

Learners' writing skills in French: Corpus consultation and learner evaluation

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Abstract

While the use of corpora and concordancing in the language-learning environment began as early as 1969 (McEnery & Wilson, 1997, p. 12), it was the work in the 1980s of Tim Johns (1986) and others which brought it to public attention. Important developments occurred in the 1990s, beginning with publications advocating the use of corpora and concordancing in language teaching (Tribble & Jones, 1990). The first empirical study of learners' consultation of corpus printouts (Stevens, 1991) was followed by studies of direct corpus consultation (Cobb, 1997), and more recently by studies of learners' actual use of corpora in L2 writing (Gaskell & Cobb, 2004; Yoon & Hirvela, 2004).

This study presents the second phase of a research project at the University of Limerick involving native speakers of English at both the masters and undergraduate level who are given the opportunity to engage in corpus consultation in order to improve their writing skills in French (see Chambers & O'Sullivan, 2004 for the first phase of this study). The aim is to investigate what type of changes they tend to make, to evaluate how effectively they complete this task, and to determine their reactions to this process. This is done with a view to discovering what similarities and differences exist between the two groups of learners in relation to their use of the corpus and their reaction to the process.

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Keywords: Corpus; Concordance; Error feedback; Writing; French

1. Introduction

Corpora and concordancing, which are increasingly used as a resource for linguistic research, are now also considered an invaluable resource in the context of language learning and teaching. A corpus, in the context of modern linguistics, is understood to imply "a finite body of text,

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sampled to be maximally representative of a particular variety of a language, and which can be stored and manipulated using a computer” (McEnery & Wilson, 2001, p. 73). A concordancer is the tool most often used in corpus linguistics to examine corpora. Johns (1988, p. 9) defines a concordancer as follows: “A concordancer is a computer program that is able to search rapidly through large quantities of text for a target item (morpheme, word, or phrase) and print out all the examples it finds in the contexts in which they appear.” The word form under examination appears in the centre of each line with an extra space at each side of it and the surrounding context at either side to the left and right, facilitating the study of the immediate context of the keyword and allowing patterns to become clearly visible. McEnery and Wilson (1997, p. 12) trace the use of concordances in the classroom back to 1969, when Peter Roe made use of them in ESP classes in Aston University, Birmingham. Publications emphasising their potential began to appear in the 1980s (Johns, 1986; Leech & Candlin, 1986), culminating in the publication of Tribble and Jones’ resource book *Concordances in the Classroom* in 1990. This was followed in the 1990s and the early years of the twenty-first century by a number of studies of the effects of direct corpus consultation by learners (Bernardini, 2000, 2002; Bowker, 1998; Cobb, 1997; Kennedy & Miceli, 2001, 2002; Stevens, 1991; Sun, 2003; Turnbull & Burston, 1998). Recently, there has been increasing interest in the use of corpora to improve language learners’ writing skills, and researchers have begun to investigate how learners use corpora in L2 writing and error correction (Gaskell & Cobb, 2004; Yoon & Hirvela, 2004). While these studies provide valuable information to language teachers and researchers wishing to provide learners with access to corpora, they leave ample scope for further research. Most focus on the English language, although Kennedy and Miceli’s study is based on Italian classes, and Bowker’s subjects are translating from French to English. In addition, these studies tend to concentrate on one aspect of language learning, such as vocabulary in the case of Cobb, as it was believed that lexical information and vocabulary were much easier for learners to interpret (Gaskell & Cobb, 2004). The recent studies have moved towards looking at L2 writing, in particular grammar acquisition and the use of concordances in the correction of errors.

This study aims to contribute to the emerging body of research in corpora and language learning by investigating the effects of corpus consultation on students’ writing and their reaction to the process, in particular, how corpora and concordancing can be used by native English speakers learning French at second-year the undergraduate level to correct their errors and improve their writing skills in French. The students consult a small corpus of texts written by native speakers on a similar subject to that studied in their French module and use the concordance data to correct errors. They then provide written feedback on the changes which they have made, including comments on the corpus consultation process and on their evaluation of the activity. The aim is to investigate what type of changes they tend to make, to evaluate how effectively they complete this task, and to discover their reactions to this new method. An empirical study involving corpus consultation is made possible by the fact that students receive training in corpora and concordancing in this same semester. Initially, we were particularly interested in aspects of language use which could not be easily mastered by using a grammar, course book, or dictionary. Indeed the initial stimulus for this study arose from an awareness that concordancing software provides an excellent means of identifying the lexico-grammatical patterns used by native speakers. Equally, this study was motivated by the need to investigate the potential of corpora in the promotion of L2 writing skills in general and the role of concordance data as a means of assisting error correction. Little attention has been paid to these areas, and researchers have emphasised the need for empirical research to investigate how learners cope and react to engaging in corpus consultation (Yoon & Hirvela, 2004). After briefly situating the study

in the pedagogical context of second language acquisition research, and giving an account of the corpus which was used, the methodology of the study will be described and the results presented, focusing on the following areas in particular: the role of corpus consultation in the correction of errors involving prepositions and lexical errors, and as an antidote to native language interference. The methodology is similar in a number of ways to a study of corpus consultation by postgraduate students (Chambers & O'Sullivan, 2004). It was decided to investigate if the positive effects of corpus consultation by postgraduate students in that study might also apply at the less advanced but much more common level of undergraduate students.

2. Corpus consultation and the second language acquisition research context

Writing has acquired greater importance in the second language classroom because of its increasing significance in the globalised community and the need to communicate via computer (Silva & Brice, 2004). Consequently, learners need access to resources which will allow them to continue to write correctly and efficiently beyond the classroom. The subject of error correction has received a lot of attention in SLA research. Levy (1991) emphasises the need for error correction, particularly in the revision stages of the writing process: "Students need the opportunity and the skills to proofread their drafts and edit them. Provisions need to be made for the teacher and student to correct drafts before the final published version" (p. 13). Brookes and Grundy (1988) underline the importance of giving students the opportunity to engage in self-correction: "And because rewriting or self-correction is so important a writing skill, a good teacher will provide the maximum classroom opportunity for it, and indeed will include rewriting ability in any overall evaluation of learners' writing skills" (p. 54). For many "an error on a page is an important opportunity for acquisition" (Gaskell & Cobb, 2004, p. 304). However, a lot of debate exists between researchers over whether or not error correction is effective and appropriate. Truscott (1996), for example, argues that grammar correction is ineffective and has harmful effects for both teachers and students, creating stress and taking up precious time: "grammar correction has no place in writing courses and should be abandoned" (p. 328). Ferris (1999) responds by claiming that this statement is "premature and overly strong" (p. 2).

Despite Truscott's arguments, there appears to be increasing evidence which demonstrates that well-done grammar correction is effective and beneficial and should therefore be continued in L2 writing classes (Ashwell, 2000; Chandler, 2003; Ferris, 1995, 1997; Ferris & Roberts, 2001). Most studies on error correction in L2 writing classes provide evidence that students who receive error feedback from teachers improve in accuracy over time (Ferris & Roberts, 2001, p. 161). Ferris (1999) concludes that in order to improve students' accuracy in writing, teachers should provide them with error feedback and require them to make corrections. Other arguments in favour of error corrections are based on research which demonstrates that students want and expect error feedback from their teachers (Ferris & Roberts, 2001; Leki, 1991). Furthermore, SLA research suggests that not correcting errors and making students aware of them can lead to fossilisation (Doughty & Williams, 1998; Ellis, 1998). Equally, many questions have been raised about the type of feedback that should be given to students and how explicit this needs to be. The feedback provided to students can be direct or indirect. Direct feedback implies teacher correction of errors while indirect feedback involves "indicating an error through circling, underlining, highlighting, or otherwise marking it at its location in a sentence, with or without a verbal rule reminder or an error code, and asking students to make corrections themselves" (Ferris, 2002, p. 63). Ferris and Roberts (2001) emphasise how SLA research has shown that indirect feedback is preferable to direct feedback, as it helps learners become engaged in the

activity and reflect upon it, and thus may help foster their long-term acquisition. For example, for [Chandler \(2003\)](#), underlining is a preferable alternative to explicit correction because it makes students become more involved in the correction process. Having to self-correct makes them actually do something with the feedback rather than just receive it; it engages them cognitively in the process. Such views reinforce [Ferris's \(2002, 2003\)](#) belief in the benefits of indirect feedback over direct feedback on students' long-term writing development, particularly for more advanced students. In this study, students are provided with indirect feedback in the form of underlining, and corpus consultation then gives them access to the resources necessary to engage in self-correction of their errors and mistakes.

There is a lot of potential for the use of corpus consultation when students engage in L2 writing. Firstly, corpora can provide students with target language input in the form of authentic texts of naturally occurring examples of real language use (other than textbook models of writing), thus increasing their exposure to the language and allowing them to advance their writing skills. Corpus consultation instantly provides many examples of words used correctly in the appropriate context, thus increasing their contextual and linguistic awareness ([Tribble, 2002](#)). It allows them to explore patterns and thus raises awareness of forms and patterns that may not be otherwise visible or obvious. Research shows that when learners engage in language learning and produce language, they do not do so by combining words and morphemes according to complex grammatical rules; rather “we produce most utterances using multi-word chunks which we have stored as wholes” ([Gavioli, 2001](#), p. 110). According to [Aston \(1995, p. 261\)](#), who refers to [Bolinger \(1975\)](#), this is the major point of overlap between corpus linguistics and language pedagogy:

Both have come to assume an idiomatic or schematic view of language competence and use. Thus rather than seeing the production and interpretation of discourse as rigidly componential, with morphemes being selected and combined according to complex sets of grammatical and pragmatic rules, both tend to see it as exploiting ready-made memorized building blocks or ‘pre-fabs’, put together using simpler ‘jerrybuilding’ operations.

Therefore, learning recurrent patterns in their typical contexts is central to successful language production, with the result that learners can reproduce multi-word chunks which they have acquired ([Aston, 1995](#); [Gavioli, 2001](#)). Corpus-based methods are a valuable means of highlighting recurrent patterns in context and helping learners internalise the schemata they need to become successful language learners and language users. Corpora can be consulted at any stage of the writing process; for example, they can be used as a resource while writing in order to check if an element of the writing is correct, if it conveys the desired meaning, and if not, to find alternatives which do fulfil these functions ([Aston, 2001](#)). Corpus consultation also has a role to play in the context of error feedback and self-correction, which is the focus of this study.

One of the reasons for the increasing popularity of giving learners direct access to corpora is the paradigm shift from concentration on the activity of teaching to a focus on the learning process. Firstly, corpora and concordancing are particularly suited to pursuing constructivist principles. As [Benson \(2001\)](#) notes: “Constructivist approaches to the psychology of learning provide strong support for the contention that effective learning begins from the learner’s active participation in the process of learning” (p. 36). Secondly, corpus consultation fits well with the theories surrounding process-oriented instruction, as the corpus and concordancer can provide the resources and tools needed for learners to build their own knowledge while developing their cognitive and metacognitive processes. Thirdly, consulting a corpus allows learners to correct

their errors inductively. As Brown (1994) points out, “most of the evidence in communicative second language learning points to the superiority of an inductive approach” (p. 92). Johns used concordance printouts in ingenious ways to promote inductive learning methods, whereby the students became active participants in the learning process based on real data, rather than passive recipients of the teacher’s knowledge, what Johns termed data-driven learning (DDL), for an example see Appendix A.

Finally, corpus consultation enhances learner autonomy by allowing learners to gain control over the learning process as they discover the forms and patterns of the language for themselves. Benson (2001) cites six approaches which support the development of learner autonomy, two of which are particularly relevant in the context of this study. He notes how “technology-based approaches emphasise independent interaction with educational technologies”, and, more important, that “teacher-based approaches emphasise the role of the teacher and teacher education in the practice of fostering autonomy among learners” (p. 111). In the case of this study, in addition to basic training in the use of the software, fostering autonomy entails making students aware not only of the existence of corpora and concordancing software, but also of the strategies which they need to devise to make use of them, and of the aspects of language use where they are most likely to be of benefit.

3. Tools and resources

The two most important decisions regarding the corpus to be provided concern the nature of the texts and the number of words. As the learners’ task is to write a short essay (600 words) in French on a topical subject concerning language diversity in France, it was decided to include a variety of texts in French relating to the history and development of the French language and to current issues relating to the language written by educated and informed native speakers of French, thus providing the students with models of well-written contemporary standard French.¹ The resulting, untagged corpus contains articles from *Le Monde*, a didactic text on the history and development of the French language (Leclerc, 2000), and research articles on this same topic. These latter texts were deemed appropriate as they deal with the subject of the essay in an academic context, and the journalistic articles were included as they briefly present and argue opinions on topics related to the same current issues which were the subject of the students’ written work. In that sense, they can be considered to be even closer to the student writing than the longer academic texts.

Once the nature of the texts was determined, the size was dependent on the number of texts which could be identified and included with permission from those holding the copyright. The corpus used with these students currently includes 180,000 words. According to Aston (1997), small corpora have advantages over their larger counterparts for use with students with little experience, as they are easier to manage, easier to become familiar with, easier to interpret, easier to construct, and easier to reconstruct. In addition to this, they tend to be more clearly patterned, and their limits are clearer (pp. 55–58). Aston (1997) defines a small corpus as typically between 20,000 and 200,000 words (p. 54).

The corpus analysis tool used for the purpose of this study is WordSmith Tools (Scott, 1996).

¹ In research, it is increasingly accepted that native speakers are not the only suitable model of the French language. However, non-native speaker texts have not been used here because texts of non-native speaker writing at an appropriate level and of a suitable topic and genre, which could serve as a model, were not discovered.

4. Methodology

The research methods employed in existing publications involving learner interaction with corpora vary considerably from one study to another, depending largely on the circumstances of the researchers and the learners. Yoon and Hirvela (2004) have produced one of the most detailed studies to date, analysing the results of 22 students, considering both qualitative and quantitative data. In contrast to this, Turnbull and Burston describe their research as a “longitudinal case study of the concordancing strategies used by two non-native English speaker postgraduate students studying at Monash University” (1998, p. 10). In terms of the number of learners, the nature of the writing task, and the time available for training, the context of the present study was largely determined by the course structures within which we were operating. The decision to focus on what type of improvements could be made to a text written using traditional resources was influenced by a desire to complement the results of previous studies, and also by the need to obtain information on the possible benefits of corpus consultation in these specific circumstances to assist us in providing guidance to future students. In this sense, the study can be classified as action research, with the aim of informing future professional practice.

The students involved in this study are 14 undergraduate learners of French following the B.A. in Applied Languages and the B.A. in Applied Languages with Computing at the University of Limerick in the academic year 2003–2004. As part of the module requirements for *French Language, Culture, and Society 3*, students complete a written assessment. Indeed, the degree programme involves many writing tasks in French, with all teaching delivered through French and all essays and assignments written in the target language. They are therefore highly motivated to participate in a project with the aim of improving their writing skills. An empirical study involving corpus consultation skills is made possible by the fact that students receive training in corpora and concordancing in this same semester as part of a core module entitled *Language and Technology*.

During the first stage of the study, a written assessment in French is completed by the students, marked, and prepared for the empirical study. The writing assessment consists of a short essay in French (600 words) relating to an aspect of the French language. The title of the essay given to the students in 2003/2004 was: “L’histoire de la langue française explique l’hésitation de la France à ratifier la Charte européenne des langues régionales ou minoritaires.” Students complete this task in their own time and may consult traditional language resources such as dictionaries and grammars. As they submit the essays, they are just beginning classes on corpus consultation skills in the *Language and Technology* module, and it is therefore likely that, for their preparation of the assessment, corpus consultation skills have played no role. This is confirmed later in the questionnaires.

In keeping with the recommendation made by Chandler (2003), the marking of the assessment took the form of underlining errors/mistakes² and placing an × in the margin to indicate a basic inaccuracy, for example, in gender, agreement, or verb forms. However, this was not limited to grammatical elements, but also included lexical and stylistic issues, and words and phrases which did not correspond to standard written French. No explanation or feedback was provided at this stage, as would normally have been the case. Instead, the students were informed that this

² It is not always possible for the researcher/lecturer to distinguish between errors, where the student is unaware of the correct form, and mistakes, which may be the result of hastiness, etc. Henceforth, the term “errors” will be used to refer to both errors and mistakes, unless otherwise stated.

feedback would take the form of an empirical study in which they would have the opportunity to improve the essay, and their agreement was confirmed in writing. The essays which had been typed by the students and e-mailed to the researchers were then reformatted to leave multiple spacing between each line of text so that students could easily write any changes they made above the original version. The underlining made by the lecturer as part of the original grading was added to the printed copies, and each underlining was numbered.

The second stage of the study involves training the students in corpus consultation skills. As part of the module, *Language and Technology*, these students are introduced to corpora and concordancing over a three-week period, with a 1-hour lecture and a 2-hour session in a computer laboratory each week. The lectures include an introduction to corpus linguistics and a brief account of the types of research based on corpora, focusing in particular on the use of corpora in language learning. In the laboratory sessions, students become familiar with analysing and interpreting concordance output before moving on to learning the functions of Wordsmith Tools. They are shown various applications of the software for language learning, in particular how to devise strategies to help them find what they are looking for and ways to fine-tune their searches which would be useful in helping them discover words and how they function with others. Particular attention is paid to guiding students in the use of corpora and concordancing for the acquisition not just of lexical items but also of a combination of lexis and grammar.

The third stage of the study involves the actual empirical study which consists of a 2-hour session in the language laboratory. This took place in the week following the lectures and seminars described above. The session was organised as follows: Students were given an introduction of 10 minutes outlining what they had to do; they were allowed up to 100 minutes to consult the corpus, revise their texts, make any changes they wished, and provide feedback on the corrections which they had made using the concordancing output. The only assistance provided during this process was technical (relating to the use of the software); no linguistic assistance was provided. During this time, the students were asked to try to improve those parts of the essays which had been underlined. They had to study the words and phrases underlined in their text, search the corpus for ways to help them improve these phrases, look at the results of the concordance, and decide if they wanted to change their text. If so, they had to do the following:

- a. Write the correction or the new word or phrase above the text of the original essay (only indicating those changes which resulted as a consequence of using the corpus).
- b. Fill in the feedback form with details of the search word they used, the results of the concordance, and what they discovered. (This allowed the researchers to identify those elements which had been corrected using the corpus.)

Students were encouraged to correct as many of the underlined elements as possible and to concentrate on the errors and inappropriate language of their choice, not on a specified number, and type of elements chosen by the teacher (as in Gaskell & Cobb, 2004). Having received guidance on such matters as search strategies and techniques, students carried out all the searches themselves. It was felt that by leaving such decisions entirely up to the learner insight could be gained into the types of errors students wish to correct and succeed in correcting, thus addressing questions of whether corpus consultation is more effective for certain types of errors and for certain levels of learners. The fourth and final stage of the study involves allowing students time to fill in the questionnaires once they have completed the above activity, and consequently gathering this data in order to analyse students' reactions to the process of engaging in corpus consultation in order to correct their errors and improve their writing skills in French.

5. Analysis of results

5.1. Introduction

The essays produced using traditional resources were compared with those corrected with the aid of a corpus, and the feedback and evaluation forms completed by the students were analysed in order to gain information on the types of errors corrected by the students and their evaluation and reactions to this process. [Table 1](#) gives an overview of the results, indicating if the attempted changes made by the students with the aid of the corpus lead to positive changes, negative changes, or no changes at all. It is important to note that only those changes which have resulted from consulting the corpus have been included in the analysis. Some of the students spotted errors, in particular accents, and changed them without consulting the corpus and without commenting on these on the feedback forms. These instances are not included in the analysis. Only those corrections for which students indicate on the feedback form the search word used, the number of occurrences of the search word, what they learned, and their revised expression will be examined as these are the changes which we know were made using the concordancer.

5.2. Classifying the errors, changes, and attempted changes made

A system of classification of errors was established based on previous taxonomies established by researchers such as [Corder \(1974\)](#), [Ferris \(2002\)](#), [James \(1998\)](#), and [Richards \(1994\)](#). The following categories of errors were identified: grammatical errors (prepositions, articles, singular/plural, adjectives, tenses); lexical errors (word choice, informal usage, idioms); syntactic errors (sentence structure, word order); and substance/mechanical errors (capitalisation, punctuation, misspelling). A summary of the changes and attempted changes made in each category of error is summarised in [Table 2](#). It is important to note that the number of changes made within these categories was not confined to a small number of students, as can be observed in [Table 3](#).

A full analysis of all the results of this project is beyond the scope of this paper; therefore, as previously stated, this study will focus on those elements which appear to improve most as a result of students engaging in corpus consultation, most notably grammatical errors followed by lexical errors. As students at this level generally make a significant number of basic grammatical errors involving gender, agreement, and verb forms, it was expected that these would account for the largest number of changes. The corpus did of course provide the correct form in the vast majority of these cases, but as these could have been very easily corrected using a dictionary or grammar, one cannot make the case that the new resource is adding anything to those already available. One type of grammatical error is, however, worth noting here, namely the use of prepositions in general, and the prepositions which accompany verbs in particular, a common source of errors in the written French of native English speakers. Prepositions account for the greatest number of changes within the grammatical category and will therefore be analysed in

Table 1
Overview of results

Total number of changes	166
Positive changes	122
Attempted changes – no improvement	38
Negative changes	6

Table 2
Total number of changes made according to type of error

Classification of error/mistake	Positive changes	No changes	Negative changes	Total number of changes
Grammatical errors				
Prepositions	19	6	0	25
Gender and agreement	14	5	1	20
Verb forms/mood	10	5	0	15
Articles	9	3	0	12
Pronouns	2	0	1	3
Use of the negative	1	1	1	3
Elision	2	0	0	2
Conjunctions	1	1	0	2
Total	58	21	3	82
Lexical errors				
Word choice/inappropriate vocabulary	22	6	0	28
Informal usage	6	4	3	13
Total	28	10	3	41
Substance/mechanical errors				
Capitalisation	18	1	0	19
Misspelling	6	2	0	8
Accents	4	1	0	5
Punctuation	1	1	0	2
Hyphens	1	0	0	1
Total	30	5	0	35
Syntactic errors	6	2	0	8
Total number of errors/mistakes	122	38	6	166

Table 3
Distribution of changes among students

	Grammatical errors	Lexical errors	Substance errors	Syntactic errors	Total
Student 1	6	0	2	1	9
Student 2	8	5	1	0	14
Student 3	3	3	3	1	10
Student 4	1	4	2	1	8
Student 5	10	2	3	0	15
Student 6	7	3	2	0	12
Student 7	6	1	4	0	11
Student 8	2	3	4	1	10
Student 9	8	6	7	0	21
Student 10	6	2	2	0	10
Student 11	1	2	1	0	4
Student 12	12	5	1	1	19
Student 13	10	3	2	1	16
Student 14	2	2	1	2	7
Total	92	41	35	8	166

Table 4
Positive changes in the category of prepositions

Incorrect expression	Corrected expression	Translation
correspond avec ^o	correspond à	corresponds to/with
partout dans la France ^o	partout en France	everywhere in France
pour certains années ^o	depuis des...	for hundreds of years
prévoit pour ^o	qui prévoit de	which foresees
en la révolution ^o	pendant la révolution	during the revolution
en avant la révolution ^o	avant la révolution	before the revolution
ont peur aux personnes ^o	ont peur des personnes	are frightened of people
en cette époque ^o	à cette époque	at that time
forçait ... d'utiliser ^o	forçait ... à utiliser	forced ... to use
invite ... pour respecter ^o	invite ... à respecter	invited ... to respect
leur hésitation de ratifier ^o	leur hésitation à ratifier	their hesitation to ratify
le refus à reconnaître ^o	le refus de reconnaître	their refusal to acknowledge
donne les citoyens ^o	donne aux citoyens	give the citizens

more detail here. This will be followed by a brief account of the next category where students benefit from corpus consultation, namely lexical errors, in particular, word choice or inappropriate vocabulary. The section will conclude with an analysis of the role of corpus consultation as an antidote to native language interference, which appears to be one of the most common sources of error within the two categories which will now be analysed, namely prepositions and word choice.

5.3. Prepositions

Nineteen of the 25 attempts to correct the use of prepositions were successful. Examples include *à* and *de*, where the following incorrect forms were initially used: *forçait ... d'utiliser*³, *leur hésitation de ratifier*^o, and *le refus à reconnaître*^o.⁴ By carrying out a concordance of the associated verbs and nouns in these phrases (*forçait*, *hésitation*, and *refus*), the students discover that these phrases should read respectively: *forçait ... à utiliser*, *leur hésitation à ratifier*, and *le refus de reconnaître*. Other examples of the incorrect use of prepositions are included in Table 4. It can be difficult to locate the appropriate section of the grammar to find if *en* or *dans* should be used with certain nouns, for example, and although a dictionary will provide the answer, it can be tedious to have to consult it in each case. Unlike errors in gender, agreement, and verb forms, there are no simple rules which can be learned to help the learner to decide if a particular verb should be followed by *de*, *à*, *par*, or no preposition. In both these cases, it is arguable that corpus consultation is a more convenient alternative, but once again, a *caveat* is necessary. If a student incorrectly wrote *hésiter de*, for example, it is very possible that she/he would have realised on seeing the underlining that the correct answer must be *hésiter à*. The role of the concordancer is therefore possibly to confirm a hunch, also a form of discovery learning. The real value of the concordancer in these instances lies in the fact that it can make correct forms and prepositions more salient to the learner, possibly making them more memorable than a dictionary or grammar, and therefore potentially leading to greater

³ The ^o symbol is used henceforth to indicate ungrammatical sentences in French.

⁴ The translations of all French phrases are included in the tables.

Table 5
Positive changes in the category of word choice

Incorrect expression	Corrected expression	Translation
la vue de la majorité dans les mots de Barère à l'autre côté à ce moment-là des privilèges extra la langue la plus commune la langue primaire la langue populaire pourquoi hésite le gouvernement une centaine d'ans plus tard est plus répandue depuis des centaines	l'opinion de la majorité d'après Barère en revanche à cette époque des privilèges la langue la plus utilisée la langue principale la langue répandue pour quelle raison ... une centaine d'années ... est plus importante depuis des siècles	the view of the majority in the words of Barère on the other hand at that time extra privileges the most common language the primary language the popular language why the government ... a hundred years later is more important for centuries

learning benefits. Also, learners are inductively learning the correct form while figuring it out for themselves, which is also believed to have positive long-term learning benefits.

5.4. Word choice

Twenty-two of the 28 attempts to correct word choice and inappropriate vocabulary are successful. Examples of errors involving word choice can be consulted in Table 5. Analysing some of the examples more closely shows us why the learner may have made the mistake and how the concordancer was of use in correcting these specific examples. In several of the examples, it would appear that the learner had a specific word in mind but did not use this word in the correct context. For example, in the expression *la vue de la majorité* (*the view of the majority*), it would appear that the student translated the word *view* directly from English, or else when he/she looked the word up in the dictionary, failed to discover the correct context in which to use this word. This is where the real value of the concordancer lies, particularly in comparison with the dictionary; it shows how the words should be used in the correct context, even providing learners with examples of words in multiple contexts. In many of the examples cited in Table 5, it would appear that negative transfer from the learner's native language was the source or cause of these errors. Therefore, these examples will be discussed in more detail in Section 5.6.

5.5. No improvements after attempted changes

Within these two categories of prepositions and word choice, on 12 occasions students' attempts to correct their errors lead to no improvements (six in the category of prepositions and six in the category of word choice). Some examples are cited in Tables 6 and 7.

Table 6
Attempted changes leading to no improvement in the category of prepositions

Incorrect expression	Attempted change	Translation
Selon l'histoire entre les Français leur hésitation pour accepter l'hésitation de la France identifier	leur hésitation d'accepter ^o l'hésitation de la France identifier pour identifier ^o	according to history between the French their hesitation to accept France's hesitation to identify

Table 7

Attempted changes leading to no improvement in the category word choice

Incorrect expression	Attempted change	Translation
parleurs bretons	parleurs du breton	speakers of Breton
n'importe quel pays		no matter what country
c'est une question d'opinion		it's a matter of opinion

On several occasions, the underlined incorrect word or phrase was entered as the search word, and when the concordancer produced no occurrences, students abandoned their search. They failed to consider possible variants of the word as their search word, or failed to look beyond the underlined word or phrase to try to resolve the problem. The authors are aware of this because the students indicated the search word used on their feedback forms. Others commented that they did not recognise what the problem was and therefore had difficulty resolving the issue. Sometimes they misinterpreted the outcome of searches. Students thus had difficulty devising effective search strategies. In the case of *parleurs bretons*, for example, a concordance search of the word *breton** would have revealed no occurrences of *parleurs bretons* but four occurrences of *qui parlait breton*. In the case of *l'hésitation de la France pour identifier*, a concordance search of *hésit** would have revealed 12 occurrences of *hésite à* or other forms of the lemma⁵ *hésiter*. In these two categories none of the attempted changes resulted in negative outcomes.

5.6. Native language interference

A close analysis of the examples involved in the category of prepositions and word choice suggests that native language interference is often a common source of the error. Native language interference occurs when the learner transfers native language 'habits' into the target language and these result in negative transfer:

L1 transfer usually refers to the incorporation of features of the L1 into the knowledge system of L2 which the learner is trying to build [. . .] Views about language transfer have undergone considerable change. Initially, transfer was understood within a behaviourist framework of learning. It was assumed that the 'habits' of the L1 would be carried over into the L2. In cases where the target language differed from the L1 this would result in interference or negative transfer. (Ellis, 1994, p. 29)

There were many challenges to the validity of these claims, but in recent times the influence of this transfer or interference has been acknowledged by researchers such as James (1998) and Odlin (1989, p. 4). Native language interference was identified by examining the interlanguage used by the student, identifying what the student was trying to say in their native language, and deciding if the incorrect or inappropriate L2 language use was likely to be due to negative transfer from their native language into French. In the category of word choice, 17 of the 28 errors would appear to be as a result of native language interference. As a result of consulting the corpus, students succeed in correcting 13 of these errors. In the category of prepositions, 7 of the 25 errors would appear to be as a result of negative transfer, 5 of which are successfully corrected by

⁵ "The term 'lemma' is used to mean the base form of a word, disregarding grammatical changes such as tense and plurality" (Biber, Conrad, & Reppen, 1998, p. 29).

consulting the corpus. In these cases, the incorrect or inappropriate L2 use appears to be the result of direct transfer from English or structuring expressions on English usage. It is possible that even more of the errors in prepositions and word choice are the result of negative transfer, but without speaking to the learners directly this cannot be established. This section provides information on the types of interlanguage used in the original essays, how the student proceeded to change these errors, and the resulting phrase. In all of the following cases, the use of the corpus and the concordancer led to a more idiomatic expression.

On several occasions, students translated words directly from English to French not realising that they were incorrect or inappropriate. For example, *the most common language* was translated as *la langue la plus commune*, *the primary language* as *la langue primaire*, and *popular language* (i.e. frequently used) as *la langue populaire*. Consulting the corpus using the noun as the search word led the students to search for alternatives, producing the following more appropriate phrases: *la langue la plus utilisée*, *la langue principale*, and *la langue répandue*. The original phrases used by the students and the resulting idiomatic phrases can be consulted in Table 8. There are seven examples of cases where the use of the incorrect preposition is most likely the result of native language interference, five of which were successfully corrected using the concordancer. *Correspond avec* exemplifies this particularly well, as in English the preposition *with* or *to* is used in this expression, whereas in French the preposition *à* is used: *correspond à*.

5.7. Learner evaluation

It was decided to pay particular attention to learners' reaction to this process because this has received little attention in the past, with the notable exception of Yoon and Hirvela (2004, p. 260), who point out: "a meaningful body of empirical research investigating learners' actual use of corpora and their attitudes toward such use has yet to emerge." They attempt to fill this gap by providing a fuller understanding of students' evaluation of corpora-based activities so as to implement successfully a corpus element in L2 writing instruction. The results of their quantitative and qualitative study reveal that students were positive towards the use of corpora in L2 writing instruction, in particular for "acquiring usage patterns of words and enhancing their writing skill" (Yoon & Hirvela, 2004, p. 77). They report that the responses from the intermediate class were generally more positive than those of the more advanced class, although this, they admit, may be attributed to the greater amount of training and practice in corpus use which this group received. This, they argue, reinforces the need for direct training in order to lead to successful corpus use.

Table 8
Examples of native language interference

Incorrect expression	Corrected expression	Translation
la vue de majorité dans les mots de Barère des privilèges extra	l'opinion de la majorité d'après Barère des privilèges	the view of the majority in the words of Barère extra privileges
la langue la plus commune	la langue la plus utilisée	the most common language
la langue primaire	la langue principale	the primary language
la langue ... populaire	la langue ... répandue	the popular language
pourquoi hésite le gouvernement	pour quelle raison ...	why the government
correspond avec ^o	correspond à	corresponds with
donne les citoyens ^o	donne aux citoyens	give the citizens

In the present study, after providing written feedback on the changes which they made, students were asked to complete a questionnaire. Firstly, they were asked to give some personal details, details of their computer literacy, and to comment on any previous experience they may have had with corpus consultation. In the second part of the questionnaire, they were asked to comment on the corpus consultation process and on their evaluation of the activity, in particular the extent to which engaging in corpus consultation skills helped them improve their writing skills in French. They were also asked to give their reactions to the training which they had received by answering the following questions: Was it sufficient to help them complete the given task? Would they consult corpora again in the future? What developments would help them to use corpora in the future? and Finally, what did they perceive as the main advantages/disadvantages of engaging in corpus consultation skills for this purpose?

The overall results were positive, with 10 of the students finding the activity extremely helpful (1), very helpful (3), or helpful (6). Four students reported that it was of little or no help, although it is interesting to note that three of these missed a lot of the training provided (one student missed all the training and two missed half of the training provided). Six of the students said that they would engage in corpus consultation skills in the future to improve their writing skills, while four stated that they would consider this option. Three students reported that they would not consult corpora again in the future (these being the same three students who missed the training provided). One student failed to reply to this section. The areas where they found that corpus consultation improved their writing skills are as follows:

- Checking the context of a word: “You can see the various options of using a word in different situations.”
- Checking sentence structure: “You can see how you should have structured it. How a French person would say it.”
- Identify the exact difference in meaning between words: “See difference of usage of words with different meanings.”
- Useful for checking idiomatic expressions: “Authentic native-speakers examples of written French.”
- It has advantages over traditional resources:
 - “More examples than in the dictionary for usage of words.”
 - “More personalised and easier to understand than the grammar book.”
- Useful for checking:
 - “If dubious structures were correct or not.”
 - “Which prepositions used with which verbs.”
 - “Searching for noun verb relationships.”
- It is quick and efficient

Comments such as these appear to confirm the hypothesis that corpus consultation has a role to play in complementing the dictionary, grammar, and course book for students at this level. Similarly, in their study, [Yoon and Hirvela \(2004\)](#) found that their students recognised that these resources could complement each other, and reported that, in comparison to dictionary use, their students “all saw equal if not greater value in corpus use” (p. 277).

In order to improve training methods, guidelines, and approaches to corpora in language learning, it is arguably more beneficial to look at the areas where students had most difficulty. At times they were left feeling frustrated for the following reasons:

- “The numbers of results can sometimes be overwhelming and takes time to sift through them. After all this often little or nothing appears.”
- “Sometimes you only get two examples. Sometimes you get thousands of examples.”
- “Vocabulary you are using may not be included in the corpus.”
- “It can help but it’s still hard to tell if the information you’re given is the information you’re looking for.”
- “If an exception is used in the corpus the student could take this to be a general rule.”
- “Could not identify the problem—why certain phrases were underlined.”
- “Can take a while to get used to.”

It would appear that students seem to have some difficulty getting used to dealing with concordance information and learning to trust the outcome of concordance searches.

Finally, the students made some recommendations with regard to developments which would help them use corpora in the future. These were of a more general nature and not specific to the training provided:

- “Greater availability of corpora and software.”
- “More assistance and more training.”
- “More classes like this one.”
- “Make larger corpora available.”

While these views on the importance of resources and training will be shared by teachers and researchers interested in corpora, it is perhaps unrealistic to expect large-scale developments in this area in the near future, particularly in broad-based language degree programmes such as those involved here. In specialised contexts such as degree programmes in linguistics or in translator training, more time may be available if corpora and concordancing is considered to be a priority area. In relation to comments on the size of the corpus, it is difficult to decide on the basis of the feedback if a much larger, possibly more general corpus would have been of more use, (if one were to become available in French), or if huge numbers of results would have been “overwhelming”, as one student reported above. (Students were shown how to reduce the numbers of results by random selection.) As feedback suggests, corpora, concordancing software, and additional training would be appreciated by undergraduate students if available, a development which could realistically be integrated in the work of language resource centres. It is important to note that the module web page included information on larger corpora which are available, with direct links to sites such as Mike Barlow’s web site, which contains links to corpora in different languages including French⁶. However, these students do not seem to have moved directly from the training provided in this course to large corpus concordancing. In conclusion, the negative comments suggest that corpus consultation is not a miracle cure for the problems of language learners at this level, although appropriate training and an awareness of the limitations of corpus consultation may help to overcome these negative reactions.

In comparison with the postgraduate study carried out previously (Chambers & O’Sullivan, 2004), it was discovered that some similarities and differences exist between the two groups of learners in relation to their use of the corpus and their reaction to the process. Although the

⁶ <http://www.athel.com/corpus.html>.

number of students participating in this study is not sufficient to draw definitive general conclusions about the similarities and differences observed according to the level of the learner, some interesting observations can be made. In both instances, the students' evaluations reveal both positive and negative reactions, suggesting that corpus consultation can be of help in a number of areas, but that, for various reasons involving training and the availability of resources, it does not automatically resolve all language learners' problems. Corpus consultation proved particularly useful for both groups in the area of lexico-grammatical patterning, particularly in relation to native language interference. It proved significantly more useful for the undergraduate students in the area of prepositions; notably, 14.5% of the total number of changes made by the undergraduate students were in relation to prepositions as opposed to 5.9% for the postgraduate students. Similarly, Yoon and Hirvela (2004) report that prepositions featured highly with their students: "Among the linguistic features of greatest interest to the participants, the usage of prepositions was what the students emphasised most in their corpus searches" (p. 276). However, Yoon and Hirvela (2004) also report that in relation to the grammatical usefulness of corpora, students do not rate corpus consultation as favourably as they rate its usefulness for vocabulary or writing skill development. The authors attribute this to the unfamiliarity of students with the notion of lexico-grammatical patterning: "grammar as presented through a corpus orientation did not conform to the notion of learning about grammar" (Yoon & Hirvela, 2004, p. 269).

When asked the extent to which they felt that working with the corpus had helped improve their writing skills in French, the reaction from the postgraduate students was slightly more positive than the undergraduate students, as revealed in Fig. 1. Interestingly, as outlined previously, this contrasts with Yoon and Hirvela's findings that the intermediate students rated corpus use more favourably than their advanced counterparts and achieved higher mean scores. Our study appears to coincide with assumptions that advanced students benefit more from corpus use, whereas the results of Yoon and Hirvela's study would appear to challenge this assumption. They do admit, however, that the more positive accounts from the intermediate students can possibly be accounted for by the increased amount of time and emphasis placed on corpus work in the intermediate class, while the advanced students had to explore the corpus on their own outside of class: "having received more direct training and practice in corpus use, the intermediate class students may have been better positioned to develop more favourable feelings about corpora" (Yoon & Hirvela, 2004, p. 277). Given the small numbers involved in the present study and the circumstances of Yoon and Hirvela's study, it is difficult to draw firm conclusions

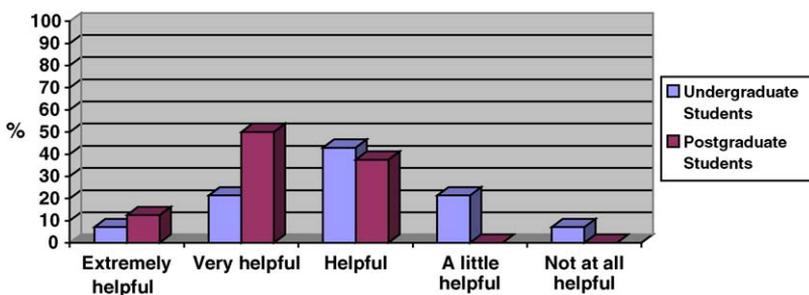


Fig. 1. To what extent do you feel that working with this corpus has helped improve your writing skills in French?

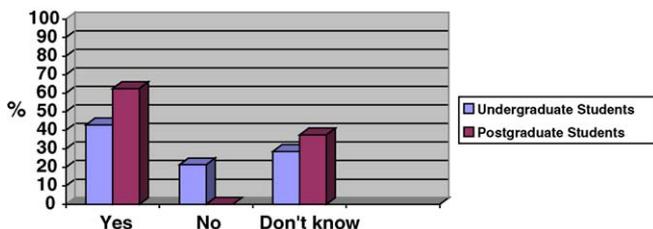


Fig. 2. Will you consult corpora to help your writing skills in the future?

on this issue. In particular, it is impossible to know whether advanced and intermediate mean the same things for the two different populations of students of different languages working in different settings.

The two empirical studies carried out at the at the University of Limerick revealed that corpora, concordancing software, and training would be appreciated by students at both levels if available, although again at the postgraduate level the results appear to be slightly more positive, with none of the students stating that they would not engage in corpus consultation again in the future. These results are summarised in Fig. 2. It is evident from the questionnaires that this hesitation to use corpora again in the future relates primarily to external factors, such as the availability of corpora and the software, and not to their reaction to the corpus consultation process. Firstly, in relation to external factors, students at all levels experience similar difficulties and make similar recommendations. However, in relation to internal factors, such as difficulties encountered by the learners, there would appear to be differences according to the level of the learner—undergraduate students appear to report more difficulties than their postgraduate counterparts, particularly in relation to dealing with the numbers of examples in the concordance output, using adjectives such as “overwhelming” to describe the process, and difficulties trusting and interpreting the output appropriately.

6. Conclusion

On the basis of one small-scale study such as this, it is not possible to claim conclusively that all English-speaking students of French at this level will be able to solve all problems of native language interference if they consult a corpus to improve a text where such cases have been highlighted in the marking process. However, the examples of this occurring are interesting in that the concordance provides information which would be difficult if not impossible to obtain from the course book, grammar, or dictionary. Past cohorts following the programmes of study involved here have been advised to see the marking of a written text as part of a process of interactive feedback. They have been encouraged to study the lecturer’s marking of the text, to decide which are errors and which are mistakes, and to use traditional resources, particularly a grammar, to learn from their errors. This system was, however, limited to the correction of grammatical errors. The lecturer’s attempts to provide corrective feedback, rephrasing examples of native language interference, did not fit well in an approach to language learning which aimed to foster inductive learning methods and learner autonomy. The results of this study suggest that, with training and guidance, consultation of an appropriate corpus may provide a means for the learners to participate more actively in the

development of their writing skills. This active participation could be enhanced by integrating corpora and concordancing into the word processing environment, as suggested by researchers such as Garton (1994), Levy (1990), and Milton (1997). Furthermore, one could envisage its integration alongside other tools into a learning package for creative writing such as *Système-D*, established at Vanderbilt University (Scott, 1990), which combines word processing with a variety of linguistic tools such as a dictionary, a verb conjugator, a grammar index, a vocabulary index, and a phrase index. Developments such as these would, however, require further research and empirical studies to investigate the introduction of corpus consultation into such learning environments.

Acknowledgement

Íde O'Sullivan wishes to acknowledge the assistance of the Irish Research Council for the Humanities and Social Sciences which provided a postgraduate scholarship to support her research.

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Appendix A

The following is an excerpt from an example taken from Tim John's Web page on DDL.⁷

Which nouns from the list at the end of the exercise complete each block of five citations?

1. paid into your bank account on the 19th
ould still produce his red box on Budget
miles inland, I got caught on midsummer
mmemorate their dead. For it was on that
Ironically, I joined the Cabinet on the

2. I really must protest, on
nsolvent, while administrators run it on
Ernest Beni of Vanuatu, speaking on
public bodies who actively campaigned on
cts could benefit those persons on whose

3. the delegation stopped in Bahrain on its
ention of names for people we met on our
's description of a poor family on their
of enzymes in a flask, he is well on the
These discoveries are first steps on the

4. rld protesting against the trial on the
no evolution. This is fallacious on two.
Liepaja. This was cancelled on economic
stering research. 'We base this call on
ed that a legacy which was on technical

5. Russia's space programme is on the
ts in Chelyabinsk and Arzamas are on the
nes be a warning of a sick planet on the
ion now find themselves teetering on the
many of the world's birds of prey on the

of each month. The repayment penalties are h
; the contents would have been faxed from Fra
by the most violent hailstorm I have ever en
in 1938 that Nazis vandalised and looted Jew
that Roy Jenkins left it in 1976, and I supp

of the Tribble family worldwide, about the c
of the banks. The best of many jibes about t
of the twenty-two island governments of the
of the constitutional amendment were the Iri
the rites were performed.

back to IAEA headquarters, Gallucci told rep
home from school. One such was a young man w
to a picnic in the bois de Boulogne. Despite
to synthesising a complex natural product.
to learning how to outwit the parasite's res

that it was "political". In May 1975, De Fre
First, even if there were no intrinsic prop
before Chernobyl exploded. Ozolins says "gre
of social justice and equity as well as on t
(such as the one suggested) invalid should b

of crisis, according to officials who gave e
of collapse. Their counterparts in the US, B
of ecological disaster, with amphibians play
of an abyss wherein lies truth: the truth of
of extinction. But some of the most spectacu

Nouns: behalf; brink; day; grounds; way.

Íde O'Sullivan is a researcher at the University of Limerick. The aim of her research is to investigate the role of corpora and concordancing in language learning and teaching, in particular the influence which corpus consultation skills have on students' writing skills in French. Íde is an IRCHSS Government of Ireland Scholar, which means that her research is funded by the Irish Research Council for the Humanities and Social Sciences.

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⁷ Tim Johns Data-driven Learning Page: <http://web.bham.ac.uk/johnstf/timconc.htm>.