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Self-assessment of academic writing in an online learning environment

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Successful academic writing courses include self-assessment opportunities for foreign language learners. Encouraging students to actively engage with their own texts is even more relevant when courses are offered in a hybrid or entirely online learning environment. During distance education, when measuring learning is becoming problematic, students reflecting on and experimenting with their work can inform the teacher, but more importantly, can promote a deeper understanding of the writing process and the written product. An effective revision and self-editing of a draft requires top-down and bottom-up approaches to the text. This study discusses how students can assess their own writing on three levels: lexically, syntactically, and at the discourse level by incorporating corpus linguistic tools in their self-assessment process. This includes vocabulary profiling, evaluating cohesion and analysing variation in register and genres. The exercises are beneficial in undergraduate language courses and also in teacher and translator training.

Keywords: self-assessment, academic writing, online teaching, corpus linguistics, EFL

Introduction

Traditionally, evaluating the quality of student texts on academic writing courses has been the sole responsibility of the teacher. This happened as a consequence of the elaborate lexical, syntactic and text-level features academic discourse possesses. While an increasing number of automated essay assessment tools take on human essay scoring¹, it seems that, for the foreseeable future, teacher assessment of academic writing will be here to stay. But exclusively teacher-lead assessment is not only burdensome and time-consuming, it also brings along negative side effects. The first thing to consider is the evaluator's varying expertise and experience, which can cause reliability issues, for example, low inter-rater reliability scores. Another problem can be that assessing writing is not an entirely objective process: possible teacher biases (and other affective factors) can distort the grades, even if a detailed marking grid is used. A third negative consequence can be the clear and oft-cited relationship between traditional assessment and academic dishonesty, particularly in researched writing assignments.

Formative assessment is increasingly gaining momentum at higher education institutions, also in English as a foreign language (EFL) writing courses. The types and impact of EFL writing feedback have been extensively researched by many, for instance Bitchener and Ferris (2012). Nicol and MacFarlaine-Dick identify seven principles of good feedback practice, according to which, good feedback practice:

- 1. helps clarify what good performance is (goals, criteria, expected standards);
- 2. facilitates the development of self-assessment (reflection) in learning;
- 3. delivers high quality information to students about their learning;
- 4. encourages teacher and peer dialogue around learning;
- 5. encourages positive motivational beliefs and self-esteem;
- 6. provides opportunities to close the gap between current and desired performance;
- 7. provides information to teachers that can be used to help shape the teaching (2005).

¹ For the comparison and analysis of presently employed, entirely automated essay scoring programmes in EFL writing assessment, see Adorján, 2019.

Assessment in an online environment

With distance education being forced on universities in 2020, the teaching and learning environment has abruptly become heavily technology-driven. Even though various language learning tools have been around for decades, as far as online assessment methods are concerned, most higher education institutions have not been able to keep up with the recent changes, letting assessment remain the weakest link in the teaching process. This is all the more unfortunate, as learning would be more effective if assessment design engaged students more by encouraging them to increase the amount of time spent on tasks, Gibbs and Simpson (2004) suggest. Two currently underrated forms of evaluation are assessing student interaction and self-assessment, which, according to Robles and Braathen (2002), should be two major components of online distance education.

Successful university courses on academic writing should also include self-assessment opportunities for foreign language learners since programmes should provide opportunities to acquire skills of self-monitoring and self-regulation. This can be best done if students assess their own work against some predefined criteria shared between the teacher and the students, or if they explore and 'play around' authentic materials, written by someone else or themselves. Encouraging students to actively engage with their own texts is even more relevant when courses are offered in a hybrid or entirely online learning environment.

Peer feedback and self-assessment of academic writing

Some peer feedback or self-assessment grids contain questions on lexical, sentence and discourse level features. A typical peer or self-assessment worksheet by Zemach and Rumisek (2003), for example, asks students to look for rhetorical features (evaluating the thesis statement, topic sentences, coherence and cohesion). Syntax is also dealt with, for example passive structures. These are useful tasks; their downside is, however, that the lexical, syntactic and discourse features of the text are not systematically analysed. The students might or might not find the correct forms or problematic elements in the text. A more scaffolded approach is necessary which can be offered by corpus linguistic tools.

Self assessment and corpus tools

While the use of technology for research and assignment production can be considered widespread, not all learners are competent users of technology for educational purposes. This is especially the case with special tools relying on corpus linguistics. Such tools can help to raise student awareness, to make the learning process faster, and to enable autonomous learning (Gavioli, 2009). In language teaching and learning, as Szudarski (2017) observes, three main types of corpora are used for linguistic explorations: authentic corpora to explore language use, learner corpora (see Granger, 2002 for more details on this), and multilingual corpora for translation studies and contrastive analysis (Flowerdew, 2012).

The corpus linguistic tools presented here can be applied to both sample authentic texts and to learner-written texts. These tools can either be an integral part of university writing courses, or they can be added to courses as enhancement and non-compulsory features. The online applications to follow have all proven helpful in the syllabi for three distinct types of EFL learners: for BA English majors, where the major objective was to achieve learner autonomy in academic writing; for students on the BA Translation Studies track, with a focus on effective self-editing and revising techniques; and for trainee language teachers so as to develop their assessment literacy. This latter group of students was also provided with corpus linguistic text evaluation assignments because recent exploratory research (Adorján, 2020a) revealed that practising English language teachers were completely unaware of the benefits of corpus techniques, nor did they employ corpus tools at any point in their teaching process. All the tools to be introduced here have already been used by students, and a detailed list of more applications can be found in Adorján, 2020b.

Tools used for bottom-up approaches

Academic vocabulary profiles of texts

A vocabulary profiler is a tool which can match the words of a text to words within a given vocabulary frequency list. The most widely known profilers can check texts for academic words or language proficiency level according to the Common European Framework of Reference for Languages (CEFR). During university seminars, two of these profilers are repeatedly used: *Lextutor* (Cobb, n.d.) and *Vocabulary Kitchen* (Garner, n.d.). *Lextutor* is a versatile online tool which can be used to explore many different aspects of academic discourse. With its *Vocabulary Profiler* function, students can analyse whether they included the right percentage of academic words in their writing by copy-pasting their short essays, and choosing the profiler *VP-Classic*. The programme will indicate the percentage of academic words in yellow.

Coxhead's (2000) Academic Word List (AWL) is the basis of *Lextutor*'s academic vocabulary profiler. It is a compilation of words appearing with high frequency across various academic disciplines. This list of 570 word families consists of lexical items with "general academic" meaning, and does not include terminology characteristic of specific disciplines. Paquot (2010) offers a comprehensive literature review on the terms *academic* and *sub-technical* vocabulary. Even if she is sceptical about the AWL's use for productive purposes (for example for writing), she admits that learning the Academic Word List is a good starting point for first year students at university, as it can provide "feasible learning goals" and is good for assessing vocabulary learning (p. 27). Our practice suggests that the list, its sublists, and its many online exercises can form the basis of systematic vocabulary building in academic writing courses.

Academic words cover approximately ten percent of an average academic text (Coxhead, 2000), yet their abstractness is an obstacle for comprehension. For most first-year essay writers, this percentage is usually around 5-8%. Using the *Typical Profiles* section of the programme, where typical academic word percentages appear, the students can explore disciplinary differences, and compare their own writing to authentic models. By applying *VP-Classic* to texts, several other frequency ratios can also be highlighted to students (Figure 1).

OUTPUT FOR F	<u>ILE</u> : U	ntitled	(0.50 k	(b)				
itegorized by user as 1	k items (I	proper n	ouns etc):	NONE (total	0 tokens)			
	Familie	es Type	s <u>Tokens</u>	Percent			Words in text (tokens):	80
K1 Words (1- 1000):	40	45	63	63 78.75% Different words (types):	Different words (types):	61		
Function:			(32)	(40.00%)			Type-token ratio:	0.76
Content:			(31)	(38,75%)	Cu	rrent	Tokens per type:	1.31
> Anglo-Sax			(13)	(16.25%)	pr	ofile	Lex density (content	0.60
			()	(,	96	Cumul.	wordshotalj	
K2 Words (1001-2000):	5	5	5	6.25%	78.75	78.75	Pertaining to onlist or	nly
> Anglo-Sax			(2)	(2 50%)	6.25	85.00	Tokens:	72
			(2)	(2.3070)	0.20	00.00	Types:	53
1k+2k				(85.00%)	5.00	90.00	Families: Tokens per family: Types per family:	48
AWL Words:	3	3	4	5.00%	10.00	100.00		1.50
> Anglo-Sax				(0.00%)			Anglo-Sax Index:	96
Off-List	~	~	~				tokens)	10
Words:	2	8	8	<u>10.00%</u>			Greco-Lat/Fr-	~
	48+?	61	80	100%			Cognate Index: (Inverse of above)	%

Figure 1. A student essay vocabulary profile showing an acceptable but not optimal percentage of AW-s

As with all applications containing numerical data, knowledge of word frequency research is necessary on the teacher's part to convey the meaning of vocabulary percentages, and to draw students' attention to the relevant lexical frequency studies (e.g. Nation, 2004; 2006; Schmitt et al, 2017). A further important aspect of such academic words is that these "less salient lexical items ... have important semantic functions – such as classifying, defining, describing, quantifying, and expressing relationships" (Read, 2015, p. 149). The words can be extracted with *Lextutor* and grouped according to these semantic functions.

CEFR levels of texts

Although the replacement of vocabulary lists into the Common European Framework of Reference for Languages (CEFR) was considered a controversial move by many second language acquisition researchers, its advocates contend that a list of words assigned for each language level is useful because it makes vocabulary knowledge (that is vocabulary size) more measurable (Milton – Alexiou, 2009). Being able to check one's own writing against CEFR level criteria becomes especially useful when learners want to pass an exam which expects them to showcase their high level of language proficiency, and where they need to prove their ability to produce the appropriate level of writing above B2-C1. Several websites offer easily interpretable data in this respect. Tools that offer both table views and text views have proven to be the most useful: here students can see the list of words at different levels in different colours, and also where these words are located in their texts (Figure 2).

Figure 2. Parts of the text and table views of a student essay in Vocabulary Kitchen

```
First of all it is scientifically proven that pursuing sports has a
positive impact on people's physical health. It boosts the
immune system, and it helps to prevent obesity and chronic
degenerative diseases, such as high blood pressure, high
cholesterol level and diabetes. Moreover, according to statistics,
those who are physically active are less likely to get cancer, the
dreaded illness that has become the leading death cause in the
21st century. Indeed, pursuing sports is really beneficial to
staying healthy and fit.
A1: 57% A2: 12% B1: 16%
                              B2: 9%
                                             C1: 2%
                                                        C2: 2%
                             5: physical 2: obesity 1: chronic
19: the 4: health 3: active
        2: activity 2: diseases 2: citizens
15 and
                                             2: pursuing 1: dreaded
        2: become 2: positive 2: mental
12: to
                                           1: cholesterol 1: glued
                               1: balance 1: disorders 1: immune
11: people 2: high
                   2: social
11: sports 2: if
                   2: society 1: beneficial 1: enhance 1: insomnia
        2: less
                   1: accepted 1: boosts
                                                      1: relieve
8: of
                                            1: hectic
7: that
         2: level
                    1: according 1: cause
                                             1: sincerely 1: sedentary
6: doing 1: activities 1: although 1: consequence
         1: almost
                    1: average 1: depression
6: in
         1: among 1: avoided 1: furthermore
6: it
        1: became 1: brief 1: impact
5° can
```

Nominalisation, lexico-grammatical and syntactic features in texts

Using concordance lines can draw students' attention to various syntactic and lexicogrammatical features. Typical features of academic discourse are passivisation as a strategy to make a text more implicit, and nominalization to make a text more condensed (Biber – Gray, 2010). Complex noun phrases (CNPs) are also challenging for students, therefore, direct instruction is necessary to improve CNP comprehension (Priven, 2020). These linguistic features, and many more, can be captured visually by analysing concordance lines. Lextutor's built-in concordance feature can offer easy analysis. In Figure 3. a section of a student essay is shown with too many sentences containing *can*. By using concordancing, not only the lexical repetitions can be captured, but it is also possible to highlight the immediate context of the word: the structures *one can* and *people can* are repeated. After clarifying the problem with the learner, alternative sentence structures with similar semantic functions can be offered, for instance, *it enables ..., they have the option to ..., ... capable of ..., manage to* It is also possible to make a point that the student overgeneralised the topic by using too broad nouns, such as *people* and *one*, instead of choosing more specific subjects, e.g. *cinemagoers, young adults (in X country)*.

Figure 3. Concordance lines of a student essay showing the overuse of CAN in Lextutor

057.	use to bring another drink or go to the toilet room finally	BY online movie watching one can watch a film from the favor
058.	the possibility to watch movies without copyright moreover	BY an at home movie night one does not have to worry about t
059.	lms at home then one is in the privileged position that one	CAN start the film when one has time for it and do not have
060.	already given schedule by watching movies online the person	CAN watch the film from the convenient bed and do not have t
061.	use otherwise one would disturb the others but at home they	CAN in addition nowadays people can buy a gadget at a low pr
062.	the others but at home they can in addition nowadays people	CAN buy a gadget at a low price to have the same experience
063.	rice to have the same experience like in the theatre people	CAN watch movies and series on b ig screen with realistic so
064.	ile at home the price is only circa 500 forints however one	CAN enjoy the film so that lying on the couch eating popcorn
065.	njoy the film so that lying on the couch eating popcorn and	CAN stop the film if one needs pause to bring another drink
066.	go to the toilet room finally by online movie watching one	CAN watch a film from the favorite genre at home one can wat
067.	ng one can watch a film from the favorite genre at home one	CAN watch the latest and prior movies too owing to netflix a
068.	rior movies too owing to netflix and hbo go people nowadays	CAN easily come at the best and newest series because on the
069.	and newest series because on these online platforms people	CAN select from millions of films series with the developmen
070.	lusion watching films at home has much more benefits people	CAN watch the latest movies in the home comfort without obey
071.	t without obeying rules for an extremely low price and they	CAN watch movies whenever they want
072.	ient bed and do not have to obey rules in the cinema people	CANNOT lie drop litter or speak about the film during the pr
073.	in our accelerated 21st	CENTURY watching movies at home instead of watching it in t
074.	n the home comfort watching movies at home is more pleasant	CHEAPER and has more offers firstly if someone choos e to wa

Tools used for top-down approaches

In teaching academic writing, besides bottom-up explorations of texts, top-down approaches are also required to identify the conventional aspects of genres. Of particular interest are questions of organisation and discursive features, such as cohesion and coherence, rhetorical moves, argument structure, hedging, or the use of metadiscourse. Carefully selected self-assessment tools can draw students' attention to covert features of the target genre by exploring sample texts and comparing these texts to their own writing. While discussing metadiscourse, Hyland (2005), for instance, suggests a three-stage model for the teaching of rhetorical consciousness-raising (Hyland, 2005:185). First, students should analyse sample texts (or texts of their own choice) with a concordancing program; next, they manipulate these texts by rewriting them for a different audience, or alternatively, summarising or translating them; and finally, students write their own texts using all their newly-gained competencies during the planning, drafting and editing phases.

Syntactic variables also significantly contribute to quality differences in academic writing. This aspect of text is analysed using readability or text reading ease indices, and can inform the students about the difficulty of their text: how it is perceived by readers. By copypasting the essay into the *Readability Analyzer*² students can make use of the Flesch Reading Ease Index offered by the online tool. The numerical information is interpreted by the website, guiding students towards lower marks, and aiming to reach the benchmark of 30. If the text receives a significantly higher score than 30, either its lexical features or its sentence structures should be adjusted. For instance, perhaps students should compose longer, more complex sentences to reach characteristics of college-level discourse.

² Tyler, S. (n.d.) https://datayze.com/readability-analyzer

Register analysis is another top-down approach to academic texts. Biber's (1988) textual dimensions constitute the basis of the analytical tool devised by Nini (2014, 2019), the Multidimensional Analysis Tagger (https://andreanini.com/software/). By using Nini's programme, it is possible to compare each student's text to other sample texts, and identify its genre. First, it generates a grammatically tagged version of the student's text. Next, it plots the text's genre by employing factor analysis on the 67 linguistic variations which comprise Biber's textual dimensions (Biber, 1989). Thus, a text can be seen as 1. Informational vs Involved; 2. Narrative vs Non-Narrative; 3. Context dependent or Independent; 4. Overt Expression of Persuasion vs Argumentation; 5. Abstract/Impersonal vs Non-Abstract/Non-Impersonal; or can be considered as 6. On-Line Informational Elaboration. Biber's study lists the words, phrases and grammar typical for each group. The visualisation tool in the programme helps students to see how far their text lies from other sample texts of various genres. For instance, the programme can indicate that the closest text type to a given essay is *Involved persuasion* based on the text's aggregate linguistic features. If the task was to write an Informational argumentative text instead, students can modify their writing by dropping or rephrasing the lexical or syntactic elements typical of Involved persuasion. One such move can be, for example, eliminating the unnecessary in my opinion discourse marker from their thesis statement, which can be followed by adding phrases required (or expected to be found) in argumentative discourse.

Conclusion

Traditional academic writing courses put too much emphasis on teacher-lead assessment. Nowadays, an increasing interest can be seen towards alternative assessment methods which involve the students more, who in turn, gain more ownership. With careful application, the use of self-assessment in academic writing courses can yield very positive educational benefits. During distance education, when measuring learning is becoming problematic, students can engage with their own texts, and this can lead to reflections on and experimenting with their work. This can inform the teacher, and it can also promote a deeper understanding of the writing process and the written product. These can justify the additional efforts required of students or the teacher. The competencies gained provide transferable skills that students can take with them and thus, can become more employable.

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