

Promoting Collocational Competence through Semantic Mapping

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Abstract

Developing NNS learners' collocational competence has been a challenge for language educators, several techniques and awareness raising activities have been proposed with varying degrees of success. One technique is word-mapping. This article presents a classroom study aiming to promote students' collocational competence through semantic mapping. Fifty-seven English major students did the pretest measuring their collocational competence by writing a paragraph on the given topic. Their writings were analyzed to identify the use of collocations in their writings. They then were given a set of instructions on how to do semantic mapping on six types of collocations, followed by lessons on collocations. After the instructions and practice, the students were asked to do the posttest and answered the questionnaires. The research instruments included the semantic mapping lessons on collocations, the achievement test, and the questionnaire measuring the students' satisfaction. The data collection was carried out in August and September 2017. Data were analyzed using basic descriptive statistics: mean, percentage, standard deviation, and paired t-test. The results showed that after the treatment the students' posttest scores were significantly higher than their pretest scores in two areas: their general writing skills and their collocational ability. It was also found that the students perceived the semantic mapping as a useful and effective collocation-learning technique.

Keywords: Collocations, Collocational competence, Semantic mapping

1. Introduction

Collocation has been a topic of scholarly discussions for many decades. Firth (1957) defined collocation as a combination of words associated with each other. McCarthy and O'Dell (1995, p. 6) defined collocation as "a pair or group of words that are often used together." Collocations or words that often go together help make the language sound natural and grammatically acceptable (Nation, 2001). Collocation is, therefore, a

noticeable feature of every language, and in fact, it is one of the qualities that could distinguish the language produced by native and non-native speakers of the language in question (Matsunoboru, 1981, cited in Larsen-Freeman and Long, p. 161). For intermediate and advanced learners, the ability to understand and use collocations is very important, a sign showing their mastery of the language. In fact, knowing a lot of words (their meanings) is one thing, putting them into context correctly is another, and most students, even among fairly competent L2 learners, often fail to master the latter (Arnaud & Savignon, 1997).

One may ask what collocation is. The 7th edition of the Oxford Advanced Learner's Dictionary, defines collocation as "a combination of words in a language that happens very often and more frequently than would happen by chance" (p. 293). The ability to use collocations correctly is called 'collocational competence'. Hill (1999) defines collocational competences as the ability to use collocations correctly and stresses the importance of such the ability. "Any analysis of students' speech or writing shows that this lack of collocational competence is one of the most obvious weaknesses (Hill, 1999, p. 164). For ESL/EFL learners, such the ability matters, but it is not always easy to develop. According to Hill (2006), "Any analysis of students' speech or writing shows that this lack of collocational competence is one of the most obvious weaknesses." The literature has mentioned the challenges of overcoming L1 interference and the lack of exposure to L2 use and repeated exposure to strengthen the acquisition (Durrant and Schmitt, 2010).

In this study, we investigated one way to enhance NNS learners' collocational competence. We did so through the use of semantic mapping as a means to enhance college students' collocation competence. Fifty-seven EFL students in Thailand were asked to write a paragraph on the given topic (How to Stay Healthy). Their writings were analyzed to determine their collocation competence and overall writing ability.

Aim

The aim of this study was to investigate the use of semantic mapping as a tool to promote the students' collocational competence. The research questions were as follows:

1. How effective was semantic mapping as a tool to promote the students' collocational competence?
2. Was there a significant relationship between the students' collocational competence and their overall writing ability?
3. Was there a significant relationship between the students' collocational competence and their English competence?
4. Did the high achievers and the low achievers have the same collocational competence and writing ability?

3. Definitions

Collocation Competence is the ability to use collocated words or words that often occur together correctly and appropriately in context. In this study, the students' collocation competence is measured by calculating the ratio of the total number of words collocated and the total number of words in each paragraph. The obtained number then was converted into percentage for further analysis.

English Competence means the English language proficiency of the students which are calculated from their GPA or grade point average. The students' GPA was classified into three groups: high, intermediate, and low.

The students refers to the third-year English majors at one of the private universities in Bangkok, Thailand.

Writing Skills in this study refers to the students' writing skills are determined from their ability to write a paragraph on Ways to Stay Healthy.

Semantic Mapping refers to the use of diagrams or graphs to organize the concepts, words, or phrases based on the central concept. The purpose is to visually display the connections between words, related words, phrases, or concepts.

2. Literature Review

2.1. Collocational Competence

According to the 7th edition of the Oxford Advanced Learner's Dictionary, 'collocation' is defined s "a combination of words in a language that happens very often and more frequently than would happen by chance" (p. 293). Similarly, Macmillan Collocations Dictionary (2010) defines collocations as "words that are often used together". In other words, words that often go together or are expected by native speakers to appear together are defined as collocations. In the literature, collocations are often discussed within the topic of formulaic sequences. Henriksen (2013, p. 29) gives some examples of those sequences:

Table 1: Taxonomy of Formulaic Sequences

Formulaic Sequences	Example
Idioms	<i>If life deals you with lemons make lemonade.</i>
Figurative expressions	<i>To freeze to the spot</i>
Pragmatic formulas	<i>Have a nice day.</i>
Discourse markers	<i>Let me see now.</i>
Lexicalized sentence stems	<i>This means that</i>
Collocations	<i>Rough crossing, remotely clear</i>

Source: Henriksen (2013, p. 29)

Henriksen (2013) defines collocations as "frequently recurring two-to-three word syntagmatic units which can include both lexical and grammatical words (p. 30)" Warren (2005) views collocations narrowly as "multi-word lexical items (cited by Henriksen, 2013, p. 34). Based on the literature review the taxonomy of collocations has not been firmly established. Reflecting this challenge, Henriksen (2013, p. 30) says that "A key issue in collocational research is the question of defining and identifying collocations".

In this study, hence, we broadly define collocations as ‘words that often go together’. Those chunks may contain grammatical as well as lexical words. Attempts have been made to classify types of collocations in English. Here is one of them.

Table 2: Types of Collocations

No	Combinations	Examples
1	Adjectives + Nouns	Bright color, major problems
2	Verbs and Nouns	Launched a project, pose a problem
3	Nouns + Nouns	A sense of pride, a pang of nostalgia
4	Verbs + Expressions with Prepositions	Filled with horror, burst into tears
5	Verbs + Adverbs	Pulled steadily, smiled proudly
6	Adverbs + Adjectives	Happily married, fully aware

Source: McCarthy and O’Dell (1995, p. 5)

McCarthy and O’Dell (1995, p. 5) cite three main reasons why L2 students should learn how to use collocations correctly.

- Collocation gives L2 students the most natural way to express themselves in English
- Collocation gives them alternative ways to say something, to make their expressions more interesting
- Collocation helps them improve their style of writing, knowing when to use and not to use such and such expressions or words

Even though collocations are essential for both L1 and L2 learners, the challenges faced by the latter are greater as they lack exposure to the target language. It is not a surprise to find that native and non-native speakers differ in their use of collocations (as reviewed by Henriksen, 2013, p. 35), that is, native speakers are more competent than non-native speakers. Collocational competence, as defined by Hill (1999), refers to the ability to use collocated words in context correctly. It is part of the ability to use words to make meaning. Every word has its collocations. For L2 learners, the ability to use collocations correctly signifies their L2 competence (e.g. Al-Zahrani, 1998; Henriksen, 2013).

2.2. Semantic Mapping

Various methods and techniques have been proposed and practiced by language teachers and researchers to help develop the students’ vocabulary ability, e.g. learn new words. One of the techniques is ‘semantic mapping’, the use of maps, diagrams, and graphs to organize ideas and words, visually. Semantic mapping, according to Oxford (1990, p. 18) is a component of memory strategies where learners create ‘mental linkages’ and apply ‘images and sounds’ to help them learn better. Zorfass and Gray (2017) outline three different types of semantic maps.

Three Types of Semantic Maps

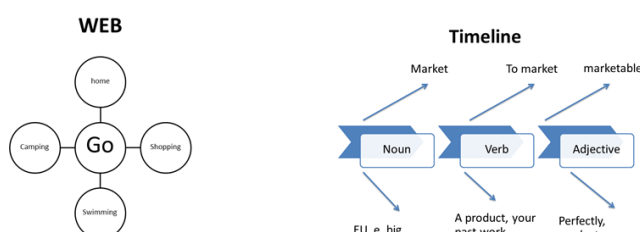


Fig. 1: Three types of semantic maps (Adapted from Zorfass and Gray, 2017)

The most common semantic mapping is the use of the web-looking diagram or map. Often, the key word or concept is put in the center circle and factors or components are connected to the key concept. The second is the timeline diagram, suitable for varying the same word with several parts of speech and collocations. The third is the Venn diagram, suitable for highlighting the commonalities. As semantic mapping is visual-based, learners can easily construct or associate the keywords with other words. Moreover, as semantic maps are systematized and categorized, learners often find it useful to memorize and conceptualize words in chunks, rather individual and isolated words.

2.3. Collocational Competence and English Proficiency

SLA research has been conducted to better understand collocations and their role in L2 acquisition. Larsen-Freeman and Long (1999) reported on a study conducted by Matsunobu (1981, cited in Larsen-Freeman and Long, 1999, p. 161) who found that native speakers as judges could distinguish writing samples, through the analysis of their error types, written by NS freshmen and NNS ones. Sadeghi (2009, p. 115) conducted a study in 2009 to determine how far differences in collocational patterns between Persian (L1) and English (L2) may lead to difficulties in the use of L2 collocations and the amount of L1 interference in this process. It was found that L1 significantly interfered with the ability to produce correct L2 collocations.

A study investigating the relationship between collocational competence and general language proficiency was conducted in Iran by Hosseini and Akbarian (2007). They showed that there was a significant relationship between the students' scores on TOEFL and their scores on the collocation test. They concluded that collocational competence was very much a construct related to the learners' general proficiency of the learners.

Farrokh, (2012) suggested approaches to teach collocations, ranging from using grids, dictionaries, and augmented inputs and outputs. Exposure to L1 texts or language use in authentic settings helps develop L2 learners' collocational competence.

Based on the literature review, we hypothesized that:

1. The students' pretest and posttest scores one would be significantly different.
2. There would be a significant relationship between the students' collocational competence and overall their writing ability.
3. There would be a significant relationship between the students' collocational competence and their overall English competence (GPA) as measured by their grade point average (GPA).
4. The collocational competence between the high achievers and low achievers significantly would be different from each other.

3. Methodology

This study employed the pretest-posttest design. Fifty-seven English major students participated in the study. For the pretest, they were asked to write a paragraph on *How to Make More Money*. Their paragraphs were assessed by two assessors to determine the level of their English writing skills, ranging from excellent (5) to poor (1). In addition, their paragraphs were also assessed to determine the frequency of acceptable collocations. Their collocation competence was measured by calculating the ratio of the total number of words collocated and the total number of words in each paragraph.

The high achievers were determined from the calculation of their GPA or grade point average. The average GPA was used to classify the level of the students. Those who have got 59 percent or lower were considered "low achievers"; 60 percent to 79 percent "average achievers", 80 percent or above "high achievers".

The Intervention

Semantic mapping was integrated into the writing class after the tasks. Six types of collocations were introduced in class. During the class, students were encouraged to think about words they could use in the work they previously wrote. They made a list of collocated words and their semantic mapping regarding the contents of their paragraphs. For example, one student had the word "money" in his list then he used collocation dictionary to help him find words that collocate with "money" like "spend money wisely", "save money", "deposit money", and etc.

Students spent six hours on creating the semantic mapping regarding the collocated words they came up with. Then, they were asked to write again on the same topic which is "How to Make More Money". This time, they were geared to put collocated words they prepared in their paragraphs. Collocated words were counted again from the students' second tasks to measure their collocation competency and compared with the first tasks..

4. Findings

Fifty-seven English major students took part in the study. Below were their means and standard deviations of the key variables.

Table 4: Students' background

		Level	Number	Percent
Academic Levels	Achieving	Low Achievers	14	24.56
		Intermediate Achievers	21	36.84
		High Achievers	22	38.59
Total			57	100

The table shows the academic achievement background of the students. Of the 57 students, 14 of them (24.56%) were considered the low achievers, 21 of them the intermediate achievers, and 22 of them (38.59%) were considered the high achievers.

Table 5: Results of the pretests and posttests

Dimension	Number	Mean	SD
Writing skills (Pretest)	42	56.66	15.87
Writing skills (Posttest)	42	68.09	9.68
Collocational Competence (Pretest)	44	53.47	18.36
Collocational Competence (Posttest)	44	63.39	15.59

Table 5 shows the students' writing skills and their collocational competence before and after the intervention. For the writing skills, forty-two students completed the task. The mean of their pretest score was 56.66 and the mean of the posttest score was 68.09. For the collocational competence, forty-four students completed the task. The mean of their pretest score was 53.47; the mean of their posttest score was 63.39 with the SD of 15.59.

Table 6: Pretest and posttest scores of the students' writing skills

	N	Mean	SD	t	Sig.
Writing Skills (Pre)	42	56.66	15.87	-3.75	0.00**
Writing Skills (Post)	42	68.09	9.68		

Table 6 shows that the students' writing skills, based on their actual paragraph writing. It was found that their mean of the pretest and posttest were significantly different at .01, with the t value of -3.75.

Table 7: Pretest and Posttest of Collocational Competence

	N	Mean	SD	t	Sig.
Collocational competence (Pretest)	44	53.47	18.36	-3.12	0.00**
Collocational competence (Posttest)	44	63.39	15.59		

Table 7 shows the comparison of the students' collocational competence between the pretest and the posttest. It was found that the difference was significant at .01.

Table 8: Correlations between the variables

	N	Writing Skills	Collocational Competence	English Proficiency
Writing Skills (Post)	44	1	.50**	.50**
Collocational Competence (Post)	44		1	.27
English Proficiency	44			1

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

Table 8 shows the result of the correlational analysis of 44 students' posttest scores of three key variables: their writing skills, collocational competence, and their overall English competence. It was found that the relationship between their writing skills and collocational competence was positive and significant at the 0.01 level. Moreover, their writing skills were also positively and significantly correlated with their overall English proficiency.

Table 9: Hypothesis Testing

No.	Hypothesis	Result
1	Students' pretest and posttest scores one would be significantly different from one another's.	Supported
2	There would be a significant relationship between the students' collocational competence and overall their writing ability.	Supported
3	There would be a significant relationship between the students' collocational competence and their overall English competence (GPA) as measured by their grade point average (GPA).	Not supported
4	The collocational competence between the high achievers and low achievers significantly would be different from each other.	Supported

Based on the analysis, the students' pretest and posttest scores one were significantly different from one another. This supported the first hypothesis. We also found that there was a significant relationship between the students' collocational competence and overall their writing ability. However, we did not find a significant relationship between the students' collocational competence and their overall English competence as measured by their grade point average (GPA). Lastly, we found that the collocational competence between the high achievers and low achievers significantly was different from each other.

5. Discussions

5.1 Collocational competence and language skills

Based on our empirical data, students' collocational competence was closely related to their writing skills and overall language proficiency. The findings confirm previously conducted studies such as the study conducted by Thadphoothon and Samrit (2017) and Al-Zahrani (1998) who found that collocations are related to general competence and writing skills. In our study, we found that the weak students produced more lexical and grammatical errors. This reflects what Hill (2006) has observed, that is, "Any analysis of students' speech or writing shows that this lack of collocational competence is one of the most obvious weaknesses."

In our study, the written works of the weak students reveal not only their poor collocation knowledge, but also their poor command of grammar. Hill (2000; 2006) suggests that English teachers should seek ways to teach students words with their collocations. Hill (1999) maintains that teachers should raise their students' awareness of collocation.

5.2 Semantic Mapping

It was found that semantic mapping has the potential to improve the students' collocational skills. This means that English teachers may raise the students' awareness is to use semantic diagram such as mind maps to let the students practice finding acceptable collocates. Other techniques may include direct teaching, using grids, and collocation dictionaries.

5.3 Opportunities to Use the Language

Students need to be encouraged to put the words that they know into use, receptively and productively. Learners need to seek opportunities to apply what they have learned, and as suggested by Ellis (2003) the students should be exposed to the target language use (L2), across the media and contexts, as often as possible.

5.4 Collocational Awareness

By directly teaching the students the role and importance of collocations in text construction, the students would develop their collocational awareness, defined as 'the ability to take into consideration the go-togetherness of English words.' This would greatly enhance their writing ability, reducing preventable errors. Developing collocational awareness can be done by pointing out the need to pay more attention to the naturalness of the language.

6. Conclusion and Recommendation

This study sought to answer three related questions: (2) whether or not the students' collocational competence was significantly related to their writing skills, (2) whether or not the students' collocational competence was significantly related to their overall English competence, and whether or not high achievers and low archivers had different collocational ability. Our study provided empirical evidence to support the existence of the relationships hypothesized. Weaker students differed from more competent students in terms of their ability to use collocated words as well as in terms of their ability to write paragraphs.

EFL/ESL teachers should seek innovative and effective ways to help develop their students' vocabulary learning and collocations. As far as writing is concerned, the more collocations the students have mastered, the better their writing is.

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