Incorporating Rich Vocabulary Instruction into a Language Classroom

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This study examined how rich vocabulary instruction can be incorporated into a language classroom in a time-efficient and pedagogically effective way. The instruction focused on developing lexical knowledge of higher-level learners, whose progress often comes to halt after they have reached the intermediate plateau. The assumption of the study was that explicit, regular, systematic teaching of word collocations will widen students' understanding of the meaning of the target words and, more importantly, their usage, and that this was expected to increase their communicative competence. Vocabulary treatment consisted of a set of homework and classroom activities whose sequence was based on their cognitive complexity and included both richness and fluency-building tasks. The adopted model of instruction proved to be highly effective in improving learners' receptive and productive vocabulary. It also raised learners' awareness about the nature of lexis and helped them to develop the skills they need in order to build their knowledge of collocations and word grammar independently of the teacher.

Key words: vocabulary instruction, collocations, independent learner

BACKGROUND

As Wilkins observed many years ago "Without grammar very little can be conveyed; without vocabulary nothing can be conveyed." (Wilkins, 1972, p.

111). In recent years, there has been the reemergence of interest in vocabulary studies. Some linguists (e.g., Lewis, 1993; 2000) even argue that vocabulary learning plays the central role in second language acquisition. While today hardly any applied linguist or language teacher would dispute the importance of vocabulary learning, opinions have been divided regarding the place and nature of vocabulary instruction in the syllabus at different levels of learner proficiency.

The three main objections to direct vocabulary teaching are the vocabulary size of native speakers, the complexity of various aspects of word knowledge, and the time it takes for instruction to have a significant effect on language use (Nation, 1999). Even by the most conservative estimates, native speakers have knowledge of tens of thousands of word families (Nation, 1999). Research on the vocabulary acquisition of second language learners showed that to have a significant effect on language use, it takes at least 15 minutes to teach one word (McKeown et al., 1985). This means that not many words can be covered during class time. Therefore, it has been argued that direct vocabulary teaching should be limited to high frequency words at lower levels of proficiency, while students at higher levels should acquire vocabulary primarily through extensive reading by inferring word meaning from context (Nation, 1999).

However, recent research suggests a need for explicit vocabulary instruction at all levels of language proficiency (e.g., Stoller & Grabe, 1993; Sökmen, 2000). One of the main arguments against implicit approaches to vocabulary teaching in the L2 is the high error occurrence during the inferencing process. Learners seldom guess the correct meaning from context (Kelly, 1990; Pressley, Levin & McDaniels, 1987). Students are often frustrated with this approach, and it is difficult to undo the damage caused by incorrect guessing (Sökmen, 2000). Furthermore, learning vocabulary from context tends to be a very slow process. Inferring word meaning correctly does not always result in long-term retention (Jenkins, Stein & Wysocki, 1984; Mondria & Wit de-Boer, 1991; Parry, 1993). Salling (1959) found that at least 5 repetitions of a word are needed to ensure learning. In the experiments conducted by

Crothers and Suppes (1967) that number was 6 to 7, while Saragi, Nation and Meister (1978) found that if learners did not know they had to learn the new vocabulary, 16 or more repetitions were found to be necessary. These findings have significant implications for students at higher levels of proficiency. Words that are new to advanced students are often less common words. This means that it may be weeks, months or even years before they encounter them again, making it more difficult for learners to acquire information about the properties of these words. Finally, students will often fail to learn high-priority lexis if it is not intentionally selected and incorporated into teaching materials (Swan, 1996). Without their attention being explicitly drawn to common word combinations, useful collocations will often remain unnoticed by the learner and consequently unavailable for storage and future use (Lewis, 2000). As a result, it is not uncommon to have intermediate and advanced language learners whose communicative ability is not improving despite the fact that their vocabulary size may be increasing. This gap between receptive and productive knowledge has been found to increase as the frequency of words decreases (Webb, 2008). This may cause frustration to higher level learners who may be able to read complex texts and still experience considerable difficulty in expressing their ideas clearly and concisely.

While it is obvious that tens of thousands of word families stored in the mental lexicon of the native speaker cannot become the focus of explicit instruction, the above findings suggest that explicit vocabulary instruction should accompany the usual inferencing activities in the L2 classroom. Direct vocabulary teaching that channels students' attention to predictable patterns in the target language can speed up the learning process, especially for learners who have limited exposure to the target language.

Considering the limited time that most learners have at their disposal, and curricular constraints that most instructors are faced with, it is important to look for ways of incorporating direct vocabulary instruction into the programme in a way that facilitates vocabulary learning most, while not taking time away from other strands of the course. This paper reports the results of one such experiment.

PURPOSE OF THE STUDY

This study aimed at helping students who had reached the intermediate plateau (a long period of study without any noticeable improvement) benefit from a breakthrough and make genuine progress. Vocabulary treatment was designed to build students' receptive and productive knowledge of the target words beyond a 2,000 high-frequency word level through a regular, systematic teaching of collocations. It also aimed at equipping students with skills that would allow them to develop their collocation knowledge independently of the teacher.

Collocations were selected as the focus of the study because lack of collocational knowledge is considered to be one of the main reasons why students are not able to use the words they know and fail to make any apparent progress beyond the intermediate level (Lewis, 2000). Many students tend to believe that learning more vocabulary simply means learning new words (Woolard, 2000). However, it is collocational competence that will enable students to be better readers and communicate more effectively. As Hill (2000, p. 55) points out, "Advanced students do not become more fluent by being given lots of opportunities to be fluent. They become more fluent when they acquire more chunks of language for instant retrieval."

An attempt was made to design learning activities that will facilitate communicative learning, while addressing one of the main problems of the communicative approach - one learner's deficient output becoming another's deficient intake.

PARTICIPANTS

The study involved 22 Japanese adult learners of English as a foreign language (EFL) enrolled at a private language school in Tokyo. The learners were at a high-intermediate level with TOEIC scores of between 770 and 850. They attended EFL classes once a week for a total of 3.5 hours (105 min of

listening and 105 min of reading) for a period of 18 weeks. The study was conducted in the reading class.

MATERIALS

Six articles were selected from English-medium newspapers and magazines. The use of authentic materials was expected to provide a natural distribution of cohesive devices, including lexical cohesion, and the variety of sources would ensure a diversity of styles (Little, Devitt & Singleton, 1988).

While all articles followed the conventions of the journalistic genre, an effort was made to ensure that a variety of topics were represented in the study, so different student interests would be accommodated. Articles that required specialized knowledge were avoided. The selected texts were between approximately 1,400 and 1,800 words in length. Each article was studied over a two-week period.

TARGET WORDS

One hundred and twenty words (twenty words from each article) believed to be new to the students were selected by the researcher and another experienced teacher who was also in charge of the reading course. As each text was studied over two weeks, the target words were divided into twelve sets of 10 words. An effort was made to ensure that all the selected words denoted a concept familiar to the learners, and thus the learners were expected to be familiar with the equivalents in their first language. This was an important consideration, as both the pre-test and the post-test included a translation task. All target words were content words.

PROCEDURES

The study had three parts:

a) A vocabulary pre-test which consisted of an English to Japanese translation of the target items and a collocation test.
b) Vocabulary treatment which included two homework and two classroom vocabulary activities.
c) A vocabulary post-test (English to Japanese translation of the target items and a collocation test).

Pre-test

Format

In order to examine the effects of vocabulary instruction on word retention, it was necessary to see whether the learners knew the words prior to the treatment. The pre-test assessed both learners' receptive and productive knowledge of the target items. Their receptive knowledge was tested by asking the learners to translate the English L2 words into their first language (L1), Japanese. The English words were presented without context. Translation into the L1 is an effective measure of receptive vocabulary knowledge, as it involves form recognition and precise meaning recall (Haastrup & Henriksen, 2000). This test format is also quick and simple, enabling a large number of words to be tested in a relatively short period of time. Furthermore, translation into the L1 enables learners to express their understanding of the target word without being hampered by their lack of language proficiency in L2 (Read, 2000).

As one of the objectives of the study was to examine the effect of vocabulary treatment on productive word knowledge, it was important to find out to what extent the students were able to use the target words. One of the most commonly used measures of productive word knowledge is the

Productive Vocabulary Levels Test (Laufer & Nation, 1999), where the learners are provided with the first letters of the words and asked to complete them in a sentence (e.g. *There are a doz_____ eggs in the basket.*) This format, however, was rejected because a correct response depends on whether the student is able to recall the target word and spell it correctly. The test does not provide enough information about whether the learners can use the words correctly.

The ability to use a word requires extended knowledge beyond word meaning. In order to produce language that is natural and accurate, learners must know which word combinations are acceptable in the target language. Meara (1996) proposed that beyond the 5,000-word level, vocabulary size becomes less important than the way in which vocabulary is structured in the learner's mental lexicon. The general hypothesis is that learners with more developed vocabulary knowledge will have a more complex and more structured network of associations. Therefore, a collocation test was considered an appropriate way of assessing the students' ability to use the words. The students were asked to write three English words that can go together with the target words. A sample of the test is available in Appendix I. The students were given 45 minutes to complete the test.

Scoring

On the translation test, each correctly translated item was awarded 1 point. To ensure reliability, students' responses were examined by the researcher and one bilingual native speaker of Japanese. Where there was a disagreement, the responses were re-examined and scored by agreement.

On the collocation test, one point was given for each probable word combination. No partial points were given. Points were not deducted for misspelling of the acceptable collocates. The test was examined by the researcher and another teacher, a native speaker of English. When there were differences in the ratings, the responses were re-examined.

Vocabulary Treatment

Starting from the premise that a systematic approach to vocabulary development results in better learning, the study looked into ways in which rich vocabulary instruction could be integrated into an advanced reading class. Rich instruction can be defined as "…giving elaborate attention to a word, going beyond the immediate demands of a particular context of occurrence" (Nation, 1999, p. 61). An attempt was made to design activities that would provide students with multiple exposure to the target words and promote a deeper processing of the words, ultimately establishing them as accessible lexical items. A deeper level of semantic processing and mental elaboration is believed to result in a better quality of word knowledge (Baddeley, 1990; Craik & Lockhart, 1972; Craik & Tulving, 1975). The retention of new information correlates with the amount and the quality of attention that the learner pays to different aspects of word knowledge (Hulstijn & Laufer, 2001). When students are asked to manipulate words, to link them to other words in the lexicon or their background knowledge, the result is a richer level of encoding and better learning.

The tasks were sequenced based on their cognitive complexity. Task complexity is the result of "…the attentional, memory, reasoning, and other processing demands imposed by the structure of the task on the language learner" (Robinson, 2001, p. 29). Sequencing of pedagogic tasks in order of increasing cognitive complexity is believed to be conducive to the development of L2 knowledge in terms of both the acquisition of new knowledge and the restructuring of existing L2 representations (Robinson, 2001).

The procedures adopted were as follows:

Step 1: Introduction to collocations (Week 1, time: 20 minutes)

The purpose of this stage was to raise students' awareness of the importance of learning word collocations. Learners usually do not have a

problem with the concept of collocations as all languages have some words that can go together and some that cannot, and explicit teaching of the word 'collocation' allows the teacher to use the term when appropriate, eventually saving a lot of class-time (Conzett, 2000). The students learned why collocations are important and how they can study collocations on their own, an important step in the development of independent language users. When they record the new words, the students were advised to write down the whole phrase from the text, not just the individual word.

They were also introduced to two collocation dictionaries that were considered to be good reference sources - *Oxford Collocations Dictionary* and *LTP Dictionary of Selected Collocations*. Finally, the students were directed to useful Internet sources. While all participants in the study had experience of using search engines, none of them seemed to have recognized the Internet as a potential vocabulary learning tool. The students were told that by typing the target word in any search engine, they can see a sample of different sentences in which that word appears. They were also reminded that by typing the phrase in inverted commas, the phrase functions as a single term, and they can check whether the words they have selected are acceptable word combinations in English.

The students were also made aware of online sources such as *Corpus Concordance Sampler* and guided through how to use them. Concordances offer more co-textual information than dictionaries, allowing a potentially more efficient exploration of the collocates of the word (Woolard, 2002). They can help increase students' sensitivity to which word combinations are possible in the target language, an important step in the development of independent language learners.

Step 2: Homework (Weeks 1-12, approximately 45 minutes perweek)

Each homework assignment contained two vocabulary activities. In Activity One, the learners were presented with the list of target words and asked to check their meaning in a dictionary. Then they were asked to copy at

least one example of authentic usage from a dictionary, the Internet, an English language magazine, etc. The purpose of this activity was to familiarize learners with the form and the meaning of the target words, and encourage them to start keeping their own collocation notebooks.

The second activity was *Collocation Crossword.* The students were asked to complete a crossword, where the clues were the collocations that go with each of the target words. The clues were given in sets of four gap-filled sentences for each of the target words. The first example always came from the article that the learners were asked to read for homework. The other three examples were taken from the *Oxford Collocations Dictionary*, the *Oxford Advanced Learner's Dictionary* and the *Corpus Concordance Sampler*. The learners were warned that in order to complete "the clue sentences", they sometimes might need to change the form of the word, but that they should use the basic dictionary form, i.e. the form given in the word list to complete the crossword. Typical collocates were highlighted in bold. An example of a set of clues is provided below.

Prodigies **have** almost **unstoppable** _____ to master the skill. I **felt a sudden** _____ to smash the teapot against the wall. I suppressed **a strong** _____ to yawn. She **resisted the** _____ to kiss him. (*Target word: *urge*)

The crosswords were created with the use of a free software program, *EclipseCrossword.com*.

This activity aimed at promoting the development of four different aspects of word knowledge: form, meaning, grammar and collocates. In order to fill in the gaps, the learners had to recall the meaning of the target word. As some sentences required different inflectional forms, they also had to think about grammatical properties. Highlighted collocates gave them typical examples of the usage of the target words. Finally, in order to complete the crossword, the students had to pay attention to spelling.

Vocabulary activities were followed by a set of comprehension questions related to the articles assigned for homework. Although no explicit attention

was given to vocabulary at this stage, the homework readings provided additional exposure to the target words.

Step 3: Classwork (Weeks 2-13, approximately 45 minutes per week)

Classroom treatment of the target words consisted of three parts: homework review, completion of discussion questions where the target words were left out, and pairwork discussion. Each part will now be discussed in more detail.

Homework review was done in two stages. First, the students were asked to share the examples of authentic usage they had found. This stage usually took about 10 minutes. Then the students were asked to compare their answers in Activity Two (crossword clues). After that, the model answers were provided, and the students' attention was drawn to the examples where the form of the word had to be changed. This stage also usually took about 10 minutes.

After the homework review was completed, the students were presented with a list of ten general discussion questions where the target words were blanked out. For example, for the word *urge* given in the previous example, the question was: *Have you ever felt a sudden _____ to travel?* The students were asked to fill in the gaps and were then provided with the model answers. Usually, 10 minutes was spent on this activity.

Finally, the students were asked to work in pairs and have a discussion. During the discussion the students were looking at different pages. Each student had to ask five questions. The target words were again left out and their position was indicated with five slash lines. (Example: *Have you ever felt a sudden ///// to travel?*). The students were instructed not to write anything but just to put the questions to their partner. The discussion usually took about 15 minutes.

The discussion preparation stage offered the students an opportunity to encounter the target word in a new context. The gap-filling exercise required the students to recall the meaning, spelling and grammatical properties of the

word. The discussion that followed provided an additional focus on the spoken form. In addition to learning the pronunciation of individual words, drawing the students' attention to collocations enabled them to learn the stress pattern of a phrase as a whole, leading to better intonation (Hill, 2000).

In summary, the vocabulary treatment ensured that the students were exposed to the target words at least eight times in seven different contexts, with an open-ended discussion offering potentially more encounters.

Post-test

The post-test consisted of a translation test and a collocation test. The tests were conducted in 12 sessions one week after the relevant vocabulary treatment. The time allowed for each testing session was 10 minutes. The test followed the same scoring procedure as the pre-test.

RESULTS

Pre-test (translation)

Although TOEIC scores and the results of the school placement test indicated that all participants were approximately at the same level of English proficiency, they did not share the same learning background. This made it difficult to select 120 words that would be new to all the students. The results of the translation pre-test indicated that most target words were new to the students. On average, the participants recognized 32.2% of the items. The number of correctly translated items varied between 14 and 69 (11.7%~ 57.5%). Relatively high Standard Deviation values (SD =14.03) indicated individual differences in the level of students' familiarity with the target words. There were two items on the list (*margin, broker*) that could be classified as loan words. Although Japanese has native forms for these words, they are also written in katakana, the script used to record loan words. Four

students provided katakana translations of the two words and these answers were marked as correct. There were also three items (*drive (n.), settlement, sentence (n.)*) which have multiple senses. Considering that the translation test was context-independent, all possible answers were marked as correct.

A close analysis of the students' responses highlighted some of the problems L2 learners experience, such as difficulties with form recognition. The students' responses supported Laufer's findings that L2 learners tend to confuse similar morphological forms (Laufer, 1990, 1997). *Physician* was often translated as *physicist, dumb* was confused with *dump, instance* with *instant, detain* with *maintain, retreat* with *retired, abundant* with *abandon* etc. Problems with form recognition made it sometimes difficult to ascertain whether the testees had any knowledge of the meaning of the target words.

Pre-test (collocations)

The analysis of the responses on the collocation pre-test suggested that the students had a very limited productive knowledge of the target items. Out of 360 elicited collocates (three words for each of 120 items), students on average produced only 40.7 words. The scores ranged between 11 and 114, with SD = 27.4, revealing significant individual differences in the level of understanding of how the target words are used.

Problems with the recognition of word forms also affected the scores on the collocation test as the students sometimes produced collocates that matched their wrong translations rather than the target items. There were also some instances where the students produced responses which were synonymous or analytically related to the target items (e.g., *drive (n.) – motivation; sophistication-detailed*). While these responses indicate familiarity with the meaning of the target words, they are not collocates and therefore, they were marked as being wrong.

Comparing performance on the translation and the collocation pre-tests.

Moderate but statistically significant correlations were established between translation and collocation scores on the pre-test (*r(df34)=*.532). The ratio of

productive to receptive knowledge was 35%. A close analysis of the students' responses, however, made it clear that receptive and productive knowledge are often at different developmental stages. There were 67 instances where students produced correct translations of the target items but were not familiar with any of the collocates. Conversely, there were also 17 instances where students produced at least one correct collocate but failed to give a correct translation of the target word.

Post-test (translation)

The scores on the translation post-test revealed a significant improvement in the students' receptive knowledge of the target items. On average, the students translated correctly 110.7 out of 120 target items (92.2%). With the exception of one student whose score was 88, the number of correctly translated items ranged between 104 and 118, with SD = 7, suggesting little variation in the testees' performance.

Post-test (collocations)

The results of the post-test also showed an improvement in the students' productive knowledge of the target words. Out of 360 elicited collocations, students on average produced 175 correct responses (49.2%). The number of acceptable collocations ranged between 107 and 260 (SD=42.6), suggesting individual differences in the level of productive knowledge of the target words.

Comparing Performance on the Translation and the Collocation Post-tests

Moderate but statistically significant correlations were established between the translation and the collocation scores on the post-test (*r(df34)=*.588). The ratio of productive to receptive knowledge was 53.3%. Most students were able to translate the target words correctly and only four instances were observed where they produced at least one correct collocation but were not

able to give a correct translation of the target word. There were 11 instances where students produced correct translations of the target items but were not familiar with any of the collocates.

Pre-test and Post-test Differences (translation)

The scores on both translation and collocation post-tests were found to be higher for all the learners who participated in the experiment, suggesting a positive effect of explicit instruction on vocabulary growth. On the translation test, there was a difference of 60% between pre-test and post-test scores, while on the collocation test an improvement of 37.9% was observed in the post-test.

The gains in vocabulary knowledge are presented visually in Figure 1.
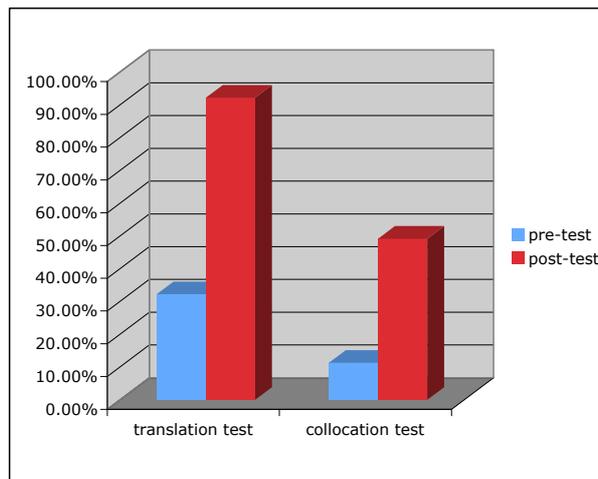

FIGURE 1
Pre-test–Post-test Differences on the Vocabulary Tests

The Wilcoxon Signed Rank Test was used to assess the statistical significance of the differences in the students' pre-test and post-test performance. The

summary of the results is provided in Table 1 below.

TABLE 1
Pre-test – Post-test Differences: Wilcoxon Signed Ranks Test

	Translation pre-test –post-test differ.	Collocation pre-test – post-test differ.
Z	-3.729	-3.724
Asymp. Sig. (2-tailed)	.000	.000

A comparison of students' results on the translation and the collocation test showed that pre-test – post-test differences on both tests were statistically significant.

DISCUSSION AND CONCLUSION

The present study is an attempt to incorporate explicit vocabulary instruction of less common words in an advanced language class. Vocabulary treatment consisted of a set of homework and classroom activities the sequence of which was based on their cognitive complexity.

Comparison of the pre-test and the post-test results revealed significant improvements in students' receptive and productive knowledge of the target words. Receptive scores were higher than productive scores. After vocabulary treatment, most students were able to translate almost all the items correctly, and were able to produce about a half of the elicited collocations. These results are in line with the findings of other studies (e.g., Fan, 2000; Laufer, 1998; Webb, 2008), which have shown that the size of the receptive vocabulary exceeds that of the productive vocabulary. However, the difference between the productive and the receptive test scores could be slightly misleading in view of the fact that the productive knowledge test was more demanding. Learners were asked to produce three collocates for each target word. A collocation test of lower sensitivity, where learners were asked to produce only one collocate, would probably decrease the differences between the receptive and the productive vocabulary scores.

Considering that the tasks were demanding, the results of the collocation test can be seen to be very encouraging. If we assume that the larger the number of collocates reflects a fuller knowledge of the target words, then students' scores on the collocation tests can be taken as an indicator of the depth of knowledge of individual lexical items. Therefore, an average score of 50% on the three-collocate post-test indicates a very high level of understanding with regard to how these words are used.

Although overall the results of the tests also give support to the common assumption that receptive knowledge precedes productive knowledge (Aitchinson, 1994; Channell, 1988; Melka, 1997), there are some indications that this may not always be true for all the learners and for all the items. On both the pre-test and the post-test there were some instances where the learners displayed some knowledge of collocations before they had a clear understanding of the meaning of the word. It is possible that learners may gain productive knowledge of some aspects of vocabulary knowledge before they gain some aspects of receptive knowledge.

The main advantage of the adopted model of vocabulary instruction seems to be its effectiveness in simultaneously improving various aspects of lexical knowledge. First, although vocabulary treatment primarily focused on the development of the students' knowledge of word meanings and collocations, it also indirectly covered other lexical properties such as the written and the spoken form, and grammatical patterns. Second, explicit teaching of collocations not only improved the students' knowledge of target words, but it also facilitated their recall of the items already represented in the mental lexicon. The learners were not just adding new items to their lexicon, they were also making adjustments to what they had already internalized. Introducing collocations recycles half-known words and therefore accelerates vocabulary learning, potentially resulting in a richer and more accessible lexical network. This should allow students to communicate more effectively. Third, in addition to enriching activities, the instruction also included a fluency-building activity (a pairwork discussion) where words were accessed through familiar paths. Finally, the treatment also helped promote learner

autonomy. It made the students aware that, in order to express their ideas precisely and concisely, they need to learn not only individual words, but also common word combinations. Work in the classroom also introduced them to strategies that should enable them to identify useful collocations in both the language they meet in class and, more importantly, in the language they meet in the outside world.

It is important to note that the time spent on vocabulary instruction in class did not exceed 45 minutes – an average of 4.5 minutes per word. This is considerably less than 15 minutes per word - the time previous studies (e.g., McKeown et al., 1985) estimated as the shortest time needed for vocabulary instruction to have a significant effect on language use.

In conclusion, the results of this study suggest that having collocations as a part of planned language input allows vocabulary instruction to be incorporated into teaching materials and class work in a time-efficient manner with significant positive effects on vocabulary learning. The outlined model of vocabulary instruction included both richness and fluency-building activities and proved to be effective in improving both the learners' receptive and productive vocabularies. It also raised the learners' awareness about the nature of lexis and helped them develop the skills they need in order to build their knowledge of collocations independently of the teacher. Emphasis on collocational competence should enable students to understand input more quickly, and speak and write more fluently, improving their overall communicative ability. That should also have a positive effect on students' motivation as they break through the intermediate level plateau and learn to communicate more effectively.

Further research to investigate the relationship between the development of receptive and productive knowledge for different types of words would be a useful follow-up to this study. It would be interesting to see how grammatical class, corpus frequency or semantic features of the word such as abstractness affect the development of the learners' collocational competence. It is hoped that the findings of this study will encourage teachers to try to incorporate collocation-centered explicit vocabulary instruction in their classes at all

levels of proficiency, and stimulate further research in this area.

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REFERENCES

Aitchinson, J. (1994). *Words in the mind: An introduction to the mental lexicon*. Oxford: Basil Blackwell.

Baddeley, A. (1990). *Human memory*. UK: Lawrence Erlbaum Associates.

Channell, J. (1988). Psycholinguistic considerations in the study of L2 vocabulary acquisition. In R. Carter & McCarthy (Eds.), *Vocabulary and language teaching* (pp. 83-96). London: Longman.

Conzett, J. (2000). Integrating collocation into a reading and writing course. In M. Lewis (Ed.), *Teaching collocation* (pp. 70-87). Croatia: Heinle.

Corpus Concordance Sampler. (Online). Available:
http://www.collins.co.uk/Corpus/CorpusSearch.aspx

Craik, F., & Lockhart, R. (1972). Levels of processing: A framework for memory research. *Journal of Verbal Learning and Verbal Behavior, 11,* 671-684.

Craik, F., & Tulving, E. (1975). Depth of processing and the retention of words in episodic memory. *Journal of Experimental Psychology, 104*, 268-294.

Crothers, E., & Suppes, P. (1967). *Experiments in second language learning*. New York: Academic Press.

EclipseCrossword.com (Online). Available: http://www.eclipsecrossword.com

Fan, M. (2000). How big is the gap and how to narrow it? An investigation into the active and passive vocabulary of L2 learners. *RELC Journal, 31*, 105-119.

Haastrup, K., & Henriksen, B. (2000). Vocabulary acquisition: Acquiring depth of knowledge through network building. *International Journal of Applied Linguistics, 10,* 221-240.

Hill, J. (2000). Revising priorities: From grammatical failure to collocational success. In Lewis, M. (Ed.), *Teaching collocation* (pp. 47-69). Croatia: Thomson.

Hulstijn, J. H., & Laufer, B. (2001). Some empirical evidence for the involvement load hypothesis in vocabulary acquisition. *Language Learning, 51*(3), 539-558.

Jenkins, J. R., Stein, M. L., & Wysocki, K. (1984). Learning vocabulary through reading. *American Educational Research Journal, 21*(4), 767-787.

Kelly, P. (1990). Guessing: No substitute for systematic learning of lexis. *System, 18*(2), 199-208.

Laufer, B. (1990). Ease and difficulty in vocabulary learning: Some teaching implications. *Foreign Language Annals, 23*(2), 147-155.

Laufer, B. (1997). The lexical plight in second language reading. In J. Coady & T. Huckin (Eds.), *Second language vocabulary acquisition* (pp. 20-34). Cambridge: Cambridge University Press.

Laufer, B. (1998). The development of passive and active vocabulary: same or different? *Applied Linguistics, 19*(2), 255-271.

Laufer, B., & Nation, I. S. P. (1999). A vocabulary size test of controlled productive ability. *Language Testing, 16*, 36-55.

Lewis, M. (1993). *The Lexical approach.* Hove and London, England: Language Teaching Publications.

Lewis, M. (2000). There is nothing as practical as a good theory. In M. Lewis (Ed.), *Teaching collocation* (pp. 10-27). Croatia: Thomson.

Little, D., Devitt, S., & Singleton, D. (1988). *Authentic texts in foreign language teaching: Theory and practice.* Dublin: Authentik.

LTP Dictionary of Selected Collocations. (2002). Croatia: Thomson.

McKeown, M. G., Beck, I. L., Omanson, R. C., & Pople, M. T. (1985). Some effects of the nature and frequency of vocabulary instruction on the knowledge and use of words. *Reading Research Quarterly, 20*(5), 552-535.

Meara, P. (1996). The dimensions of lexical competence.' In B. Malmkjaer & Williams (Eds.), *Performance and competence in second language acquisition* (pp. 35-53). UK: Cambridge University Press.

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

Mondria, J-A., & Wit-de-Boer (1991). The effects of contextual richness on the guessability and the retention of words in a foreign language. *Applied*

Linguistics, 12(3), 249-267.

Nation, I. S. P. (1999). *Teaching vocabulary in another language.* NZ: Victoria University of Wellington.

Oxford Collocations Dictionary for Students of English. (2002). Oxford: Oxford University Press.

Parry, K. (1993). Too many words: learning the vocabulary of an academic subject. In T. Huckin, M. Haynes, & J. Coady (Eds.), *Second language reading and vocabulary learning* (pp. 109-129). US: Ablex Publishing Corporation.

Pressley, M., Levin, J. R., & McDaniels, M. A. (1987). Remembering versus inferring what a word means: Mnemonic and contextual approaches. In McKeown & Curtis (Eds.), *The nature of vocabulary acquisition* (pp. 107-123). Hillsdale, N.J.: Lawrence Erlbaum.

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

Robinson, P. (2001). Task complexity, task difficulty, and task production: exploring interactions in a componential framework. *Applied Linguistics, 22*(1), 27-57.

Salling, A. (1959). What can frequency counts teach the language teacher? *Contact, 3*, 24-29.

Saragi, T., Nation, I. S. P., & Meister, G. F. (1978). Vocabulary learning and reading. *System, 6*(2), 72-78.

Sökmen, A. J. (2000). Current trends in teaching second language vocabulary. In Schmitt & McCarthy (Eds.), *Vocabulary: Description, acquisition and pedagogy* (pp. 237-257). U.K.: Cambridge University Press.

Stoller, F. L., & Grabe, W. (1993). Implication for L2 vocabulary acquisition and instruction from L1 vocabulary research. In Huckin, Haynes, & Coady (Eds.), *Second language reading and vocabulary learning* (pp. 24-44). US: Ablex Publishing Corporation.

Swan, M. (1996). *Language teaching is teaching language.* Plenary IATEFL.

Webb, S. (2008). Receptive and productive vocabulary sizes of L2 learners. *Studies in Second Language Acquisition*, *30*, 79-95.

Wilkins, D. A. (1972). *Linguistics in Language Teaching*. US: MIT Press.

Woolard, G. (2000). Collocation – encouraging learner independence. In Lewis, M. (Ed.), *Teaching collocation* (pp. 28-46). Croatia: Thoms.

APPENDIX I

A Sample of Vocabulary Pre-test / Post-test

Instructions: For each of the words on the list, write a Japanese translation. Then write 3 English words that can be used together with the words below.

Example: *dog* 犬   ***bark   family   friendly***

If you don't know the word, leave the line blank.

Target Words	Translation	Collocations (words that can be used together)
1. to probe		
2. to forge		

APPENDIX II

List of Target Words

1. to probe	2. to forge
3. to materialize	4. drive
5. urge	6. startling
7. to mediate	8. to enhance
9. resources	10. boom
11. prowess	12. innate
13. abducted	14. proxy
15. sobering	16. to nurture
17. precocious	18. sensational
19. rigorous	20. remarkable
21. estate	22. altruistic
23. loophole	24. instance

25. transplant
26. surrogate
27. trafficking
28. anachronistic
29. to disclose
30. to creep
31. transaction
32. broker
33. enforce
34. fine
35. to convict
36. controversial
37. to indulge
38. premium
39. publicity
40. to address
41. suspect
42. sentence
43. plot
44. to charge
45. cordial
46. to detain
47. penalty
48. to outweigh
49. sophisticated
50. to sway
51. sin
52. to resent
53. to undermine
54. to envy
55. to lament
56. adverse
57. to impair
58. prone
59. complacent
60. prudent
61. eruption
62. stigma
63. rumble
64. cone
65. penal
66. censorship
67. uproar
68. dumb
69. unwarranted
70. steady
71. to stab
72. courtship
73. utility
74. grudge
75. elaborate
76. terminal
77. gruesome
78. to prescribe
79. fatal
80. legitimate
81. settlement
82. raft
83. skeleton
84. latitude
85. remnant
86. counterfeit
87. notorious
88. retreat

89. cynicism
90. abundant
91. therapy
92. ingredient
93. to appall
94. vigilant
95. seizure
96. prosecution
97. cumbersome
98. to store
99. nuance
100. rampant
101. to stem
102. ceiling
103. edict
104. patent
105. genuine
106. skirmish
107. dissent
108. technicality
109. secondary
110. physician
111. bioethics
112. edge
113. to exhibit
114. imbalance
115. malpractice
116. margin
117. nomination
118. gangrene
119. sacred
120. to reprimand

APPENDIX III

Samples of Vocabulary Activities

**Homework Review**
Task 1
Instructions: Share your examples with your partner.

Task 2:
Instructions: Compare your answers with your partner. Then, check your answers against the model answers below. If you have any questions, ask your teacher.

Across

8. Is **the management of** the mental **RESOURCES** something that can be developed? Prodigies are much better at utilizing their **mental RESOURCES** than ordinary children. We need to **mobilize RESOURCES** in the community to provide shelter for the homeless. Australia is a country **rich in natural RESOURCES.**

9. The right side of the brain **MEDIATES** pattern recognition and spatial awareness. A UN mission has been sent to **MEDIATE between** the warring factions. A PKK leader says US can **play a MEDIATING role** between Turkey and PKK. Thought **is** always **MEDIATED by** language.
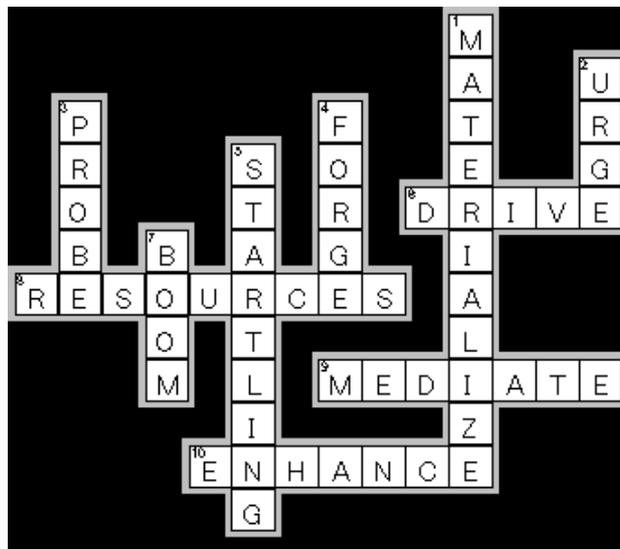
Classroom Activities

Discussion
Part One

Instructions: Fill in the gaps with a suitable word from the list. You may need to change the form of the word.

probe   forge   materialize   drive (n.)   urge (n.)   startling   mediate
enhance   resources   boom

1. If two of your friends were arguing, would you try to _____ or would you leave them alone?
2. Do all companies have to go through the cycles of_____ and bust, or can busts be avoided by good management?
3. How strong is your _____to learn English?
4. What do you do to _____your health?
5. Have you ever felt a sudden _____to travel?..........

Part Two

Instructions: Find a partner. Student A should stay on this page. Student B should go to the next page.

Student A	**Student B**
Part One: Coaching Partner	Part One: Answering Partner
Directions: Ask the following questions. *Look up when you speak.*	**Directions:** Answer every question your partner gives.
1. If two of your friends were arguing, would you try to ///////// or would you leave them alone?	
2. Do all companies have to go through the cycles of ///////// and bust, or can busts be avoided by good management?.....	Part Two: Coaching Partner
	Directions: Ask the following questions. *Look up when you speak.*
Part Two: Answering Partner	1. What do you think are the reasons behind the ///////// success of Korean TV dramas?
Directions: Answer every question your partner gives.	2. Compared to other countries, does Japan protect its natural ///////// well?.......