

# Disciplinary Writing for Publication in English: Empowering and Equipping EFL Doctoral Students with Writing Skills and Tools

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## **Abstract**

The paper presents two approaches to teaching disciplinary writing, namely a corpus-based and process-based approach. In the former, the distinction is made between large general corpora, used for grammatical, lexical, and stylistic questions, and small genre- and journal-specific corpora, suitable for conventionalized use of discipline-specific language. In the latter approach, specific techniques for generating ideas within the prewriting phase are discussed such as free writing, mind/concept mapping, and skeleton/patch writing.

**Key words:** corpus, disciplinary writing, free writing, mind mapping, process, skeleton writing

## **Introduction**

This paper draws on the research in genre-based writing pedagogies (Swales 2004, Aitchison et al. 2010, Kamler and Thomson 2006, Casanave and Vandrick 2003, Biber et al 2007) and has as its focus the teaching of disciplinary writing in English for publication. Although the concept of genre has been utilized as a research and teaching tool in many different fields of inquiry (e.g., rhetorical studies, applied linguistics, English for Specific Purposes), attempts at establishing effective EFL (English as a Foreign Language) writing pedagogies have not completely succeeded in achieving their didactic goals as explicit genre teaching raises many unanswered questions such as: How can a specific genre be taught outside the context of its use? In particular, how can EFL doctoral students acquire such a complex and intricate genre as the research article in classroom environments? What tools, skills, and knowledge are necessary for these students to apply in order to be adequately equipped for disciplinary writing?

The paper offers several possible solutions to these questions, stemming from the experience of the author with teaching EFL doctoral writing course focused on publishing in geographical and medical journals. Particularly, two specific approaches to teaching disciplinary writing are put forward, namely a corpus-based and process-based approach. In addition, useful Internet sources of online text analytic tools are recommended and briefly explained.

## **The Use of Corpora in Learning to Write in the Disciplines**

The last decade has seen a gradual shift from the passive use of large general English corpora (e.g., British National Corpus) to the exploration and application of quite small genre- and journal-specific corpora collected by students themselves (e.g., a corpus of 40 medical case reports from a specific medical journal). This shift has been conducive to greater autonomy of EFL students and their increased self-confidence in learning to write in the disciplines.

Despite the shift, both types of corpora can be effectively used in academic writing courses. Corpora can be systematically searched with the help of what has been referred to as a concordancer, i.e. a software tool which automatically searches a given corpus and constructs concordances. Concordances are alphabetical lists of the main words used in the corpus together with their immediate contexts (see Figure 1).

Figure 1: Concordances for *writing*

|     |  |
|-----|--|
| A5Y | I don't care what you're <b>writing</b> down, just as long as I don't see it in Republican News .  |
| G07 | But now I think it needs <b>writing</b> down.  |
| JYE | She was <b>writing</b> down a message when she heard someone come into the room and knew without turning that it was R                       |
| FU3 | It may be worth mentioning that some candidates achieve Grade" A" without mentioning any historian or <b>writing</b> down                    |
| G00 | It's definitely worth <b>writing</b> down a style-sheet for each design you create as this allows a you to maintain a much more effect. </p> |
| K55 | Pupils were invited to join the poll, casting as many votes as they wished simply by <b>writing</b> down a teacher's name aga                |

Concordancers used in large corpora can demonstrate and clarify the use of general lexis (such as phrasal verbs, collocations, and idioms), point to fine-tuned grammatical norms, contribute to a substantially improved style of writing, aid in revising drafts, provide inspiration with the model language which students aspire to achieve, and last but not least, empower students to have more control over their writing and more independence from teachers. Concordancers are especially useful for collocations. For instance, they can help students find out:

- what verbs or adjectives go with a searched noun, or what adverbs match with a searched verb (this can be done by sorting the searches left);
- what prepositions can go with a searched noun or verb (by sorting the searches right).

One of the best-known corpora is the British National Corpus with the Sketch Engine concordancer<sup>1</sup>, which is quite advanced text-analysis software. Since Sketch Engine is provided free of charge at Masaryk University (MU), all MU students and faculty members can have online access to this tool. In addition to creating concordances, Sketch Engine offers other functions. For example, the Word Sketch function provides a detailed summary of the typical grammatical and collocational behaviours of a specific word (available for a noun, verb, or adjective). Below (see Figure 2) is an extract from such a summary for the verb *cause*.

As can be seen from Figure 2, the verb *cause* typically collocates with nouns such as *damage, harm, injury, etc.* functioning as objects in the example sentences from the corpus. In the subject position, on the other hand, nouns such as *negligence, virus, smoking, etc.* tend to occur in the corpus. If all the nouns in subject and object positions are taken into account, an interesting conclusion can be made regarding the verb *cause*: it is typically used with nouns having negative connotations (e.g., *damage, problem, death, defect, assault, pollution, etc.*). Therefore, a sentence in which the verb is used with a noun having a positive connotation (such as *\*The party's election victory caused great joy among the people.*) would tend to sound strange, possibly with an ironic tone. Such language explorations carried out by the

<sup>1</sup> A simplified version of the Sketch Engine without registering can be accessed here: <http://ske.fi.muni.cz/open/>

students themselves aid in developing their independence and self-confidence as far as their learning-to-write trajectory is concerned.

Figure 2: Word Sketch for the verb *cause*

| <b>object</b> | <b>15648</b>         | <b>5.8</b> | <b>subject</b> | <b>9099</b>        | <b>6.2</b> | <b>modifier</b> | <b>1971</b>        | <b>0.3</b> |
|---------------|----------------------|------------|----------------|--------------------|------------|-----------------|--------------------|------------|
| damage        | <a href="#">938</a>  | 10.1       | negligence     | <a href="#">55</a> | 7.35       | reasonable      | <a href="#">26</a> | 8.72       |
| harm          | <a href="#">276</a>  | 8.92       | virus          | <a href="#">53</a> | 7.14       | indirectly      | <a href="#">16</a> | 7.77       |
| injury        | <a href="#">295</a>  | 8.39       | smoking        | <a href="#">27</a> | 6.36       | possibly        | <a href="#">27</a> | 7.67       |
| problem       | <a href="#">1014</a> | 8.38       | defect         | <a href="#">29</a> | 6.33       | thereby         | <a href="#">26</a> | 7.66       |
| trouble       | <a href="#">249</a>  | 8.33       | bacterium      | <a href="#">26</a> | 6.23       | mainly          | <a href="#">32</a> | 7.51       |
| death         | <a href="#">383</a>  | 7.96       | infection      | <a href="#">32</a> | 6.09       | inevitably      | <a href="#">20</a> | 7.48       |
| delay         | <a href="#">146</a>  | 7.87       | factor         | <a href="#">76</a> | 6.09       | partly          | <a href="#">22</a> | 7.47       |
| confusion     | <a href="#">137</a>  | 7.81       | assault        | <a href="#">28</a> | 6.05       | probably        | <a href="#">51</a> | 7.1        |
| difficulty    | <a href="#">223</a>  | 7.75       | pollution      | <a href="#">31</a> | 6.05       | thus            | <a href="#">36</a> | 7.01       |

Another function which Sketch Engine offers is the Thesaurus. This function provides lists of words occurring in similar contexts as the target word (a noun, verb, or adjective). Obviously, such a tool is important for a varied use of synonyms positively impacting one's style of writing. Figure 3 demonstrates an extract from a long list of synonymous lexis with regard to the adjective *efficient*.

Figure 3: The Thesaurus function for the adjective *efficient*

| <b>efficient</b>                    |       |       |
|-------------------------------------|-------|-------|
| British National Corpus freq = 3959 |       |       |
| Lemma                               | Score | Freq  |
| <a href="#">effective</a>           | 0.318 | 9903  |
| <a href="#">reliable</a>            | 0.278 | 2203  |
| <a href="#">flexible</a>            | 0.257 | 2385  |
| <a href="#">sophisticated</a>       | 0.25  | 2427  |
| <a href="#">successful</a>          | 0.246 | 10704 |
| <a href="#">safe</a>                | 0.238 | 6351  |
| <a href="#">powerful</a>            | 0.233 | 7070  |
| <a href="#">practical</a>           | 0.231 | 7612  |
| <a href="#">convenient</a>          | 0.225 | 1974  |
| <a href="#">proper</a>              | 0.221 | 6348  |
| <a href="#">easy</a>                | 0.22  | 13957 |

Generally, large corpora such as the British National Corpus<sup>2</sup> (96 million words), British Academic Written English Corpus<sup>3</sup> (7 million words), Corpus of Contemporary American English (425 million words), or TIME Magazine Corpus of American English<sup>4</sup> (100 million words) are instrumental in solving specific grammatical problems (such as the use of articles *the*, *a*, *an*, -), lexical questions (Which nouns in the subject and object positions can go with the verb *cause*?), and

<sup>2</sup> <http://www.natcorp.ox.ac.uk/>

<sup>3</sup> [http://ske.fi.muni.cz/bonito/run.cgi/first\\_form?corpname=preloaded/bawe2;](http://ske.fi.muni.cz/bonito/run.cgi/first_form?corpname=preloaded/bawe2;)

<sup>4</sup> <http://corpus.byu.edu/>

stylistic uncertainties (Is the phrase *my contribution* meaning *my paper/article* used as much in English academic discourse as in Czech [*můj příspěvek*]?). As has already been suggested above, corpora can also function as an aid in brainstorming ideas (especially the Word Sketch feature of the Sketch Engine). Taken all these features into consideration, it can be claimed that the use of corpora helps to transform EFL students from mere passive recipients into active explorers of the language, equipping them with a valuable tool.

On the other hand, too general and extensive corpora (such as the British National Corpus) containing different types of discourse (such as written, spoken, academic, popular, etc.) cannot solve questions with regard to the conventional use of terminology from a specific discipline in academic writing. In addition, disciplines differ in their conventional use of, for example, first person pronouns (the use of *I* or *we*, how and where in the research article they are typically used), the use of hedging devices (such as *can* or *may*) and most frequent reporting verbs (such as *say*, *argue*, and *suggest*) (see Figure 4 for the most frequent reporting verbs used in specific disciplines).

Figure 4: Most frequent reporting verbs in specific disciplines  
(Hyland 2008: 553)

| Discipline             | Most frequent verbs                      |
|------------------------|--|
| Philosophy             | say, suggest, argue, claim, propose      |
| Sociology              | argue, suggest, describe, discuss, note  |
| Applied Linguistics    | suggest, argue, show, explain, point out |
| Marketing              | suggest, argue, demonstrate, propose     |
| Biology                | describe, find, report, show, observe    |
| Electrical Engineering | show, propose, use, report, describe     |
| Mechanical Engineering | show, report, describe, discuss          |
| Physics                | develop, report, study                   |

This is where small genre- and/or journal-specific corpora can make a difference in helping doctoral students write more effectively in their respective disciplines. By downloading research articles dealing with a specific topic, within a five to ten year time frame, and from a specific journal, students will have an up-to-date corpus of relevant articles from their disciplines. Such a corpus can demonstrate what specialized terminology should be used when writing about the chosen topic, what style is necessary for an increased chance of being published, and typical constructions occurring in the specific sections of the article (such as the introduction, methods, results, discussion and/or conclusion). Combined with the specific moves within individual sections of the research article, such corpora are powerful tools in that they model the preferred lexical and grammatical structures used in a particular journal of a specific discipline.

An example of such a specialized corpus would be a corpus of 40 medical case reports from two medical journals: *Journal of Medial Case Reports* and *Cases Journal*. The corpus was created by the author with the aim of demonstrating what language tends to be used in the particular sections of the case report and in their specific moves in the two online journals (Helán 2011). Using the Swalesian structural move analysis (2004) and the above mentioned specialized corpus, it was revealed that, for example, the introduction sections of case reports contain the

same, but shorter moves also identified by Swales in research articles, i.e. Move 1: Establishing a territory, Move 2: Establishing a niche, and Move 3: Presenting the present work.

It was found that the most frequently occurring words and phrases in Move 1 tend to denote commonality, frequency or typicality of occurrence of a pathological condition or application of a diagnostic procedure: e.g., *the most common sites, the majority of patients, patients with SPS usually experience*, etc. In Move 2 authors of MCRs state why their report is worth reading and claim rarity, uniqueness, or a lack of similar cases being reported in the literature: e.g., *an uncommon injury, a unique case of patient, few reported cases*, etc. Distinctive features of Move 3 include authors' self-mention together with reporting verbs (e.g., *we report/present/describe a/the case*), the use of demonstrative adjective *this* and demonstrative adverb *here*: e.g., *In this report, we describe a case of...; Here we report...*

Text analysis tools suitable for developing small corpora of highly specialized and genre-specific texts can, as a rule, be freely downloaded from the Internet. TextSTAT<sup>5</sup> is a simple concordance software tool, which can read both plain text files and HTML files directly from websites. AntConc<sup>6</sup> is another freeware corpus analysis toolkit which was especially designed for use in classrooms. Yet another text analysis tool for creating a corpus of disciplinary texts (up to 100,000 words), developed at the University of Adelaide, is AdTAT<sup>7</sup> (Adelaide Text Analysis Tool). This tool is a self-contained application which does not have to be installed in a PC but can be launched just from a USB stick.

## **The Process-Based Approach to Disciplinary Writing**

The importance of the writing process is frequently undervalued, especially in EFL instruction due to many reasons such as a lack of time for teaching the skill of writing in addition to the other skills (speaking, reading, and listening) and the knowledge of language (grammar and lexis); teaching methodology stressing the end-product rather than the process of writing; motivational factors (students have to re-write and revise their drafts); and an increased workload that EFL teachers would have to cope with. However, there appear to be several advantages resulting from focusing on the specific steps of the writing process (prewriting, first draft, revising, proofreading, final copy). Prewriting or preparing to write in particular can be exploited in the academic writing instruction.

In the prewriting phase it is important to brainstorm interesting and original ideas (based on the research conducted) so that the author is able to write an article which is novel in some way, contributes to the disciplinary knowledge, or fills in a gap in the knowledge (which needs to be explicitly stated in the introductions – see Swales 2004). There are several techniques such as free writing, mind/concept mapping, skeleton/patch writing, or the use of templates, all of which can help authors generate such ideas for their articles.

Free writing is an excellent way of learning to write provided it is performed on a regular basis for ten to fifteen minutes. The method of free writing was mainly developed by Elbow (1973, 1998) and basically consists in virtual absence of any editing during the prewriting phase of the writing process. The idea behind the

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<sup>5</sup> <http://neon.niederlandistik.fu-berlin.de/en/textstat/>

<sup>6</sup> <http://www.antlab.sci.waseda.ac.jp/software.html>

<sup>7</sup> <http://www.adelaide.edu.au/red/adtat/>

method is that editing at the same time as writing may be the main cause of the 'writing block' (i.e., being unable to write or having nothing to write about) and 'procrastination' (i.e., extreme delaying of the actual writing). As Elbow (1998: 14) states: "So much writing time and energy is spent *not* writing: wondering, worrying, crossing out, having second, third, and fourth thoughts... Frequent freewriting exercises help you learn simply to *get on with it* and not be held back by worries about whether these words are good words or the right words... Thus, freewriting is the best way to learn – in practice, not just in theory – to separate the producing process from the revising process (original emphasis)". See Figure 5 for an illustration of a freewriting exercise.

Figure 5: An example of a freewriting exercise (taken from Elbow 1973: 1-7)

I think I'll write what's on my mind, but the only thing on my mind right now is what to write for ten minutes. I've never done this before and I'm not prepared in any way--the sky is cloudy today, how's that? now I'm afraid I won't be able to think of what to write when I get to the end of the sentence--well, here I am at the end of the sentence--here I am again, again, again, again, at least I'm still writing--Now I ask is there some reason to be happy that I'm still writing--ah yes! Here comes the question again--What am I getting out of this? What point is there in it? It's almost obscene to always ask it but I seem to question everything that way and I was gonna say something else pertaining to that but I got so busy writing down the first part that I forgot what I was leading into. This is kind of fun oh don't stop writing--cars and trucks speeding by somewhere out the window, pens clattering across peoples' papers. The sky is still cloudy--is it symbolic that I should be mentioning it? Huh? I dunno. Maybe I should try colors, blue, red, dirty words--wait a minute--no can't do that, orange, yellow, arm tired, green pink violet magenta lavender red brown black green--now I can't think of any more colors--just about done--relief? maybe.

In case of disciplinary writing, the state of being uncertain and worried about writing in English, exacerbated by the incomplete knowledge of the terminology conventionally used in the discipline, may cause such anguish to doctoral students that they often resort to literal translation from their mother tongue. This recourse to Czech should be avoided altogether since it renders their writing nearly incomprehensible in English.

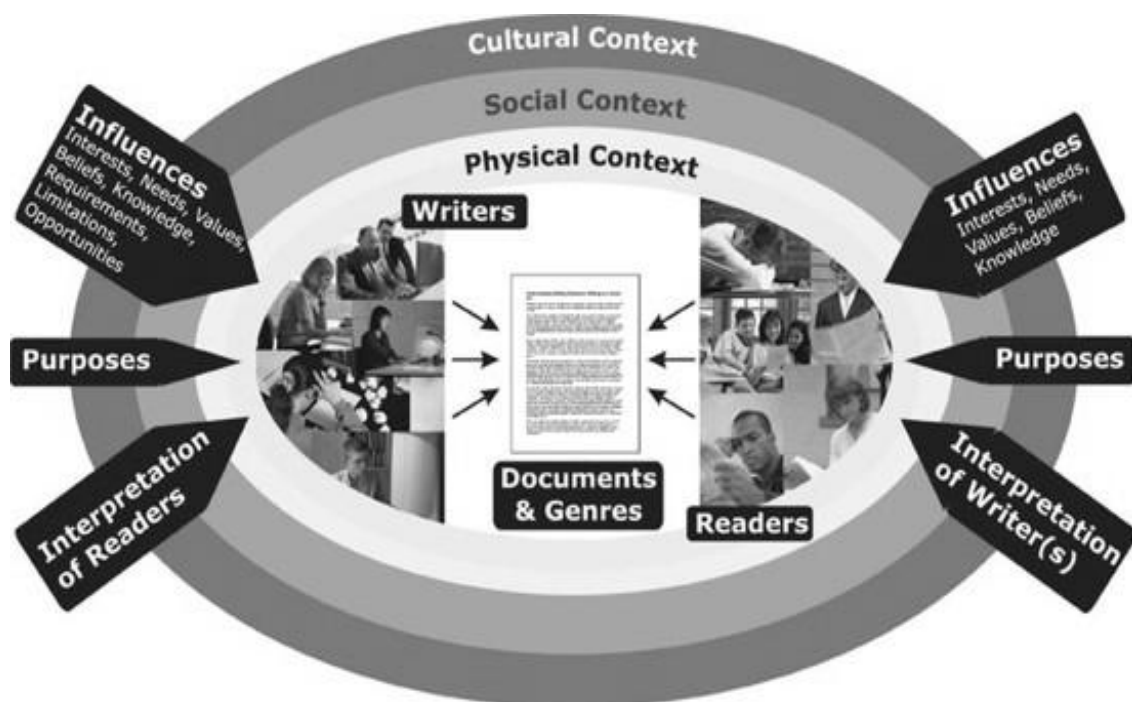
Another technique suitable for the prewriting phase is mind or concept mapping, i.e., brainstorming single ideas and/or concepts and finding relations between them. This method is conducive to effective reasoning and argumentation – skills highly in need especially among EFL doctoral students. Mind mapping can be carried out both on paper and using a PC – in the latter case, a Windows-based software tool called MindMapper<sup>8</sup> was developed to enable the users to create mind/concept maps, charts, diagrams, etc., also suitable for lectures and presentations (see Figure 6 for an illustration of mind/concept mapping).

Skeleton writing, alias patch writing, alias syntactic borrowing, alias writing templates (Kamler and Thomson 2006, King 2007) are all names of another technique especially useful to novice and/or EFL doctoral students who have only recently 'joined' the discourse community of discipline-specific professionals. Firstly, students are asked to identify and underline all the language patterns contributing to the structural moves of the research writing (discussed above concerning the

<sup>8</sup> <http://www.mindmapper.com/main/main.asp> (only a free trial is available here)

introduction section of the medical case report). Next, students attempt to brainstorm synonymous expressions which can replace the ones underlined in the text so that word-for-word copying is avoided. The resulting, underlined text should be reduced to a skeleton of expressions which the original author used to realize the moves. The next step involves elaborating on the identified expressions by filling in the students' own content. As Kamler and Thomson (2006: 57) point out: "The skeleton creates a linguistic frame to play with. It encourages writers to take on the subject position of an experienced, authoritative writer – at least linguistically. It allows them to write themselves into an authoritative stance they may not be able to take by themselves. Thus the syntactic framework scaffolds a kind of linguistic identity work."

Figure 6: Mind/concept mapping of "The Writing Situation"



Skeleton writing is not to be interpreted as plagiarism. As has been suggested above, this technique is enormously useful in the initial stages of the writing process, helping particularly EFL students unaware of both the English and disciplinary styles of academic writing. Numerous revisions and re-writings are typically performed before the final draft is finished. The following is an example of the skeleton writing exercise (adapted from Kamler and Thomson *ibid.*):

### **I. Identifying and underlining important rhetorical patterns**

The study builds on and contributes to work in critical linguistics (Coulthard, 1996; Chilton, 1982; Fairclough, 1989; Seidel, 1985; Van Dijk, 1989, 1991; Wodak, 1989). Although studies in critical linguistics have examined the discursive construction of past events, there has not been an extended study of the construction of a projected event. As such, this study provides additional insight into the constructive processes of language by explicating the linguistic and rhetorical processes through which a projected—future—event is constructed as a discrete and autonomous state of affairs.

## II. Adding synonymous expressions to some of the underlined words

The study builds on and contributes to work in \_\_\_\_\_.

|  |  |
|--|--|
| work<br>research<br>paper<br>report<br>survey<br>article | draws on<br>is based<br>on<br>expands<br>extends |
|--|--|

|   |
|---|
| adds to<br>makes a contribution to<br>refers to<br>is connected with<br>is linked with<br>is related to |
|---|

Although studies in \_\_\_\_\_ have examined \_\_\_\_\_,  
there has not been a/an \_\_\_\_\_.

|   |
|---|
| investigated, compared, concerned, demonstrated,<br>dealt with, focused on, looked at, indicated, revealed,<br>found, reported, shown, suggested... |
|---|

As such, this study provides additional insight into \_\_\_\_\_.

|   |
|---|
| understanding of, perspective on, viewpoint on,<br>position on, standpoint on |
|---|

## III. Using the skeleton and synonyms to write a paragraph

(sample answer – the used skeleton and synonyms are underlined)

The paper is based on and makes a contribution to the research in genre analysis (Swales 2002, Hyland 2008). Although studies in genre analysis have dealt with medical discourse, there has not been a detailed study carried out on the genre of medical case reports. As such, this study provides an additional perspective into the language medical professional use in writing clinical reports of patients' cases.

## Conclusion

This paper attempted to demonstrate how corpus- and process-based approaches to learning to write in the academic disciplines can be employed in classroom environments. Not only do these approaches help students improve their style of writing but also empower them, give them more control over their writing and make them less dependent on teachers. Obviously, due to the limited space here, the paper could not cover other related areas concerning the teaching methodology of using corpora in academic writing courses. The same applies to the process-based approach, in which for instance revision techniques (such as group editing or one-to-one writing conference) had to be omitted.

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