## 行政院國家科學委員會專題研究計畫 成果報告

# 從語詞的搭配觀點探討本國大學生使用英文同義字之研究 研究成果報告(精簡版)

計畫類別:個別型

計 畫 編 號 : NSC 99-2410-H-034-047-

執 行 期 間 : 99年08月01日至100年07月31日 執 行 單 位 : 中國文化大學英國語文學系(所)

計畫主持人:劉振蘋

計畫參與人員:碩士班研究生-兼任助理人員:謝佩芸

大專生-兼任助理人員:張芳綺

公 開 資 訊 : 本計畫可公開查詢

中華民國100年10月31日

中文摘要: 從語詞的搭配觀點探討本國大學生使用英文同義字之研究

劉振蘋 副教授 文化大學英國語文學系

#### 摘要

近年來,許多英語搭配詞的研究都聚焦在英語學習者寫出英語 搭配詞的一般能力,至於有關英語學習者使用同義字寫出搭配 詞的能力之研究卻不多見。同義字在寫作上有其特殊功能,不 僅可使語義更加清楚明白,還可增進篇章整體語意的連貫,以 及語言表達的多樣性。但同義字與其他字詞的詞語搭配力度 (collocability),不盡然相同。本文旨在探討台灣大學生使用英 文同義字寫出搭配詞的能力。參與本研究的受測者為八十二名 不同科系的臺灣大學生,研究工具為二十題含 refuse 或 reject 的搭配詞填充測驗,而研究的五種搭配類型為:(一) refuse +  $N \cdot (\underline{-})$  refuse + to  $V \cdot (\underline{-})$  refuse + somebody + something  $\cdot (\underline{\square})$ reject + N, 及(五) reject + N1 + as + N2. 以及二十一題含 quick、fast 的搭配詞填充測驗:研究英美人士在搭配詞中經常 使用二字的三大類型:A型、B型、C型。研究發現,受測者 的英文程度與其寫出英文同義字搭配詞的能力,沒有顯著相關 性。受測者在寫出含有 refuse 和 reject 語彙搭配詞(lexical collocations)的能力也無太大差異。唯一顯著不同的是,受測者 在寫出含有 refuse 之語法搭配詞(syntactic collocations)表現較 佳,在寫出含有 reject 之語法搭配詞表現較差。受測者在使用 quick 和 fast 的同義字寫出搭配詞時, A 型較接近英式, B 型與 英/美二式差異均頗大,C型較接近美式。文中就「標的語」(即 英語)及受測者母語(即中文)這兩個層面,對受測者使用同義 字 refuse 和 reject 寫出搭配詞的能力與問題,有具體而詳盡的 分析與討論。文末論及本研究結果在教學上的意涵,並提出可 行之教學建議:如設計以語料庫為本的教學活動、教導學生寫 作時使用線上語料檢索工具 (web-based concordancers),以提昇 學生使用同義字寫出正確搭配詞的能力。

英文摘要: A Study of Taiwanese University Students' Production of Collocations of English Synonyms

Chen-Pin Liu Associate Professor English Dept. of Chinese Culture Univ.

#### **Abstract**

Much research on English collocations has been devoted to learners' general competence in producing English collocations, but few studies have examined EFL learners' performance in using English synonyms in collocations. As a device for clarity of meaning, lexical cohesion, and variety in writing, synonyms, to a certain extent, are different from each other in their collocability. This paper, thus, intends to explore EFL university students' competence in using English synonyms in lexical and syntactic collocations. Eighty-two Taiwanese university students of various majors participated in the study and were asked to complete a gap-filling collocation test of twenty questions that covered five major collocation patterns of refuse and reject: (1) refuse + N, (2) refuse to + V, (3) refuse + somebody + something, (4) reject + N, and (5) reject + N1 + as + N2, and a gap-filling collocation test of twentyfirst questions that covered five collocation patters of quick and fast based on the exclusive or alternative use of quick and fast in British and/or American English.

The findings of the study reveal that students of different English proficiency levels performed similarly in producing collocations of refuse and reject. It was also found that students performed similarly in producing lexical collocations of refuse and reject. The only significant difference occurred between students' performance in syntactic collocations (SC) of refuse and their performance in syntactic collocations of reject: they scored higher on SC of reject than on SC of refuse.

In the performance of collocations of quick and fast, learners' performance on Type A collocations of quick and fast was closer to the British native speakers' than to the American native speakers'. Learners' performance on Type B collocations of quick and fast was significantly deviant from both the British and the American native speakers'. Learners' performance on Type C collocations of quick and fast was found closer to that of the American native speakers'. It ends with pedagogical implications that focus on the design of corpus-based learning activities and the teaching of the use of webbased concordencers in writing to help increase students' ability to produce acceptable colloc

#### 從語詞的搭配觀點探討本國大學生使用英文同義字之研究

劉振蘋 副教授 文化大學英國語文學系

#### 摘要

近年來,許多英語搭配詞的研究都聚焦在英語學習者寫出英語搭配詞的一般能力, 至於有關英語學習者使用同義字寫出搭配詞的能力之研究卻不多見。同義字在寫作 上有其特殊功能,不僅可使語義更加清楚明白,還可增進篇章整體語意的連貫,以 及語言表達的多樣性。但同義字與其他字詞的詞語搭配力度(collocability),不盡然 相同。本文旨在探討台灣大學生使用英文同義字寫出搭配詞的能力。參與本研究的 受測者為八十二名不同科系的臺灣大學生,研究工具為二十題含refuse或reject的搭 配詞填充測驗,而研究的五種搭配類型為:(-) refuse + N,(-) refuse + to (-) refu refuse + somebody + something, (四) reject + N, 及(五) reject + N1 + as + N2. 以及二 十一題含quick、fast的搭配詞填充測驗:研究英美人士在搭配詞中經常使用二字的 三大類型:A型、B型、C型。研究發現,受測者的英文程度與其寫出英文同義字搭 配詞的能力,沒有顯著相關性。受測者在寫出含有refuse 和reject語彙搭配詞(lexical collocations)的能力也無太大差異。唯一顯著不同的是,受測者在寫出含有refuse之語 法搭配詞(syntactic collocations)表現較佳,在寫出含有reject之語法搭配詞表現較差。 受測者在使用quick 和fast的同義字寫出搭配詞時,A型較接近英式,B型與英/美二 式差異均頗大,C型較接近美式。文中就「標的語」(即英語)及受測者母語(即中文) 這兩個層面,對受測者使用同義字refuse和reject寫出搭配詞的能力與問題,有具體 而詳盡的分析與討論。文末論及本研究結果在教學上的意涵,並提出可行之教學建 議:如設計以語料庫為本的教學活動、教導學生寫作時使用線上語料檢索工具 (web-based concordancers),以提昇學生使用同義字寫出正確搭配詞的能力。

#### 關鍵詞

動詞同義字、形容詞同義字、語彙搭配詞、語法搭配詞、詞語搭配力度、線上語料檢索工具

## A Study of Taiwanese University Students' Production of Collocations of English Synonyms

Chen-Pin Liu
Associate Professor
English Dept. of Chinese Culture Univ.

#### **Abstract**

Much research on English collocations has been devoted to learners' general competence in producing English collocations, but few studies have examined EFL learners' performance in using English synonyms in collocations. As a device for clarity of meaning, lexical cohesion, and variety in writing, synonyms, to a certain extent, are different from each other in their collocability. This paper, thus, intends to explore EFL university students' competence in using English synonyms in lexical and syntactic collocations. Eighty-two Taiwanese university students of various majors participated in the study and were asked to complete a gap-filling collocation test of twenty questions that covered five major collocation patterns of *refuse* and *reject*: (1) *refuse* + N, (2) *refuse* to + V, (3) *refuse* + somebody + something, (4) *reject* + N, and (5) *reject* + N1 + *as* + N2, and a gap-filling collocation test of twenty-first questions that covered five collocation patters of *quick* and *fast* based on the exclusive or alternative use of *quick* and *fast* in British and/or American English.

The findings of the study reveal that students of different English proficiency levels performed similarly in producing collocations of *refuse* and *reject*. It was also found that students performed similarly in producing lexical collocations of *refuse* and *reject*. The only significant difference occurred between students' performance in syntactic collocations (SC) of *refuse* and their performance in syntactic collocations of *reject*: they scored higher on SC of *reject* than on SC of *refuse*.

In the performance of collocations of *quick* and *fast*, learners' performance on Type A collocations of *quick* and *fast* was closer to the British native speakers' than to the American native speakers'. Learners' performance on Type B collocations of *quick* and *fast* was significantly deviant from both the British and the American native speakers'. Learners' performance on Type C collocations of *quick* and *fast* was found closer to that of the American native speakers'.

It ends with pedagogical implications that focus on the design of corpus-based learning activities and the teaching of the use of web-based concordencers in writing to help increase students' ability to produce acceptable collocations of synonyms.

#### **Keywords**

verb synonyms, adjective synonyms, lexical collocations, syntactic collocations, collocability, web-based concordancers

## A Study of Taiwanese University Students' Production of Collocations of English Synonyms

Chen-Pin Liu
Associate Professor
English Dept. of Chinese Culture Univ.

#### INTRODUCTION

There is an increasing awareness of the importance of synonyms in EFL writing. They are a lexical means to achieve the cohesion of a text (Halliday & Hasan, 1976; Gutwinski, 1976), a tool for paraphrasing a passage when it needs to be restated in another form to clarify its meaning, and a way to add variety to writing. However, most synonyms are not absolute synonyms similar to each other in terms of their collocability at both lexical and syntactic levels. The verbs *yield* and *concede*, for instance, differ in their syntactic collocation patterns: both can take a noun object (e.g., concede/yield something to somebody), but only concede may take a that-clause (e.g., She conceded that I was right.) (Martin, 1984). If learners want to have the ability to produce acceptable collocations of synonyms, they need to be exposed to a sufficient number of examples of different types of lexical and syntactic collocations of synonyms. Yet, a reflection of the ways vocabulary is usually presented in most English readers, that is, via glosses or synonyms, causes us to doubt the possibility of learners' success in using synonyms in their right collocations. Although a great number of studies have been carried out to investigate learners' competence in producing different types of English collocations, not as many studies have been done to understand how learners perform in using English synonyms in collocations. The purpose of the study, thus, is to investigate Taiwanese university students' collocational competence in producing lexical and syntactic collocations of verb synonyms refuse and reject.

#### LITERTURE REVIEW

#### **The Concept of Collocation**

The concept of collocation has been approached from different perspectives. In the lexical composition approach, Firth (1957) proposed that meaning by collocation is an abstraction at the syntagmatic level. The relationship between the words in a sentence is a linear one. The neo-Firthians echoed Firth's concept. McIntosh (1961) believed that there is a restriction on the use of a word with a group of semantically related words. The restriction is a matter of range. Halliday (1966) noted that it is necessary to describe

lexical patterns in language "in the light of a lexical theory complementary to grammatical theory" (p. 148). At the same time, Sinclair began to view grammar and lexis as "two interpenetrating ways of looking at language form" (Sinclair, 1966: 411) and distinguished between the casual collocation from the significant collocation "according to the frequency of repetition of the collocates in several occurrences of an item" (Sinclair, 1966, p. 418).

In the semantic approach to collocations, linguists have been convinced that co-occurrence of words is the result of their semantic properties. They tried to establish a semantic theory that is different from, but complementary to, grammar (Gitsaki, 1999). Porzig (1934), for example, developed a notion of semantic fields founded on the relations of sense holding between pairs of syntagmatically connected lexemes (Crystal, 1992: 379). According to Porzig, one could not explain the meaning of bark without mentioning dogs. Katz and Fodor's Semantic Theory (Katz & Fodor, 1963) posited that each dictionary entry must contain a selection restriction and explanations for why certain words are combined. For example, *sleep* requires an animate subject, and *break* requires a physical object that is rigid. Chomsky's selectional restrictions in his transformational generative grammar represent his early attempts to describe the phenomenon of collocations. They were defined as restrictions on the selection of a noun phrase specified by subcategorization rules (Chomsky, 1965). For example, verbs eliciting emotion (e.g., scare) are transitive and so require an object noun phrase. But the noun phrase must be something that can experience an emotion: e.g., the verb scare should be followed by an animate noun phrase.

In the structural approach, its advocates argued that collocations should be studied for their lexical and semantic relationships as well as for their syntactic relationship. Greenbaum (1974, p. 82), for example, defined collocations as words in close grammatical relationships, such as adverb + verb: *much prefer*. He proposed that the collocability of words should be "tied" to syntax because certain lexical items occur only in certain syntactic relationships: it is acceptable to say *His sincerity frightens us*, but it is unacceptable to say \**We frighten his sincerity*. Mitchell (1971, p. 57) described collocations as lexico-grammatical units by pointing out that "lexical particularities derive their meaning not only from contextual extension of a lexical kind but also from the generalized grammatical patterns within which they appear" (p. 48). Kjellmer (1984, p. 163) defined collocation as "lexically determined and grammatically restricted sequences of words." Jones and Sinclair (1974) pointed out important findings such as: verbs tend to collocate with grammatical items (e.g., *put* and *take* collocate with many prepositions to form phrasal verbs). Aisenstadt (1979: 71) also suggested that restricted collocations\* can be analyzed in structural patterns: e.g., V + (Art) + (Adj.) +

\_

<sup>\*</sup> Aisenstadt (1979, p. 71) defined restricted collocations as "combinations of two or more words used in one of their regular, non-idiomatic meanings," following specific structural patterns, and restricted in their

N (e.g., give a loud laugh).

Benson, et al. (1986) proposed two types of collocations, lexical collocations and grammatical collocations. Lexical collocations consist of nouns, adjectives, verbs, and adverbs; they are subcategorized into seven types: e.g., verb + noun; adjective + noun; noun + verb; noun 1 + of +noun 2; adverb + adjective; and verb + adverb. Grammatical collocations consist of a dominant word (verb, noun, adjective) and a preposition or grammatical structure such as an infinitive or a clause, and are subcategorized into eight types: for example, noun + preposition; noun + to + infinitive; noun + that + clause; preposition + noun; adjective + preposition; and collocations involving verbs. The last pattern is further classified into nineteen subtypes.

In the phraseological approach, word combinations are classified into four types on the basis of transparency and commutability: (1) free combinations (e.g. *drink tea*) used in a literal sense; (2) restricted collocations (e.g. *perform a task*) with one element used in its non-literal sense; (3) figurative idioms (e.g. *do a U-turn*), which have a figurative meaning but preserve a literal interpretation; (4) pure idioms (e.g. *smell a rat*), which have a figurative meaning and whose elements cannot be substituted (Cowie, et al., 1993).

Mel'čuk (1998) described "collocations" as a subclass of "set phrases" (p. 23) and classified collocations into four categories (pp. 30-31): (1) collocations with light verb collocates such as *do* and *take*; (2) collocations in which the meaning of the collocate is expressed only in combination with the keyword: e.g., *black* (meaning "without milk") *coffee*; (3) collocations in which the collocate cannot be replaced by other synonyms: e.g., *strong* (\*powerful) coffee; (4) collocations in which the meaning of the collocate includes the meaning of the keyword: in the collocation *the horse neigh*, the collocate *neigh* means "to make a long loud sound that a horse makes" (Summers & Gadsby, 2000, p. 972).

#### **Definition of Synonyms**

Synonyms are different words with identical or very similar meanings. Very few pairs or sets of synonyms are absolute synonyms which have exactly the same meaning (Cruse, 1986). Instead, most synonyms are near synonyms, which differ in terms of their dialectal forms, their connotations, their pragmatic values, or their co-occurrence restrictions. *Fall* and *autumn*, for instance, are synonyms that are used in different dialects of English. *Skinny* and *slender* are synonyms that have different connotations: the former is pejorative, whereas the latter is flattering. *Hide* and *conceal* are synonyms that differ in their pragmatic value: *hide* is more common than *conceal*. Finally, there are synonyms that differ in their collocational restrictions. *Grill* and *toast*, for example, are synonyms

commutability (i.e., their ability to combine with other words) not only by grammatical and semantic valency (like the components of so-called free word combinations) but also by usage."

that denote the same action or process but are collocated with different noun objects: *grill the meat* vs. *toast the bread*. Thy have to observe systematic collocational restrictions. *Customer* and *client*, on the other hand, are synonyms that observe semi-systematic collocational restrictions. It is noted that bakers and grocery stores have customers, who acquire something material in exchange for money, whereas lawyers and advertising agencies have clients, who receive a less tangible professional or technical service. But people who use the services of a bank can be called its customers. The third type of collocational restrictions are idiosyncratic. Synonyms *umpire* and *referee* are an example of how individuals differ in their preferences for the judge in a baseball game.

#### **Studies on English Collocations and Collocations of Synonyms**

Over the past thirty years, research on collocations range from the focus on EFL learners' collocational competence (e.g., Channell, 1981; Fayez-Hussein, 1990; Liu, 1999a; Yuan & Lin, 2001), to the focus on its development (e.g., Gitsaki, 1996) and the focus on EFL learners' collocational errors (Howarth, 1998; Liu, 1999b; Chen, 2002; Nesselhauf, 2003; Chen & Tang, 2004; Li, 2005). One of the interesting findings of the sources of miscollocations is the use of synonyms (Liu, 1999b; Wang, 2001; Liu, 2002). Some examples include \*received his challenge for accepted his challenge (Liu, 1999b) and \*attain a special purpose for accomplish a special purpose (Liu, 2002). Farghal & Obiedat (1995) found that the learners used synonyms as a straightforward application of the open choice principle which led to the production of many miscollocations. In some other EFL studies, learners were found to avoid using synonyms (Linnarud, 1983; Laufer, 1991), or to use synonyms as if they are interchangeable in all contexts (Cohen, et al., 1988), or to produce problematic collocations of synonyms like \*complete\_ dream for fulfill dream (Shih, 2000).

Stubbs's paper on collocations of *small* and *little* and of *big* and *large* (Stubbs, 1995) shed much light on the importance of applying "idiom principle" in producing collocations of synonyms. He cited the findings of Baker and Freebody (1989), who found that *little girl* or *girls* (146) is a much more general pattern than *small girl* or *girls* (8). Stubb then noted that *small* is often preceded by words

-

Sinclair (1991: 110-115) proposed two sets of principles to account for the structural patterning of lexis, including collocations. One is the open choice principle, which is "a way of seeing language text as the result of a large number of complex choices of words, phrases, and clauses" constrained by grammaticalness. The other is the idiom principle, which holds that "a language user has available to him or her a large number of semi-preconstructed phrases that constitute single choices, though they appear to be analyzable into segments." The former governs the *ad hoc* creation of phrases and clauses, that is, casual collocations (Fernando, 1996). The latter governs the use of prefabricated multiword expressions and various habitual collocations (Fernando, 1996). These two principles, seemingly opposite, actually complement each other and can be observed in a normal discourse, where the novel and the conventional co-exist.

concerning quantities (e.g., comparatively, exceedingly, infinitely, relatively), whereas little is often preceded by words like beautiful, charming, cute, dear, lovely, pretty, sweet, tiny, and funny. The synonyms big and large are often used in fixed phrases: for example, big brother, large intestine. Big boy can also connote "grown up" (e.g., Big boys don't cry) or "self-important" (e.g., big fish). Big can have a metaphorical meaning as well: Big Apple (meaning "New York"). In contrast, large often means "more than average" and usually precede the following nouns: amount, numbers, size, and volume.

Yeh, et al. (2007) conducted an empirical study in which five units of data-driven learning materials were designed to facilitate students' learning of synonyms of five overused adjectives *important*, *beautiful*, *hard*, *deep*, and *big*. Students were encouraged to discover collocational patterns of the target synonyms from the clustered citations searched and displayed by TANGO, which are sorted and listed according to the frequency of the collocations. TANGO is a collocation aid that can retrieve adjective-noun, verb-noun, and verb-preposition-noun collocations from three corpora (i.e., the Sinorama Chinese-English parallel corpus, a 40-million-word encyclopedic and bilingual electronic textual database about facts of Taiwan; the English Voice of America corpus, and the British National Corpus) and show them in concordance lines. The results of the study provided positive evidence for the usefulness of the tool TANGO in helping students to learn collocations of synonyms and use them in writing.

Xiao and Mcenery (2006) explored the collocational behavior and semantic prosody of near synonyms from a cross-linguistic perspective. Their findings suggested that the negative semantic prosodies and preferences of near synonyms are different. Therefore, near synonyms are usually not interchangeable in English and Chinese. The implication of this finding is: the teacher should be careful in offering synonyms to learners when they attempt to explain the meanings of a word. They also found that the collocational behavior and semantic prosodies of near synonyms are very similar in two different languages such as Chinese and English. The implication of this finding is: it is the teacher's responsibility to show learners which item in L1 is an equivalent of an item in L2. Finally, they noted that collocation patterns and semantic prosodies can vary across text categories. The difference is especially distinct between texts in general domains and technical or specialized texts.

#### **Theoretical Framework of the Study**

The present study attempts to investigate Taiwanese EFL learners' performance in producing collocations of synonyms *refuse* and *reject*. The discussion of learners' performance patterns was conducted on the basis of the Collocationist Model of

Language. The collocationist model of language is an important part of the theoretical framework of the study. It draws attention not only to the open choice principle (Sinclair, 1991), which deals with the syntactic relationships between the elements in the clause or sentences; but also to the idiom principle (Sinclair, 1991), which observes the strong patterning in the co-occurrences of words and the large number of semi-preconstructed phrases that constitute single choices.

In this collocationist view of language, the whole dichotomy between vocabulary and grammar is replaced by a spectrum of patterns arranged from those which are absolutely fixed and non-generative, to those which provide a high degree of generalization, though usually with some restrictions (Lewis, 2000: 149). Thus at one end of the spectrum are rare words such as *penicillin* which are high-content words that have smaller collocational fields. At the other end are the most frequent words of the language such as *put*, *take*, and *of*, which carry very little meaning in themselves but are elements in many different patterns.

Here, language is first about meaning, and meaning is mainly conveyed by the lexis such as words, collocations, and fixed expressions in a text. Grammar as part of the management of text is not the focus of meaning-creation but can be acquired as the learner takes in the whole chunks that contain structures (Hill, 2000: 52; Lewis, 2000: 147). Recent studies indicated the problems with the traditional grammar patterns. Many of the general patterns are in reality subject to restrictions of some kind. The pattern may be allowed to use only in a particular genre. Or the pattern is typical of only a restricted set of nouns, adjectives, or verbs (Lewis, 2000: 149). In this view of language, a word grammar approach (Woolard, 2000: 44) overrides the traditional approach to grammar because the former takes into consideration those syntactic constraints on the use of lexis that are usually ignored in the latter.

#### **Research Questions**

- 1. Is Taiwanese learners' English proficiency related to their competence in producing semantic and syntactic collocations of verb synonyms *refuse* and *reject*?
- 2. How do Taiwanese learners as a whole and at different levels of English proficiency perform in producing different types of semantic and syntactic collocations of verb synonyms *refuse* and *reject*?
- 3. Is Taiwanese learners' English proficiency related to their competence in producing semantic and syntactic collocations of adjective synonyms *quick* and *fast*?
- 4. How do Taiwanese learners as a whole and at different levels of English proficiency perform in producing different types of adjective synonyms of *quick* and *fast*?

## METHODOLGY Participants

Eighty-two Taiwanese university students participated in the study. They were selected from three intact classes. Among them, thirty were English majors, and fifty-two were non-English majors. They were all freshmen and had studied English for at least six years. A standardized English usage test, Foreign Language Proficiency Test (FLPT, 2003), was given to the participants at the beginning of the study. They were ranked according to their scores on the FLPT English usage test.

#### **Materials**

#### Refuse and Reject

Twenty questions (see Appendix A) were designed to investigate students' performance in producing collocations of verb synonyms *refuse* and *reject*. The researcher collected the patterns to be studied by consulting Oxford Advanced Learner's Dictionary (OALD) (at http://www.oxfordadvancedlearnersdictionary.com/). The lexical

Table 1 Five Patterns of Collocations of Refuse and Reject Investigated in the Study

		Lexical Collo	cations
Refus	e + N	Co-oc	currence Frequency by JustTheWord
(a)	refuse the offer		114
	refuse invitation		25
	refuse the help		15
(b)	refuse the application	on	115
	refuse the changes		20
	refuse the request		18
Rejec	$\mathbf{r} \mathbf{t} + \mathbf{N}$		
	reject the proposal		166
	reject the claim	126	
	reject the idea	124	
	reject the offer		103
	reject the argument		99
	reject the plan		78
	reject the suggestion	n	72
	reject the notion		36
		Syntactic Coll	ocations
Refu	se + to V		
	refuse to take	refuse to accept	refuse to answer refuse to admit

**Refuse** + **somebody** + **something** 

Refuse him entry

#### Reject + N1 + as + N2

reject the idea as ... reject love as...

collocations (LC) included in the test were chosen according to the frequency rank orders of the LC examples collected by the collocation search engine JustTheWord (at http://www.just-the-word.com/), which provides a detailed description of the company that a word keeps in modern English and shows the most frequently used combinations of a word with the frequency of each combination in the British National Corpus. The LC pattern "refuse +N" was divided into two subcategories according to the semantic information of refuse given in the OALD: refuse in 1(a) means "you do not want something that has been offered to you"; refuse in 1(b) means "you will not allow something." The following is a list of the patterns of collocations of refuse and reject investigated in the study.

#### Quick and Fast

Twenty-one questions (see Appendix B) were designed to investigate students' performance in producing collocations of adjective synonyms *quick* and *fast*. The researcher collected the patterns to be studied by consulting Oxford Advanced Learner's Dictionary (OALD) (at http://www.oxfordadvancedlearnersdictionary.com/). The lexical collocations (LC) included in the test were chosen according to the frequency rank

Table 2 Use of Either Quick or Fast in British and American English

No.		BNC 英式%	COCA 美式%
1	quick	86	82
	fast	14	18
2	quick	10	29
	fast	90	71
3	quick	93	93
	fast	7	7
9	quick	75	42
	fast	25	58
11	quick	70	98
	fast	30	2
12	quick	58	83
	fast	42	17
13	quick	86	84
	fast	14	16
14	quick	83	98
	fast	17	2
15	quick	58	50

	fast	42	50
16	quick	50	75
	fast	50	25
17	quick	64	82
	fast	36	18
20	quick	7	17
	fast	93	83

orders of the LC examples collected by the collocation search engine JustTheWord (at http://www.just-the-word.com/), which provides a detailed description of the company that a word keeps in modern English and shows the most frequently used combinations of a word with the frequency of each combination in the British National Corpus.

The LC pattern "quick/fast +N" was divided into five categories according to the pragmatic use of the two adjectives in British and American English: (1) collocations in table 2 involves the use of either *quick* or *fast* in British English and American English; (2) collocations in table 3 involves the exclusive use of *quick* in both British and American English; (3) collocations in table 4 involves the exclusive use of *quick* in British but alternative use of *quick* and *fast* in American English; (4) the collocation in table 5 involves the exclusive use of *fast* in British English but alternative use of *fast* in American English; (5) the collocation in table 6 involves the exclusive use of *fast* in American English but alternative use of *quick* and *fast* in British English.

Table 3 Exclusive Use of Quick in BNC and COCA

No.		BNC 英式%	COCA 美式%
4	quick	100	100
	fast	0	0
8	quick	100	100
	fast	0	0
19	quick	100	100
	fast	0	0
21	quick	100	100
	fast	0	0

Table 4 Exclusive Use of *Quick* in BNC but Alternative Use of *Quick* and *Fast* in COCA

No.		BNC 英式%	COCA 美式%
6	quick	100	94
	fast	0	6
10	quick	100	91
	fast	0	9
18	quick	100	89
	fast	0	11

Table 5 Exclusive Use of *Fast* in BNC but Alternative Use of *Quick* and *Fast* in COCA

No.	BNC 英式%		COCA 美式%	
5	quick	0	9	
	fast	100	91	

Table 6 Exclusive Use of Fast in COCA but Alternative use of quick and fast in BNC

No.	BNC 英式%		COCA 美式%	
7	quick	60	0	
	fast	40	100	

Then the first and second categories were further classified into five subcategories according to the sense meaning of *quick* in the collocations. Category 1 was classified into three subcategories: (a) collocations in items 2, 12, 13, 15, 17 involve the use of *quick* that means "lasting for or taking only a short time"; (b) collocations in items 16 and 20 involve the use of *quick* that means "moving or doing something fast"; (c) collocations in items 1, 3, 9, 11, 14 involve the use of *quick* that means "happening very soon, without any delay." Category 2 was also classified into two subcategories: (a) collocations in items 19 and 21 involve the use of *quick* that means "lasting for or taking only a short time"; (b) collocations in items 4 and 8 involve the use of *quick* that means "moving or doing something fast."

#### **Procedures**

#### Refuse and Reject

The eighty-two participants were first given an English usage test taken from the Foreign Language Proficiency Test (FLPT, 2003) to determine their proficiency level in English usage. Then they were given a test containing twenty collocations. They were asked to fill in the blank with a verb. If they felt either *refuse* or *reject* was the only acceptable answer, they filled in that word. If they felt both *refuse* and *reject* were acceptable, they were requested to fill in the blank with the word that was more frequently used. They were not allowed to use any dictionary. Neither were they allowed to discuss with their classmates.

#### Quick and Fast

Similar to the procedure for the collocation test involving the use of *refuse* and *reject*, the eighty-two participants were given a test containing twenty-one collocations involving the use of *quick* and *fast*. They were asked to fill in the blank with an adjective.

If they felt either *quick* or *fast* was the only acceptable answer, they filled in that word. If they felt both *quick* and *fast* were acceptable, they were requested to fill in the blank with the word that was more frequently used. They were not allowed to use any dictionary. Neither were they allowed to discuss with their classmates.

#### **Statistical Analysis of the Data**

#### Refuse and Reject

Before the collected data was analyzed, an investigation was made of the native use of the twenty collocations of *refuse* and *reject* included in the test given to the subjects. Two corpora were used: one is The Corpus of Contemporary American English (COCA) (at <a href="http://www.americancorpus.org/">http://www.americancorpus.org/</a>); the other is British National Corpus (BNC) (at <a href="http://ca.sketchengine.co.uk/auth/corpora/">http://ca.sketchengine.co.uk/auth/corpora/</a>). The results are shown in Table 2. Of the twenty collocations, only the first one, \_\_\_\_\_ application, allows two forms: both *reject application* and *refuse application* are acceptable.

Table 7 Native Use of Collocations of *Refuse* and *Reject* in the Test

Item No.	Collocation	Native Use
1	application	Reject / Refuse
2	request	Refuse
3	help	Refuse
4	claims	Reject
5	invitation	Refuse
6	idea	Reject
7	offer	Refuse
8	argument	Reject
9	to accept	refuse
10	suggestion	Reject
11	him admittance	Refuse
12	proposal	Reject
13	changes	Refuse
14	plan	Reject
15	violence as a weapon	Reject
16	him permission to	Refuse
17	election as a fraud	Reject
18	view	Reject

19	notion	Reject
20	idea as	Reject

After the participants' tests are scored, Pearson Product Moment correlation coefficient was used to measure the correlation between learners' English proficiency of language usage and their competence in producing collocations of synonyms. After the mean scores are calculated, a paired-sample *t*-test was used to assess the significance of the differences between the mean performances in (a) each collocation of *refuse* (item numbers 2, 3, 5, 7, 9, 11, 13, 16) and each collocation of *reject* (item numbers 1, 4, 6, 8, 10, 12, 14, 15, 17, 18, 19, 20); (b) each lexical collocation (LC) of *refuse* (item numbers 1, 2, 3, 5, 7, 13) and LC of *reject* (item numbers 1, 4, 6, 8, 10, 12, 14, 18, 19); (c) each syntactic collocation (SC) of *refuse* (item numbers 9, 11, 16) and SC of *reject* (item numbers 15, 17, 20); (d) each LC of *refuse* in the first pattern (item numbers 3, 5, 7) and each LC of *refuse* in the second pattern (item numbers 1, 2, 13); (e) each SC of *refuse* in the first pattern (item number 9) and each SC of *refuse* in the second pattern (item numbers 11, 16); (f) each LC of *refuse* (item numbers 1, 2, 3, 5, 7, 13) and each SC of *refuse* (item numbers 9, 11, 16); (g) each LC of *reject* (item numbers 1, 4, 6, 8, 10, 12, 14, 18, 19) and each SC of *reject* (item numbers 15, 17, 20) (see Table 2).

#### Quick and Fast

Another investigation was made of the native use of the twenty-one collocations of *quick* and *fast* included in the test given to the subjects. The two corpora used are: the Corpus of Contemporary American English (COCA) (at http://www.americancorpus.org/) and the British National Corpus (BNC) (at http://ca.sketchengine.co.uk/auth/corpora/). The results are shown in the following tables:

Table 8 Use of Either *Quick* or *Fast* in BNC and COCA

No.		Collocate	BNC 英式%	COCA 美式%
1	quick	response	86	82
	fast		14	18
2	quick	growth	10	29
	fast		90	71
3	quick	decision	93	93
	fast		7	7
4	quick	comparison	100	100
	fast		0	0
5	quick	rate	0	9
	fast		100	91
6	quick	shower	100	94

	fast		0	6
7	quick	game	60	0
	fast		40	100
8	quick	call	100	100
	fast		0	0
9	quick	service	75	42
	fast		25	58
10	quick	change	100	91
	fast		0	9
11	quick	answer	70	98
	fast		30	2
12	quick	progress	58	83
	fast		42	17
13	quick	recovery	86	84
	fast		14	16
14	quick	solution	83	98
	fast		17	2
15	quick	delivery	58	50
	fast		42	50
16	quick	actions	50	75
	fast		50	25
17	quick	access	64	82
	fast		36	18
18	quick	thinking	100	89
	fast		0	11
19	quick	comment	100	100
	fast		0	0
20	quick	pace	7	17
	fast		93	83
21	quick	look	100	100
	fast		0	0

After the participants' tests are scored, Pearson Product Moment correlation coefficient was used to measure the correlation between learners' English proficiency of language usage and their competence in producing collocations of synonyms. Then, the mean scores are calculated for (a) Type A collocations that involve the use of either *quick* or *fast* in both British and American English (items 1, 2, 3, 9, 11, 12, 13, 14, 15, 16, 17, 20; (b) Type B collocations that involve the exclusive use of *quick* in both British and American English (items 4, 8, 19, 21); (c) Type C collocations that involve the exclusive use of *quick* in British English but alternative use of *quick* and *fast* in American English (items 6, 10, 18). Item No. 5 is the only question that tests on a collocation that involves the exclusive use of *fast* in British English and alternative use of *quick* and *fast* in American English. Item No. 7 is the only question that tests on a collocation that involves

the exclusive use of *fast* in American English and alternative use of *quick* and *fast* in British English. No mean procedure is carried out for these two test items.

After the mean procedures, Type A collocations are classified into three subcategories according to the sense of *quick*: (1) collocations in items 2, 12, 13, 15, 17 involve the use of *quick* that means "lasting for or taking only a short time"; (2) collocations in items 16 and 20 involve the use of *quick* that means "moving or doing something fast"; (3) collocations in items 1, 3, 9, 11, 14 involve the use of *quick* that means "happening very soon, without any delay." Type B Collocations are also classified into two subcategories according to the sense of *quick*: (1) collocations in items 19 and 21 involve the use of *quick* that means "lasting for or taking only a short time"; (2) collocations in items 4 and 8 involve the use of *quick* that means "moving or doing something fast."

Then a paired-sample *t*-test was used to assess the significance of the differences between the mean performances of the learners and that of the British and/or American native speakers in each collocation category and subcategory.

#### RESULTS

#### Refuse and Reject

The results of the study showed that the eighty-two learners scored a mean of 47.6 (SD=15.3) on the collocation test of *refuse* and *reject* and a mean of 51.1 (SD=16.5) on the FLPT English usage test. A Pearson product moment correlation coefficient test revealed that there was no significant correlation between the two tests (r = .212; p = .056 > .05).

Table 9 Correlation Between the Scores on the Collocation Test of *Refuse* and *Reject* and the FLPT English Usage Test

Tests	Mean	SD	r	<i>p</i> -value
Collocation Test of Refuse and Reject	47.6	15.3	.212	.056
FLPT English Usage Test	51.1	16.5		

Total score of FLPT English Usage Test = 108Total score of collocation test = 100 Mean = average of total score

An examination of learners' performance on the two broad types of collocations of *refuse* and *reject* showed that learners performed better on collocations of *reject* (M = 2.62; SD = .89) than on collocations of *refuse* (M = 2.46; SD = .97). A close examination of learners' performance of lexical collocations of *refuse* and *reject* revealed that they scored similarly on both: their mean score on each LC of *refuse* was 2.585 (SD = 1.049) and their mean score on each LC of *reject* was 2.554 (SD = .967).

A subsequent examination of learners' performance on the two subtypes of LC of *refuse* showed that they performed better on the first pattern of LC of *refuse* (M = 2.754;

SD = 1.462) than on the second pattern of LC of *refuse* (M = 2.418; SD = 1.53). An examination of learners' performance on the two subtypes of SC of *refuse* revealed that they scored higher on the second pattern of SC of *refuse* (M = 2.408; SD = 1.942) than on the first pattern of SC of *refuse* (M = 2.134; SD = 2.488).

A separate examination of learners' performance on collocations of *reject* showed that they scored higher on SC of *reject* (M = 2.825; SD = 1.542) than on LC of *reject* (M = 2.554; SD = .967).

Table 10 Learners' Performance on Different Types and Subtypes of Collocations of *Refuse* and *Reject* 

Collocation Type/Subtype	Mean	SD
Collocations of Refuse and Reject	2.56	.76
Collocations of Reject	2.62	.89
SC of <i>Reject</i>	2.825	1.542
LC of <i>Reject</i>	2.554	.967
Collocations of Refuse	2.46	.97
SC of Refuse	2.317	1.732
SC of Refuse 1	2.134	2.488
SC of Refuse 2	2.408	1.942
LC of <i>Refuse</i>	2.585	1.049
LC of Refuse 1	2.754	1.462
LC of Refuse 2	2.418	1.53

Total score of collocation test = 100 Mean = the average score of each test item No. of test items = 20

To assess the significance of the difference between the scores on any two types of collocations of *refuse* and *reject*, a paired-sample *t*-test was conducted. Table 11 shows that there was significant difference only between SC of *refuse* and SC of *reject*; learners scored lower on SC of *refuse* than on SC of *reject* (MD = -.508; SD = 2.17; *t*-value = -2.12; p < .05).

Table 11 Comparison of Learners' Performance on Different Types of Collocations of *Refuse* and *Reject* 

<b>Comparison of Collocation Subtypes</b>	MD	SD	t-value
LC of refuse vs. LC of reject	.031	1.14	.25
LC of reject vs. SC of refuse	.237	1.791	1.2
LC of refuse vs. SC of refuse	.268	1.929	1.26
LC of reject vs. SC of reject	271	1.629	1.51
SC of refuse vs. SC of reject	508	2.17	-2.12*

p < .05

A paired-sample *t*-test was also conducted to assess the significance of the difference between the performances on any two patterns of collocations of *refuse*. The results showed that learners scored differently on the four patterns of collocations of *refuse*, but there was no significance in the difference between any two of the scores (Table 12).

Table 12 Comparison of Learners' Performance on Different Subtypes of Collocations of *Refuse* and *Reject* 

<b>Comparison of Collocation Subtypes</b>	MD	SD	t-value
LC of refuse 2 vs. SC of refuse 2	.01	2.292	.04
SC of refuse 1 vs. SC of refuse 2	274	2.664	93
LC of refuse 2 vs. SC of refuse 1	.284	2.693	.96
LC of refuse 1 vs. LC of refuse 2	.335	2.135	1.42
LC of refuse 1 vs. SC of refuse 2	.345	2.378	1.32
LC of refuse 1 vs. SC of refuse 1	.619	3.08	1.82

#### Quick and Fast

A comparison of learners' and British/American native speakers' performance on Type A collocations of *quick* and *fast* showed that learners' performance was closer to the British native speakers' (MD = -7.83) than the American native speakers' (MD = -15.58), but the difference was not significant statistically. A closer look at the subcategories showed that learners' performance was closest to native speakers in producing Type A(2) collocations of *quick* and *fast*, and least close to native speakers in producing Type A(1) collocations of *quick* and *fast*.

In the production of Type B collocations of *quick* and *fast*, learners' performance was significantly different from both the British and the American native speakers (MD = -31.75). A closer look at the two subcategories showed that learners' performance was closer to native speakers in producing Type B (2) collocations of *quick* and *fast* (MD = 33.5) than in producing Type A (1) collocation of *quick* and *fast* (MD = 30).

In the production of Type C collocations of *quick* and *fast*, learners differ from both the British and the American native speakers, but the difference between the learners and the British NS (MD = -56) was greater than the learners and the American NS (MD = 47.33).

Table 13 Comparison of Learners' and Native Speakers' Production of Various

Types of Collocations of Quick and Fast

Types of Collocations of Quick and Fast	MD	SD	t-value
Type A			
Learners vs. NS	-11.708	27.865	-1.46
Learners vs. British	-7.8333	29.1293	-0.93
Learners vs. American	-15.5833	29.3829	-1.84
<b>Type A (1)</b>			
Learners vs. NS	-15	39.546	85
<b>Type A (2)</b>			
Learners vs. NS	2.25	33.588	.09
<b>Type A (3)</b>			
Learners vs. NS	-14	13.11	-2.39
Type B			
Learners vs. NS	-31.75	3.594	-17.67**
Learners vs. British	-31.75	3.594	-17.67**
Learners vs. American	-31.75	3.594	-17.67**
Type B(1)			
Learners vs. NS	-33.5	4.95	-9.57*
Type B(2)			
Learners vs. NS	-30	1.414	-30
Type C			
Learners vs. NS	-51.667	8.607	-10.06*
Learners vs. British	-56.000	9.644	-10.06*
Learners vs. American	-47.333	7.638	-10.73*
Type A: items 1, 2, 3, 9, 11, 12, 13, 14, 15, 16, 17, 20 Type A(2): items 16 and 20 Type A(3): items 1, 3 Type B(1): items 19 and 21 Type B(2): items 4 ar * $p < .05$ ** $p < .001$	, 9, 11, 14	Type A(1): item Type B: items Type C: items	

In the production of Item 5 (quick/fast rate) in the collocation test (see Appendix B) which involves the exclusive use of fast in British English but alternative use of quick and fast in American English (Table ), it was found that learners' performance was closer to American native speakers'.

Table 14 Exclusive use of Fast in British English but Alternative Use of Quick and Fast in American English

<b>Collocation Item</b>	<b>Learners %</b>	British NS %	American NS %
5. Quick rate	27	0	9
Fast rate	73	100	91

In the production of Item 7 which involves the exclusive use of *fast* in American English but alternative use of *quick* and *fast* in British English, it was found that learners' performance was more similar to that of the British native speakers.

Table 15 Exclusive Use of *Fast* in American English but Alternative Use of *Quick* and *Fast* in British English

<b>Collocation Item</b>	Learners %	British NS %	American NS %
7. Quick game	45	60	0
Fast game	55	40	100

#### **DISCUSSION**

#### The Production of Collocations of Refuse and Reject

The first research question concerns the relationship between Taiwanese learners' proficiency in English usage and their competence in using collocations of verb synonyms *refuse* and *reject*. The results of the study showed an unexpected finding: there is no significant difference between the performance of the higher-level learners and that of the lower-level learners in producing lexical and syntactic collocations of *refuse* and *reject*. In other words, learners in general did not have a good knowledge of the collocational restrictions of synonymous verbs *refuse* and *reject*. One possible explanation for this finding is that the use of synonyms in collocations probably has not received adequate attention in vocabulary teaching. Most EFL teachers, except writing teachers, did not place an emphasis on the use of synonyms in collocations. Consequently, students, no matter what their English proficiency levels, seem to be equally unaware of the collocational restrictions of synonyms, or more exactly verb synonyms in the present study.

The second research question concerns learners' performance in producing collocations of synonyms *refuse* and *reject*. The results of the study showed that learners showed similar performance on LC of *refuse* and LC of *reject*: the mean of each LC of *refuse* and each LC of *reject* is 2.6. An analysis of the lexical patterns of *refuse* and *reject* revealed that *refuse* is more complicated than *reject* in terms of its patterns of lexical

collocations: refuse occurs in two patterns of lexical collocations: (1) refuse + nouns that the agent of refuse is offered (e.g., help, invitation, and offer); (2) refuse + nouns that the agent of refuse is allowed to have (e.g., application, request, and changes); reject occurs in only one pattern of lexical collocations: reject + nouns that the agent of reject accepts or considers (e.g., application, claims, plan, view, notion, proposal, suggestion, argument, and idea). An examination of the learner's English dictionaries revealed another possible reason for students' low competence in using both verb synonyms in lexical collocations: the information provided in most mono English dictionaries for EFL students, such as Longman Dictionary of Contemporary English and Oxford Advanced Learner's Dictionary, do not contain all the examples of the lexical collocations of a keyword. The third reason is the fact that the Chinese translations of refuse and reject are similar. Therefore, EFL students of Chinese were frequently found to rely on the use of literal translation when producing lexical collocations of refuse and reject and use the two verbs interchangeably.

Unlike their similar performance on LC of *refuse* and *reject*, students scored significantly higher on SC of *reject* than on SC of *refuse*: they scored a mean of 2.825 on each SC of *reject*, but a mean of 2.317 on each SC of *refuse*. Regarding students' better performance on SC of *reject* than on SC of *refuse*, a possible reason is related to the syntactic behavior of the two verbs. An analysis of the meanings of *refuse* and *reject* in relation to the noun collocates included in the twenty collocations in the test revealed that *refuse* occurs in two patterns of syntactic collocations: (1) *refuse* + to V (e.g., *refuse to accept*); (2) *refuse* + N 1(Indirect Object) + N2 (Direct Object) (e.g., *refuse him admittance*; *refuse him permission*), but *reject* occurs in only one pattern of syntactic collocations: *reject* + N1 + as N2 (or adjective) (e.g., *reject violence as a weapon, reject election as a fraud, reject the idea as unrealistic).* 

#### The Production of Collocations of Quick and Fast

The fourth research question concerns the relationship between Taiwanese learners' proficiency in English usage and their competence in using collocations of adjective synonyms *quick* and *fast*. The results of the study were unexpected: there was actually no answer to this question because it was found that there was no absolutely right or wrong use of the two synonyms in collocations. Instead, five patterns were discovered regarding the native use of collocations of *quick* and *fast*. The British and American native speakers use both *quick* and *fast* in Type A collocations (items 1, 2, 3, 9, 11, 12, 13, 14, 15, 16, 17, 20). Type C collocations involve the exclusive use of *quick* in British English but alternative use of *quick* and *fast* in American English (items 6, 10, 18). Item No. 5 involves the exclusive use of *fast* in British English and alternative use of *quick* and *fast* in American English. Item No. 7 involves the exclusive use of *fast* in American English and alternative use of *quick* and *fast* in British English. Only Type B collocations

involve the exclusive use of *quick* in both British and American English (items 4, 8, 19, 21).

Due to the specific nature of collocations of *quick* and *fast*, the fourth research question which concerns learners' performance in producing collocations of synonyms quick and fast was approached in a way different from the way in which the second research question is approached. It was found that learners' performance on Type A collocations of quick and fast was closer to the British native speakers' than to the American native speakers'. Learners' performance on Type A (1) collocations of quick and fast, which involve the use of quick that means "lasting for or taking only a short time, was the poorest. Their performance on Type A(2) collocations of quick and fast, which involve the use of *quick* that means "moving or doing something fast", was the best. Learners' performance on Type B collocations of quick and fast was significantly deviant from both the British and the American native speakers'. A comparison of the two subtypes, Type B(1) and Type B(2), revealed that learners' performance on Type B(2), which involves the use of *quick* that means "lasting for or taking only a short time", was better than their performance on Type B(1), which involves the use of *quick* that means "moving or doing something fast." Learners' performance on Type C collocations of quick and fast was also quite deviant from the native speakers'. A comparison of their use with the British and the American uses of the two adjectives in collocations revealed that the learners' use of collocations of *quick* and *fast* was closer to the American native speakers'. In the production of *quick/fast* rate, which involves the exclusive use of *fast* in British English but alternative use of quick and fast in American English, it was found that learners' performance was closer to American native speakers'. In the production of quick/fast game, which involves the exclusive use of fast in American English but alternative use of *quick* and *fast* in British English, it was found that learners' performance was more similar to that of the British native speakers.

#### PEDAGOGICAL IMPLICATIONS

The study provides a clear picture of Taiwanese learners' competence in producing lexical and syntactic collocations of verb synonyms *refuse* and *reject*. From the findings of the study, some pedagogical implications can be drawn for EFL teachers regarding the ways in which teachers can help students acquire collocations of verb synonyms.

First of all, teachers ought to help students increase their awareness of collocation patterns of verb synonyms. Teachers may recommend students to consult a collocation dictionary such as one of those published by Longman, Cambridge, Collins COBUILD, and Oxford, but they usually include a limited number of examples, which can hardly provide a good picture of the major collocation patterns of a verb synonym that is searched for. Thus, teachers can make up for this disadvantage by using large corpora to

provide students with rich input of authentic examples.

Teachers may introduce students to corpus analysis. They may use data-driven learning (DDL) technique and involve more advanced students in inductive collocation searching work that requires them to identify target collocations of synonyms in retrieved concordance lines and to group them into different patterns. As students try to formulate generalizations of the use of synonyms in collocations, they will come up with hypothesis about the use of the target synonyms in collocations. With less advanced students, teachers may design deductive collocation searching tasks in which students are presented with generalized patterns and then requested to classify retrieved and selected concordance data based on the given patterns. As they sort out the random occurrences into categories, they are consolidating their knowledge of the target synonyms in specific collocation patterns.

In addition to DDL tasks of either inductive or deductive type, teachers may take one step further to develop in EFL writing students the ability to use various kinds of web-based concordancers (e.g., JustTheWord, the Sketch Engine, Tango, iWiLL Collocation Explorer, and the NTNU Concordancer) in order to search for acceptable collocations of synonyms.

#### **CONCLUSION**

The study explores EFL university students' competence in using English verb synonyms *refuse* and *reject* in five major collocation patterns. The findings indicate that students of different English proficiency levels performed similarly in producing lexical and syntactic collocations of *refuse* and *reject*. The study also found that the students performed similarly in producing lexical collocations of *refuse* and *reject*. The only significant difference occurred between students' performance in SC of *refuse* and their performance in SC of *reject*: students scored higher on SC of *reject* than on SC of *refuse*. Some pedagogical implications can be made from these findings. First, more attention should be given to the teaching and learning of various patterns of collocations of synonyms. Second, students should be cautioned not to use literal translation in producing collocations of synonyms. When a monolingual English dictionary or a dictionary of collocation fails to provide the target collocations of synonyms, they should use various web-based concordancers to find them in retrieved concordance lines. Last of all, teachers may design both inductive and deductive DDL tasks to guide students in discovering how synonyms differ and similar in their lexical and syntactic collocation patterns.

#### References

- Aisenstadt, E. (1979). Collocability restrictions in dictionaries. In R. R. K. Hartmann (Ed.), *Dictionaries and their users: Papers from the 1978 B. A. A. L. Seminar on Lexicography* (pp. 71-74). Exeter: University of Exeter.
- Baker, C. & Freebody, P. (1989). Children's first school books. Oxford: Blackwell.
- Benson, M., Benson, E., & Ilson, R. (1986). *The BBI Combinatory Dictionary of English:* A Guide to Word Combinations. Philadelphia: John Benjamins.
- Channell, J. (1981). Applying semantic theory to vocabulary teaching. *ELT Journal*, *35*, 115-122.
- Chen, P. C. (2002). A corpus-based study of the collocational errors in the writings of the *EFL learners in Taiwan*. Unpublished master's thesis, National Taiwan Normal University, Taipei.
- Chen, C. Y., & Tang, Y. T. (2004). Collocation errors of Taiwanese college students: Oral and written production. *Selected Papers from the Thirteenth International Symposium on English Teaching* (pp. 268-277). Taipei: Crane.
- Chomsky, N. (1965). Aspects of the theory of syntax. Massachusetts: M. I. T. Press.
- Cohen, A., Glasman, H., Rosenbaum-Cohen, P. R., Ferrara, J., & Fine, J. (1988). Reading English for specialized purposes: Discourse analysis and the use of student informants. In P. L. Carrell, J. Devine & D. E. Eskey (Eds.), *Interactive approaches to second language reading* (pp. 152-167). New York: Cambridge University Press.
- Cowie, A. P., Mackin, R., & McCaig, I. R. (1993). Oxford dictionary of English idioms. Oxford: OUP.
- Cruse, D. A. (1986). Lexical semantics. Cambridge: Cambridge University Press.
- Crystal, D. (1992). *An encyclopedic dictionary of language and languages*. Massachusetts: Blackwell.
- Farghal, M., & Obiedat, H. (1995). Collocations: A neglected variable in EFL. *IRAL*, *33*, 315-333.
- Fayez-Hussein, R. (1990). Collocations: The missing link in vocabulary acquisition amongst EFL learners. In J. Fisiak (Ed.), *Papers and studies in contrastive linguistics: The Polish English contrastive project* (pp. 123-136). Poznan, Poland: Adam Mickiewicz University.
- Gitsaki, C. (1996). *The development of ESL collocational knowledge*. Unpublished doctoral dissertation, Center for Language Teaching and Research, University of Queensland.
- Gitsaki, C. (1999). Second language lexical acquisition: A study of the development of collocational knowledge. Maryland: International Scholars publications.
- Greenbaum, S. (1974). Some verb-intensifier collocations in American and British English. *American Speech*, *49*, 79-89.
- Gutwinski, W. (1976). Cohesion in literary texts: A study of some grammatical and lexical features of English discourse. The Hague: Mouton.
- Firth, J. R. (1957). Modes of meaning. *Papers in linguistics* 1934-1951. Oxford: Oxford University Press.

- Halliday, M. A. K. (1966). Lexis as a linguistic level. In C. E. Bazell, J. C. Catford, M. A. K. Halliday, & R. H. Robins (Eds.), *In memory of F. R. Firth* (pp. 148-162). London: Longman.
- Halliday, M. A. K. and R. Hasan (1976). *Cohesion in English.* London: Longman UK group Limited.
- Hill, J. (2000). Revising priorities: From grammatical failure to collocational success. InM. Lewis (Ed.), *Teaching collocation* (pp. 47-69). England: Language Teaching Publications.
- Howarth, P. (1998). The phraseology of learners' academic writing. In A. P. Cowie (Ed.). *Phraseology* (pp. 161-186). Oxford: Oxford University Press.
- Jones, S., & Sinclair, J (1974). English lexical collocations. *Cahiers de Lexicologie*, 24, 15-61.
- Katz, J. J., & Fodor, J. A. (1963). The structure of a semantic theory. In J. A. Fodor & J. J. Katz (Eds.), *The structure of language: Readings in the philosophy of language* (pp. 479-518). Englewood Cliffs, N.J.: Prentice-Hall.
- Kjellmer, G. (1984). Some thoughts on collocational distinctiveness. In J. Aarts & W. Meijs (Eds.), *Corpus linguistics: Recent developments in the use of computer corpora in English language research* (pp. 163-171). Costerus N. S. vol. 45. Amsterdam: Rodopi.
- Laufer, B. (1991). The development of lexis in the production of advanced L2 learners. *The Modern Language Journal*, 75, 440-448.
- Lewis, M. (2000). Language in the lexical approach. In M. Lewis (Ed.), *Teaching collocation* (pp. 126-154). England: Language Teaching Publications.
- Li, C. C. (2005). A study of collocational error types in ESL/EFL college learners' writing. Unpublished master's thesis, Ming Chuan University.
- Linnarud, M. (1983). On lexis: the Swedish learner and the native speaker compared. In K. Sajavaara (Ed.), *Cross language analysis and second language acquisition*. Jyväskylä: University of Jyväskylä.
- Liu, C. P. (1999a). A study of Chinese Culture University freshmen's collocational competence: "Knowledge" as an example. *Hwa Kang Journal of English Language & Literature*, *5*, 81-100.
- Liu, C. P. (1999b). An analysis of collocational errors in EFL writings. *The Proceedings of the Eighth International Symposium on English Teaching* (pp. 483-494). Taipei: Crane.
- Liu, L. E. (2002). A corpus-based lexical semantic investigation of verb-noun miscollocations in Taiwan. Unpublished master's thesis. Tamkang University.
- Martin, M. (1984). Advanced vocabulary teaching: The problem of synonyms. *The Modern Language Journal*, 68(2), 130-137.
- McIntosh, A. (1961). Patterns and ranges. Language, 37, 325-37.
- Mel'cuk, I. (1998). Collocations and lexical functions. In A. P. Cowie (Ed.), *Phraseology* (pp. 23-53). Oxford: Oxford University Press.
- Mitchell, T. F. (1971). Linguistic 'goings on': Collocations and the other lexical matters arising on the syntagmatic record. *Archivum Linguisticum*, 2, 35-61.

- Nesselhauf, N. (2003). The use of collocations by advanced learners of English and some implications for teaching. *Applied Linguistics*, 24, 223-242.
- Porzig, W. (1934). Wessenhafte Bedeutungsbeziehungen. Beiträge zur Geschichte der deutschen Sprache und Literatur 58, 70-79.
- Shih, H. H. (2000). The influence of synonymy over collocation learning. *Selected Papers from the Ninth International Symposium on English Teaching*. 516-520.
- Sinclair, J. McH. (1966). Beginning the study of lexis. In C. E. Bazell, J. C. Catford, M. A. K. Halliday & R. H. Robins (Eds.), *In Memory of F. R. Firth* (pp. 410-430). London: Longman.
- Sinclair, J. (1991). Corpus, concordance, collocation. Oxford: Oxford University Press.
- Stubbs, M. (1995). Collocations and cultural connotations of common words. *Linguistics* and Education 7, 379-390.
- Summers, D., & Gadsby, A. (2000). *Longman advanced American dictionary*. England: Pearson Education.
- Wang, C. J. (2001). A study of the English collocational competence of English majors in *Taiwan*. Unpublished master's thesis, Fu Jen Catholic University, Taipei.
- Woolard, G. (2000). Collocation—encouraging learner independence. In Lewis, M (Ed.), *Teaching collocation: Further developments in the Lexical Approach* (pp. 28-46). England: Language Teaching Publications.
- Xiao, R & Mcenery, T. (2006). Collocation, semantic prosody, and near synonymy: A cross-linguistic perspective. *Applied Linguistics*, *27*(1), 103-129.
- Yeh, Y., Liou, H. C. & Li, Y.H. (2007). Online synonym materials and concordancing for EFL college writing. *Computer Assisted Language Learning*, 20(2), 131-152.
- Yuan, H. C., & Lin, C. Y. (2001). Collocations: A case study of Ming Chuan University students. *Proceedings of the Eighteenth Conference on English Teaching and Learning in the Republic of China* (pp. 407-422). Taipei, Taiwan: Crane.

#### Appendix A

Collocation Test on the Use of Refuse and Reject in Collocations

Directions: Please fill in the blank with either "refuse" or "reject." If you think both work well with the sentence, then fill in both words.

1. He says the Depar	tment of Immigration has	his application for permanent
residency.		
2. The judge	his request to be freed for t	three days to organize the
management of his	s business.	
3. He the	help of his father's family in e	stablishing his medical practice.
4. He clair	ns that he was suffering from c	cancer and that any operation was
planned.		
5 He her in	nvitation to speak at a conferen	ice.
6. He the i	dea of nothingness after death.	
7. Tears fell onto Sar	nantha's silken blouse, but she	my offer of a tissue.
8. The majority	the argument that the marr	riage laws do not discriminate against
homosexuals.		
9. The government _	to accept further foo	d aid from the USA.
10. He the s	suggestion that he should resign	n at once.
11. They	him admittance to t	the library building.
12. The Committee _	the proposal almost una	mimously (全體一致).
13. There are a numb	per of ways to accept or	_ changes.
14. The government	the plan and brought	negotiations to a standstill.
15. He unconditional	ly violence as a politi	cal weapon.
16. The UK government	nent him permission	to enter the country.
17. European Union	the election as a fra	nud.
18. Many people	the view of life after	death.
19. Lefebvre	the notion of postmodern	ism.
20 He	the idea as unrealistic	

## Appendix B

### Collocation Test on the Use of *Quick* and *Fast* in Collocations

#### **Directions:**

- 1. Please fill in the blank with *quick* if you think *quick* is acceptable and *fast* is not acceptable.
- 2. Please fill in the blank with <u>fast</u> if you think <u>fast</u> is acceptable and <u>quick</u> is not acceptable.
- 3. Please fill in the blank with <u>both words</u> if you think both are acceptable. Circle the one that is more acceptable.

1. This is a response to your question.
2. With the growth of economy and industrialization, air pollution has become a
major environment issue.
3. It was a decision on his part: he saw what he wanted, and pursued it without
fear.
4. I made a comparison of the two products.
5. Children are growing at a rate and need healthy nutrition in order to develop
strong bones and muscle.
6. I took a shower, threw my clothes in the laundry and went back into my room
7. Nine Ball is a game of pool that is commonly seen on television.
8. About a month later I gave her a call to see how things were going for her.
9. We aim to provide you with service, quality products and competitive prices.
10. A change of color from dark-brown to red occurred.
11. Could you give me a answer to the question?
12. In recent years, due to an ever-increasing financial support, China has made
progress in the field of astronomy.
13. We look forward to her recovery.
14. They offered me a solution to the problem.
15. Our mail order service offers you delivery of all products in stock.
16 actions are required to prevent losses.
17. With E-Statements you can have access to your bank records and protect the
environment!
18. Driving is a complex activity that requires thinking and reaction, good
perceptual abilities, and split-second decision-making.
19. I wanted to give a comment on this blog!
20. Shopping centers continue to expand at a pace.
21. You should have a look at this video, which will show you how easy it can
be to make your own website using our website builder software.

## 計劃成果

#### Part of the findings of the project has been presented in a conference paper:

Liu, C. P. (2011). A study of EFL learners' use of synonymous verbs in collocations. Paper presented at AILA 2011, Beijing, China. August 23-28, 2011. NSC 99-2410-H-034-047- (Received a travel grant from the NSC: 100-2914-I-034-011-A1)

## 國科會補助計畫衍生研發成果推廣資料表

日期:2011/10/31

國科會補助計畫

計畫名稱:從語詞的搭配觀點探討本國大學生使用英文同義字之研究

計畫主持人: 劉振蘋

計畫編號: 99-2410-H-034-047- 學門領域: 英語教學研究

無研發成果推廣資料

## 99 年度專題研究計畫研究成果彙整表

計畫主持人:劉振蘋 計畫編號: 99-2410-H-034-047-計畫名稱:從語詞的搭配觀點探討本國大學生使用英文同義字之研究 備註(質化說明:如數 量化 個計畫共同成果、成 本計畫 實際已達 預期總達成 單位果列為該期刊之封面 成果項目 成數(被接 實際貢 數(含實際 故事...等) 獻百分 受或已發 已達成數) 表) 比 0 100% 期刊論文 一 研究報告/技術報 0 0 100% 篇 論文著作 0 研討會論文 0 100% 0 0 專書 100% 0 0 申請中件數 100% 件 專利 已獲得件數 0 0 100% 國內 0 0 100% 件數 件 技術移轉 0 0 100% 千元 權利金 碩士生 1 1 100% 96000 元 0 0 參與計畫人力 博士生 100% 人次 (本國籍) 0 0 100% 博士後研究員 0 0 100% 專任助理 0 100% 國外 期刊論文 研究報告/技術報 0 100% 告 Liu, C. P. (2011). A study of EFL learners' use of synonymous verbs in collocations. Paper 論文著作 presented at AILA 2011. Beijing, China. August 研討會論文 100% 23-28, 2011. **NSC** 99-2410-H-034-047-(received a travel grant from the NSC: 100-2914-I-034-011-A1) 0 0 專書 100% 章/本 0 0 100% 申請中件數 專利 件 0 0 100% 已獲得件數 0 0 100% 件數 件 技術移轉 0 0 100% 權利金 千元 0 0 參與計畫人力 碩士生 100% 人次 (外國籍) 0 0 博士生 100%

0

100%

博士後研究員

		專任助理	0	0	100%	
	其他成果	無				
` '	·以量化表達之					
	如辦理學術活					
1	隻得獎項、重要					
	合作、研究成果					
	影響力及其他					
	產業技術發展 體效益事項					
	短 双 血 爭 垻 青以文字敘述填					
列。)	10人了 放延供					
/ /					1	

	成果項目	量化	名稱或內容性質簡述
科	測驗工具(含質性與量性)	0	
	課程/模組	0	
處	電腦及網路系統或工具	0	
計畫	教材	0	
鱼加	舉辦之活動/競賽	0	
	研討會/工作坊	0	
項	電子報、網站	0	
目	計畫成果推廣之參與(閱聽)人數	0	

## 國科會補助專題研究計畫成果報告自評表

請就研究內容與原計畫相符程度、達成預期目標情況、研究成果之學術或應用價值(簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性)、是否適合在學術期刊發表或申請專利、主要發現或其他有關價值等,作一綜合評估。

1.	請就研究內容與原計畫相符程度、達成預期目標情況作一綜合評估
	■達成目標
	□未達成目標(請說明,以100字為限)
	□實驗失敗
	□因故實驗中斷
	□其他原因
	說明:
2.	研究成果在學術期刊發表或申請專利等情形:
	論文:□已發表 □未發表之文稿 ■撰寫中 □無
	專利:□已獲得 □申請中 ■無
	技轉:□已技轉 □洽談中 ■無
	其他:(以100字為限)
	Part of the findings of the project has been presented in a conference paper:
	Liu, C. P. (2011). A study of EFL learners' use of synonymous verbs in
со	llocations. Paper presented at AILA 2011, Beijing, China. August 23-28, 2011. NSC
	-2410-H-034-047-
3.	請依學術成就、技術創新、社會影響等方面,評估研究成果之學術或應用價
	值(簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性)(以
	500 字為限)
	The findings of the project are significant in three ways. First, we can have a
	better understanding of the nature of the Englisy synonyms, both verb and adjective
	synonyms, used in collocations. Second, we can understand Taiwanese university
	learners's knowledge and use of the English synonyms in collocations. Third, the
	findings can be useful information for both EFL teachers, textbook writers, and
	dictionary compilers in their teaching, material preparation and creation, as well
	as production of dictionaries for EFL learners.