Brazilian Graduate Students' Perceptions of Their Challenges with Academic Writing in English

Marina S. Dantas-Lunn and Marília M. Ferreira

Abstract

International publication in prestigious English journals challenges novice EFL researchers, especially graduate students. While these challenges have been extensively studied abroad (Bitchener & Basturkmen, 2006; Huang, 2010; Lavelle & Bushrow, 2007; Pessoa, Miller & Kaufer, 2014; Phakiti & Li, 2011; Smirnova, 2015; Zhang & Mi, 2010), they have not in Brazil. To uncover these difficulties, a questionnaire was designed and applied to 303 graduate students from the largest Brazilian public university. The most frequent challenges were writing in natural-sounding English, using prepositions, and writing unknown genres. Participants also perceived clarity as very important in "good" English writing, yet hard to achieve given their vocabulary or grammatical limitations. These results might be explained by the participants' affiliation to a traditional view of language and of writing (Zamel, 1976, 1982) and their lack of experience with academic discourse in English, possibly due to their insufficient English literacy trajectories.

Key words: Writing difficulties, EAP writing, academic literacy, Brazilian graduate students, internationalization.

Introduction

The growing internationalization of higher education (Altbach & Knight, 2007; Qiang, 2003) has increased the pressure on academics to publish in well-ranked international journals (Koljatic & Silva, 2001; Lillis & Curry, 2010; Paasi, 2005), which usually utilize English, the *lingua franca* of science (Hülmbauer, Böhringer & Seidlhofer 2008). However, academics from non-mainstream, non-anglophone countries (Lillis & Curry, 2010) find publishing in English to be very challenging (Canagarajah, 2002; Cho, 2004; Flowerdew, 1999). These challenges can range from (mis)understanding the readership of different journals, incorporating the field's values about how to construct arguments, and using academic discourse. The latter can especially challenge those with limited English proficiency (Meneghini & Packer, 2007).

Similarly to other non-mainstream (or periphery¹) countries (Canagarajah, 2002), the Brazilian scientific community faces many obstacles in international publishing, such as limited funding and the lack of infrastructure (Ferreira, 2016), which jeopardize its insertion into the global realm (Hess, 1995). Yet, the Brazilian government has been promoting the improvement of the quality of graduate programs since 1990's and one of the quality criteria adopted was international publication (Ferreira, 2016). As a result, graduate students (GS) have also experienced increasing pressure for earlier international publication. However, the challenges that surround their efforts, especially

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¹ Even though this terminology seems to be outdated in our field, it is still a prevalent notion among developing countries.

considering the difficulty of communicating knowledge in a foreign language (English, in our case) have not been extensively studied (see them below).

Undergraduates' writing difficulties in English have been intensely researched abroad, both in English-speaking countries (Al-Asadi, 2015; Ene, 2014; Leki & Carson, 1994; Robertson Et Al., 2000; Wingate, 2012) and in non-anglophone contexts (Camps, 2004; Davoudi, Nafchi & Mallahi, 2015; Evans & Green, 2007; Ntereke & Ramoroka, 2015; Pessoa, Miller & Kaufer, 2014). Graduate students' difficulties writing in English have also been frequently investigated, either from the students' perspective (Lavelle & Bushrow, 2007; Phakiti & Li, 2011; Plakans, 2009; Zhang & Mi, 2010), from professors' (Carrió-Pastor & Mestre-Mestre, 2014; Casanave & Hubbard, 1992; Cheng, 2008; Huang & Foote, 2010; Raymond & Des Brisay, 2000; Zhu, 2004) or from both (Bitchener & Basturkmen, 2006; Huang, 2010).

In Brazil, investigations into English writing have been confined to corpusbased and/or contrastive analysis studies focusing on lexical or grammatical patterns (Almeida, 2014; Recski, 2004, 2006), to the teaching of specific academic genres (Coelho, 2011; Motta-Roth & Hendges, 1998), or to pedagogical initiatives and course design (Aranha, 2002; Ramos, 2004). The few studies specifically geared towards graduates' difficulties writing in English found were: Dayrell & Aluísio, 2008 (on collocation patterns with 'work'); Aranha (2009) and Ferreira (2012), both on research article introductions; Schuster Lizotte, Aluísio & Dayrell (2013), on meaningcompromising lexical or grammatical errors in abstracts; Vieira (2017) and Vieira & Aranha (2015), on needs analysis for EAP writing course design. To the best of our knowledge, Brazilian GS's overall perceived difficulties with EAP writing had not yet been gathered in one single investigation.

To fill this gap, the present research aimed at uncovering Brazilian GS's challenges with academic writing in English. We hope that this study can both inform advisors, policy makers, course designers and teacher educators to better prepare junior researchers to socialize into academic literacy for publication, thus providing better support for future pedagogical and institutional initiatives that can strengthen universities' internationalization efforts of knowledge production.

Methods

The research was conducted at a well-ranked Brazilian public University², which offers 264 graduate programs in all fields and has 30,202 students³ regularly enrolled in its Master's and Doctor's programs. The 303 participants of this research (99 masters and 204 doctorates) came from the three main fields of knowledge: 146 (48%) from Life Sciences, 81 (27%) from Exact Sciences and 76 (25%) from Human Sciences.

In order to answer the research question – what are the main difficulties perceived by graduate students in their academic writing in English? – an online questionnaire was designed, piloted, reformulated and distributed to the participants. The electronic platform chosen was Google Forms. The questionnaire was piloted three times

²According to the QS World University Rankings of 2019, this University holds the 118th position.

³ Figures from 2018. Available on https://uspdigital.usp.br/anuario/AnuarioControle

in order to improve question wording and to estimate response time. Subsequently, it was emailed to the University's various graduate programs, which forwarded the questionnaire to the GS on their distribution lists. The participants had two weeks to respond before a reminder was sent. The data collection lasted 11 weeks.

The questionnaire, which was preceded by an informed consent to ensure the compliance of the research with ethical procedures, was composed of 71 questions divided into six sections (named from A to F in the original questionnaire). This paper focused on the analysis on sections D (difficulties) and F (importance): in section D, GS reported their perceived degree of difficulty with 30 features of academic writing, whereas in section F, GS were asked to anticipate which items their professors would supposedly value most when assessing the students' writing in English. The other sections collected information of various sorts: profile, EFL learning history, and the perceived level of knowledge of English, of academic genres and of their writing process.

The questions in sections D and F were of various types, comprising a mixture of multiple choice, open-ended (i.e., questions which required a more thorough, detailed answer), closed-ended (that is, "yes" or "no" questions), and Likert-scale questions. The questions were adapted and combined from various studies: Bitchener & Basturkmen, 2006; Casanave & Hubbard, 1992; Evans & Green, 2007; Hyon & Chen, 2004; Jenkins, Jordan & Weiland, 1993; and Lavelle & Bushrow, 2007.

As soon as the responses were received, they were immediately categorized and color-coded according to the participants' field of study as Life (lilac), Exact (yellow), or Human Sciences (light blue). The questions used to determine each participant's main field of knowledge were in section A, where GS provided the names of their graduate programs and of their colleges. Participants enrolled in hybrid programs were excluded from the research.

In this study, the data were analyzed both quantitatively and qualitatively. On the one hand, responses to closed-ended, multiple choice and Likert-type questions were counted and tallied for the overall GS sample and for each field of knowledge. On the other hand, responses to open-ended questions were approached qualitatively, having been analyzed according to similar, repeated patterns (lexical or semantic) or themes in common (Richards, 2015). Based on such a similarity criterion, categories were created and replies were interpreted, coded, categorized and finally counted, whenever applicable.

Results

Profile of the Participants

Almost half of the 303 GS (48%) were from Life Sciences, whereas 81 (26.7%) came from Exact Sciences and 76 (25%) from Human Sciences. The greater participation of Life Sciences is easily explained by the acknowledged importance of English as a Lingua Franca by this field. For example, several Brazilian journals in Medicine are published in English (*Brazilian Journal of Medical and Biological Research; The Brazilian Journal of Infectious Diseases; Brazilian Journal of Cardiovascular Surgery*, to name a few).

Most participants were enrolled in doctoral courses (66%), whereas 33% were pursuing a master's degree and only 1% of the GS were in postdoctoral studies (being

two from Life Sciences and one from Exact Sciences). This predominance of doctoral GS among the participants is likely due to the greater pressure for international publication on doctorates by their graduate programs.

50.5% of the GS perceived themselves at an advanced proficiency level, whereas 31.4% declared an intermediate level of EFL knowledge and 7.9% perceived themselves at a basic EFL level (10.2% of the GS either ignored their proficiency level or did not answer the question at all). Within the three main fields of knowledge, Human Sciences had the highest percentage of GS (52.6%) report an advanced level of EFL knowledge, against 50.6% in Exact Sciences, and 49.3% in Life Sciences. Incidentally, the latter was also the field with the highest percentage of GS at a basic EFL level (8.9%, against 7.4% in Exact Sciences, and 6.6% in Human Sciences). However, this finding contrasts with two others: 1) GS's length of formal EFL studies; and 2) their proficiency in the language.

1) The total study time for each participant was calculated by adding up the length of time the student reported having had studied in different formal EFL learning contexts, such as language centers and student exchange programs. Although GS's average time of formal EFL studies outside the University was calculated at 4.1 years, 51% of the GS reported having attended fewer than three years of formal EFL studies. Overall, these figures might indicate that the respondents did not study English enough to achieve the proficiency level required for adequate performance with academic discourse and publication (Gnutzmann & Rabe, 2014; Uzuner, 2008).

Concerning the length of formal EFL studies across fields, Life Sciences achieved the highest average length of study (calculated at 4.5 years). Human Sciences GS studied for an average of four years whereas Exact Sciences' average dropped to 3.4 years. These numbers reveal that, long though some GS's EFL preparation might have been, it may not be sufficient for them to achieve that advanced level declared. Moreover, we could question whether GS's EFL studies would be specific enough (that is, geared toward academic English rather than supposedly general English) to ground the command of the academic discourse necessary for international publication.

2) Furthermore, neither did GS's length of EFL studies outside of the University match the advanced level declared in the question about their perceived proficiency level (50.5%). Nevertheless, the importance of English for their fields might be a crucial motivation for GS to persist in studying it. Figure 1 shows the breakdown of the participants' EFL study time for each field of knowledge:

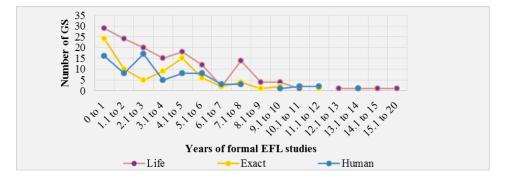


Figure 1. GS's length of formal EFL studies (in years) per field.

Regarding the participants' verified English proficiency, all of the GS had taken the English proficiency exam required by the graduate program that each GS had applied for. That exam, however, consists of a non-standardized English test which solely assesses reading comprehension of specialized texts. Furthermore, fulfilling this requirement for admission into graduation programs does little to cast light on GS's exact assessment of their proficiency level (or on their perception of English proficiency) as the only result disclosed by those programs is "Pass" or "Fail."

In addition to the required entry proficiency exam, 49.5% of the overall GS reported having taken at least one extra EFL proficiency test⁴ (such as IELTS or TOEFL), the most frequent type of which was TOEFL⁵, with 48% overall (36.2% in Life; 58.1% in Exact; 69% in Human Sciences).

Although this research did not dwell on GS's scores for any exams, our assessment of the GS's proficiency indicates that most of them did not take a standardized proficiency test and when they did, only reading was assessed. It is reasonable to say that Brazilian GS do not prioritize obtaining a TOEFL/ IELTS score as they are often required mostly for study abroad programs and they are costly. As a result, it would be fair to say that GS are not being properly assessed either in their general English knowledge, or in their writing skills – the latter being so much needed for future required international publication. In other words, the findings reveal a contradiction between what GS perceive – most as advanced students – and the reality – their short period of time of English studies and their level of proficiency testing.

In addition to these facts – inadequate perception of their proficiency and not having their English writing skill level being assessed – GS's EFL learning trajectories outside the university revealed a variety of formal and informal learning contexts and ways of learning⁶:

⁴ The distribution per field was similar for Life and Exact Sciences (54.8% and 50.6% respectively), being considerably lower for Human Sciences (38.2%).

⁵ Although the questionnaire did not specify the types of TOEFL (IBT or ITP, for example), the predominance of this test over other test types may be due to the fact that the Brazilian Government has sponsored the ITP version for this University's students.

 $^{^{6}}$ Because many responses included more than one category, if the isolated percentages are added up, they will amount to more than 100%.

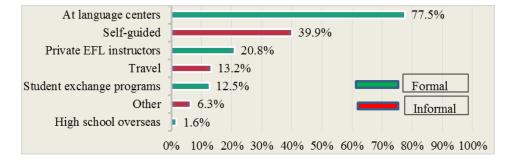


Figure 2. Where/how GS learned English outside of the university: formal and informal learning contexts.

Figure 2 shows that the vast majority of the GS learned English at language centers, which is the typical place where Brazilians learn a foreign language. The second most common way of learning was through self-learning, probably because of the easy access students have nowadays to technological resources for learning English such as apps and the internet. In this research, however, only the formal contexts of EFL instruction were considered.

Based on these findings, we can also hypothesize that Brazilian GS are not fully aware of their difficulties with writing and conclude that the pressure for publication lags behind the linguistic support (not to mention others) needed (Ferreira, 2016). In other words, GS do not seem to have the command of English that grounds the academic discourse or the writing skills required to write for international publication.

Most Challenging Items Perceived by GS in Their EAP Writing

GS's perceptions of their challenges to write in EAP were collected mainly through 30 Likert-type scale questions⁷ in section D of the questionnaire ("on a scale ranging from 0 to 5, in which 0 means 'zero difficulty' and 5 means 'extreme difficulty', what degree of difficulty did you encounter in the following 30 items in your English writing?"). Degrees 4 and 5 were counted, combined and relabeled as 'difficult'. Figure 3 shows the top ten most difficult items overall and the percentage of GS with that perception:

⁷ See Table 3 in the Appendix for a complete list of the 30 items researched.

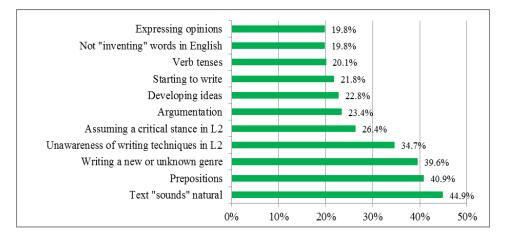


Figure 3. Top ten most difficult items for GS overall.

Fig. 3 shows that the three most difficult items were 1) writing texts that would "sound" natural in English (44.9%), 2) using prepositions adequately (40.9%), and 3) writing a new or unknown genre (39.6%). Each of these items will be discussed separately below. The figure also shows that somewhat complex and abstract actions involved in EAP writing – argumentation, expressing opinions or assuming a critical stance – were perceived as very difficult by many GS. This is so possibly because these actions require the use of "higher level construction skills" (Lavelle & Bushrow, 2007, p. 809) which are even harder to achieve in an additional language.

Writing Texts That Would "Sound" Natural in English

"Sounding" natural in English here means the overall fluency in writing achieved by avoiding unusual word choices, faulty grammar, unexpected sentence building, or even extraneous terminology in a given field. In addition, considering the academic discourse, this naturalness would refer to the adopted rhetoric of a given field (later, we will see that participants unintentionally seem to associate this feature with native-speakerism – Holliday, 2006). This item was perceived as difficult by 44.9% of GS overall. Fig. 4 shows the degrees of difficulty per field with naturalness in writing:

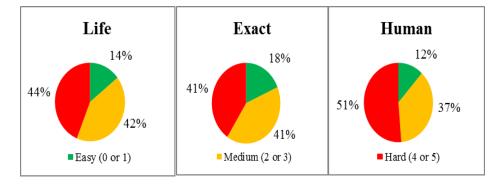


Figure 4. Distribution per field of GS's degrees of difficulty with naturalness in their English writing.

These results reveal that GS of all areas of knowledge – but especially of Human Sciences – show a notable degree of difficulty in attaining the written performance level required by the academic community. This finding might be explained by the relatively lower pressure this area has for international publication. Assuming that GS have little experience with academic writing, which is not the focus of language schools – they could be unaware of disciplinary conventions and conceive "sounding natural" as the Native Speaker model frequently overvalued by these contexts and by publishers, as we can see below.

As previously stated, sounding natural can also be associated with a native speaker academic rhetoric often adopted by publishers, which is also a form of native-speakerism (Holliday, 2006). Non-native speakers' testimonies of being advised to have their manuscripts corrected by a native speaker are not unusual. We found some excerpts from GS's answers which indicate this association⁸ (our emphasis is underlined):

"There is considerable difficulty in writing like a native." (Life Sciences)

"In general, I don't have difficulty in expressing myself in English through writing, but I don't <u>write like a native</u>. My biggest doubt is always about which prepositions to use." (Exact Sciences)

(About their English learning trajectory) "Two years abroad, at a language school for foreigners with native teachers." (Human Sciences)

"The feedback I got for my manuscript was that I should have my text <u>corrected by a native speaker</u> before the resubmission." (Exact Sciences)

The first and third excerpts indicate that GS should be adequately supported in their writing so that they can have conditions to deal with the preferred model of rhetoric for publication. In addition, they need to know the disciplinary conventions of writing and their relationship with this supposedly preferred model of the Native Speaker.

⁸ Even though the word 'native' was not used by the questionnaire, it occurred 35 times in the GS's responses (22 times in Life, and 13 times in Exact Sciences).

Using Prepositions Adequately. Using prepositions adequately was the second most frequent challenge perceived by GS: 40.9% of the participants overall. Figure 5 shows the breakdown of the frequency of responses for each field:

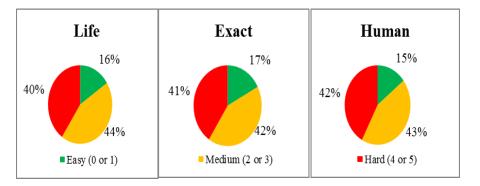
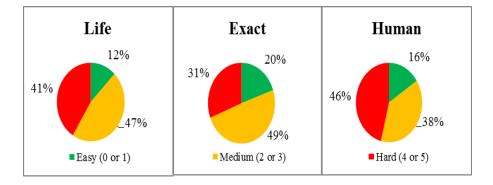


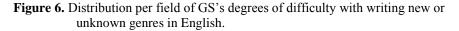
Figure 1. Distribution per field of GS's degrees of difficulty with using prepositions in their English writing.

Preposition usage in English can be very challenging for Brazilian learners and they may transfer this difficulty from their General English learning to writing for academic purposes. Yet, this perception of difficulty with a grammatical item reveals that the GS might still adhere to traditional views of language and of writing (Zamel, 1976, 1982). In these views, language is reduced to grammatical accuracy and writing is conceived as an asocial activity. Good writing becomes grammatically correct writing. Another explanation could be the language school context in which most GS studied English (see item 3.1). Usually in those places, along with the textbooks adopted, the concept of writing is generalist (Hyland, 2002) and asocial. This disregard for writing's social aspects might therefore explain why a grammatical criterion poses such high degree of difficulty for graduate students writing in English. It also signals that they might not be fully aware of their real difficulties with academic English writing as we pointed out before. In our opinion, one of the serious consequences of such a limited perception is the obfuscation of important elements of academic discourse (such as disciplinary conventions) and skills (such as paragraphing, citation and summarizing). Ultimately, this limited view could hinder the development of GS's writing skills.

Writing a New or Unknown Genre in English

The third most frequent challenge for graduate students was reported by 39.6% of the GS overall, with the following distribution per field:





The excerpts below⁹ illustrate GS's perceived difficulty when writing new genres:

(About writing a research article) "It was difficult because I had never written such long and elaborate texts in this language." (Life Sciences)

"I believe that without a sample it would be really difficult to even start writing." (Life Sciences)

"When a theme is new to me, I have a lot of difficulty writing about it (...) I have to read a lot to familiarize myself with it before I start writing." (Exact Sciences)

"The texts published in older journals aren't always made available digitally for me to access them through the Internet." (Human Sciences)

Still regarding GS's written production in English (Section C, in response to the question "have you ever had to write any texts in English during your graduate studies?"), 237 GS (78.2%) reported having already produced at least one text in English. The percentages of GS from Exact (89%) and Life sciences (81.5%) were higher than in Human Sciences (60.5%). This finding seems to indicate that the hard sciences are being more internationalized than the Human Sciences.

Among the 237 GS who responded affirmatively to the previous question, the three genres reported as being difficult to write were research articles (54%); conference, research article or research proposal abstracts (25.3%); research proposals (7.2%). The frequencies with which these genres were reported to be the most difficult in each field are shown below:

⁹ These excerpts were selected from the answers to questions 32 ("Did you always manage to access an exemplar of the texts that you have been asked to write in English?") or 36 ("Do you find other difficulties in your English writing not previously mentioned in the questionnaire?"), both in section D of the questionnaire.

Table 1. Breakdown per field of the three most difficult genres reported by GS.

Genres/Field	Life	Exact	Human
Research Articles	64%	58.3%	21.7%
Abstracts	16%	25%	50%
Research Proposals	6.7%	8.3%	6.5%

GS reported many challenges in producing the above genres in English. The most frequent ones were the following: restricted vocabulary (25 occurrences¹⁰), grammar issues along with lack of technical vocabulary (23 occurrences each), and overall limited language proficiency (22 occurrences). This finding reveals that GS have to write demanding and complex genres during their graduate studies despite their limited experience with declared advanced English proficiency. Two (research article and abstract) are directly related to the spread of knowledge and one (research proposal), to international cooperation and funding of research. Yet, this complexity of texts contrasts with the few years (below three years) of EFL study most GS (51%) had. This short time of English studies can also account for the types of difficulties faced: lack of the foundations of the language (grammar and vocabulary) and lack of technical vocabulary. This finding can signal that GS are not being exposed to concepts of their fields in English or that even though they read specialized texts in English¹¹ they are not able to grasp them due to this overall lack of proficiency. Moreover, this lack of proficiency is aggravated by the scarcity of resources for students' academic literacy development in Brazilian universities¹² (Ferreira, 2016). In other words, the difficulties perceived by GS relate to a traditional concept of writing that probably emerges out of language schools (the most common place to study the language) and which can be reinforced by publishers' frequent recommendation for the overall revision of a manuscript by a native speaker.

In contrast, GS did not identify conventions, moves or complex skills as challenges to write academic genres. It seems that genre is not even understood by them as being a part of writing as a social activity. Before these findings, one might wonder about the role of socialization that graduate school had on GS through advising or discipline writing. Yet, language schools seem to have influenced GS's writing more.

Looking more closely at the distribution of the top three hardest items for GS per area, it is possible to detect interesting disciplinary differences. For example, while there were more variations in the percentages of GS regarding the natural quality of English writing and producing an unfamiliar genre as difficult, the three fields showed a relatively similar distribution of GS for whom using prepositions in English is a challenge. As explained before, this might result from their English language learning history.

¹⁰ The occurrences were not numerous for two reasons. First, the types of difficulties reported were varied, which reduced the subtotals for each category. Second, being an optional item on the questionnaire, 16.9% of the GS who actually answered the question affirmatively refrained from detailing what made writing those challenging genres difficult.

¹¹ Brazilian graduate seminar students customarily read texts in English but hold discussions and write assignments in Portuguese.

¹² Language without Borders is a federal language program which aims to increase the academic community English proficiency and their academic performance in this language. Nevertheless, its focus so far has not been supporting students directly to write complex genres like the ones these GS need.

The results also show that Human Sciences have more reported difficulties with writing in English as far as the top three items are concerned. One possible explanation is the fact that writing in English might not be demanded from them as much as it is by Life and Exact Sciences. In other words, with fewer opportunities for writing, Human Sciences would ultimately obtain less practice as academic writers in English. On the other hand, Exact Sciences face less difficulty with these items maybe because their writing has a more formulaic nature (Flowerdew, 1999).

Challenges Grouped Thematically

The 30 categories investigated in section D of the questionnaire were grouped thematically, as follows: items related to L1-L2 interference and/or translation (such as false cognates and technical vocabulary); lexical, grammatical or syntactic issues (pronouns, articles, sentence building); writing process issues (paraphrasing, argumentation, developing ideas); and miscellaneous ones. The analysis focused on the most difficult items (degrees 4 or 5) and which achieved over 20% of the GS. We noticed that the writing process group concentrated the highest number of items (namely, five), as the table below shows (figures over 20% of GS are bolded):

Table 2. Hig	h degree o	f difficultv	with writing	process-related items
	in active o			process related neering

D26. Writing a new or unknown genre	39.6%
D23. Assuming a critical stance in L2	26.4%
D22. Argumentation	23.4%
D19. Developing ideas	22.7%
D18. Starting to write	21.8%
D21. Expressing opinions	19.8%
D25. Managing citations, references in the text	19.5%
D24. Paraphrasing	16.5%
D14. Paragraphing	7.3%
D16. Sectioning the text	5.6%
D17. Planning the writing	5.3%

This concentration in the writing process group may indicate that GS's difficulties with academic writing in English not only are related to faulty or inexistent academic writing literacy building initiatives but also that these difficulties might not be exclusive to their English writing. In other words, these skills might not have been adequately exploited and developed even in the GS's mother language, Portuguese. That deficiency might thus have been transferred to English.

Important but Difficult Items

Section F of the questionnaire investigated both the importance of and the difficulty posed by 36 uncategorized features of academic writing (see Table 4 in the Appendix). A 10-

degree Likert-scale question¹³ was used to measure the importance, whereas the most difficult items were simply listed in response to an open-ended question¹⁴. The features researched were adapted from Bitchener & Basturkmen (2006), Casanave & Hubbard (1992), Evans & Green (2007), Jenkins, Jordan & Weiland (1993), and such writing manuals as popular as the traditional *The Elements of Style*¹⁵, thus also serving as validation of this research.

The five most valued items (i.e. rated 9 on the Likert scale) were the following: clear objective of the text (80.5%), overall clarity (80.2%), coherence (79.2%), clear research justification (71.9%), and correct spelling (68%). The markedly high percentages would indicate that most GS recognize the value of the items being researched in "good" writing. However, some of these features are subjective. For example, objectivity is often associated with an American style of writing which represents cultural values expressed by the widely known metaphor *time is money*. This value is manifested, for instance, in the CARS model for research article introductions (Swales, 2004) or the thesis statement at the end of essay introductions. On the other hand, the five items most often mentioned as posing difficulty for GS in their English writing were writing English that would "sound" natural, flow, clarity, accurate grammar, and writing cohesively. Furthermore, out of the five most valued items in the Likert scale above, at least three can be achieved through grammar accuracy (clarity, coherence and spelling).

Analyzing how the five most important features for GS ranked in the complete difficulty ranking, we observed that they occupied the 21st, 3rd, 6th, 26th and 15th positions respectively. These results would indicate that clearly stating the objective of a text in English and the research justification (moves of a research article, for example) would not pose as much difficulty as writing in English with clarity and coherence. Conversely, the most difficult features for GS averaged the following degrees of importance in their perception: 7.9 (sounding natural), 7.8 (reading flow), 8.6 (clarity), 8.1 (accurate grammar), and 8.5 (cohesion).

When the subjects' perceptions of difficulty and importance for those 36 items were contrasted, the following was found:

¹³ "On a scale ranging from 0 to 9, in which 0 means 'totally unimportant' and 9 means 'absolutely important', how important do you believe the following 36 items to be when you write in English?"

¹⁴ "Which items from the 36 in the previous question do you perceive as the most difficult when you write in English?"

¹⁵ Strunk, J. R.; White, E. B. *The Elements of Style*. Pearson Education, 2009 (50th anniversary edition), 1st. ed. 1935. 106 p.

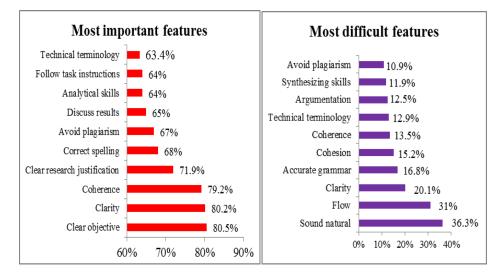


Figure 7. GS's perceptions of importance versus difficulty of features of academic writing in English.

What GS found important can shed light on their limited awareness of academic discourse for publication. Their answers seem to indicate that they are aware of the importance of clarity as a general feature of the text which is manifested in crucial parts like the goal statement and stating the research justification, also known as the "gap" (Swales, 2004). They may know that through literacy brokering from advisors and reviewers. However, this contrasts with the second most difficult item – spelling – and with their perceived difficulty with prepositions from section D of the questionnaire, which are more formal aspects of the language and linked to overall limited proficiency.

The most difficult features for GS indicate important topics in which their performance in writing should probably be improved; however, we might also infer that they may not have the tools available to do that by themselves. Indeed, four of the top-ten items ranked as the most important were also among the most difficult features for GS writing in English: clarity, coherence, using technical vocabulary appropriately in English and avoiding plagiarism. Clarity and coherence in these results would reveal GS's limitation to express in English the disciplinary content that they would probably master in L1. Moreover, other two of GS's limitations might be inferred from the presence of vocabulary and plagiarism in this ranking: that GS's limited vocabulary (roughly 75% of GS perceived a medium or high degree of difficulty with this item) might influence their ability of avoiding plagiarism by not being able to paraphrase properly; and that using synonyms excessively might lead to distancing GS's English writing from the current terminology in their disciplinary discourse communities, as exemplified in this excerpt from a GS in Life Sciences:

Because English is a poor [sic] language, one that doesn't have as many alternatives to word choice or word order in a sentence as Portuguese, there is always a concern of involuntary plagiarism. This occurs because very often

the methodology of other research groups in our area is similar. Hence, some sentences might sometimes resemble each other and they may even be identified as copies by anti-plagiarism software.

This excerpt reveals the conflict between the pressure for original, authentic wording – highly praised by the English academic discourse (Scollon, 1995) – and the GS's insecurity to wander away from the original wording through paraphrasing. That participant also seems to ignore formulaic sentences which might be copied without incurring in plagiarism.

The comparison between degrees of importance and of difficulty also points to an underlying conflict: why would such categories as reading flow and sounding natural, resulting from a supposed focus on the reader by the writer, have been perceived as difficult if they were not important as well? This disparity might reveal a distortion in GS's perception: that they might not have a very clear view of their own difficulties when writing academically in English as we have already pointed out.

Discussion

This study, which consisted in the application of an online questionnaire to GS at a Brazilian University, aimed at uncovering those students' difficulties with writing academically in English. The findings revealed that their main difficulties are writing in natural-sounding English, using prepositions adequately, and writing unknown genres, with an overall predominance of difficulty in items related to the writing process. Another finding revealed that much as GS realize the importance of some features of academic writing in English, they also face difficulty in incorporating those features into their own writing, especially in light of their vocabulary or grammatical limitations.

The questionnaire had some limitations. One refers to the vagueness of its wording, which might have jeopardized participants' understanding of such elusive concepts as 'clarity' and 'sentence building', or even one's personal view of what writing that would 'sound natural in English' might possibly mean. Regarding the latter, which happened to be the main difficulty overall, even if it is assumed that participants took it to mean "academic discourse in native-like English," one might argue that some academic discourse features can also be inherently vague (such as objectivity and clarity), as they may depend on each writer's ability to articulate a myriad of elements to be achieved. Another limitation refers to the rather technical language of the questionnaire. One could argue that words such as 'coherence', 'cohesion', and even 'prepositions' might have confused the respondents. Yet, GS might also have remembered them from their L1 classes.

Both the data in section 3.2.2 and GS's profile reveal that they seem to be limited to a traditional notion of language as grammatical accuracy and writing as grammar correctness. This limited perception, which likely originates from GS's L2 literacy experiences in English language schools, fundamentally prevents them from perceiving not only genre structure or more complex skills as part of academic writing for publication but also, and ultimately, the difficulties they have. Section F corroborates this finding.

The study revealed that overall half of the participants had not been tested on their written English proficiency, much less on their academic writing skills in English.

The lack of assessment of GS's readiness for written performance upon admittance into graduate school might explain why the difficulties pointed out in the research show basic level limitations with the language such as prepositions, vocabulary and grammar. Therefore, it is crucial to keep fostering Brazilian GS's proficiency throughout graduate school and to maximize GS's opportunities to practice their academic writing skills in English during this period so that they can reach the point of facing fewer difficulties with academic discourse before students are required to produce high stakes genres like the ones addressed in this study.

The most frequently reported difficulty (writing natural-sounding texts in English) reveals that GS also attributed importance to the unnatural quality of their writing and that they were aware of certain inappropriacy in their L2 writing. That inappropriacy would supposedly point to GS's writing lower quality, which might evidence that they have embraced the myth of native-speakerism (Holliday, 2006), whether consciously or not. One might argue that this perceived inappropriacy might echo GS's English teachers, professors' or tutors' own beliefs, supposedly inadvertently internalized. According to Holliday (2006), the belief that a native speaker of English would embody and set a standard of perfection to be achieved by an EFL learner is an ideology that permeates English teaching. It also reproduces what Pennycook (1998) described as the colonialist myth: a stereotypical "'autonomous', 'organized', 'inventive' Robinson Crusoe 'civilizing' Man Friday" (Pennycook 1998:10-16 apud Holliday 2006:386). Sometimes disguised as learner-centeredness, the ultimate goal of the liberalism present in nativespeakerism is "to improve learner behavior" (ibid, p. 386), by "correcting non-native speaker culture negatively and confiningly labels what are in effect 'non-native speaker' 'cultures' as 'dependent', 'hierarchical', 'collectivist', 'reticent', 'indirect', 'passive', 'docile', 'lacking in self-esteem'", among other things (Holliday, 2006).

The most common genres GS have to write (research articles, abstracts, and research proposals) confirm the pressure on these novice writers to write complex texts without necessarily having had adequate proficiency with the language or without having experienced appropriate literacy instruction which approaches the macrostruture of those genres, or even the importance of the writer's awareness of the audience's role in the activity.

Brazil is a non-mainstream country where resources for publication and improvement of language proficiency do not keep pace with the increasing pressure and demand for internationalization of universities and publication in well-ranked journals. The experience provided by language schools or by formal L1 learning (Bonini, 2002) seems not to have been either enriched or substituted by appropriate academic discourse socialization at this Brazilian University. The portrait of the sample of Brazilian GS obtained by this study shows a group of students who are in great need to learn how to write for publication purposes but lack the basic command of the English language, genre knowledge and complex skills required by this context. In other words, GS's literacy history affects their language and writing perceptions, which in turn mold their awareness of their own difficulties with writing.

One could argue that such focus on GS's difficulties might only reinforce the now rather outdated deficit discourse (Badenhorst, Moloney, Rosales, Dyer & Ru, 2015; Canagarajah, 2002; Street, 2009); however, the analysis shows that these are socially constructed rather than particular individuals' fault (Lillis & Curry, 2006). The difficulties

become historical, and, by extension, cultural. It seems thus evident that there is an urgent need for pedagogical interventions which will enable an increase of Brazilian GS's level of academic literacy. However, before the picture that we have described can start to improve, the very concept of academic literacy should be changed and fostered by the several educational levels that precede Higher Education.

References

- Almeida, V. C. (2014). O uso de MAKE na escrita acadêmica de aprendizes brasileiros de inglês [The use of 'make' in Brazilian EFL learners' academic writing]. Domínios de Lingu@gem, 8(1), 75-90.
- Altbach, P. G., & Knight, J. (2007). The internationalization of higher education: Motivations and realities. *Journal of Studies in International Education*, 11(3-4), 290-305.
- Aranha, S. (2002). A otimização da escrita acadêmica através da conscientização textual [Optimizing academic writing through textual awareness]. In: *Estudos Linguísticos*, 31.
- Aranha, S. (2009). 23 The development of a genre-based writing course for graduate students in two fields. *Perspectives on Writing*, 465-482.
- Badenhorst, C., Moloney, C., Rosales, J., Dyer, J., & Ru, L. (2015). Beyond deficit: graduate student research-writing pedagogies. *Teaching in Higher Education*, 20(1), 1-11.
- Bitchener, J., & Basturkmen, H. (2006). Perceptions of the difficulties of postgraduate L2 thesis students writing the discussion section. *Journal of English for Academic Purposes*, 5(1), 4-18.
- Bonini, A. (2002). Metodologias de ensino de produção textual: a perspectiva da enunciação e o papel da psicolinguística [Methodologies for the teaching of textual production: the perspective of enunciation and the role of psycholinguistics]. *Perspectiva*, 20(1), 23-47.
- Camps, D. (2004). Paying attention to identity in advanced EAP writing class. *Revista* Brasileira de Linguística Aplicada, 4(1), 315-328.
- Canagarajah, A. S. (2002). A geopolitics of academic writing. University of Pittsburgh Press.
- Carrió-Pastor, M. L., & Mestre-Mestre, E. M. (2014). Lexical errors in second language scientific writing: Some conceptual implications. *International Journal of English Studies*, 14(1), 97-108.
- Casanave, C. P., & Hubbard, P. (1992). The writing assignments and writing problems of doctoral students: Faculty perceptions, pedagogical issues, and needed research. *English for Specific Purposes*, 11(1), 33-49.
- Cheng, A. (2008). Analyzing genre exemplars in preparation for writing: The case of an L2 graduate student in the ESP genre-based instructional framework of academic literacy. *Applied linguistics*, 29(1), 50-71.
- Cho, S. (2004). Challenges of entering discourse communities through publishing in English: Perspectives of nonnative-speaking doctoral students in the United States of America. *Journal of Language, Identity, and Education, 3*(1), 47-72.

- Coelho, J. G. R. (2011). Análise linguístico-discursiva do gênero introdução de artigo de pesquisa (para fins específicos): Teste ANPAD [Linguistic and discursive analysis of the genre introduction to research article (for specific purposes): The ANPAD test]. *Revista Brasileira de Linguística Aplicada*, 11(4), 871-894.
- Davoudi, M., Nafchi, A. M., & Mallahi, O. (2015). A macro-level error analysis of Iranian undergraduate EFL learners' performance on writing tasks. *Journal of Studies in Education*, 5(4), 222-241.
- Dayrell, C., & Aluísio, S. (2008). Using a comparable corpus to investigate lexical patterning in English abstracts written by non-native speakers. In *LREC 2008 Workshop on Comparable Corpora* (pp. 61-66).
- Estela, E. N. E. (2014). Understanding the EAP writing and online learning needs of Chinese university students: a multiple-method needs assessment study. *Asian Journal of English Language Teaching*, 24(24), 121-150.
- Evans, S., & Green, C. (2007). Why EAP is necessary: A survey of Hong Kong tertiary students. *Journal of English for Academic Purposes*, 6(1), 3-17.
- Ferreira, M. M. (2007). Approaches to L2 writing instruction. In: Maciel, R.F. & Araújo, V.A. (org.). Ensino de Língua Inglesa: contribuições da Linguística Aplicada. Campo Grande - MS: UNAES, p. 175-190.
- Ferreira, M. M. (2012). O letramento acadêmico em inglês: Dificuldades na confecção da seção introdução de artigos acadêmicos [Academic literacy in English: Difficulties in writing the introduction to research articles section]. *Revista Brasileira de Linguística Aplicada*, 12(4), 1025-1048.
- Ferreira, M. M. (2016). Challenges for Brazilian post/graduate students writing in the academy: insights for future pedagogical interventions. In: Badenhorst, C., & Guerin, C. (Eds.) (2016). *Research literacies and writing pedagogies for masters* and doctoral writers. Brill.
- Ferreira, M. M., & Lousada, E. G. (2016). Ações do Laboratório de Letramento Acadêmico da Universidade de São Paulo: promovendo a escrita acadêmica na graduação e na pós-graduação [Actions by the Laboratory of Academic Literacy of the Universidade de São Paulo: promoting academic writing in undergraduate and graduate programs]. Ilha do Desterro: A Journal of English Language, Literatures in English and Cultural Studies, 69(3), 125-140.
- Flowerdew, J. (1999). Writing for scholarly publication in English: the case of Hong Kong. *Journal of Second Language Writing*, 8(2), 123-145.
- Gnutzmann, C., & Rabe, F. (2014). 'Theoretical subtleties' or 'text modules'? German researchers' language demands and attitudes across disciplinary cultures. *Journal of English for Academic Purposes, 13*, 31-40.
- Hess, D. J. (1995). Science and technology in a multicultural world: The cultural politics of facts and artifacts. New York: Columbia University Press.
- Holliday, A. (2006). Native-speakerism. ELT Journal, 60(4), 385-387.
- Huang, J., & Foote, C. J. (2010). Grading between the lines: What really impacts professors' holistic evaluation of ESL graduate student writing? *Language Assessment Quarterly*, 7(3), 219-233.
- Huang, L. S. (2010). Seeing eye to eye? The academic writing needs of graduate and undergraduate students from students' and instructors' perspectives. *Language Teaching Research*, 14(4), 517-539.

- Hülmbauer, C., Böhringer, H., & Seidlhofer, B. (2008). Introducing English as a lingua franca (ELF): Precursor and partner in intercultural communication. *Synergies Europe*, 3(9), 25-36.
- Hyland, K. (2002). Specificity revisited: how far should we go now?. *English for specific purposes*, *21*(4), 385-395.
- Hyon, S., & Chen, R. (2004). Beyond the research article: university faculty genres and EAP graduate preparation. *English for Specific Purposes*, 23(3), 233-263.
- Jenkins, S., Jordan, M. K., & Weiland, P. O. (1993). The role of writing in graduate engineering education: a survey of faculty beliefs and practices. *English for Specific Purposes*, 12(1), 51-67.
- Koljatic, M. M., & Silva, M. R. (2001). The international publication productivity of Latin American countries in the economics and business administration fields. *Scientometrics*, 51(2), 381-394.
- Lavelle, E., & Bushrow, K. (2007). Writing approaches of graduate students. *Educational Psychology*, 27(6), 807-822.
- Leki, I., & Carson, J. G. (1994). Students' perceptions of EAP writing instruction and writing needs across the disciplines. *TESOL Quarterly*, 28(1), 81-101.
- Lillis, T., & Curry, M. J. (2006). Reframing notions of competence in scholarly writing: from individual to networked activity. *Revista Canaria de Estudios Ingleses 53*, 63-78.
- Lillis, T., & Curry, M. J. (2010). Academic writing in global context: The politics and practices of publishing in English. New York, Routledge.
- Meneghini, R., & Packer, A. L. (2007). Is there science beyond English? Initiatives to increase the quality and visibility of non-English publications might help to break down language barriers in scientific communication. *EMBO reports*, 8(2), 112-116.
- Motta-Roth, D., & Hendges, G. R. (1998). Uma análise transdisciplinar do gênero abstract [A transdisciplinar analysis of the genre abstract]. Intercâmbio. Revista do Programa de Estudos Pós-Graduados em Linguística Aplicada e Estudos da Linguagem. ISSN 2237-759X, 7.
- Ntereke, B. B., & Ramoroka, B. T. (2015). Effectiveness of academic writing activities and instruction in an academic literacy writing course at the University of Botswana. *Journal of pedagogic development*, 3(5), 45-56.
- Paasi, A. (2005). Globalisation, academic capitalism, and the uneven geographies of international journal publishing spaces. *Environment and Planning A*, 37(5), 769-789.
- Pennycook, A. (1998). English and the Discourses of Colonialism. London: Routledge.
- Pessoa, S., Miller, R. T., & Kaufer, D. (2014). Students' challenges and development in the transition to academic writing at an English-medium university in Qatar. *International Review of Applied Linguistics in Language Teaching*, 52(2), 127-156.
- Phakiti, A., & Li, L. (2011). General academic difficulties and reading and writing difficulties among Asian ESL postgraduate students in TESOL at an Australian university. *RELC Journal*, 42(3), 227-264.
- Plakans, L. (2009). Discourse synthesis in integrated second language writing assessment. *Language Testing*, 26(4), 561-587.

- Qiang, Z. (2003). Internationalization of higher education: Towards a conceptual framework. *Policy futures in education*, 1(2), 248-270.
- Ramos, R. C. G. (2004). Gêneros textuais: uma proposta de aplicação em cursos de inglês para fins específicos [Genres: a proposal for the application in ESP courses]. *The ESPecialist*, 25(2), 107-129.
- Raymond, P. M., & Des Brisay, M. (2000). An EAP course for Chinese MBA students. *TESL Canada Journal*, 17(2), 29-32.
- Recski, L. (2004). Negociando certeza e incerteza em escrita acadêmica em inglês [Negotiating certainty and uncertainty in EAP writing]. *Trabalhos em Linguística Aplicada*, 43(1), 51-68.
- Recski, L. (2006). Epistemic modality and spoken discourse: an English-Portuguese cross-linguistic investigation. *Linguagem & Ensino*, 9(1), 159-185.
- Richards, L. (2015). Handling qualitative data: A practical guide. 3rd ed., London, Sage.
- Robertson, M., Line, M., Jones, S., & Thomas, S. (2000). International students, learning environments and perceptions: A case study using the Delphi technique. *Higher Education Research & Development*, 19(1), 89-102.
- Schuster, E., Lizotte, R., Aluísio, S. M., & Dayrell, C. (2013). Approaches for helping Brazilian students improve their scientific writings. *Proceedings of the 9th Brazilian Symposium in Information and Human Language Technology*, (pp. 178-182). Available on: www.aclweb.org.
- Scollon, R. (1995). Plagiarism and ideology: Identity in intercultural discourse. Language in Society, 24(1), 1-28.
- Smirnova, N. V. (2015). Writing-for-publication: Online pedagogy for post/graduate research writing. In Cecile Badenhorst and Cally Guerin (Eds.). Research literacies and writing pedagogies for masters and doctoral writers. Leiden: Brill.
- Street, B. (2009). "Hidden" features of academic paper writing. Working Papers in Educational Linguistics, 24(1), 1-17.
- Strunk, J. R., & White, E. B. (2009). *The elements of style*. Pearson Education (50th anniversary edition). 1st ed.1935. 106 p.
- Swales, J. M. (2004). *Research genres: Explorations and applications*. Cambridge: Cambridge University Press.
- Swales, J. M., & Feak, C. B. (2004). *Academic writing for graduate students*. Ann Arbor: The University of Michigan Press.
- Uzuner, S. (2008). Multilingual scholars' participation in core/global academic communities: A literature review. *Journal of English for Academic Purposes*, 7(4), 250-263.
- Vieira, B. G. A. M. (2017). Genre knowledge in the needs analysis process: using a writing activity to assess present-situation. *Trama*, *13*(28), 29-53.
- Vieira, B. G. A. M., & Aranha, S. (2015). A análise de necessidades na trajetória da elaboração de um curso de EAP para pós-graduandos em Ciência da Computação [Needs analysis in the elaboration trajectory of na EAP course for Computer Science graduates]. *The ESPecialist*, 36(1).
- Wingate, U. (2012). 'Argument!' helping students understand what essay writing is about. *Journal of English for Academic Purposes*, 11(2), 145-154.
- Zamel, V. (1976). Teaching composition in the ESL classroom: What we can learn from research in the teaching of English. *TESOL Quarterly*, *10*(1), 67-76.

- Zamel, V. (1982). Writing: The process of discovering meaning. *TESOL Quarterly*, 16(2), 195-209.
- Zhang, Y., & Mi, Y. (2010). Another look at the language difficulties of international students. *Journal of Studies in international Education*, *14*(4), 371-388.
- Zhu, W. (2004). Faculty views on the importance of writing, the nature of academic writing, and teaching and responding to writing in the disciplines. *Journal of* second language Writing, 13(1), 29-48.

Brezilyalı Yüksek Lisans Öğrencilerinin İngilizce Akademik Yazıda Karşılaştıkları Zorluklara Dair Algıları

Özet

Uluslararası saygın İngilizce dergilerde yayın yapmak, yabancı dil olarak İngilizce alanındaki tecrübesiz araştırmacıları, özellikle de yükseklisans öğrencilerini, zorlamaktadır. Bu zorluklar Brezilya dışındaki ülkelerde yaygın bir şekilde çalışılmaktadır (Bitchener & Basturkmen, 2006; Lavelle & Bushrow, 2007; Zhang & Mi, 2010; Huang, 2010; Phakiti & Li, 2011; Pessoa, Miller & Kaufer, 2014; Smirnova, 2015). Bu zorlukları ortaya çıkarmak için, bir anket geliştirilmiş ve Brezilya'nın en kalabalık devlet üniversitesinden 303 yüksek lisans öğrencisine uygulanmıştır. En sık karşılaşılan zorlukların İngilizcenin doğal kullanımı, edatların doğru kullanımı ve yeni türlerde yazma olduğu tespit edilmiştir. Katılmcılar "iyi" İngilizce yazımında ifade netliğini çok önemli bulmuşlar; ancak kelime dağarcığı ve dilbilgisindeki eksikleri düşünüldüğünde netliği sağlamanın bir o kadar zor olduğunu belirtmişlerdir. Bu sonuçlar, katılıncıların geleneksel bir dil ve yazı görüşünü benimsemeleri (Zamel, 1976; 1982) ve İngilizcede akademik anlatım konusundaki deneyimsizlikleriyle açıklanabilir.

Anahtar Kelimeler: Yazma zorlukları, akademik amaçlı İngilizce, akademik okuma-yazma, Brezilyalı yüksek lisans öğrencileri

Appendix

The 30 Items investigated in section D of the questionnaire

1.Vocabulary	18.Starting to write
2.Prepositions	19.Developing ideas
3.False cognates	20.Understanding and using other texts in
4.Correct spelling	L2
5.Finding equivalent expressions in L2	21.Expressing opinions
6.Technical vocabulary	22.Argumentation
7.Making the text "sound" natural in L2	23.Assuming a critical stance in L2
8.Not "inventing" words in English	
	24.Paraphrasing
9.Verb tenses	25.Managing citations in the text
10.Subject-verb agreement	26.Writing a new or unknown genre
11.Pronouns	
12.Articles	27.Unawareness of writing techniques in
13.Sentence building	L2
14.Paragraphing	28.Difficulties with L1 academic writing
15.Cohesion	29.Using appropriate style to format
16.Sectioning the text	sources
17.Planning the writing	30.Not knowing online tools or resources

36 Items studied in section F of the questionnaire

22 Clarity
23.Clarity
24. Coherence
25.Sectioning and organizing the text
overall
26. Grammatical accuracy
27.Correct spelling
28. Punctuation
29.Writing paragraphs with a single topic
30.Clear connection and transition
between paragraphs
31.Using technical vocabulary
appropriately in English
32.Using discipline-specific expressions
appropriately
33.Writing a text according to the
instructions provided
34.Quality of the writing – does the text
sound natural in English
35.Writing a text that is easy to follow
36.Avoiding plagiarism

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