthermore, the design features of gamification tools played a significant role in advancing participants' professional learning in academic writing and terminology, attributable to the diverse types of question designs employed. Lastly, the post-discussion sessions proved invaluable. They offered participants opportunities to rectify misunderstandings and deepen their comprehension of academic writing through collaborative learning. During these sessions, learners engaged in discussion, querying, and clarification of each other's doubts or misconceptions, thereby co-constructing and expanding upon each other's contributions. Instructors acted as facilitators, steering class discussions toward a more profound grasp of the subject matter. This collaborative approach empowered learners to generate insights that transcended the instructor-provided content (Arner et al., 2017).

#### 8.6. Practical Suggestions

Instructors ought to make an informed choice when selecting gamification tools. These should be intuitive for both instructors to formulate questions and for learners to access. Specifically, using these tools should be simplified through methods like scanning Quick Response (QR) codes to answer questions, avoiding the cumbersome process of creating usernames and passwords for various gamification platforms. Additionally, the tools must feature capabilities for tracking and recording learners' academic progress.

To effectively incorporate gamification tools and foster post-discussion in courses for emerging researchers, three recommendations can be made. Firstly, it is essential that gamification tools support a diverse array of question formats. Beyond multiple-choice questions, the inclusion of short answer formats is crucial. This variety compels learners to articulate their thoughts in their own words, particularly when responding to open-ended questions,

thus enriching their learning experience (Dakka, 2015; Lee & Shih, 2015; Lee *et al.*, 2016; Ono *et al.*, 2014).

Secondly, it is recommended to provide guiding questions to deepen post-discussion among novice researchers. According to Lee and Shih (2015), gamification tools can enhance participatory learning through guided classroom discussions, employing cognitive processes such as conjecture, speculation, and refutation (p. 148). This approach motivates learners to delve into content discussions in small groups, focusing on pivotal questions.

Thirdly, extending the time allowed for responding to questions is advised, providing participants with ample time to reflect. Certain gamification tools, like Kahoot!, may not be ideal for studying intricate subjects or concepts, including academic writing or technical terminology, due to the cognitive demands associated with these more complex topics (Ismail & Mohammad, 2017).

#### 8.7. Conclusions

This investigation introduced gamification tools into three courses focusing on technical terminology and academic writing – two at the graduate level and one at the undergraduate level – with a total participation of 51 students. The study underscored the significance of gamification in enhancing learning for both undergraduate and graduate students, particularly within challenging and specialised subjects. The efficacy of immediate feedback through gamification tools, as well as discussions with peers and instructors, has been broadly recognised within the realm of technology-enhanced language learning, especially with devices like clickers or response systems. This research highlighted three key recommendations for the use of gamification tools, namely crafting a variety of question types, facilitating post-discussion with guiding questions, and allocating ample time for responses on gamification platforms. The findings offer valuable guidelines to assist higher education faculty in formulating questions on specialised topics and leading post-discussions within a community of practice.

However, the study had its limitations. The dual role of the researcher as the instructor might have influenced students' feedback on gamification activities. Additionally, the relatively small sample size of 51 participants results in a limited applicability of these findings. In future research, undergraduate and graduate students could be put into groups and asked to design their own quizzes on gamification tools. These quizzes could serve as introductory reviews, followed by post-discussions facilitated by the quiz creators. Discourse analysis could then be employed to examine how language features manifest across texts and interact in specific types of discourse (Paltridge, 2012), offering insights into how students grasp technical terminology and academic writing practices.

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**Abstract**: This study integrated gamification tools into two graduate courses and one undergraduate course on technical terms and academic writing (N = 51). The data analysis of gamification tools, audio clips, a pre-test, a delayed post-test, and a questionnaire indicated that participants had positive attitudes toward the quizzes designed on the gamification tools and toward post-discussions. These resources helped participants clarify their misconceptions about technical terms and academic writing. Participants showed significant improvement in the post-tests. Suggestions were provided on how to effectively integrate gamification tools into future teaching.

**Keywords**: academic writing, gamification tools, post-discussions, technical terms, TESOL (Teaching English to Speakers of Other Languages)

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### The Use of Technology, Digital Tools, and Artificial Intelligence in Academic Writing in Additional Languages: A Review of Empirical Studies from 2014 to 2023

#### 9.1. Introduction

Growing interest in the application of technology, digital tools, and artificial intelligence (AI) in academic writing since the early 2000s has been the result of the pervasiveness of the Internet and the availability of digital search tools such as specialised library databases and Google Scholar. Schoolnik (2018) has classified digital tools for academic writing in terms of the following functions: research, focusing and prodding (i.e. stimulating students to write), language, collaboration, design and graphic, reference and bibliography. In recent years, besides technology and digital tools, artificial intelligence technologies, machine learning, and natural language processing have been explored for the enhancement of the writing process and the quality of academic writing. In November 2022, ChatGPT was released by OpenAI as language software accessible freely over the Internet. Its launch triggered both excitement at its potential for use in academic writing and ethical concerns.

Our chapter synthesises and evaluates the development of technology, digital tools, and artificial intelligence in the field of academic writing in the past decade by reviewing 42 empirical studies to answer the following questions: (1) What types of technology, digital tools, and artificial intelligence have been used for academic writing in English as an additional language (EAL) for teachers and students? and (2) What are the outcomes of digital tools and AI's applications for teachers and students of academic writing? Based on the findings, a set of suggestions for enhancing academic writing for teachers and students in additional languages and future research directions will be offered.

#### 9.2. Literature Review

#### 9.2.1. English as an Additional Language

In the present study, the term English as an Additional Language (EAL) refers to both English as a Second Language (ESL) and English as a Foreign Language (EFL). The chapter only synthesises ESL, EFL, and TESOL studies published in English because, as a global language or lingua franca, it is widely used in international contexts for communication in the domains of technology, education, and research. Studies on academic writing in which the participants were specified as EAL learners have dealt with diverse concerns.

One key finding (Huang, 2010) indicates a considerable overlap in the academic writing skills deemed 'very important' by both graduate and undergraduate EAL students and their instructors, as identified through a comprehensive survey at a Canadian university. This suggests a commonality in expectations regardless of the academic level.

In another study conducted at a New Zealand university (Coxhead, 2012), EAL students were found to employ diverse techniques to incorporate academic or technical vocabulary into their essays during an integrated reading and writing task. This demonstrates the students' adaptive strategies in navigating academic writing requirements.

Further research involving EAL doctoral students at an Australian university (Ma, 2021) identified translation as a common writing strategy, with the primary challenge being the differences in rhetorical structures between the students' first language and English. This underscores the complexity of academic writing for EAL students, stemming from linguistic and cultural disparities.

Lastly, an examination of feedback practices at a UK university (Poverjuc, 2011) revealed that EAL students' satisfaction with feedback on academic writing was influenced by factors such as timing, feedback nature, language used by tutors, as well as individual and cultural differences. These factors occasionally hindered students' understanding and utilisation of the feedback, pointing to the need for more nuanced feedback practices.

Overall, these studies collectively highlight the diverse challenges and strategies related to academic writing for EAL learners, emphasising the importance of targeted support and instructional approaches to address their specific needs.

#### 9.2.2. Technology in Academic Writing

Schcolnik (2018) classified digital tools into the following categories: research tools (e.g. MAXQDA), organisational tools (e.g. mind mappers), focusing and prodding tools (e.g. focus assistants), language tools (e.g. grammar checkers, Grammarly, spellcheckers, dictionaries, thesauri, concordancers, Google Translate), collaboration tools (e.g. blogs), design and graphic tools (e.g. Piktochart), and reference and bibliography tools (e.g. EndNote).

Tarade *et al.* (2023) also listed similar tools, but they introduced plagiarism checking tools and text formatting tools instead of focusing and prodding tools. Moreover, they emphasised the need to use different digital tools to write academic papers for both teachers and students. They concluded with a discussion of the increasing automation of digital tools with the additional of "artificial intelligence algorithms (...) such as suggestions for completing sentences, correcting misspelt words, paraphrasing, and similar" (p. 33), though they also pointed out certain limitations in using artificial intelligence for writing and paraphrasing.

Strobl *et al.* (2019) systematically reviewed "44 tools across 26 quantitative and qualitative features related to writing processes, pedagogical approaches, feedback modalities and technological specifications" (p. 33) as digital support for academic writing.¹ They concluded that there is a considerable number of tools supporting argumentative essay writing in English but not enough for other genres and other languages. Pedagogical tools focus mainly on "automated support for revising on the micro-level targeting factual knowledge (e.g. grammar, spelling, word frequencies)", rather than supporting writing strategies and self-monitoring for "macrolevel text quality (e.g. argumentative structure, rhetorical moves)" (p. 33).

According to Golan *et al.* (2023), the use of artificial intelligence in academic writing falls into two broad categories: (1) tools that evaluate and assess the quality and validity of written work (e.g. plagiarism detection software and automated peer-review platforms); and (2) tools that assist authors in

<sup>1</sup> They listed the following tools: Academic Vocabulary, Article Writing Tool, AWSuM, C-SAW (Computer-Supported Argumentative Writing), Calliope, Carnegie Mellon prose style tool, CohVis, Corpuscript, Correct English (Vantage Learning), Criterion, De-Jargonizer, Deutsch-uni online, DicSci (Dictionary of Verbs in Science), Editor (Serenity Software), escribe, Essay Jack, Essay Map, Gingko, Grammark, Klinkende Taal, Lärka, Marking Mate (standard version), MyAccess!, and Open Essayist.

the writing process (e.g. identify and correct errors, translate, summarise text, generate specific outlines or manuscripts, research protocols, and other written documents). Specific AI tools highlighted by Golan *et al.* (2023) are as follows:

Writefull improves grammar, style and readability of inputted writing. Quillbot is a tool that uses machine learning algorithms to reduce syntax complexity and increase clarity. Wordtune uses automated feedback on grammar, style and readability. Cohere can be used by researchers and scientific authors to generate summaries, outlines and entire manuscript sections based on a given set of sources. ChatGPT is an OpenAI tool that has a chatbot—user interface that can be used to clarify, fine-tune and polish excerpts of writing (p. 328).

Lingard (2023) suggested ways to use ChatGPT for academic writing, such as brainstorming for creation of outlines, generating counterarguments, summaries, and abstracts, and editing with ChatGPT for clarity and coherence. According to the scholar, ChatGPT can provide structures through brainstorming tools to produce titles, outlines, and counterarguments, but writers need to double-check content for gaps and inaccuracies.

In their study on the use of technology in academic writing, Bakla and Karakaş (2022) surveyed 249 non-native English-speaking researchers to find that many of them used various software (bibliographic data management tools, plagiarism software) and dictionaries in academic writing. Some respondents also used tools not listed in the survey: Grammarly for grammar checking, Google Translate, and Google as a corpus. Mali (2022) surveyed 67 EFL Indonesian undergraduate students to find them frequently using an online dictionary, Google search engine, Google Translate, and an online grammar checker to enhance their academic writing.

In their exploration of AI in academic writing, Geng and Razali (2022) reviewed 11 papers regarding the effectiveness of the Automated Writing Evaluation (AWE) programme in improving undergraduates' writing performance. They highlighted the lack of the design of a delayed post-test, analyses of writing performance in terms of writing traits, and research into students' writing strategies regarding the use of the AWE programme. Fan and Ma (2022) examined the effects of automated writing evaluation (AWE) feedback on students' English writing performance by reviewing 22 studies categorised as within-group and between-group studies. The results indicated that AWE feedback might be helpful for student writing under certain conditions.

Though there have been some reviews on digital technologies and pedagogies to support academic writing (see Strobl et. al., 2019) and AI in academic writing (see Geng & Razali, 2022), to date there has been no systemic review of

published findings regarding the use of technology, digital tools, and artificial intelligence in academic writing in additional languages.

#### 9.3. Methodology

We conducted keyword searches using the EBSCOhost database with the following combination of keywords: "academic writing", "additional language OR second language", "technolog\* OR digital tool\* OR AI". The initial search yielded 1,437 results. These results were subsequently refined to include only academic journal articles, book chapters, and conference proceedings published in English from 2000 to 2023, with full text available at the researchers' institution. The refinement process narrowed down the results to 493 articles.

We then carefully reviewed the titles and abstracts of these retained articles and selected 62 articles to further narrow the pool down to journal articles and conference proceedings published between 2014 and 2023. We used these inclusion criteria to select 42 articles which focus on a) academic writing, b) English as additional language/EFL/ESL, c) use of technology, digital tools and artificial intelligence, and d) empirical research. We selected these 42 empirical studies for further in-depth analysis. We coded the articles in terms of English as additional language/EFL/ESL, types of technology, digital tools and artificial intelligence (classified based on definitions in the literature reviewed), applications and outcomes related to digital tools and AI to answer the two research questions:

RQ1. What types of technology, digital tools, and artificial intelligence have been used for academic writing in English as an additional language for teachers and students?

RQ2. What are the applications and outcomes related to technology, digital tools, and AI for teachers and students of academic writing?

#### 9.4. Findings

# 9.4.1. Technology, Digital Tools and Artificial Intelligence That Have Been Used for Academic Writing in English as an Additional Language for Teachers and Students

The findings are reported in terms of technology and digital tools: blended learning, computer-mediated communication (CMC), designed technological programmes, and technological tools (see Table 9.1). The collected data are also categorised in terms of artificial intelligence type: general, corpora, Automated Writing Evaluation (AWE), Grammarly and Grammark (AWE), and Icourse/Pigai/Quillbot/machine translation (ETMT) (see Table 9.2).

#### 9.4.1.1. Technology and Digital Tools

**Table 9.1.** Technology and digital tools used for academic writing in English as an additional language

Type of technology and digital tools used for academic writing	No. of studies
Computer-assisted learning and assessment tools	8
Collaborative and peer-based learning tools	5
Online learning and instructional tools	4
Digital writing and publishing platforms	3
E-readers and digital tools	1

#### Computer-Assisted Learning and Assessment Tools

There were four studies related to blended learning. Bostanci and Çavuşoğlu (2018) implemented a process-genre approach in the instruction of 16 EFL Turkish Cypriot teacher trainees. This method, which integrates concepts from both the process-based and genre-based approaches to writing as advocated by Badger and White (2000), was combined with the blended learning approach (BLA), i.e. "a combination of face-to-face classroom activities and online work" (Bostanci & Çavuşoğlu, 2018, p. 3). The participants were found to produce better written products when they were taught using the BLA, perhaps due to additional feedback sessions, support and in-class discussions and debates during online work, and the freedom to produce essays at their own pace and time.

Hosseinpour *et al.* (2019) investigated the effects of blended learning, utilising the Edmodo mobile application, on the academic writing proficiency of 60 senior Iranian EFL students majoring in Translation Studies. The study also aimed to elicit the students' perceptions of this approach. The experimental group, which practised collaborative essay writing using the Edmodo mobile application, outperformed the control group in overall writing proficiency. This superiority was particularly evident in aspects such as organisation, vocabulary, and the mechanics of writing.

Milad (2017) devised a blended course incorporating Web-Quests (WQs) to integrate previously identified reading and writing research skills needed to improve academic writing. It was introduced to 31 students registered in an Academic Writing course taught at the Arab Open University. Statistical analysis revealed significant improvement in the students' academic writing skills due to the integration of the stages of the reading and writing process, which helped the students to approach academic writing systematically.

Similarly, Termsinsuk (2015) explored the efficacy of a blended Instructional Model via Weblog to enhance English summary writing ability among 41 Thai EFL students majoring in English. The study found that students showed improvements in utilising academic vocabulary, applying accurate punctuation, maintaining content accuracy and clarity, and using precise citations in their summaries.

There were four studies on *computer-assisted learning and assessment*. Pourdana (2022) explored the impact of computer-assisted diagnostic assessment (DIA) on the sustainable improvement of 36 Persian EFL learners' collaborative writing and engagement modes. A repeated-measures ANOVA indicated significant progress in lower-level writing skills (sentence structure, word choice and grammar, mechanics), but no considerable progress in higher-level writing skills (organisation and development), though a one-way ANOVA showed the DIA's impact on individuals' sustainable writing improvement from the pre-test to the immediate and delayed post-tests.

Babni (2019) investigated the impact of computer-mediated communication (CMC) tools on the writing skills and performance of 286 Moroccan EFL university students. The results from the writing task showed that the use of CMC tools had a detrimental impact on the students' academic written productions, because most students failed to conform to the standards of academic writing in terms of layout, organisation, style, level of formality, grammar, content, mechanics, and tone. Despite these findings, 60.22% of the participating students believed that active participation in computer-mediated communication would enhance their academic writing skills.

Yang (2016) designed a computer-supported collaborative learning (CSCL) system to investigate how 24 Taiwanese EFL graduate students transform and construct their academic knowledge through peer feedback when involved in summary writing. The experimental group made more local (i.e. grammatical) and global (i.e. text development, organisation, and style) revisions on their own as well as their peers' summaries, compared to those in the control group.

Gadomska (2015) described transforming a Lego-based activity into a technology-mediated task in academic writing to third-year BA students at the University of Social Sciences and Humanities in Warsaw, Poland. This approach enhanced various skills, including online writing, digital photography, computer editing programmes, animation, e-learning tools, blog writing, reading, teamwork, and IT skills.

#### Collaborative and Peer-based Learning Tools

There were five studies tackling this theme. Kung (2018) assessed an innovative advanced academic writing course using blog-assisted language

learning (BALL) at a US research university. The 34 participants in the advanced academic writing class (12 Chinese, 11 Korean, 6 Japanese, and 5 Thai) perceived writing instruction through BALL positively, but the experience did not strengthen their learning confidence and motivation.

Pham and Usaha (2016) showed how blog-based peer response helped 32 Vietnamese EFL students taking a 15-week academic writing course to improve their writing revisions. Blog-based e-peer reviewers provided more comments on global areas (content and organisation) than on local areas (such as mechanics, word choice, punctuation, spelling). However, only 38% of the revisions were made fully or partly based on peer comments.

Ebadi and Alizadeh (2021) investigated the impact of peer online learner-driven feedback (LDF) using Google Docs and peer-editing on IELTS/academic writing tasks in EFL Iranian learners. The study found that LDF-based peer-editing significantly enhanced the learners' academic writing skills as post-test scores in the experimental group (N = 20) were significantly higher than those in the control group (N = 20).

Shayakhmetova *et al.* (2020) examined the implementation of Collaborative Academic Writing Skills in English in a computer-assisted language learning (CALL) classroom for 50 Kazakh EFL university students. They found it to be more engaging than traditional classes, intellectually stimulating, with more productive feedback and better perception of the research purposes.

Hassanzadeh *et al.* (2021) examined the effect of software-supported concept mapping (CACM) with the use of the Inspiration graphic organiser software on lexical diversity (LD) in 53 EFL undergraduates' argumentative essays within a process writing framework over seven weeks. The CACM group showed better performance in lexical diversity, correlating with the overall quality of essays.

#### Online Learning and Instructional Tools

There were four studies related to this subject. Li and Liu (2018) implemented computer-assisted technologies like discussion boards in an English for Academic Purpose class for five ESL students (Paraguay, Spain, Germany, South Korea, and Mongolia) at a small public university in southwest Oklahoma, USA. The diverse international students found that the discussion board enhanced their reading and writing practice, as they received more feedback, had additional writing opportunities, and revised more frequently and effectively.

Zakaria and Hashim (2020) used the online game application Kahoot! as the primary tool for student assessment in an academic writing course with 32 ESL students at a public university in Malaysia. Despite some technology-related anxiety, learners found game-based assessment to be highly engaging.

Lin *et al.* (2017) designed online genre-based writing instructions (GBWI) – an e-learning tool with a Chinese interface – for 32 Taiwanese EFL Engineering graduates and evaluated its perceived usefulness in users' English academic writing development. The participants found the system useful and helpful while learning English academic writing.

Chen and Tseng (2021) developed the Scaffolding English E-assessment Learning (SEEL) programme to provide instant feedback and scaffolding hints to facilitate the acquisition of English grammar. They compared how cognitive styles (i.e. holists vs serialists) affected learners' reactions to the SEEL, including learning performance, learning perception, and learning behaviour. Holists obtained better post-test scores than serialists due to better use of hints and feedback.

#### Digital Writing and Publishing Platforms

There were three studies on this theme. Thienthong and Suppasetseree (2016) developed a WordPress-based Academic Writing (WAW) instructional model for EFL English-major undergraduates. Trial (N = 31) and implementation (N = 33) with different student groups indicated the efficiency of the WAW lessons.

Lee *et al.* (2016) examined The Writing Portal (TWP), a supplementary online writing platform, to support 16 TESL Malaysian pre-service teachers' writing needs throughout the five stages of the writing process (i.e. planning, drafting, revising, editing, and publishing). TWP was found to provide links to evaluate Internet resources, a writing portfolio, and collaboration tools such as the Group Forum, chat, a writing portfolio, a private messaging system, and a comment function for pages or articles created. The authors concluded that TWP addressed students' writing needs at all stages of the writing process for multiple writing tasks.

Engin (2014) studied 18 Emirati female ESL learners who had to craft a digital video tutorial on academic writing. The activity promoted second-language learning through research, simplification, explanation, encouraged more focus on form, and promoted accuracy in English. However, the learners reported tension between the roles of students as producers and consumers, with a preference for teacher explanations over peer-produced videos due to concerns about their reliability.

#### E-Readers and Digital Tools

Hung and Young (2015) explored the use of e-readers among 12 Taiwanese EFL university students, finding that they facilitated reading, annotation, information retrieval, and peer review processes in academic writing.

#### 9.4.1.2. Artificial Intelligence

**Table 9.2.** Artificial intelligence used for academic writing in English as an additional language

Type of artificial intelligence used for academic writing	No. of studies
Automated Writing Evaluation (AWE)	14
Al-based software, applications, and technology tools	5
Corpora	2

#### Automated Writing Evaluation (AWE)

Six studies focused on Grammarly and Grammark. Faisal and Carabella (2023) investigated the use of Grammarly by 23 Indonesian fourth-semester English Language Education university students. Most students deemed the application useful in revising their errors, improving their academic writing, and boosting their confidence, although certain instances of feedback were perceived negatively by some students. Miranty et al. (2021) discussed the effectiveness of using Grammarly to teach writing to 80 Indonesian university students. While the experimental group showed significant improvement in writing scores in the post-tests, the difference was not statistically significant compared to the control group. Nova (2018) analysed Grammarly's strengths and weaknesses as an automated writing evaluation programme by looking at three Indonesian postgraduate students' experiences in using this programme and evaluating their academic writing. Strengths included "useful color-coded feedback with explanation and example, ease of account access, high rate of evaluation speed, and free service", but some issues were also noted, such as misleading feedback, reference list checks, and lack of context and content evaluation. Parra and Calero (2019) compared the effects of using Grammark and Grammarly as tools complementary to teachers' feedback on the writing performance of 28 Ecuadorian undergraduates. Both Group 1 (AWE-Grammark + Teacher instruction) and Group 2 (AWE-Grammarly + Teacher instruction) showed improvement, with no significant difference between the tools, yet students had positive attitudes towards their use. Yousofi (2022) explored attitudes towards Grammarly among 66 Afghan students from private language schools and public universities and five teachers. The response to Grammarly's impact on writing skills development was largely favourable. Zinkevich and Ledeneva (2021) applied Grammarly to evaluate 100 Russian ESP Master's students' essays. Though the programme showed gaps in students' academic writing - punctuation, wordy sentences, redundancy, and an abundance of personal pronouns in formal style – it was criticised for only offering better variants without addressing errors comprehensively.

Two studies involved *Icourse/Pigai*. Han *et al.* (2021) investigated the effects of the use of Icourse + Pigai (an automatic writing evaluation system) on 280 Chinese EFL undergraduates' academic writing performance, lexical complexity, and self-regulated learning strategies. The study found that the combination supported self-regulated learning by offering increased writing practice and correction feedback, although it did not significantly enhance lexical complexity. Huang and Renandya (2020) explored 67 Chinese EFL university students' perceptions of Pigai. Lower-proficiency students valued Pigai's feedback highly, but no significant difference in revision quality was observed between the experimental group (using Pigai and a process-oriented writing approach without teacher feedback) and the control group (process-oriented writing approach without teacher feedback).

Among the remaining studies (N = 6), Chukharev-Hudilainen and Saricaoglu (2016) developed an automated causal discourse analyser (AWE) to investigate its accuracy in processing learners' causal discourse in academic writing on a sample of cause-and-effect essays written by 17 non-native undergraduate students of advanced-level academic English. The results (precision of .93, recall of .71, and accuracy of .76) show the effectiveness of this tool in providing automated formative feedback with promising precision and accuracy. Koh (2017) compared the application of non-continuous automated feed-

Koh (2017) compared the application of non-continuous automated feedback (NCAF) to continuous automated feedback (CAF) in process-based writing instruction. In the study, the CAF group did not receive language-related AWE feedback to the point of disrupting the development of their content, and they significantly outperformed the NCAF group in terms of total score, grammar, and content.

Mohsen and Alshahrani (2019) demonstrated that a hybrid approach combining AWE feedback using MyAccess! with instructor feedback led to significantly better essay revisions than AWE feedback alone.

Saricaoglu (2019) explored the impact of automated formative feedback on written causal explanations of 31 ESL students enrolled in an advanced-low-level academic writing class. Pre- and post-test drafts, feedback reports for first and revised drafts from the automated writing evaluation system, and screen-capturing videos revealed statistically significant changes in learners' causal explanations within one cause-and-effect essay, while no significant improvement was observed across pre- and post-tests.

Taskiran and Goksel (2022) studied 36 Turkish students in a higher education institution participating in a closed Facebook group ("Write and Improve") over nine weeks. The students received feedback from their English language teachers for the first three tasks, and they received feedback from the

automated feedback for the last three tasks. The study showed that feedback from English language teachers was slightly more effective than automated feedback in improving academic writing skills.

Sevcikova (2018) investigated AWE in terms of online, open-source writing aide tools offering grammar, spelling, and writing style improvement available either for free or as paid versions. 61 Saudi Arabian university students perceived these tools as positive despite limitations in recognising genre, style, and context (especially in the free version). Some students were doubtful of a computer's ability to understand the content of their writing and therefore to accurately correct mistakes.

#### AI-based Software and Applications and Technology Tools

There were five studies tackling this subject. Hamamah *et al.* (2023) looked at AI-based software and applications to support English academic writing among four Indonesian EFL academics. The participants used tools like Google Translate for word choice and collocations and WordHippo for conjugation exploration.

Zulfa et al. (2023) investigated the use of AI and technology tools in English academic writing by 73 EFL students at the Islamic University of Indonesia and the impact it had on their writing skills. The students employed a total of 15 technology tools, categorised into four types: language tools (Grammarly, QuillBot, Parapharser.io, Google Translate, Merriam-Webster, DeepL, U-Dictionary, Dictionary.com, Turnitin), sources (Google Scholar, ChatGPT), saving tracks or automatic saving of documents (Microsoft Word, Google Docs), and reference management (Mendeley). The tools were reported to significantly aid in providing direct feedback and corrections, developing writing skills and enhancing grammatical and vocabulary knowledge.

Kurniati and Fithriani (2022) examined the use of Quillbot (an AI-powered digital tool) by 20 Indonesian post-graduate EFL students, noting three main benefits: improved attitudes towards writing, user-friendly features, and support for language development.

Mirzaeian (2021) implemented editing input for machine translation (ETMT) in academic writing for 20 Persian EFL university students, observing statistically significant improvements in overall scores and the use of determiners, but not in paraphrasing and collocation, possibly due to vocabulary and grammatical knowledge gaps (both in the mother tongue and in English).

Mizumoto *et al.* (2017) developed AWSuM (Academic Word Suggestion Machine), a web-based tool designed for writing research articles, trialled by eight L2 Japanese writers (six undergraduate and two graduate students writing their theses in Applied Linguistics). Preliminary feedback highlighted the tool's positive impact on genre writing pedagogy.

#### Corpora

For the two studies dealing with this theme, Abbas *et al.* (2023) proposed an assistive environment for academic writing improvement through the use of domain-specific formulaic sequences (FSs) corpora. By classifying FSs extracted from published articles into rhetoric categories with a machine learning technique in the Assistive Rhetoric Phrase (ARP) writing system, they found that 58 novice EAL Master's students perceived this approach as more useful than the traditional phrase bank approach.

Alsehibany and Abdelhalim (2023) studied 32 Saudi female EFL students majoring in English, who reacted positively to using direct corpus consultation (specifically, the Corpus of Contemporary American English) to enhance their vocabulary and academic writing skills. This approach notably reduced all four types of vocabulary errors (collocation, connotation, word form, and spelling), though students faced challenges such as analysing corpus results, website registration, limited search capabilities, and other technical issues.

#### 9.5. Discussion

This review analysed 42 studies, evenly divided between those exploring technology and digital tools (N = 21) and those utilising AI in teaching and learning academic writing for English as an Additional Language (EAL) (N = 21).

Of the studies focusing on technology and digital tools, 17 reported predominantly positive outcomes, while four presented mixed results. In the realm of AI, nine studies reported mixed outcomes, one was negative, and eleven showed positive reception. In terms of Automated Writing Evaluation (AWE), mixed results were evident. Studies on Grammarly were split, with three indicating positive effects and three showing mixed outcomes (e.g. Nova, 2018; Zinkevich & Ledeneva, 2021). Miranty *et al.* (2021) reported improvement – though not statistically significant – in writing scores, highlighting the nuanced impacts of automated grammar checkers. Notably, there were no empirical studies on ChatGPT, possibly due to its recent emergence as a pedagogical tool in 2022.

Future research could explore blended learning strategies, such as the process-genre approach, to enhance academic writing through additional feedback and online discussions (Bostanci & Çavuşoğlu, 2018) or collaborative writing (Hosseinpour *et al.*, 2019). Studies could also continue evaluating technological programmes designed to enhance academic writing such as Scaffolding English E-assessment Learning (SEEL) (Chen & Tseng, 2021), The Writing Portal (TWP) (Lee *et al.*, 2016), and collaborative academic writing in CALL classrooms.

#### 9.6. Practical Applications of Digital Tools and AI

In teaching academic writing with the use of technology, digital tools, and AI, the process-genre approach can be used effectively. For process writing, software-supported concept mapping (CACM) and the Inspiration graphic organiser software could be used for teaching argumentative essays within a process writing framework, as demonstrated in the study by Hassanzadeh *et al.* (2021). Inspiration could help writers structure arguments in the pre-writing stage to "organise their ideas by creating hierarchical concept maps and to make immediate changes by adding concepts, creating links, labelling propositions, and moving items around" (Hassanzadeh *et al.*, 2021, p. 219). Instructors can also use online writing platforms such as The Writing Portal (TWP) to support the five stages of the writing process, i.e. planning, drafting, revising, editing, and publishing (Lee *et al.*, 2016), as well as to provide automated feedback for process-based writing instruction (Koh, 2017). Additionally, Grammarly can be introduced as an automatic grammar checker (Faisal & Carabella, 2023).

In terms of the genre approach, educators can consider online genre-based writing instructions (GBWI), an e-learning tool with a Chinese interface designed by Lin *et al.* (2017) for Chinese EFL learners, AWSuM or Academic Word Suggestion Machine trialled with eight L2 Japanese writers to support research article writing with a genre and process-genre approach, or the blended learning approach (BLA) (Bostanci & Çavuşoğlu, 2018). Students may benefit from the latter thanks to its potential of helping produce better writing with more feedback sessions (online and face-to-face), support and in-class discussions and debates (Bostanci & Çavuşoğlu, 2018), and opportunities to practise collaborative essay writing (Hosseinpour *et al.*, 2019).

In our educational approach, we incorporate genre-based pedagogies alongside process writing theories, leveraging a variety of technology, digital tools, and artificial intelligence to develop academic writing skills. According to Hyland (2003), genre-based pedagogies facilitate an understanding of the structure and lexicogrammatical patterns of texts within specific genres through a cycle of modelling, joint negotiation, and independent construction.

During the teaching and learning process, we begin by modelling and discussing examples of academic texts, breaking down their language features and structures (Hyland, 2003). To integrate artificial intelligence in this pedagogical framework, we employ ChatGPT's 'Regenerate response' function to produce multiple versions of responses to an academic writing prompt. This allows us to deconstruct various texts within the same genre, enabling a comparative analysis that enriches students' insights into structuring academic texts through effective rhetorical strategies.

In the planning phase of process writing, we introduce tools like Popplet and MindMeister for brainstorming or concept mapping and utilise ChatGPT for generating titles, outlines, and counterarguments, as highlighted by Lingard (2023). ChatGPT also aids in the ideation phase by producing rebuttals and counterarguments. For the editing phase, Grammarly serves as an automated tool for revising grammatical errors, punctuation, sentence structure, and redundancy.

Subsequently, in the stages of joint negotiation and independent text construction, we guide students to collaboratively build arguments or discussions, using ChatGPT to supply points and counterpoints. We instruct students to critically evaluate or adapt these AI-generated suggestions, mindful of potential inaccuracies, as Lingard (2023) advises the verification of ChatGPT content for accuracy and completeness.

This approach underscores the importance of explicit genre instruction, especially considering that Strobl *et al.* (2019) found a lack of digital tools that adequately support strategic writing at the macro level, such as argumentative structure and rhetorical moves. Our methodology aims to bridge this gap, ensuring that students not only understand genre conventions but also effectively apply them in their writing.

#### 9.7. Conclusion

This chapter reviewed 42 studies focused on the integration of technology, digital tools, and artificial intelligence (AI) in teaching and learning academic writing for English as an Additional Language (EAL). Of these, half explored the use of technology and digital tools, with 17 reporting positive effects and four yielding mixed results. These findings underscore the significant role that technology and digital tools play in enhancing EAL learning and teaching experiences. The other half of the studies examined the application of AI in EAL academic writing, presenting a more diverse set of outcomes: eleven were positive, nine showed mixed results, and one was negative. Notably, Grammarly and Automated Writing Evaluation (AWE) were tools that each received mixed evaluations across three studies, reflecting the nuanced impact of AI on academic writing practices.

A limitation of this review is its inability to provide an exhaustive overview of all available technology, digital tools, and AI applications in EAL academic writing. Additionally, the absence of empirical studies on ChatGPT may be attributed to its relatively recent adoption in 2022, highlighting a potential area for future research.

In conclusion, while the adoption of technology, digital tools, and AI offers promising avenues for enhancing EAL academic writing, the varied

outcomes indicate the need for careful implementation and further exploration to fully understand their impact. Finally, with the continuous evolution of AI tools, further investigation into AWE and emerging tools like ChatGPT is recommended.

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**Abstract**: There has been a growing interest in the application of technology, digital tools, and artificial intelligence in academic writing since the early 2000s. The use of artificial intelligence has been studied in journal articles published in recent years. This chapter synthesises and evaluates the development of technology, digital tools, and artificial intelligence in the field of academic writing for the past decade by reviewing 42 empirical studies. We conducted keyword searches using the EBSCOhost database with the following combination of keywords: "academic writing", "additional language OR second language", "technolog\* OR digital tool\* OR AI" to select journal articles and conference proceedings published between 2014 and 2023. We focused on 42 empirical studies to answer the following questions: (1) What types of technology, digital tools, and artificial intelligence have been used for academic writing in English as an additional language for teachers and students? and (2) What are the applications of technology, digital tools, and AI and their outcomes for teachers and students of academic writing? Based on the review of the published studies and conference proceedings, a set of suggestions for enhancing academic writing for teachers and students in additional languages and future research directions was presented.

**Keywords**: technology, digital tools, artificial intelligence, academic writing, English as an additional language

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# 10. Teaching Portuguese as an Additional Language and Academic Writing: The Co-Construction of Multicultural Identities in Telecollaboration Activities between Brazil and Canada

#### 10.1. Introduction

Teaching Portuguese and English as additional languages in multicultural contexts requires a sensitive and inclusive approach that values students' heterogeneous cultural backgrounds which enrich pedagogical practices. Interculturality plays a fundamental role, facilitating the exchange of experiences and perspectives among students from varied cultural and socio-economic environments. Integrating intercultural elements into teaching enhances the learning experience, fostering greater awareness of global cultures. Bearing that in mind, foreign language teachers must adapt their curriculum and teaching strategies to meet the needs of diverse students, incorporating culturally relevant materials and promoting effective intercultural communication. This adaptive and inclusive approach creates a welcoming environment where all students feel represented and valued, preparing them for a varied and interconnected world.

This chapter aims to explore the innovative realm of collaborative language learning through telecollaboration activities, specifically focusing on writing methodologies and the construction of learning trails. It also addresses the absence of research on writing practices and teaching methodologies for distinct languages learnt simultaneously within telecollaborative contexts. The work highlights the integration of Brazilian and Canadian university students via Zoom meetings, facilitated to enhance language proficiency and intercultural competence. Utilising a learning trail framework aligned with course curricula, students from York University (Canada) and the Federal Institute of Southeastern Minas Gerais (Brazil) engaged in synchronous and asynchronous activities, providing feedback for continuous improvement. The incorporation of multimodal, bilingual materials such as music and lectures enriched the learning experience, fostering bilingualism, group collaboration, and multicultural interaction. Tasks encompassed reading, listening, comprehension, and critical analysis, promoting both language skills and cultural understanding.

This initiative underscores the significance of digital multiliteracies in students' linguistic and cultural development. Although the project involves both Portuguese and English learning, we aim to focus and reflect on teaching practices of Portuguese as an Additional Language (PAL). The chapter emphasises the importance of appropriate educational resources and the integration of technologies and digital tools in Portuguese teaching, ultimately contributing to the promotion of intercultural interaction and collaborative knowledge production. Finally, we aim to share our reflections and preliminary discussions on PAL teaching in multicultural contexts, including the challenges faced by teachers, the impact of PAL teaching on identity formation and intercultural understanding, and teachers' digital literacy.

Talk to Us is a project coordinated by professors Cátia Martins (York University, Canada) and Fernanda Reiff (IF Sudeste MG, Santos Dumont Campus, Brazil), aimed at fostering intercultural exchange and collaborative language learning (Portuguese and English) among undergraduates from both institutions. Through translanguaging practices, students are encouraged to use technological tools and blend languages during conversations to improve comprehension and linguistic skills. García et al. (2012, p. 52) assert that "[t]ranslanguaging refers to an approach that seeks to embrace the semiotic and sociocultural multiplicity of contemporary language practices".

In the context of the *Talk to Us* project, students from different cultural backgrounds engage in peer interactions, enhancing their linguistic skills through discussions of cultural traditions and shared experiences. This approach fosters confidence, encourages active participation, and utilises translanguaging practices, enabling students to navigate language barriers together while developing intercultural competencies. Such collaborative environments create richer learning experiences and improve overall language proficiency.

Ailton Krenak (2020, p. 26) highlights that "the idea of linguistic educa-

Ailton Krenak (2020, p. 26) highlights that "the idea of linguistic education devoid of life experiences and the world around us, without the possibility

of bringing our existences into the classroom, only reinforces the tendencies of our time to create absences: of the sense of living in society, of the very essence of the experience of life". Krenak's reflection on the importance of connecting learning with life and personal experiences is fundamental to intercultural language learning in the *Talk to Us* project. By promoting cultural exchange among students, the project enables participants to share their stories and traditions, enriching the learning experience. Through interaction with different cultures, students expand their vocabulary and language skills and develop a more in-depth understanding of diversity, creating a more meaningful and inclusive learning environment.

The experiences shared by students in the *Talk to Us* project are closely connected with the approaches discussed above, as we can see in one student saying, "I learnt a new word that I use every day now. It's interesting how practice helps me memorise new words". Another student noted, "I learnt names of food like *feijoada* and family terms like *filha*, *madrasta*, *meio-irmão*, and *meia-irmã*". Additionally, a student compared the terms *guitarra* and *violão*, enhancing their understanding of cultural nuances. Such interactions foster communication among people from different parts of the world, enriching their language and cultural knowledge.

#### 10.2. PAL in Multicultural Contexts

Teaching Portuguese as an Additional Language is a powerful tool for the development of students' multicultural identity. For example, when studying Brazilian literature in a PAL course, a Polish student may identify with the stories of immigrants and refugees, drawing parallels with their own life experience. This can help them to value not only their own cultural background but also Brazilian culture, enriching their multicultural identity. In the educational context of teaching PAL, translanguaging emerges from linguistic and social interaction among different speakers, challenging conventional aspects of language and promoting positive changes in individuals' humanistic formation and in society. To understand this context, it is fundamental to explore concepts such as the intercultural communicative approach, which highlights the communicative dimension of language and its connection with human interactions.

Interaction is central to language learning, as it is considered a social phenomenon intrinsically linked to the sociocultural context of the speaker. In this sense, learning a language is also an immersion in a culture, emphasising the importance of interculturality in the language teaching and learning process. As highlighted by Blackledge *et al.* (2013), there is an understanding that the communicative process is characterised by the interaction of a wide

range of resources (linguistic, semiotic, identity-related, cultural) in specific contexts in space and time. Within this context, the concept of translanguaging emerges as a more comprehensive approach to explain the production of social meanings, recognising the insertion of linguistic practices in power systems and considering all the social diversity associated with these practices.

Another relevant point is how teaching PAL can contribute to the formation of hybrid identities. For example, if a Canadian student of Portuguese descent wishes to learn PAL and is exposed to pedagogical practices that encourage reflection on (multi)identity issues, this student has great potential to develop what we call a hybrid identity, blending their Canadian cultural references with elements of Portuguese-speaking peoples' culture. We believe that the interaction between diverse cultures can result in a deeper and more complex understanding of the students' own identity, leading to a more dynamic appreciation of cultural diversity in contemporary communities.

Regarding multicultural contexts, we highlight in our pedagogical practices the importance of respect for diversity, especially in academic activities and in the job market, where interaction and collective productivity are essential. Thus, we advocate for a sensitive approach to identity issues in PAL teaching programmes with the aim of expanding understanding and mutual respect among students from different cultural, religious, ethnic, and social backgrounds. For example, when discussing cultural issues in the classroom, students are encouraged to consider different perspectives and respect others' cultural differences, which fosters a more inclusive and respectful environment where diversity can be valued and celebrated.

#### 10.2.1. Multicultural Identity

Learning an additional language, especially through a translanguaging approach, transcends mere acquisition of linguistic skills, as it encompasses cultural immersion and the negotiation of identity. Students learning PAL bring their own cultural experiences, values, and perspectives, which shape how they perceive and integrate the Portuguese language into their lives.

In multicultural contexts, where different cultures meet and interact, stereotypes often arise. These stereotypes, crucial in the construction of identity, are based on perceptions of similarity and difference (Paiva, 2017). They shape how we categorise both ourselves and others, influencing individual self-concepts and societal views. Furthermore, from a colonial perspective, non-dominant languages and cultures are typically marginalised or invalidated.

A key pillar of PAL pedagogical practices is the recognition and valorisation of minority cultures. Teaching Portuguese from an inclusive, critical perspective seeks to give visibility to underrepresented cultures, enriching

the learning experience for all students. For instance, exploring literature from lesser-known Portuguese-speaking communities broadens students' awareness of cultural representations and fosters a deeper understanding of the complexity of these societies. The cultural diversity present in Portuguese-speaking countries reflects a history shaped by colonialism, independence movements, and social struggles. This diversity offers rich opportunities for critical analysis and reflection on social, historical, and political dynamics. By examining these complexities, students gain a more profound understanding of the various cultural realities that define the Portuguese-speaking world.

In alignment with decolonial perspectives, it is crucial to recognise the specificities of each Portuguese-speaking community rather than grouping them under a single 'Lusophone' identity, as Arenas (2011) highlights. The term *Lusophone* often carries colonial connotations, and reframing the conversation to focus on the distinctiveness of each culture allows for a more inclusive and accurate representation.

Additionally, PAL teaching can enhance the inclusion and representation of minority groups in universities. Minority groups, often defined by numerical inferiority or limited political, economic, or social power, include ethnic, racial, religious, gender, and sexual orientation minorities. By welcoming students from diverse linguistic and cultural backgrounds, PAL programmes create an inclusive academic community where various identities are recognised and respected. This is especially relevant in university settings, where diversity enriches the learning experience and fosters mutual respect.

When defining identity, learners draw from a variety of factors, such as personal and social characteristics, ethnic origins, religious affiliations, and cultural values. Identity, in this context, is not a static construct but a dynamic, fluid one shaped by both internal and external influences. Learning a foreign language is a key vehicle for expressing one's identity (Ochs, 2008), and as Lightbown and Spada (2013) suggest, learning a new language often entails acquiring a new identity. Language acquisition process, especially Portuguese, often triggers reflections on self-identity and cultural connections. Learners navigate between their native cultures and the new linguistic and cultural norms, adapting and reshaping their identities. This dynamic process requires critical reflection, as learners confront moments of tension and adaptation.

In the context of this chapter, telecollaboration projects provide a powerful platform for identity negotiation in PAL classrooms. By engaging with peers from diverse linguistic and cultural backgrounds, students continuously reshape their cultural and linguistic identities. These projects enhance learner agency (Norton, 2012), allowing students to actively participate in their learning and identity construction. Technology facilitates this process by enabling meaningful engagement with diverse perspectives, fostering a deeper

understanding of cultural differences. Telecollaboration projects position students as agents of their own learning, empowering them to take responsibility for negotiating their identities and envisioning how they wish to be perceived in the future. The construction of linguistic identities and knowledge in the target language occurs through both oral and written texts. In our case, this takes place within an academic context, with academic writing being the focus of the following section.

#### 10.2.3. Academic Writing

Language is an interactive activity, and in its written form we can understand it as a process (Marcuschi, 2008; Koch & Elias, 2010; Cavalcante et al., 2014). Technological tools such as Zoom, Messenger, and Google Meet offer us channels through which we can practise written language in virtual interactions. In this sociocommunicative practice, we can get close to different people, cultures, and languages, and at the end of the experience, through exploring otherness, we can build identities and expand our linguistic knowledge in the target language. It is based on these assumptions that we discuss academic writing and the teaching of PAL as contributing to the co-construction of multicultural identities in a telecollaboration context.

Studies that address academic writing and telecollaboration are still scarce, especially those aimed at teaching PAL. Recent research considers telecollaboration as an instrument of internationalisation, on the one hand, and predominantly language teaching, on the other (Marques & Bonvino, 2020; Moura & Bruz, 2021). The latest studies highlight the training of language teachers, the effectiveness of teaching English through telecommunication, the effectiveness of using technologies, and the role of this language in society. Thus, with a focus on critical literacies, we believe writing practices are fundamental aspects in (tele)collaborations between teachers and institutions that engage in these partnerships for language teaching and learning.

Writing to learn a language and writing in an additional language – as well as writing as a process – are topics of relevant investigation in diverse pedagogical contexts (Majchrzak, 2018; Warchał & Zakrajewski, 2023). Grabe and Kaplan (1996) propose that understanding academic writing should emerge from an ethnographic perspective by asking the following questions: who writes, what do they write about, for whom, for what purpose, why, when, where, and how. The authors argue that writing at university level should not be perceived as an isolated set of cognitive skills, but rather as a set of social practices that are contextual and situated, essential for the dissemination of knowledge within academic communities. In contrast, Hryniuk (2019), when investigating the academic writing and English-language publications

of Polish academics, linguists, and applied linguists, warns of the challenges and highlights the pressures exerted by publication-based assessment systems.

In this chapter, we emphasise that in the scholarly environment, academic writing manifests itself through various textual genres (more or less frequent) adapted to different purposes and audiences, including literature reviews, binders, research methods, and critical discussions (Giltrow et al., 2014). Writing transcends the simple expression of individual ideas on paper or computer screen, constituting a process of construction that encompasses both linguistic arsenal and cultural legacy. Teaching practices are profoundly influenced by teachers' conception of language, which directs the selection of teaching content, the desired skills and competences, and the methodologies to be implemented (Figueira-Cardoso, 2022), which can favour the development of telecollaboration activities. In this sense, in the act of writing, the purpose, audience, and context of communication directly influence lexical selection, formality, textual construction, and discourse patterns (Gottlieb & Ernst-Slavit, 2013).

Multiliteracies are fundamental in this context, as they allow PAL students to become more proficient in dealing with the diversity of communication forms present in contemporary society. This includes the ability to understand and produce multimodal texts, such as infographics, digital presentations, and videos, which are increasingly common in academic and professional environments. Multiliteracies also help students adapt to an increasingly digital and visually oriented world, where effective communication often depends on the ability to understand and produce texts that combine different forms of language.

The use of diverse textual genres in the teaching of PAL can be related to the possibilities of multimodality, which involves the use of different forms of communication beyond written text, such as images, videos, audio, and interactive resources. In Moraes's (2015) viewpoint, multiliterate practices in classrooms allow students to improve oral communication skills alongside reading and writing. Through multimodality, students explore diverse forms of expression, including oral communication, in an engaging learning environment. Thus, by incorporating pedagogical practices that explore multimodality, PAL students have the opportunity to develop not only their reading and writing skills but also their speaking skills, as multimodal communication often requires the combination of different language modalities.

The studies cited so far address, in common language, the social constructionism of literacy practices. Lea and Street (1998) describe 'academic literacies' as a culturally integrated approach to the learning process in academic disciplines. This approach is expressed through discursivity that encompasses knowledge, discourse, and power, emphasising the dynamics of meaning in

communication and representation (Ma, 2023). In undergraduate/graduate courses in additional and mother language contexts, academic writing is often geared towards preparing students for future academic challenges in their university careers, such as writing summaries, responses to texts, and documentary research. This instruction, although practical and targeted, is sometimes considered as monotonous and unproductive due to its demanding nature and the limited time students have to master it combined with the long time it takes to complete the tasks. In contrast, students in academic contexts of Portuguese as a foreign language (language courses) enjoy greater freedom, being less pressured by the immediate demands of academic writing.

According to Johnson (2016) and Chauhan (2022), academic writing is the main form of expression and production of knowledge in academic contexts and is fundamental for student assessment in undergraduate and postgraduate courses. The writing process involves the assimilation of various assumptions considered common sense while recognising the impossibility of full articulation and responsibility for the impact generated by the knowledge thus produced. In this way, academic writing transcends the mere act of writing texts, becoming an essential means of communication between academics in various disciplines and fields of study (Warchał, 2007; Greene & Lidinsky, 2015).

Fonseca (2019) discusses how the production of knowledge in universities is closely linked to reading and writing practices, which simultaneously give students a legitimate space for expression and are shaped by power relations. These relations influence not only what can be said, but also who is allowed to speak and how discourses are formed. The teaching of academic writing has the potential to both challenge and reinforce these power structures. Fonseca (2021, 2023) explores the difficulties faced by academics in constructing meaning, even in familiar discursive contexts and in familiar textual genres (research project, thesis). The author identifies that these difficulties often stem from the lack of a robust enunciative project in the texts, resulting in writings that are perceived as unified spaces rather than dispersed fields of meaning. This conformity to "the known", whether deliberate or unconscious, saves the individual from the frustrations of the writing process, and authorship emerges, presenting a heterogeneity that is shaped by the reaffirmation or rejection of concepts, often without explicit attribution, demonstrating the complexity of authorship and attribution in academic discourse.

Bailey (2015) lists the most common types of academic writing, which include notes, letters, CVs, abstracts, annotated bibliographies, paragraphs, reports, essays, research papers, and dissertations or theses, each with its own design, style, and length defined according to the academic programme and disciplinary requirements. Academic writing – involving the production of genres used to disseminate scientific findings and critical thinking – presents

significant challenges. This is due to the lower degree of standardisation and monitoring required to be compared to other more practical types of writing. In this sense, we agree with Martins (2013, p. 28), who states that "studies of textual genres do not aim to restrict themselves to the taxonomic classification of texts, since the emphasis of these studies is on the analysis of socio communicative functionality and not on formal features or linguistic properties". As can be seen in the various theoretical approaches we have discussed, they obey different institutional norms and specific requirements (genre, formats, and citation styles) that must be followed by students.

Teaching PAL through an approach based in various textual genres is a pedagogical practice that has proven effective in constructing experiences according to the linguistic complexity of texts and their functionalities in everyday life and the literacy of students. By analysing the different textual genres present in academic writing in PAL, students are exposed to different styles of writing, textual structures, and specific vocabulary. This contributes to the development of their writing skills. Furthermore, the exploration of textual genres present in the most common social media today, such as biographies, poems, reports, interviews, self-help texts, life narratives, and literary excerpts, can further expand the possibilities of linguistic, thematic, and discursive analysis in the classroom, contributing to students' identity perceptions. These textual genres reflect the diversity of voices and experiences present in contemporary society, and their critical analysis can enrich students' understanding of the different forms of expression and construction of identities present in digital communication and everyday life.

The introduction of different text genres in the teaching of PAL allows students to become familiar with the conventions and specific characteristics of each discursive type. This prepares them to produce more appropriate and effective texts in the reality of living in society at large, as well as in academic contexts. Additionally, teaching these textual genres promotes the development of other language skills, such as understanding complex texts, critical analysis, and argumentation, which are essential for the acquisition, understanding, and proficiency in the target language.

In addition to that, Selber's (2004) model of digital multiliteracies comprises three interconnected approaches. The functional approach emphasises the technical skills users develop when interacting with digital devices, which alters their relationship with technology. The critical approach views computers as cultural artifacts, urging users to recognise the social structures reflected in digital content and to question the motivations of technological industries. Finally, the rhetorical approach advocates for a shift from being mere users to becoming producers of technology, prompting critical reflection on how technology influences interactions and its broader social implications.

Selber's approach to digital multiliteracies aligns well with the methodologies discussed in the context of collaborative academic writing. In telecollaboration activities within PAL teaching, the functional approach highlights the technical skills students develop through real-time interactions using digital tools. The socio-interactionist approach complements this by emphasising the importance of social interaction for joint knowledge construction, as seen in virtual exchanges that promote language and intercultural skills.

## 10.2.4. Collaborative Writing as an Interaction Tool in Telecollaboration

Collaborative writing in PAL can be facilitated by various online tools, allowing students to develop their skills collaboratively and interactively. For example, platforms like Google Docs and Microsoft Word Online enable students to write together in real time, contributing to the elaboration of collective texts. With the use of such tools, students can divide tasks, discuss ideas, and edit the text collaboratively, enriching the learning experience.

Moreover, collaborative feedback is an essential practice for improving writing in PAL. Students can use commenting tools on these platforms to offer suggestions and corrections to each other, promoting mutual learning. For example, after producing a joint text, students can review and comment on the parts written by their peers, providing insights and suggestions for improvement. This not only enhances each student's individual writing skills but also stimulates reflection and collaboration among them. We have also noticed that, in the collaborative writing process, the function of each mediation tool must occur in an integrated and coordinated manner to contribute to the functioning of the multimodal text. This has been argued by Signorini and Cavalcanti (2010) in research focused on mediation with technological information artifacts.

In summary, collaborative writing in PAL can be effectively conducted through online tools that allow real-time collaboration and collaborative feedback. These practices not only develop students' writing skills but also promote collaboration, interaction, and mutual learning, making the learning process more dynamic and meaningful.

#### 10.2.4.1. Development of Narratives in PAL

The development of narratives in Portuguese is a meaningful writing production strategy that promotes reflection on students' identities and the deconstruction of stereotypes about Portuguese-speaking peoples around the world. Through activities such as biographical narratives, life stories,

interviews, retellings of classmates' stories, and other genres of self-writing, students are encouraged to express their experiences creatively and explore different cultural perspectives. These tasks are aligned with Kramsch's (1993, p. 30) assertion that "culture puts its imprint on the conversational and narrative styles of the members of a social group. These styles are generally considered to form part of people's cultural identities".

Taking this concept into account, we understand that when students write a biographical narrative, they have the opportunity to reflect on their experiences and identities while practising language use. Similarly, when retelling classmates' stories or creating fictional interviews, students develop their writing and oral expression skills, as well as expand their knowledge about the diverse cultures of Portuguese-speaking countries.

When developing learning paths to PAL classes, introducing narrative development proposals not only stimulates students' creativity; it also promotes cultural expression and the construction of a broader and more inclusive view of the Portuguese-speaking communities, contributing to a more meaningful and intercultural learning experience. With these classroom dynamics, we can expand students' oral participation, as well as the group's reflections on relevant identity issues for each of them discussed.

#### 10.2.4.2. Use of Blogs, Podcasts, Images, and Layout in PAL Teaching

The use of blogs, podcasts, images, and layout in teaching PAL is a pedagogical practice that enriches learning by providing a more technological, dynamic, and engaging experience. Through these multimodal resources, students have the opportunity to access different forms of language, which contributes to the development of their language and communication skills. For example, blogs and podcasts allow students to create and share content related to the Portuguese language, such as written texts, audio, and video, thus enhancing their oral and written production and comprehension skills. Moreover, the use of images and layout can help incorporate cultural and authentic aspects of the Portuguese language into teaching, making classes more contextualised and meaningful for students. In this way, the use of blogs, podcasts, images, and layout in PAL teaching not only enriches the learning process but also contributes to a greater connection with the cultures of Portuguese-speaking countries, promoting a more authentic and intercultural learning experience.

Tarnopolsky (2000), in exploring the teaching of writing in Ukraine, argues that effective instruction of writing is pleasurable and incorporates activities that stimulate playful writing, such as creating extravagant descriptions and transforming conventional texts into absurd narratives. This includes

promoting collaborative writing and creating stories with moral and illustrative elements. The demanding nature of academic writing, coupled with the short time frame in which students must try to master it, leaves little time for tasks that students might perceive as more interesting and enjoyable. In contrast, students in PAL contexts, without the immediate demands of academic writing, can have more freedom and develop skills and knowledge through activities practised by means of telecollaboration, for example.

We cannot ignore the fact that academic writing represents a form of creative expression that requires a deep understanding and sophisticated use of one's mother language or a foreign language. The practical relevance of academic writing may be limited after graduation, as many students who do not pursue a scientific career will not practise writing academic genres, such as the scientific article. However, other skills, such as critical thinking, planning, reading, and using sophisticated language resources, can be employed in any professional career. Assuming that language is a historically situated socio-interactive activity

(Marcuschi, 2008), i.e. "a system in constant interaction with its shared knowledge about its world and its society" (Beaugrande, 1997, p. 11), it is argued, supported by Bakhtin and Volochinov (2006, p. 125), that verbal interaction thus constitutes the fundamental reality of language. The true substance of language is not constituted by an abstract system of linguistic forms, nor by the isolated monological utterance, nor by the psychophysiological act of its production. It is constituted by the social phenomenon of verbal interaction, carried out through utterances. Contemporary theory distances itself from static models of textual genres, understanding them as responses to recurring rhetorical situations, an idea supported by theorists such as Miller (1994) and Swales (1990). Zavala (2011) and Majchrzak (2018) point out that textual production is influenced by multiple factors, such as an individual's experience with their first language, their proficiency in the second language, their previous experiences with specific textual genres. The type of instruction received informs their beliefs about cultural differences. The writers' agency is reflected in their rhetorical choices and preferences. Students can focus especially on writing from source texts, completing summaries, responses to texts, essay exams, and documentary research, for example. This type of instruction is very practical and meets an immediate need of the students but is considered by some to be rather monotonous. It distances itself from the theoretical assumptions of language, writing, and language teaching postulated in this chapter.

In a Brazilian Studies BA course at the University of Warsaw, for example, contents related to literature, culture, and linguistics are complemented by learning a new language system, making writing in the target language an essential means of assessing learning. In this sense, the ability to critically evaluate texts by others, as pointed out by Defazio *et al.* (2010), is crucial,

especially at postgraduate levels and in professional programmes. Hryniuk (2018) highlights the importance of academic writing courses, often offered throughout the educational trajectory or integrated into practical language courses, which aim not only to deepen knowledge in other disciplines such as linguistics and literature, but also to facilitate students' success in academic tasks and exams.

In this chapter, working with diverse textual genres presupposes an understanding of the basic foundations of multiple literacies (Rojo, 2009). Multiliteracies (Kleiman, 1995) are sets of social practices in which a subject or group of subjects uses language to make sense of speech and writing. The use of language in these practices reveals identities and self-awareness of both the subjects and the people who practise them.

The expansion of knowledge in a foreign language, in this case PAL, presupposes that the discursive practices of the subject or group of subjects result in a critical perception of identities. They place these subjects in new positions and forms of interaction. We understand, then, that the development of literacy in an academic environment, here treated as academic literacy, is built from learning the use of a particular language in social and discursive practices situated in the academic context. The student is required to read and write, speak and listen to various textual genres related to the topics addressed, the area of knowledge of the respective course, and the professional performance for which they are being trained.

# 10.3. Methodological Approach

The pedagogical practice presented here is grounded in ethnographic methodologies, fostering a deep and contextualised understanding of teaching. Ethnography in educational activities is closely associated with the study of human groups, their institutions, interpersonal behaviours, material productions, and beliefs (Angrosino, 2009). Since the 19th century, ethnography, alongside qualitative research, has demonstrated its value, importance, and relevance in the academic field. When focused on specific topics with qualitative objectives, especially in the study of certain groups, ethnography not only serves as a robust methodological and theoretical foundation for research but also as an effective strategy when aligned with investigative goals. In education, ethnographic studies have approached the socio-anthropological perspective, allowing the voices of those involved to be heard and considered. This active listening provides opportunities for critical reflection and the possibility of taking concrete actions in educational practices and policies, contributing directly to the inclusion and transformation of the educational environment and its participants.

Consequently, participant observation, widely used in the development of telecollaboration activities (Brazil and Canada), incorporates the ethnographic process as a fundamental research tool adhering to academic and scientific rigour. The role of the researcher, as an observer, varies according to the level of immersion in the field of study, reflecting the degree of involvement with the subjects and the environment observed. Observation, as an investigative practice, is a complex process as it deals with human relationships and behaviours, requiring a careful and reflective approach. Even when employing other data collection methods, the researcher remains an attentive observer, constantly balancing their perception with critical judgment. In this sense, reflection becomes central to ensuring impartiality and a thorough analysis of the observed phenomena.

Academic writing is more than just the production of texts: it is a sociocognitive and interactionist process that requires students to activate specific knowledge and apply diverse strategies to ensure the cohesion and coherence of discourse (Koch & Elias, 2010). Integrating telecollaboration activities into PAL teaching approaches and methodologies is a strategy that significantly expands the possibilities for interaction and learning for students. Through telecollaboration, students can communicate and collaborate with peers from different cultures and geographical locations using digital technologies. This practice not only promotes the development of language and intercultural skills in an authentic way but also stimulates the exchange of knowledge and experiences among participants (Levy, 2001).

Incorporating such practices into the learning path – highlighting telecollaboration, socio-interactionist approaches, and technological tools – lays a robust foundation for a dynamic teaching-learning environment that values and leverages students' experiences. Moreover, employing ethnography and participant observation enriches our understanding of interaction processes, collaborative writing, and narrative development in teaching both Portuguese and English as additional languages. These insights are instrumental in continuously tailoring educational practices and technologies to fit the sociocultural contexts of learners.

# 10.4. Learning Path: Writing Practices in Telecollaboration

# 10.4.1. Building Learning Paths

Building learning paths in the teaching of PAL is an approach that aims to promote the development of students' language skills in a sequenced and organised manner. These paths are developed based on carefully planned didactic sequences, which consist of tasks that are ordered in advance and guided

by objectives, skills, tools, methodologies, and different complexities. Or, according to Dolz and Schneuwly (2004, p. 20), they are defined as "a succession of organized and articulated school activities, methodologically planned with the aim of teaching something".

## 10.4.2. Concept and Organisation

The concept behind learning paths is to provide students with a continuous and progressive learning experience, where each step of the path is related to and built upon the previous one. Michael Long's (2000) discussion on task-based language teaching and language acquisition emphasises the importance of task design in language learning, which contributes to the development of learning paths within a constructivist framework. This means that tasks and activities are designed to gradually develop students' language skills, starting with simpler aspects and progressing to more complex challenges as they advance along the path.

### 10.4.3. Thematic Continuity

The proposed paths can be organised around a *specific* or *continuous theme*, allowing students to explore different aspects of the language and associated culture in a deep and meaningful way. For example, a learning path about travel could start with simple vocabulary and grammar tasks related to travel, then progress to reading and understanding texts about tourist destinations, and culminate in writing projects such as travel reports or oral presentations about travel experiences.

# 10.4.4. Didactic Sequences

These sequential and organised approaches underlying the learning paths not only help students develop their language use skills (speaking, listening, reading, and writing) more effectively but also provide them with a more integrated and meaningful learning experience, contributing to deeper and longer-lasting knowledge acquisition.

In this section, we propose a didactic possibility for translanguaging pedagogy, permeating knowledge related to socio-interactionist and ethnographic linguistics, considering discursive and semiotic studies in their interface with language education, according to the studies of García and Wei (2014).

The planning of educational practices that form the learning path proposed in this article aims to provide educators with a new way of thinking about language education and language teaching, in a way that values what the learner

brings with them in terms of linguistic, social, and cultural repertoire. Thus, the methodological procedure described and illustrated in the section below aims to involve students in meaningful learning, considering sociolinguistic practices from the subjects who produce them, the various contexts in which they are produced, and the power relations established in these spaces.

It is important to emphasise that the didactic material produced included a variety of multimodal and bilingual genres, such as music, lectures, narrative stories, comics, advertisements and advertising articles, among others. The activities aimed to develop bilingualism, collaborative work in groups, linguistic awareness, and promote interaction in multicultural environments, using Portuguese and English as interactive resources. The tasks consisted of reading, listening, text comprehension, and written production of syntheses and critical positions on the topics addressed.

## 10.4.5. Resources and Didactic Materials in Learning Paths

Resources and didactic materials play a fundamental role in supporting learning paths in telecollaboration activities in PAL. For example, materials such as videos, audios, authentic texts, and interactive exercises can be incorporated to offer a variety of stimuli and learning contexts. These resources are essential for promoting the development of students' language skills, as they provide opportunities for practice and exposure to the language in different contexts and communicative situations.

Additionally, specific online platforms are essential for facilitating telecollaboration in PAL. Platforms like Zoom, Google Meet, and Microsoft Teams offer communication, collaboration, and resource-sharing tools that are crucial for the success of telecollaboration activities. These platforms allow interaction between students from different geographical locations, enriching the learning experience by exposing students to different linguistic and cultural varieties of the Portuguese language.

Educational digital games hosted on online platforms can also be valuable resources in telecollaborative writing activities for teaching PAL. For example, platforms such as Wonderwall, Jamboard, Quizizz, Heads Up, and Quizlet are known for their effectiveness in teaching foreign languages and have the potential to be adapted for teaching Portuguese. These games offer a variety of interactive activities, such as vocabulary, grammar, and listening comprehension exercises, designed to engage students and promote written language practice. The accessible nature of these online games makes them ideal for writing activities, as they can be accessed by students in different geographical locations simultaneously, facilitating collaboration between them and providing students with more dynamic, interactive, and effective learning experiences.

#### 1st Step - Welcoming

Considering the social interactionist approach, which emphasises the importance of social interaction in shaping an individual's cognitive development and acquisition of language, the initial practice of translanguaging didactics should encourage students to use their sociocultural knowledge to construct a meaningful presentation with the information they deem necessary for a first contact with speakers of other languages. This unit should be developed in three stages: (1) the presentation of the contents and units proposed throughout the project to the students and their respective objectives, as well as the functioning of translanguaging practices; (2) the understanding of the class profile through dialogues, research tools, or another form that the teacher deems most appropriate, in order to comprehend the students' experiences and the topics that most interest the group (at this stage, it is also crucial to encourage participants to discuss their curiosities, doubts, and expectations regarding the project); and (3) the construction of a small presentation, the topic of which can be defined together or predefined by the teacher, to stimulate the students to expand their linguistic repertoire with the use of another language.

## 2nd Step - Working Guidelines

In this activity, students were challenged to collaborate in creating guidelines to improve group work dynamics. Initially, an introduction about the importance of establishing clear rules to promote an effective collaboration environment was presented and discussed with the class. Then, students were divided into small groups to conduct a brainstorming session where they discussed and listed ideas on how they wanted the group to function, addressing issues such as communication, task division, and conflict resolution.

Subsequently, there was a whole-class discussion where groups shared their proposals and discussed the different suggestions, seeking to reach a consensus on the most important guidelines. Based on this discussion, students drafted the final guidelines, ensuring they were clear, specific, and achievable, reflecting the principles of collaboration and mutual respect.

After the guidelines had been drafted, groups reviewed and, if necessary, adjusted their proposals before officially approving them. Throughout the course, groups implemented their guidelines and regularly evaluated their effectiveness, promoting regular discussions about their compliance and making adjustments as needed. This activity aimed not only to improve group work dynamics but also to develop communication, negotiation, and collaboration skills among students.

#### 3rd Step - Building Affinities

In the context of foreign language teaching, it is crucial to promote the building of affinities among students, contributing to a more collaborative and welcoming learning environment. Highlighting the importance of communication and group work, Gibbons (2015, p. 74) asserts that "being able to use this interpersonal function of language appropriately in collaborative work is an important dimension to knowing how to work in a group. The interpersonal function of language concerns itself with how a message or idea is given to others rather than on the content of the message itself".

In order to achieve this goal, we proposed a structured activity that aimed to connect students through their interests, experiences, and language skills. To start the activity, we suggested that students be divided into pairs or small groups, ensuring a diversified composition that includes students with different levels of proficiency in the foreign language. Next, each group was guided to create a presentation using the digital tool they felt most comfortable with to share their interests, hobbies, and relevant personal experiences, encouraging informal conversation and the discovery of common ground among group members.

Based on the shared interests, groups engaged in a specific interaction activity which included thematic board games and structured discussions on relevant topics. During the activity, students were encouraged to communicate and share information in the target foreign language, providing a valuable opportunity to practise the language authentically and meaningfully while strengthening the bonds between group members.

At the end of the activity, students had the chance to share their experiences and offer feedback to each other on communication and collaboration within the group, identifying strengths and areas for improvement in their interactions. Finally, they were encouraged to stay in touch outside the classroom, whether through social networks, WhatsApp groups for study purposes, or informal exchanges, strengthening the connections initiated during the activity over time and contributing to a more cohesive and supportive learning environment.

## 4th Step - Identity Perception

In the execution of the multicultural task of identity construction, it was essential to begin with an open and sensitive discussion about the various cultures present in the classroom. This step allowed students to share their own cultural experiences and perspectives while addressing cultural stereotypes with care. Emphasising the complexity and diversity of each culture, it also alerted about the dangers of simplistic generalisations. As Wei (2011, p. 1224)

asserts, "they consciously construct and constantly modify their socio-cultural identities and values through social practices such as translanguaging".

The task used in our learning path aimed to promote identity affirmation through various aspects of culture, encouraging students to explore elements such as food, music, family traditions, and clothing, which connected them to their cultural origins. When discussing the task proposal with students prior to the intercultural encounter, they were encouraged to reflect on the impact of cultural stereotypes on self-esteem and the image of a people, and we discussed the deconstruction of harmful cultural stereotypes, emphasising individuality and diversity within each culture.

At the end of this activity, having observed the interactions of Portuguese language students with English language students, we inferred that the multicultural task not only promotes a deeper and more respectful understanding of different cultures but also strengthens students' self-esteem and cultural identity, contributing to an inclusive and enriching learning environment.

It is worth noting that, when developing didactic material for the multicultural identity construction task, it is essential to consider various aspects to ensure its effectiveness and relevance. The material should be imbued with cultural sensitivity, addressing the various cultures present in the classroom with respect and avoiding simplistic stereotypes. It is important to emphasise to students that they include a wide diversity of cultural perspectives, recognising the complexity of each culture and avoiding generalisations that marginalise specific groups.

## 5th Step - Sociocultural Investigation

After working on identity aspects in the culture and individual perspectives of the students, we moved on to a task focused on the sociocultural investigation of the participants' cultures. As our work proposal is anchored in the perspective of critical applied linguistics, we must "incorporate views of language, society, and power that are capable of dealing with questions of access, power, disparity, and difference and that see language as playing a crucial role in the construction of difference" (Pennycook, 2001, p. 18).

The primary objective of this activity, though, is to encourage students to explore and share significant aspects of their own cultures, as well as to learn about the cultures of their peers. Thus, the activity was planned in such a way that students conduct research on various sociocultural aspects of their countries of origin, such as traditions, public policies, customs, cuisine, festivities, and differences between class values and beliefs, using varied sources such as books, the internet, interviews, and personal experiences to enrich their understanding of their cultures.

After the research phase, students were encouraged to produce a genre text, using Portuguese as the language of communication, to share their research with their peers. We suggest proposing students to share their research through written presentations, such as portfolios, photo collages using the Jamboard platform, or other interactive formats, allowing all participants to contribute to and learn from each other.

Regarding interactions, students were guided with questions that served as a framework for critically analysing the similarities and differences between their cultures of origin, reflecting on how these aspects influence their individual identities and social dynamics in their communities. The emphasis was on appreciating the cultural diversity present in the classroom, highlighting the richness and complexity of the different cultural perspectives of the participants. In conclusion, this activity provided students with the opportunity to further reflect on their own cultural identity and how it relates to the cultural identities of their classmates. By promoting this intercultural awareness, the activity contributed to the development of communicative skills in Portuguese and to the construction of a collaborative and respectful learning community.

#### 6th Step - Retelling Narratives

Following the learning path planning, we devised an activity that would stimulate foreign language students to produce narratives about their own experiences, family memories, or cultural stories from their city or country of origin. Initially, we engaged in a dialogue with the students, offering insights into the cultural significance of storytelling. They showcased a diverse array of examples such as folk tales, personal anecdotes, and historical narratives drawn from both the target and heritage cultures. These narrative forms are commonly acknowledged to contribute to individuals' cultural identities. Next, students were instructed to reflect on their personal experiences and family memories. They were encouraged to draw inspiration from significant events in their lives and stories passed down by their elders, or even tales and legends about prominent people and characters in their cities or countries.

We suggested conducting research and collecting additional material, which could involve interviews with family members, consulting local history books, or visiting historical sites to enrich their narratives.

The activity should preferably be elaborated with oral genres, emphasising the oral tradition of each country. For this, students were to create videos, presentations, animations, or even comics to illustrate storytelling. At the end, students presented their narratives to the groups and posted them on a collective class page (we used the Padlet platform) so that each one could

watch, comment, or ask about a classmate's story. We asked each student to comment on two presentations produced outside their groups.

## 7th Step - Memoir Writing

Building on this first experience of collaborative writing, with the help of other students and teachers offered in the finalisation of the text, we proposed working with the textual genre of the memoir, presenting examples and highlighting its importance in preserving culture and identity.

The activity relied on the research and writing carried out in the previous activity and the exploration of memories and cultural identity, with students reflecting on their personal experiences and collecting additional material, such as old photographs or family stories, promoting the sharing of cultural experiences and the development of their language skills. Based on this, students developed their stories, organising the characteristic textual structure of this genre, which involved a personal, descriptive, and reflective narrative. During this process, it was extremely important to offer support in adapting vocabulary and grammatical structures to the memorialistic context and to the foreign language they were learning.

During the narrative development process, students were guided in structuring their stories, from drafting an outline to organising elements such as introduction, development, climax, and conclusion. At the same time, we emphasised the use of linguistic knowledge acquired in the foreign language course, including varied vocabulary, appropriate grammatical structures, and idiomatic expressions relevant to their narrative. After completing the narrative, students participated in revision and feedback activities, where they offered and received constructive feedback from peers or the teacher to improve their stories. For this, we used the Google Docs platform with shared documents. Feedback was given in the form of comments on the main text.

We believe that through this collaborative writing, participants were able to contribute to the cohesion and coherence of narrative texts by engaging in peer correction, thus promoting the sharing of cultural experiences and the development of students' language skills. Finally, the presentation and discussion of the narratives in the classroom, among groups, promoted the exchange of cultural experiences and shared memories, enriching learning and encouraging critical reflection on identity, memory, and culture.

## 8th Step - Collaborative Analysis and Reflection

To conduct a comprehensive and constructive review of the project, we proposed a guided study, bringing together participants for a collective conversation

about the undertaking they were participating in, using data compiled from the forms filled out throughout the collaboration. We addressed issues such as the project's timeline, task preparation, each participant's personal performance, and factors that may have contributed to or hindered progress, as well as a collaborative reflection on language use and other relevant aspects of the activities.

This activity was carried out first within groups, encouraging students to discuss the positive aspects, challenges faced, and suggestions for improvement for future collaborative activities. After the group discussion period, we returned to the main room and invited group members to share their thoughts. During the presentation of the groups' ideas, we took notes on the main contributions, suggestions, compliments, and criticisms presented.

# 10.5. Interactive Feedback and Reflections through Pedagogical Practices

Originating from the interactional principle, where a text is produced with a potential reader in mind, the entire writing process is guided by this concept. Geraldi (2003) emphasises that the 'other' serves as the measure for all textual production, not only influencing the reading process but constituting a necessary condition for the existence of a text from its very conception. Therefore, the teaching of academic writing should be regarded as an investigative practice committed to the production of knowledge. Mastery of textual genres and revision skills are essential for authors aiming to make significant contributions to their field of knowledge. Barzotto *et al.*'s (2018) proposal supports what we advocate for in this text: teaching that integrates reading and writing, in which the production of knowledge meets the urgent need to train academics who not only understand but also push the boundaries of what is recognised as legitimate knowledge in their fields of study.

The development of academic writing skills is crucial for students to meet the standards required in undergraduate and postgraduate courses. Writing tasks at these levels include, but are not limited to, descriptive, analytical, persuasive, critical, and investigative writing. Chauhan (2022) emphasises that it is essential for students to recognise writing as an iterative and recursive process that involves generating ideas, planning, initial drafting, revising, and editing, culminating in sharing the finished work. Important during this process are not only the formal aspects of writing, such as content, organisation, purpose, and audience, but also adherence to academic conventions that encompass objectivity, formality, citation styles, simplicity, clarity, conciseness, and sensitivity to textual genres.

Moreover, in the context of learning through telecollaboration, feedback plays an important role. According to Schillings *et al.* (2023), written

feedback in the acquisition of academic writing skills should be structured in three main forms: (1) feed up, which guides the student as to expectations; (2) feed back, which provides information on current performance; and (3) feed forward, which suggests how to improve in the future. The effectiveness of this process, however, is limited by the students' ability to interpret and implement the feedback they receive into concrete improvements in their writing skills. In this context, direct interaction through dialogue about feedback is considered by many scholars to be a potentially more effective means of promoting learning. However, the evidence regarding the effectiveness of interactive feedback, particularly face-to-face feedback, is still ambiguous, suggesting the need for further research to clarify these dynamics.

This section provides an analysis of the students' feedback in light of the theories discussed in the chapter. The data was collected both through Google Forms, which the students completed at the end of each meeting, and from the teachers' notes during the group's eighth meeting. It is important to first highlight that the described telecollaboration meetings emphasise promoting intercultural interaction and the development of linguistic competence through translanguaging practices. This approach allows students to utilise multiple linguistic resources from their native and foreign languages, fostering not only linguistic proficiency but also a deeper understanding of the cultures involved.

When analysing the students' statements, we observe how these interactions reflect the concepts of multicultural identity and translanguaging practices. For example, consider the statement:

(1) "Dear diary, my friends and I talked about the different traditions of each country, typical dishes, music, and family habits"

This statement is directly linked to the idea that telecollaboration provides an opportunity for students to discuss and learn about diverse cultures, which is a key aspect of developing a multicultural identity. The text mentions that cultural exchanges help students perceive and value cultural differences, in addition to connecting them to their experiences. The second statement reads:

(2) "It was interesting to hear about their life in Brazil during Christmas because it is very different from what happens in Canada. Here, it is very cold, and we only have vacations for two or three weeks, but in Brazil, they have summer vacations during Christmas"

This reflects the practice of comparing cultural experiences, something promoted in telecollaboration meetings. The exchange of experiences, as mentioned in the text, allows for reflection on how cultural differences shape

students' perceptions, contributing to the deconstruction of stereotypes. The text discusses the importance of exploring these cultural differences to enrich students' understanding of diversity. Additionally, the statement about the characteristics of Canadian houses shows how students were applying their daily observations in their interactions:

(3) "The houses that the Canadians showed had different features from ours, such as basements and fireplaces, while in Brazil, houses generally do not have these features"

Here, we observe how translanguaging also promotes discussions about everyday life and local realities, enriching the learning experience and allowing students to create connections between their experiences and those of others.

Finally, the collaborative writing aspect is also evident in the statements about helping peers with languages, such as the following:

(4) "Studying Portuguese by speaking with my colleagues and helping my colleagues with English"

This type of interaction is characteristic of the collaborative learning model advocated for in the text, where students use their skills to mutually contribute to the teaching–learning process. Collaboration, as mentioned earlier, promotes a more dynamic and meaningful learning experience, with students taking active roles in the process.

Thus, we can conclude that the students' statements exemplify the theoretical principles discussed in the chapter regarding telecollaboration, translanguaging, and interculturality, confirming the effectiveness of these practices in developing students' linguistic and intercultural skills.

Every year, the number of teachers of Portuguese as a foreign language (non-native language, additional language, heritage language, etc.) around the world is growing. The continuous expansion of university programmes and language policies for the economic development of Portuguese-speaking communities through the dissemination of language and culture has propelled a scenario of prosperity for PAL on a global scale.

There are many challenges facing teachers of PAL in the academic language teaching scenarios discussed in this chapter. One of them is the delicate issue of expanding PAL programmes in schools, universities, and community centres. The development of teaching Portuguese as an additional language needs to be seriously reflected on and restructured, taking into account the training of teachers who work in these PAL contexts, as well as the curricula and teaching programmes.

The PAL teacher community recognises the diversity and breadth of the significant challenges posed by students' cultural and linguistic differences. It is urgent and essential to expand the debates on PAL teacher training, teaching programmes, curricula, reference manuals, as well as to address the ignorance of literature and the arts in formal educational contexts. Moreover, there is a disparity in public policies for promoting and offering PAL courses around the world. Didactic and pedagogical issues are at the centre of urgent reflections on updating PAL teaching, making them a priority in the discussions presented in this paper. Although there is a wide variety of support materials for PAL classes, the theoretical and epistemic foundations that underpin these manuals do not adequately reflect multicultural, multimodal, innovative approaches, or, most importantly, the diverse identities of Portuguese-speaking communities today.

There are aspects to consider when offering PAL course programmes in disparate linguistic contexts, with varying levels of proficiency and specific learning objectives. All these variables are determinants of the choices teachers need to make when adapting the programmes and materials to be used. For example, when teaching a group of adults who need to learn Portuguese for academic purposes, as in the undergraduate and postgraduate courses offered at the University of Warsaw in the Portuguese Studies and Brazilian Studies programme, teachers need to incorporate activities and materials related to the academic environment, engaging students in work with discursive genres, a strong ally in the development of linguistic skills and knowledge required of the normative writing produced at higher education institutions.

# 10.6. Concluding Thoughts

This chapter serves as a modest invitation to praxeologically reflect on teaching PAL from a multicultural identity perspective, as developed through our academic writing practices in the telecollaboration project. Integrating Information and Communication Digital Technologies (ICT) into our pedagogical practices has enabled us to redefine our roles in teaching academic writing and our notions of being teachers and researchers. These roles demand constantly updating skills and competencies to function in a networked society. We have observed that today's PAL teachers must move beyond merely using technologies; they must integrate them effectively into the learning path. This involves promoting diverse writing skills and digital literacy, which requires a critical and creative understanding of the writing process and the contemporary challenges in multicultural contexts.

The implementation of a learning path and the promotion of telecollaboration activities in the teaching of PAL play a crucial role in the construction of identities and sharing of culturally significant narratives. The transformation

of everyday literacy practices with the use of technology influences not only the construction of identities but also the way knowledge is constructed and disseminated. In this sense, it is essential for students to have opportunities to learn the academic discursive practices in multicultural contexts and reflect on the teaching–learning processes in the digital environment. They should discuss the potential of digital tools and develop a critical point of view that influences and is influenced by social interactions.

Teacher training plays a crucial role in this context, requiring educators to be proficient in the use of diverse academic writing genres and able to integrate them creatively and constructively into the multicultural university environment. This approach will foster meaningful and relevant learning experiences, making way for the construction of more inclusive and representative identity narratives in a multicultural classroom.

The pedagogical practices discussed in this chapter highlight the importance of teaching PAL in multicultural contexts. Through a translanguaging approach, students not only learn a new language but also engage with diverse cultural experiences, leading to the development of multicultural identities. This approach challenges stereotypes, promotes respect for diversity, and fosters the formation of hybrid identities among students.

Furthermore, the integration of diverse textual genres, multiliteracies, and technology in PAL teaching methodologies enhances the learning experience, making it more dynamic, interactive, and relevant to students' lives. Collaborative writing, narrative development, as well as the use of blogs, podcasts, images, layout, language learning apps, and video conferencing contribute to the development of language skills, cultural understanding, and intercultural communication competence.

Overall, teaching PAL in multicultural contexts requires a sensitive approach to identity issues, recognition of the diversity within Portuguese-speaking communities, and a commitment to promoting inclusivity and mutual respect. By embracing these principles and implementing innovative teaching methodologies, educators can create enriching learning environments where students can thrive linguistically, culturally, and personally.

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**Abstract**: Teaching Portuguese as an Additional Language (PAL) in multicultural contexts presents both a challenge of learning a new language and an opportunity to employ methodologies for teaching academic writing. In this chapter, we discuss the methodological principles underlying the telecollaboration activities and learning paths used in our approach. These activities facilitated intercultural interactions and experiences with various academic genres among the participating student groups. The telecollaboration between Brazil and Canada promoted multilingualism, which was instrumental in fostering both linguistic and cultural development. Digital tools played a crucial role in enhancing academic writing skills, contributing to the formation of intercultural identities. One of the primary challenges in teaching PAL was helping students navigate the complexities of academic writing in a non-native language. This required not only developing linguistic proficiency but also gaining a deep understanding of academic discourse, which is often shaped by cultural specificities. The use of appropriate educational resources and materials was essential in this process, as was the incorporation of digital tools and technologies

that supported the development of academic writing skills in PAL. The chapter concludes with reflections on issues that recent research on academic writing has not extensively explored, particularly methodologies that integrate telecollaboration, identity, intercultural issues, and the production of various written genres. These reflections highlight the challenges faced by PAL instructors in teaching academic writing within the theoretical and methodological frameworks presented in this chapter, aiming to promote a more comprehensive view of education in global contexts.

**Keywords**: academic writing, identity, multiculturalism, learning path, textual genres



Compared to other publications on academic writing, such as Eli Hinkel's *Teaching Academic L2 Writing* (2020) and Ramona Tang's *Academic Writing in a Second and Foreign Language* (2012), the strength of Testa and Figueira-Cardoso's work comes from the diversity of languages addressed, the variety of contributors' professional background, the overall unity of approach across chapters, the accessible explanations of theories and technical terms, and the detailed descriptions of pedagogical activities. While most publications on academic writing relate to the areas of English as a Foreign Language (EFL), English as a Second Language (ESL), and Teaching English to Speakers of Other Languages (TESOL), Testa and Figueira-Cardoso's volume effectively embodies the multilingual perspective its authors advocate, with contributions directed at instructors of Portuguese, Italian, Spanish, and English as additional languages.

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An important issue is of course the presence of Artificial Intelligence and the temptation to use it in academic writing. For some time now, this topic has stirred emotion among university teachers; there is therefore a need for texts treating AI not merely as an enemy but also presenting possibilities of its beneficial implementation, since it is a new reality that no longer can be avoided.

(...)

The book contains material that can be used by university teachers to improve the quality of instruction and come up with solutions to modern challenges in academic writing. It can also serve as a source of inspiration for original research, not just in the languages analysed by the authors. The latter possibility concerns university teachers as well as graduate students and doctoral candidates preparing theses in linguistics and applied linguistics.

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