Studies in Second Language Learning and Teaching
Department of English Studies, Faculty of Pedagogy and Fine Arts, Adam Mickiewicz University, Kalisz
SSLLT 2 (1). 67-92
http://www.ssllt.amu.edu.pl

Quantifying controlled productive knowledge of collocations across proficiency and word frequency levels

Déogratias Nizonkiza
University of Antwerp, Belgium
deogratias.nizonkiza@student.ua.ac.be

Abstract

The present study explores the relationship between controlled productive knowledge of collocations and L2 proficiency, the role of frequency in controlled productive knowledge of collocations, and the quantifiability of controlled productive collocational knowledge growth alongside L2 proficiency and word frequency levels.

A proficiency measure and a productive collocation test modelled on Laufer and Nation (1999) were presented to Belgian and Burundian English majors. The results show that scores on both tests distinguish between proficiency levels and, furthermore, highly correlate. This suggests that controlled productive knowledge of collocations develops as proficiency increases, supporting earlier studies (Boers, Eyckmans, Kappel, Stengers, & Demecheleer, 2006; Bonk, 2001; Eyckmans, Boers, & Demecheleer, 2004; Gitsaki, 1999) that had established a relationship between collocational knowledge and L2 proficiency. The results also show that the more frequent the collocations, the better they are known, which highlights the crucial role played by frequency in knowing words (Nation & Beglar, 2007). Furthermore, the number of collocations added can be quantified and we observe moderate gains at beginner and advanced levels, and impressive gains at intermediate levels. This supports and extends Laufer's (1998) and Zhong and Hirsh's (2009) findings and lays basic ground work for teaching collocations, the amount of which should increase with proficiency levels.

Keywords: quantifying, controlled productive knowledge, L2 proficiency, frequency levels

Collocations have attracted increased research attention over the past decades, and four fundamental questions have been examined. While two of the questions, namely, the importance of collocations and the relevance of explicitly teaching them, have been properly addressed and are not contentious issues anymore, the two others, namely, how to teach collocations and exactly what collocations to teach, do not seem to have been properly addressed.

Over the past few years, a number of studies have demonstrated the importance of collocations in an L2 context (see among others Cowie, 1998; Granger & Meunier, 2008; Howarth, 1998; Nesselhauf, 2005; Pawley & Syder, 1983; Wray, 2002). Collocations have been found to characterise L2 proficiency, with empirical evidence showing that collocational knowledge develops alongside proficiency both receptively (Eyckmans, 2009; Gyllstad, 2007, 2009; Keshavarz & Salimi, 2007) and productively (Bonk, 2001; Eyckmans, Boers, & Demecheleer, 2004; Gitsaki, 1999; Nizonkiza, 2011a). Subsequent to the growing importance and significance attributed to collocations in research, several calls to teach vocabulary/foreign language with special emphasis on collocations have been made. Many scholars have recommended teaching collocations explicitly as a way forward in foreign language teaching (see among others Boers, Eyckmans, Kappel, Strengers, & Demecheleer, 2006; Lewis, 1993, 1997, 2000; Martynska, 2004; Nattinger & DeCaricco, 1992). However, neither how to teach collocations nor exactly what to teach have been properly addressed so far.

Recently, pedagogical experiments have been conducted in order to address the 'how' to teach collocations. Although no common teaching method has been adopted so far, different studies point to the general observation that raising learners' awareness of the phenomenon of collocations constitutes the best strategy to adopt while teaching collocations (see among others Barfield, 2009; Boers et al., 2006; Boers & Lindstromberg, 2008; Coxhead, 2008; Jiang, 2009; Peters, 2009; Wray & Fitzpatrick, 2008; Ying & O'Neill, 2009). Two approaches, that is, the awareness-raising and attention-drawing techniques, which are basically similar in nature and which find their theoretical ground in Nation's (2001) three psychological conditions, that is, noticing, retrieving, and generation (Coxhead, 2008), have been tried.

The awareness-raising approach was trialled in different contexts by means of different tasks, the different studies pointing to the same observation that raising L2 learners' awareness of collocations is efficient. It helps learners overcome the fundamental problem they have when learning collocations. L2 learners generally attend to individual words, breaking the collocation down into separate units, which impinges on their fluency as they have to reconstruct the words in appropriate pairings at the time of use (Barfield, 2009; Wray, 2002). This approach, which puts awareness-raising activities at the front in

teaching collocations, was felt to be an option to fill the gap in teaching collocations/multiword units. The attention-drawing technique also referred to as the effectiveness of 'phrase-noticing' is an approach inspired by Lewis's Lexical Approach that has been put to the test by Boers et al. (2006) among others. Boers et al. (2006) measured the possible gains in terms of oral proficiency of participants as a result of phrase-noticing activities in which they had taken part. The authors came to the conclusion that the phrase-noticing approach helps students to recognize chunks/collocations that they are able to use in real conversations, therefore improving their oral proficiency.

Equally important is the question of 'what' collocations to teach, and it is far from being properly addressed. Collocation dictionaries, which provide common collocations, are helpful for teachers and L2 learners and can be relied on in this perspective. For instance, an assessment of the *The BBI Combinatory Dictionary of English: A Guide to Word Combinations* (Benson, Benson, & Ilson, 2010) and *Macmillan Collocations Dictionary for Learners of English* (2010) shows that they are indeed important for learners and teachers. According to Ptaszyński (2011), the BBI dictionary presents data useful to a heterogeneous audience (students, teachers, translators, writers, etc.) and can therefore be referred to as a *one-size-fits-all dictionary*. The dictionary provides its users with useful and detailed information particularly important for learners of English who want to improve their productive skills. However, very little is known about the proficiency levels of the learners, the nature of the text they want to write, and their mother tongue, which makes it hard to believe that the data presented in the dictionary and its accessibility match the profile and needs of its prospective users. Therefore, the dictionary ". . . remains a dictionary of a linguist, by a linguist, and for a linguist" (Ptaszyński, 2011, p. 151).

Coffey (2011), who has assessed the *Macmillan Collocations Dictionary for Learners of English* (2010), finds it well planned as a pedagogical dictionary. It offers learners ways to find relevant collocations easily, for instance, by grouping collocates in semantic sets with their meanings provided. However, the dictionary does not have an overview of the collocations on which it focuses and does not draw more attention of learners to collocational patterns such as verb and adjective headwords that lead to noun collocates learners may otherwise overlook.

Wible, Kuo, Chen, Tsao, and Hung's (2006) tool, namely, the COLLOCATOR, which basically functions in the same way as collocation dictionaries, was designed in an attempt to help teachers/learners find out which collocations to teach/learn. The COLLOCATOR is a web-based tool, which once activated, selects and detects the multiword expressions from the British National Corpus (BNC) occurring on the webpage a user is viewing. They are highlighted

and presented in pairs. This tool presents a significant turn for extracting and determining which collocations are important, thus helping both learners and teachers to focus on common collocations. However, the large amount of collocations that the COLLOCATOR detects may be confusing, especially for learners who need to be helped as to which collocations to attend to (Wible, 2008). Like dictionaries of collocations,[1] the COLLOCATOR does not specify which collocations to teach at which level of proficiency, an issue that needs exploring.

In view of the above, I believe that tracking the collocational knowledge growth as proficiency develops and across word frequency bands may be one way to address this question. The present study has been initiated in this light and builds on the established relationship between collocations and L2 proficiency in order to study the measurability of productive collocational knowledge growth. It replicates Nizonkiza (2011b) and will pursue the same objectives, namely, (a) the extent to which controlled productive collocational knowledge increases as overall L2 proficiency develops, (b) the extent to which controlled productive collocational knowledge of L2 learners develops according to word frequency levels to which it adds, and (c) the quantifiability of collocations gained according to proficiency and word frequency levels.

The first aim of the study was motivated by research findings according to which a strong relationship between receptive collocational competence and L2 proficiency exists (Gyllstad, 2007, 2009; Keshavarz & Salimi, 2007; Nizonkiza, 2011a). The pertinent question here is whether or not the same holds for productive knowledge of collocations. The assumption is that the same relationship should be logically found for productive knowledge of collocations (cf. Bonk, 2001; Gitsaki, 1999), or controlled productive knowledge, in the present case. Empirical evidence suggests that productive knowledge always lags behind receptive knowledge (Jaén, 2007; Laufer, 1998; Laufer & Paribakht, 1998) and that learning vocabulary in general, and passing from receptive to productive knowledge in particular, is not a linear activity (Laufer, 1998; Meara, 1996; Melka, 1997; Read, 2004). I therefore assume that controlled productive knowledge of collocations increases with L2 proficiency, but the gain from one level of proficiency to another is not always significant, a hypothesis that was confirmed in the original study. However, the sample population consisted of three levels of proficiency at the beginner and low intermediate levels and Nizonkiza (2011b) suggested replicating the study in order to include more levels, which is the raison d'être of the present study.

The second issue explored is the extent to which controlled productive knowledge of collocations is influenced by word frequency, as it has been demon-

[1] For a comprehensive overview of collocation dictionaries, I refer the reader to Handl (2009).

strated that the more frequent words are better known at the vocabulary size level (Beglar, 2010; Nation, 1983; Nation, 1990; Nation & Beglar, 2007) and for receptive collocational competence (Gyllstad, 2007; Nizonkiza, 2011a). It was shown that controlled productive collocational competence of L2 learners increased from the less frequent to the more frequent word levels in the original study, which will be tested in the present study with more levels of proficiency.

A twofold question, not tackled in the original study, has been added. As controlled productive knowledge of collocations grows with proficiency and word frequency levels, it makes sense to reflect about the extent to which we can quantify the collocations gained (a) from one level of proficiency to another; and (b) from one word frequency level to the next. In other words, the following question will be answered: If collocational knowledge develops with proficiency and word frequency levels, is the knowledge acquired quantifiable?

In brief, the present study will test the following assumptions:

1. Controlled productive knowledge of collocations grows with proficiency, but the gain from one level of proficiency to another is not always significant.
2. Controlled productive collocational competence of L2 learners increases from less frequent to more frequent word levels.
3. As collocational knowledge develops with proficiency and word frequency levels, the knowledge added can be quantified and, following the nonlinear nature of vocabulary growth in general (cf. Laufer, 1998; Meara, 1996; Melka, 1997; Read, 2004), the gains are dependent on both proficiency and word frequency levels.

Measuring Vocabulary Growth

Research in vocabulary has, among other things, tried to measure vocabulary growth. Nation's (1990) Vocabulary Levels Test (VLT), which requires "learners to match target words to their synonyms or definitions" (Read, 2000, p. 171) is the most widely used matching test for this purpose (Ishii & Schmitt, 2009; Read, 2007). It involves word definition matching in either sense, namely, word-definition or definition-word matching.

Findings from measuring vocabulary size have come up with interesting pedagogic and research implications that are considerable both for teaching and research, enabling syllabus and material developers to (a) design what may be an optimal syllabus, namely, one that brings in optimal conditions for the learning/teaching activities to succeed (Laufer, 1998; Schmitt, Schmitt, & Clapham, 2001); and (b) decide on how many words to teach in a unit and how to teach them (Read, 2000). They enable researchers to (a) quantify the

threshold instruction for comprehending written materials (Laufer, 1998) and (b) use the materials generated for studying the relationship between vocabulary growth and the learning conditions (Laufer, 1998). For a complete overview of vocabulary size and text coverage, I refer the reader to Nation and Waring (1997) and Nation (2006).

Measuring vocabulary growth has been extended to productive knowledge. Laufer and Nation (1999) adapted the VLT and came up with its active version, which measures the controlled productive ability, where each test item is presented in a sentential context with the first two letters provided and the test-takers' role is to fill in the missing letters (Laufer & Nation, 1999). However, whenever two letters can start two words, a third letter is added in order to disambiguate the cue.

Laufer (1998) used this test in order to compare three types of vocabulary knowledge, namely, receptive,[2] free productive, and controlled productive, after one year of instruction. The study involved two groups of Israeli English learners with six and seven years of exposure to the language. The study examined the gains in these types of knowledge, how they are related to one another, and the changes that occur in these relationships. Laufer (1998) observed that both receptive knowledge and controlled productive vocabulary progressed well, but with more progress at the receptive level, while free productive vocabulary did not progress at all. The receptive vocabulary size was found to be larger than controlled productive size, with a larger gap in the more advanced group.

Zhong and Hirsh (2009) used an adapted version of the controlled productive test to examine the growth of controlled productive knowledge and compare it to receptive knowledge. The study involved high school students in China. The test presented to participants consisted of items selected from the 2000-word, 3000-word, 5000-word levels and the Academic Word List (AWL). It was administered in pre- (third week of class) and post-experimental conditions (10 weeks later). As indicated by the findings, both receptive and controlled vocabulary knowledge grow significantly at some word levels after a 10-week course. Overall, greater growth was observed at the controlled productive knowledge than the receptive knowledge, but the receptive knowledge was larger than controlled productive knowledge at all the levels. However, the gap between the two lessened after 10 weeks of study. My study is in line with Zhong and Hirsh's (2009) study and will measure controlled productive collocational knowledge growth.

[2] I adopted the terms mostly used in the literature although Laufer (1998) used *passive*, *active*, and *controlled active*.

Quantifying Controlled Productive Collocational Competence Across Proficiency Levels

Sample Population

English majors from a university in Belgium and in Burundi participated in the study. The first data set was collected from English majors in Burundi and the results are reported in Nizonkiza (2011b). Participants from Burundi are aged between 20 and 26. They speak Kirundi, their mother tongue; French, a language of wider communication in Burundi and used in official matters; and Swahili (for a few of them), a lingua franca of East Africa. They were selected from year one (n = 36), year three (n = 44), and year four[3] (n = 36) using the systematic random sampling technique[4] (cf. Babbie, 1990; Dagnelie, 1992). Participants sat the tests on three successive days in the following order: year four, year three, and year one. They were invited by their lecturers and sat the tests in two sessions (TOEFL first and the collocation test afterwards) with a short pause in between (30 minutes). TOEFL was administered and marked following the Educational Testing Service's instructions. As regards the collocation test, students were required to follow the instructions and an example was provided. The test lasted 10 to 30 minutes and students were awarded 1 point per correct answer. TOEFL scores were used in order to determine the proficiency levels of the participants. Their scores ranged between 310 and 506 and the mean scores of the groups are 335.17 in Level 1; 386.40 in Level 2; and 444.63 in Level 3 (paper-based TOEFL total score is 677); levels were confirmed as different by a post-hoc analysis test (Scheffe).

Given the low level of proficiency of participants (from beginner to intermediate), Nizonkiza (2011b) recommended replicating the study in order to include more English majors and therefore get more levels of proficiency. Then, 100 Belgians doing English majors, almost at the end of their first year at the university (end of April), with Dutch as their L1, aged between 18 and 20, volunteered to participate. The students were invited through their lecturer in a proficiency course. Those who attended the following class a week later participated. I was allowed in 20 minutes before the class ended and presented the test, which lasted 5 to 15 minutes.

[3] In Burundi, the bachelor degree is organised in four years. Year two could not be included in the study because the data was collected towards the end of the year and second year students who had finished their exams were away.

[4] According to the technique, every nth subject is selected from a random starting point.

The Belgian students had sat an old paper-based version of TOEFL for other purposes and their level of proficiency was quite high with scores ranging from 493 to 657. The Burundian and the Belgian data were encoded and put in the same data set. However, 30 of the Belgian students who either did not finish the collocation test or who did not have any TOEFL scores were excluded from the analysis. After merging the two data sets, participants were allocated to proficiency levels on the basis of their TOEFL scores. Bearing in mind Bouma's (1984) suggestion that a group should consist of at least 30 candidates for statistical reasons, five levels of proficiency were distinguished. Level 1 (*n* = 33) scored between 310 and 356; Level 2 (*n* = 42) scored between 360 and 410; Level 3 (*n* = 40) scored between 413 and 493; Level 4 (*n* = 40) scored between 503 and 577; while Level 5 (*n* = 30) scored between 580 and 657. A Scheffe analysis test was run and confirmed that the different proficiency levels belonged to different groups.

The Test Battery

A controlled productive test of collocations (see Appendix B) was developed and presented to participants. Frequency of words and their syntactic nature guided the selection and only verb-noun (V + N) combinations were retained. The V + N combinations constitute the collocations investigated in this study for the three reasons explained in Gyllstad (2007), namely, (a) they constitute frequent occurrences, (b) they are very difficult for L2 learners, and (c) they contain the most important information for communication. The fourth reason is that when we express ourselves, we do not think of the verb first. We tend to start with the noun, standing for the action we want to do and then think of a verb which goes with it, which stands for how to do the action (*Oxford Collocations Dictionary for Students of English*, 2002).

The target words were selected from Nation's (2006) word frequency count, a database of word families based on the BNC and organised in frequency bands of 1000 words each. Words were selected from the 2000-word, 3000-word, 5000-word levels (cf. Nation, 1983; Nation, 1990; Schmitt et al., 2001), and Coxhead's (2000) AWL, which consists of frequent words in academic contexts, but which do not appear in the first 5000 words. The 10000-word level, another level considered by Nation and colleagues was excluded, due to the fact that it consists of words deemed to be too infrequent to allow us to learn much from scores at this level, given the proficiency level of the initial sample population (Burundians) of the study (cf. Nizonkiza, 2011b). Ten words (cf. Nation & Beglar, 2007) were selected from each of the word frequency bands, making a total of 40 target items. The target words, known as nodes, had to be nouns and

were selected using systematic random sampling (Babbie, 1990; Dagnelie, 1992), according to which each *n*th (100th in this case) word is selected from a random starting point. Whenever the 100th word was not a noun, the next noun was selected instead.

The next step was to select their collocates (verbs in the V + N combination) from the *Oxford Collocations Dictionary for Students of English* (2002). The frequency of collocates was also controlled and they had to be of higher frequency level than the nodes (cf. Gyllstad, 2007) or similar frequency, in case no collocate of higher frequency was found. The whole selection procedure is summarised through the following steps:

- A noun was selected from Nation's (2006) word frequency count.
- All the verbs collocating with it in the V + N combination (from the *Oxford Collocations Dictionary for Students of English*, 2002) were listed.
- Their frequency level was checked in Nation's (2006) word frequency count.
- The verbs of similar frequency level, if not possible to find higher level, were retained.
- An online collocation sampler,[5] which gives different collocates of the node, and information on how many times they appear in the *Bank of English*, how many times they cooccur with the node, and how significantly they do so, was run with the most significant collocate considered for selection.

For instance, the collocates of the word *accuracy* include *of*, *with*, *be*, *correct*, *checked*, *ensure*, *lack*, *predict*, *fly*, and so on, up to the 100th cooccurring word. *Improve*, *increase*, *check*, *confirm*, *test*, *ensure*, *doubt*, and *question* are presented in the *Oxford Collocations Dictionary for Students of English* (2002) as the relevant V + N combinations. I selected *ensure* because it belongs to the 1000-word level, being thus more frequent than *accuracy*, which belongs to the 2000-word level, and collocates with it more significantly with mutual information (MI) of 2.3, higher than the other verbs of the V + N combination. The collocations were presented in a sentential context with the verb to the left of the noun.

As regards the format, the test was modelled on Laufer and Nation's (1999) Vocabulary Levels Test active version, which presents words in a sentential context. In the present test, once the collocates were identified, authentic illustrations were selected from the *Oxford Collocations Dictionary for Students of English* (2002), which was chosen because it was designed as a learning tool, compiled on the basis of the BNC (frequency of collocations was

[5] The collocation sampler is available online at: http://www.collins.co.uk/Corpus/CorpusSearch.aspx

checked from the corpus), and containing sentences from the BNC, or with minor modifications aimed at making them more accessible to learners, without altering the meaning of the collocations.

Laufer and Nation's (1999) original test was developed from Nation's (1990) Vocabulary Levels Test and was designed to test the controlled productive ability, which refers to

> the ability to use a word when compelled to do so by a teacher or researcher, whether in an unconstrained context such as a sentence writing task, or in a constrained context such as a fill in task where a sentence context is provided and the missing target word has to be supplied. (p. 37)

The verb was deleted (in each sentence) with the first two letters provided and underlined in order to avoid wildly varying answers (cf. Laufer & Nation, 1999). Test-takers were instructed to complete the underlined word whereon an example was provided so as to ensure transparency (see the example below).

Instruction:	Complete the underlined words in the sentences below.
Example:	She is conducting campaigns to ***at***..... new clients. She is conducting campaigns to ***attract*** new clients.

Results

Controlled productive knowledge of collocations grows with proficiency. The first aim of the study was to measure the extent to which controlled productive collocational knowledge grows with proficiency. As the test-takers were ranked and grouped in five levels of proficiency according to their TOEFL scores, the collocation test scores were analysed in this light.[6] The means and standard deviations are presented in Table 1 and show that the same levels are reflected through the collocation test scores with much variability at the beginner levels. The means significantly distinguished between the levels as indicated by the results from a one-way analysis of variance (ANOVA) and its related significance level of 0.000, 2-tailed.

Post-hoc comparisons that used the Scheffe test were conducted and indicate that the mean differences between the different levels (Table 2, Column 2) and their related significance levels (Table 2, Column 4) are statistically significant except the difference between Levels 1 and 2. What we learn from this finding is that Levels 1 and 2 actually belong to one group.

[6] Although not reported here, reliability of items was measured. The Cronbach's alpha, which is .90, indicates that the test is internally consistent although a few items (5), whose corrected item total correction is below Ebel's (1979) scale cut-off point (.19), need revising.

Table 1 Mean scores on Collocation Test

Level	*N*	*Mean*	*SD*
1	33	20.85	4.18
2	42	21.02	5.06
3	40	25.85	4.37
4	40	33.38	2.46
5	30	36.50	1.99

Table 2 Groups set by Scheffe test

(I) level	(J) level	Mean difference (I-J)	Std. error	*Sig.*
1	2	-.175	.901	1.000
	3	-5.002*	.911	.000
	4	-12.527*	.911	.000
	5	-15.652*	.978	.000
2	1	.175	.901	1.000
	3	-4.826*	.856	.000
	4	-12.351*	.856	.000
	5	-15.476*	.926	.000
3	1	5.002*	.911	.000
	2	4.826*	.856	.000
	4	-7.525*	.867	.000
	5	-10.650*	.936	.000
4	1	12.527*	.911	.000
	2	12.351*	.856	.000
	3	7.525*	.867	.000
	5	-3.125*	.936	.028
5	1	15.652*	.978	.000
	2	15.476*	.926	.000
	3	10.650*	.936	.000
	4	3.125*	.936	.028

*. The mean difference is significant at the 0.05 level.

The predictive relationship between collocational knowledge and L2 proficiency was studied further by fitting a regression line (Figure 1). The formula of the regression line can be expressed in the following terms: $Y = bX + a$ (cf. Salkind, 2011), where Y = proficiency, expressed by TOEFL score; b = the slope or direction of the line; X= the score used as the predictor, collocation test in this case; and a = the point at which the line crosses the y-axis. Using the coefficients from Table 3, the formula can be numerically written as follows: $Y = 11.215X + 152.826$. We can therefore use this equation to predict the level of proficiency, namely, TOEFL score (Y), given any score in the collocation test (X). As Figure 1 shows, the regression line has a positive slope, which re-

flects a positive correlation (.837, Appendix B) between knowing collocations and level of proficiency. Then, it appears from this finding, that the more collocations a learner knows, the more proficient he is, suggesting that controlled productive knowledge of collocations grows alongside proficiency level. However, as can be seen from Table 2, the post-hoc test put proficiency Levels 1 and 2 in the same group, implying that knowledge gained from one proficiency level to another is not always significant. The findings above confirm the first hypothesis of the study, which says that controlled productive knowledge of collocations grows with proficiency, but the gain from one level of proficiency to another is not always significant.

Table 3 Collocation-proficiency regression model

Model		Unstandardized coefficients		Standardized coefficients	*t*	*Sig.*
		B	Std. error	Beta		
1	(Constant)	152.826	15.267		10.010	.000
	COLLOTTOT	11.215	.542	.837	20.698	.000

Note: Dependent variable: TOEFL (proficiency)

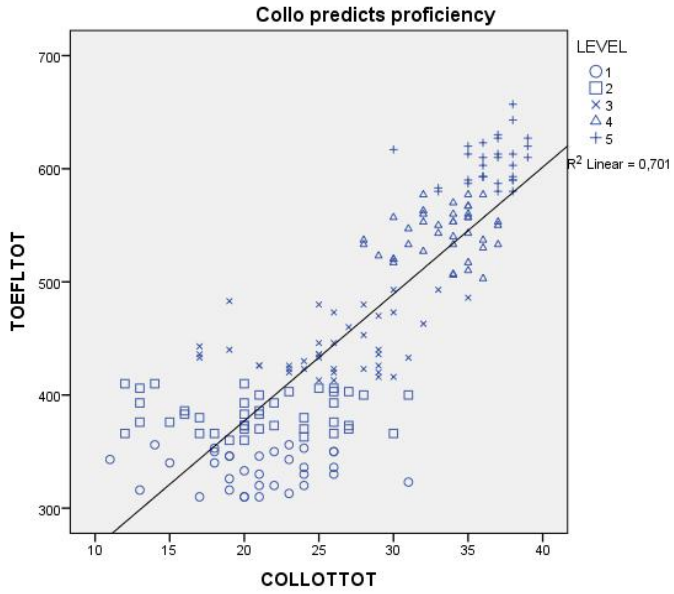

Figure 1 Correlative links between TOEFL and Productive Collocation Test

Word frequency affects controlled productive knowledge of collocations. The second issue addressed in the study is the extent to which controlled productive knowledge of collocations of L2 learners develops according to word frequency levels. As words were selected from different word frequency levels, a one-way repeated ANOVA, involving the word frequency levels the collocation test consists of, was performed and results are presented in Table 1, Appendix A. They show that the overall difference in mean scores is statistically significant as shown by the Sphericity Assumed Correction Test and its associated significance level that is 0.000.

However, the test (Sphericity Assumed Correction) does not point to where significant differences occur even though it can be seen from the mean scores that the higher the frequency band, the higher the score. The mean is 7.65 at the 2000-word level; it drops slightly to 7.42 and 6.62, respectively at the 3000-word level and AWL; while it drops dramatically to 5.53 at the 5000-word level. The data were therefore analysed further using the Bonferroni post-hoc test, which is a multiple-comparison test that shows where the differences are significant (Table 2, Appendix A). From the second column (Mean difference I-J), we can see that the differences are statistically significant between all the word frequency levels except between the 2000-word and 3000-word levels.[7] This confirms the second hypothesis of the study, according to which controlled productive knowledge of collocations of L2 learners increases from the less frequent to the more frequent word levels.

Quantifying collocation gains across proficiency and word frequency levels. The third aim which the study addressed was the quantifiability of collocations gained across proficiency and word frequency levels. In order to quantify additions according to proficiency, means from Table 1 were used. The last column shows that means are higher at higher levels of proficiency and range between 20.85 and 36.35. The mean differences between two successive proficiency levels, which are 0.17 from Level 1 to Level 2, 4.83 from Level 2 to Level 3, 7.53 from Level 3 to Level 4, and 2.97 from Level 4 to Level 5, virtually represent estimates of collocations learners can add from one level of proficiency to another. Overall, additions tend to be small at the beginner (between Levels 1 and 2) and advanced (between Levels 4 and 5) levels, while impressive gains are observed at the intermediate (between Levels 2 and 3 and especially between Levels 3 and 4) levels, clearly indicating that the additions depend on proficiency levels.

[7] In Table 2 in Appendix A, 1 stands for 2000-word, 2 for 3000-word, 3 for 5000-word, and 4 for AWL.

In order to quantify additions according to word frequency levels, means were computed and are presented in Table 4.

Table 4 Collocation means across word frequency levels

	N	Minimum	Maximum	*Mean*	*SD*
2000-word	185	2	10	7.65	2.01
3000-word	185	1	10	7.42	2.09
AWList	185	1	10	6.62	2.14
5000-word	185	1	10	5.53	2.14

The mean scores in Table 4 stand for estimates of collocations likely to be known at each word frequency level. The standard deviations do not differ across the frequency bands although they are slightly lower at higher word frequency levels, levels likely to be better known. According to N. Schmitt (personal communication, 2003 as cited in Xing & Fulcher, 2007), the expected score at an acquired word frequency level should be 80%, which means 8 out of 10 in the present case.[8] The scores were weighed against this scale, which shows that learners need to add at least 0.35 at the 2000-word level, 0.48 at the 3000-word, 1.38 at the AWL, and 2.47 at the 5000-word. Clearly, it will take much more time to take learners to the 5000-word level than to the 2000-word, where they need 2.47 and 0.35, respectively. In other words, more time is needed in order to take learners to a less frequent word band than to a more frequent one, which implies that words acquired depend on frequency bands with more words added at higher ones.

The two findings above allow me to confirm the third hypothesis, according to which collocational knowledge added can be quantified and the gains depend on both proficiency and word frequency levels.

Discussion

The present study attempts to measure controlled productive knowledge of collocations, operationalised through verb-noun combinations, across proficiency and word frequency levels. In order to achieve the three aims of the study, a proficiency test (TOEFL), and a collocation test were presented to Belgian and Burundian English majors. The first aim pursued in the study is the extent to which controlled productive knowledge of collocations increases as proficiency develops. The proficiency measure used to allocate participants to proficiency groups distinguishes between five different groups,

[8] Ten words were selected from each word frequency band and students were awarded 1 point per correct answer and 0 points for a wrong answer.

the same groups that are also reflected in the collocation test with significant differences. However, the differences between the levels are consistently more moderate at beginning and advanced levels, namely, from Level 1 to Level 2 and from Level 4 to Level 5 (cf. Table 1), which empirically supports Laufer's (1998) observation that vocabulary growth is slow at beginning levels and gains momentum as proficiency increases. It complements Laufer's study by showing that a plateau in collocations' growth can be reached, confirming Li and Schmitt (2009), who did not find any progress in terms of collocation production among advanced Chinese learners of English. The study also supports the nonlinearity nature of vocabulary growth (Laufer, 1998; Meara, 1996; Melka, 1997; Read, 2004). For these scholars, word acquisition is not a steady progression along a continuum and has shifting and transition zones, especially from receptive to productive knowledge: two levels of word knowledge which I believe characterise proficiency levels of learners.

While the present study confirms Nizonkiza's (2011b) findings, it also presents empirical evidence for his assumption that collocation growth is slow at low levels, gains momentum at intermediate levels and stabilises and even reaches a plateau at very advanced levels, an assumption formulated on the basis of Laufer's (1998) and Li and Schmitt's (2009) observations above. However, reservation should be made as regards the predictive power of controlled productive knowledge of collocations over L2 proficiency. While controlled productive knowledge of collocations is a predictor of overall proficiency, it may not be a reliable one at beginner levels.

The second question addressed in the study is the role of word frequency in controlled productive knowledge of collocations. As the test items were selected from different word frequency levels, the test scores were analysed accordingly and results indicate that the differences in mean scores are significantly different between each two word frequency levels, except between the 2000-word and 3000-word levels. The presence of upper intermediate and advanced learners among the participants may account for the less significant difference between scores at these two word frequency levels that are at the borderline of the frequency cut-off point. According to Schmitt et al. (2001), the cut-off point of frequency is the 2000-word level. Results also indicate that the higher the frequency band is, the higher the score will be, which highlights the fundamental role played by frequency in knowing words (Beglar, 2010; Nation, 1983; Nation, 1990; Nation & Beglar, 2007). This finding extends the role played by frequency in word knowledge, which has empirical support at the vocabulary size level, to controlled productive knowledge of collocations.

The quantifiability of collocations gained across proficiency and word frequency levels is the third aim of the study. Estimates of collocations that

can be added according to proficiency are represented by mean scores differences between each two successive proficiency levels. They tend to be smaller at beginner and advanced levels than at intermediate levels, clearly demonstrating that collocation gains are dependent on proficiency level.

As regards collocations gained according to word frequency levels, mean scores at each frequency word band were weighed against Schmitt's cut-off point of an acquired word frequency band. The differences between the actual scores and the cut-off point were found to be minor at higher word frequency bands, gradually becoming more substantial at less frequent word bands. This implies that gains depend on word frequency band and it logically takes less time to take a learner from the 2000-word level to the 3000-word than taking her/him from the 3000-word to the 4000-word for instance. The teaching implication from the above findings is that frequency should definitely be attended to when selecting collocations to teach in addition to learners' proficiency levels. Focus should be put on the most frequent words first, namely, up to the 2000-word level while teaching collocations, which has support at the vocabulary size level (Nation, 2006), where it is suggested that the 2000-word level should be explicitly taught while the other vocabulary levels can simply be taught through reading.

The present study suffers chiefly from two major drawbacks. Firstly, the vocabulary size of the participants was not tested by means of a standardised vocabulary size test. This would have allowed me to know whether the collocation test scores at a given word frequency band was low because of individual items or because of collocations, especially at infrequent word frequency bands. It would also have allowed comparing the findings of the present study with those at the vocabulary size level. Furthermore, the study did not do any qualitative analysis of the test items, which is the only way to address the main limitations of the test construct, especially when the context and the two letters provided are analyzed.

Conclusion

As discussed above, the results of the study suggest that (a) controlled productive knowledge of collocations develops parallel to L2 proficiency as the same proficiency levels distinguished by means of TOEFL are reflected through the collocation test scores, (b) frequency is found to play a fundamental role in controlled productive knowledge of collocations' growth as the test-takers gradually scored better from the less frequent to the more frequent levels, and (c) collocational knowledge growth can be quantified, where the gains are dependent on both proficiency and word frequency levels.

The present study has achieved the set objectives, but has also posed challenging questions worth considering in future research. The findings of the study show that more proficient L2 learners do better and that more frequent collocations are better mastered. However, the study did not make any reference to the teaching approaches the participants followed, which was practically impossible given the wide range and background of participants. A follow-up study, more experimental in nature, in associating an approach to teaching collocations and test scores of participants, would tell us more about controlled productive knowledge of collocations and thereby enhance the quality of the present study, which only gave an overall indication of the collocational knowledge growth across proficiency and word frequency levels. Moreover, the present study is semi-longitudinal, namely, the participants were specifically selected from different learning levels (year one, year three, and year four among the Burundian students) and more proficient participants (Belgian students), and the question is whether or not a purely longitudinal study would come up with the same observations. Furthermore, the test used provides the first two letters of the word to be supplied (the collocate), which is actually the main limitation of the test; it remains to be seen whether or not the same test taken without the first two letters provided would lead to the same conclusions. It would be interesting to explore this in a follow-up study. Extending this study to other types of collocations will certainly yield interesting results too, which will contribute towards modelling collocations better than they are today.

In summary, the study has clearly demonstrated that collocational growth follows proficiency levels as well as frequency of words, which lays basic ground work for a collocation-based syllabus. For instance, the *Oxford Collocation Dictionary for Students of English* (2002) and Nations's (2006) word frequency counts considered in developing the collocation test used in the study can also be considered in selecting 'which' collocations to teach. This kind of selection along with the awareness raising approaches reported in Barfield and Gyllstad (2009), Boers and Lindstromberg (2009), or the cognitive-linguistics-inspired pedagogy reported in Boers and Lindstromberg (2008) will definitely take this debate a step further, especially now that the question of teaching collocations is much more related to what aspects to teach and how to teach them (Granger & Meunier, 2008). It is hoped that the study has made a considerable step in this direction. All the above studies, though conducted in different contexts using different tasks, point to the same observation, that raising students' awareness of collocations improves their knowledge of collocations. My study, which has shown that moderate gains of collocations are found at low and advanced levels while impressive gains of collocations are found at intermediate levels, sheds some light as to finding out exactly

what collocations to teach at which learning stages, namely, deciding on what collocations to teach at which level of proficiency taking into account both word frequency and proficiency levels.

Acknowledgements

This study was successfully completed thanks to the great contribution of Prof. Kris Van de Poel from the University of Antwerp who has provided constructive criticism from the design of instruments used for data collection up to the present stage. I owe her more than I can express. Many thanks are also addressed to Prof. Piet Swanepoel from the University of South Africa for his comments on the final draft of the paper. I am greatly indebted to Mr Daniel Sossi who participated in the design of the test and proofread the final manuscript. It would be unfair not to thank the editor and two anonymous reviewers for their invaluable suggestions.

References

Babbie, E. R. (1990). *Survey research methods*. California: Wordsworth.

Barfield, A. (2009). Following individual L2 collocation development over time. In A. Barfield & H. Gyllstad (Eds.), *Researching collocations in another language* (pp. 208-223). New York: Palgrave Macmillan.

Benson, M., Benson, E., & Ilson, R. F. (2010). *The BBI combinatory dictionary of English*. Amsterdam: John Benjamins.

Boers, F., Eyckmans, J., Kappel, J., Stengers, S., & Demecheleer, M. (2006). Formulaic sequences and perceived oral proficiency: Putting the Lexical Approach to the test. *Language Teaching Research, 10*, 245-261.

Boers, F., & Lindstromberg, S. (Eds.). (2008). *Cognitive approaches to teaching vocabulary and phraseology*. Berlin: Mouton De Gruyter.

Boers, F., & Lindstromberg, S. (2009). *Optimizing a lexical approach to instructed language acquisition*. New York: Palgrave Macmillan.

Bonk, W. J. (2001). Testing ESL learners' knowledge of collocations. In T. Hudson & J. D. Brown (Eds.), *A focus on language test development: Expanding the language proficiency construct across a variety of tests* (pp. 113-142). Honolulu: University of Hawaii Second Language Teaching and Curriculum Center.

Bouma, G. D. (1984). *The research process*. Oxford: Oxford University Press.

Coffey, S. (2011). A new pedagogical dictionary of English collocations. *International Journal of Lexicography, 24*, 328-341.

Cowie, A. P. (Ed.). (1998). *Phraseology: Theory, analysis and applications*. Oxford: Clarendon Press.

Coxhead, A. (2000). A new academic word list. *TESOL Quarterly, 34,* 213-239.

Coxhead, A. (2008). Phraseology and English for academic purposes: Challenges and opportunities. In S. Granger & F. Meunier (Eds.), *Phraseology. An interdisciplinary perspective* (pp. 149-161). Amsterdam: John Benjamins.

Dagnelie, P. (1992). *Principes d'expérimentation*. Gembloux : Presses Agronomiques deGembloux.

Ebel, R. L. (1979). *Essentials of education measurement*. New Jersey: Prentice Hall.

Eyckmans, J. (2009). Toward an assessment of learners' receptive and productive syntagmatic knowledge. In A. Barfield & H. Gyllstad (Eds.), *Researching collocations in another language* (pp.139-152). New York: Palgrave Macmillan.

Eyckmans, J., Boers, F., & Demecheleer, M. (2004). The Deleted-Essentials Test: An effective and affective compromise. *Humanising Language Teaching* 6. Retrieved from www.hltmag.co.uk/nov04/mart04.htm

Gitsaki, C. (1999). *Second language lexical acquisition: A study of the development of collocational knowledge*. San Francisco: International Scholars Publications.

Granger, S., & Meunier, F. (Eds.). (2008). *Phraseology. An interdisciplinary perspective*. Amsterdam: John Benjamins.

Gyllstad, H. (2007). *Testing English collocations*. (Unpublished doctoral dissertation). Lund University, Lund.

Gyllstad, H. (2009). Designing and evaluating tests of receptive collocation knowledge: COLLEX and COLLMATCH. In A. Barfield & H. Gyllstad (Eds.), *Researching collocations in another language* (pp. 153-170). New York: Palgrave Macmillan.

Handl, S. (2009).Towards collocational webs for presenting collocations in learners' dictionaries. In A. Barfield & H. Gyllstad (Eds.), *Researching collocations in another language* (pp. 69-85). New York: Palgrave Macmillan.

Howarth, P. (1998). Phraseology of second language proficiency. *Applied Linguistics, 19,* 24-44.

Ishii, T., & Schmitt, N. (2009).Developing an integrated diagnostic test of vocabulary size and depth. *RELC Journal, 40,* 5-22.

Jaén, M. M. (2007). A corpus-driven design of a test for assessing the ESL collocational competence of university students. *International Journal of English Studies, 7,* 127-147.

Jiang, J. (2009). Designing pedagogic materials to improve awareness and productive use of L2 collocations. In A. Barfield & H. Gyllstad (Eds.), *Researching collocations in another language* (pp. 99-113). New York: Palgrave Macmillan.

Keshavarz, M. H., & Salimi, H. (2007). Collocational competence and cloze test performance: A study of Iranian EFL learners. *International Journal of Applied Linguistics, 17*, 81-92.

Laufer, B. (1998). The development of passive and active vocabulary in a second language: Same or different? *Applied Linguistics, 19,* 255-271.

Laufer, B., & Nation, P. (1999). A vocabulary size test of controlled productive ability. *Language Testing, 16,* 33-51.

Laufer, B., & Paribakht, T. S. (1998). The relationship between passive and active vocabularies: Effects of language learning contexts. *Language Learning, 48*, 365-391.

Lewis, M. (1993). *The Lexical Approach: The state of ELT and the way forward*. Hove: Language Teaching Publications.

Lewis, M. (1997). *Implementing the Lexical Approach: Putting theory into practice*. Hove: Language Teaching Publications.

Lewis, M. (2000). *Teaching collocations: Further development in the Lexical Approach*. Hove: Language Teaching Publications.

Li, J., & Schmitt, N. (2009). The acquisition of lexical phrases in academic writing: A longitudinal case study. *Journal of Second Language Writing, 18,* 85-102.

Macmillan collocations dictionary for learners of English. 2010.

Martynska, M. (2004). Do English language learners know collocations? *Investigationes Linguisticae, 11*, 2-12.

Meara, P. (1996). The dimensions of lexical competence. In G. Brown, K. Malmkjaer, & J. Williams (Eds.), *Competence and performance in language learning* (pp. 35-53). New York: Cambridge University Press.

Melka, T. F. (1997). Receptive versus productive vocabulary. In N. Schmitt & M. McCarthy (Eds.), *Vocabulary: Description, acquisition, and pedagogy* (pp. 84-102). New York: Cambridge University Press.

Meunier, F., & Granger, S. (Eds.). (2008). *Phraseology in foreign language learning and teaching.* Amsterdam: John Benjamins.

Nation, P. (1983). Testing and teaching vocabulary. *Guidelines, 5*, 12-25.

Nation, P. (1990). *Teaching and learning vocabulary*. Rowley, MA: Newbury House.

Nation, P. (2001). *Learning vocabulary in another language*. New York: Cambridge University Press.

Nation, P. (2006). How large a vocabulary is needed for reading and listening? *Canadian Modern Language Review, 63*, 59-82.

Nation, P., & Beglar, D. (2007). A vocabulary size test. *The Language Teacher, 31*, 9-13.

Nation, P., & Waring, R. (1997). Vocabulary size, text coverage and word lists. In N. Schmitt & M. McCarthy (Eds.), *Vocabulary: Description, acquisition and pedagogy* (pp. 6-19). Cambridge: Cambridge University Press.

Nattinger, J. R., & DeCarrico, J.S. (1992). *Lexical phrases and language teaching*. Oxford: Oxford University Press.

Nesselhauf, N. (2005). *Collocations in a learner corpus*. Amsterdam: John Benjamins.

Nizonkiza, D. (2011a). The relationship between lexical competence, collocational competence, and second language proficiency. *English Text Construction, 4*, 113-146.

Nizonkiza, D. (2011b). The relationship between controlled productive collocational competence and L2 proficiency. *Toegepaste Taalwetenschap in Artikelen, 84/85*, 29-37.

Oxford collocations dictionary for students of English, 2002.

Pawley, A., & Syder, F. H. (1983). Two puzzles for linguistic theory: Native like selection and native like fluency. In J. C. Richards & R. W. Schmidt (Eds.), *Language and communication* (pp. 191-226). London: Longman.

Peters, E. (2009). Learning collocations through attention-drawing techniques: A qualitative and quantitative analysis. In A. Barfield & H. Gyllstad (Eds.), *Researching collocations in another language* (pp. 194-207). New York: Palgrave Macmillan.

Ptaszyński, M. O. (2011). Review of the BBI Combinatory Dictionary of English. *Hermes, 46*, 147-151.

Read, J. (2000). *Assessing vocabulary*. New York: Cambridge University Press.

Read, J. (2004). Plumbing the depths: How should the construct of vocabulary knowledge be defined? In P. Bogaards & B. Laufer (Eds.), *Vocabulary in second language* (pp. 209-227). Amsterdam: John Benjamins.

Read, J. (2007). Second language vocabulary assessment: Current issues and new directions. *International Journal of English Studies, 7*, 105-125.

Salkind, N. J. (2011). *Statistics for people who (think they) hate statistics*. Oaks: Sage Publications.

Schmitt, N. (1998). Measuring collocational knowledge: Key issues and an experimental assessment procedure. *ITL, 119-120*, 27-47.

Schmitt, N., Schmitt, D. & Clapham, C. (2001). Developing and exploring the behaviour of two new versions of the vocabulary levels test. *Language Testing, 18*, 55-88.

Wible, D. (2008). Multiword expressions and the digital turn. In S. Granger & F. Meunier (Eds.), *Phraseology. An interdisciplinary perspective* (pp. 163-181). Amsterdam: John Benjamins.

Wible D., Kuo C. H., Chen M. C., Tsao N. L., & Hung T. F. (2006). A computational approach to the discovery and representation of lexical chunks. In P. Mertens , C. Fairon, A. Dister, P. Watrin (Eds.), *Verbum ex machina. Actes de la 13e conférence sur le Traitement automatique des langues naturelles*. Presses universitaires de Louvain, Louvain-la-Neuve (Cahiers du Cental 2): 868-875.

Wray, A. (2002). *Formulaic language and the lexicon*. Cambridge: Cambridge University Press.

Wray, A., & Fitzpatrick, T. (2008). Why can't you just leave it alone? Deviations from memorized language as a gauge of nativelike competence. In S. Granger & F. Meunier (Eds.), *Phraseology. An interdisciplinary perspective* (pp. 123-147). Amsterdam: John Benjamins.

Xing, P., & Fulcher, G. (2007). Reliability assessment for two versions of Vocabulary Levels Tests. *System, 35*, 182-191.

Ying, Y., & O'Neill, M. (2009). Collocation learning through an 'AWARE' approach: Learner perspectives and learning process. In A. Barfield & H. Gyllstad (Eds.), *Researching collocations in another language* (pp.181-193). New York: Palgrave Macmillan.

Zhong, H., & Hirsh, D. (2009). Vocabulary growth in an English as a foreign language context. *University of Sydney Papers in TESOL, 4*, 85-113.

APPENDIX A

One-way Repeated ANOVA Tables

Table 1 Word frequency levels one-way repeated ANOVA

	Source	Type III sum of squares	*df*	Mean square	*F*	*Sig.*	Partial eta squared
Level	Sphericity assumed	509.939	3	169.980	119.480	.000	.394
	Greenhouse-Geisser	509.939	2 .874	177.451	119.480	.000	.394
	Huynh-Feldt	509.939	2.924	174.392	119.480	.000	.394
	Lower-bound	509.939	1.000	509.939	119.480	.000	.394
Error (level)	Sphericity assumed	785.311	552	1.423			
	Greenhouse-Geisser	785.311	528.758	1.485			
	Huynh-Feldt	785.311	538.034	1.460			
	Lower-bound	785.311	184.000	4.268			

Table 2 Multiple comparisons of means at word frequency levels

(I) level	(J) level	Mean difference (I-J)	Std. error	*Sig.*[b]	95% Confidence interval for difference[b]	
					Lower bound	Upper bound
1	2	.238	.114	.229	-.066	.542
	3	2.124*	.121	.000	1.800	2.448
	4	1.038*	.115	.000	.732	1.343
2	1	-.238	.114	.229	-.542	.066
	3	1.886*	.139	.000	1.515	2.258
	4	.800*	.125	.000	.466	1.134
3	1	-2.124*	.121	.000	-2.448	-1.800
	2	-1.886*	.139	.000	-2.258	-1.515
	4	-1.086*	.128	.000	-1.428	-.745
4	1	-1.038*	.115	.000	-1.343	-.732
	2	-.800*	.125	.000	-1.134	-.466
	3	1.086*	.128	.000	.745	1.428

a. Based on estimated marginal means

*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Bonferroni.

APPENDIX B

Correlations between TOEFL, collocation test and word frequency levels

Table 3 Correlations

		2000-word level	3000-word level	5000-word level	AWLIST	COLLOTTOT	TOEFLTOT
2000-word level	Pearson correlation	1	.717**	.686**	.721**	.894**	.746**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	185	185	185	185	185	185
3000-word level	Pearson correlation	.717**	1	.600**	.677**	.858**	.730**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	185	185	185	185	185	185
5000-word level	Pearson correlation	.686**	.600**	1	.670**	.850**	.700**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	185	185	185	185	185	185
AWLIST	Pearson correlation	.721**	.677**	.670**	1	.882**	.740**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	185	185	185	185	185	185
COLLOTTOT	Pearson correlation	.894**	.858**	.850**	.882**	1	.837**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	185	185	185	185	185	185
TOEFLTOT	Pearson correlation	.746**	.730**	.700**	.740**	.837**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	185	185	185	185	185	185

**. Correlation is significant at the 0.01 level (2-tailed).

APPENDIX C

Productive Collocation Test

Productive Vocabulary Test

Name:	Date:
Level of study (year):	Start hour:
University:	End hour:

Instruction: Complete the underlined words in the sentences below.
Example: She is conducting campaigns to ***at***..... new clients.
She is conducting campaigns to ***attract*** new clients.

1. I ha..... no intention of changing jobs because I am happy where I am.
2. Enemy planes were seen to dr..... bombs along the railway line.
3. They always pa..... a 10% commission on every sold encyclopaedia.
4. I wonder, this unusual building seems to barely fi..... the definition of a house.
5. Better sa..... your energy not trying to persuade people who are not interested.
6. She asked him if he could ke..... a secret before telling him the horrible story.
7. Great care is being taken to en..... the accuracy of research data with good planning, several revisions and rewrites as part of the procedure.
8. She felt she would ma..... a terrible mess of her life if she were to throw everything overboard now.
9. They did not ge..... the permit for a street demonstration against university fees they had applied for a couple of months ago.
10. Her appointment will fi..... the gap created when the marketing manager left.
11. They held celebrations to ma..... the anniversary of Mozart's death.
12. It is common practice that when a song ends, the performer has to ta..... a bow.
13. They plan to se..... congratulations to Tony on his new job and bought a nice card.
14. We could he..... a faint echo, before it slowly died away.
15. Victory will br..... glory, fame, and riches to the football team.
16. She inherited all the family precious stones, but she does not like to we..... jewellery.
17. In May and June, females leave the males to bu..... a nest and incubate their eggs.
18. She joined the navy where she expects to re..... the rank of captain before retiring.
19. He is a person who can se..... his soul to the devil provided he gets money.
20. Why didn't the referee bl..... the whistle just before he shot the goal; it would have prevented the clash between rival supporters.
21. When she got pregnant at the age of 16, she decided to ha..... an abortion.
22. The estate expects to ho..... an auction to raise money.
23. Our party should en..... diversity, not division, in order to attract new members.
24. How do you ex..... the discrepancies between the money and the receipts?
25. Jumbo jets somehow la..... the glamour of the transatlantic liner which has an impact on the number of passengers.
26. She had a short time to dress and ap..... lipstick before rushing out to the party.
27. The burglars had to br..... a pane of the front window to enter the house.
28. He vowed to ta..... revenge on the man who had killed his brother.

29. They have decided to ch..... the catwalk stereotype of the skinny model.
30. They called on the government to help pro..... native wildlife as a response to the major environmental concerns of the century.
31. She was hoping she would not have to gi..... evidence in court.
32. I can't re..... any conclusions from their vague observations.
33. She had to pa..... some compensation for the damages she had caused.
34. With the new computer, you can ha..... access to all the files.
35. The mechanic can ma..... the necessary adjustments to the broken engine.
36. Many universities in the UK ch..... special fees to overseas students.
37. His sound argument will la..... the foundations for future cooperation between the two countries.
38. We have to fo..... the safety guidelines laid down by the government.
39. It is the duty of the local community to pr..... accommodation for the homeless.
40. He was found to su..... from clinical depression after several months of hospitalisation.